

# Policy Rates and Structural Reforms in Shaping the Episodic Behaviour of Foreign Direct Investment in India

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## Abstract

India has emerged as one of the global leaders in attracting foreign direct investment (FDI) inflows, recording a record high of USD 84.83 billion in FY2024. However, it is still ambiguous whether monetary policies, such as the RBI repo rate, have a major impact on FDI inflows since the reforms began. In this study, the relationship between RBI repo rate and FDI inflows is examined using a sample of 26 annual observations from 2000 to 2025. The study uses multiple OLS regression models and includes five macroeconomic variables such as the RBI repo rate, real GDP growth, CPI inflation, INR/USD exchange rate, and growth of broad money supply (M3). Three directional hypotheses are tested using Keynesian investment theory, cost of capital theory, and Mundell-Fleming trilemma. The model explains 72.1 percent of FDI inflows ( $R^2 = 0.721$ , Adj.  $R^2 = 0.652$ ,  $F = 10.349$ , and  $p < 0.001$ ). None of the three hypotheses was able to achieve a 5 percent significance level. The robust check of the model using first differences also confirmed the absence of a significant relationship. The correlation analysis of the last 8 years revealed a negative relationship between the RBI repo rate and FDI inflows, especially during the reform and monetary easing period from 2013 to 2019. The most important factor contributing to FDI growth in India over the last 25 years has been structural reforms and improvements in institutions rather than monetary policies. The RBI repo rate and other monetary policies are not reliable tools for maintaining FDI inflows into India. The most reliable tools include maintaining the credibility of policies, reform momentum, and exchange rate policies to sustain FDI inflows into India within the framework of Viksit Bharat @ 2047.

**Keywords:** Foreign Direct Investment, Monetary Policy, RBI Repo Rate, India, Structural Reform

## INTRODUCTION

The past two and a half decades have seen a sharp increase in FDI inflows in India reaching USD 2.16 billion in 2000 and all time high in USD 84.83 billion in FY2024 (DPIIT, 2025). The Reserve Bank of India has been enjoying a high level of monetary policy activism over the period of the review, whereby full cycles of the repo rate have been maintained within the possible range. In 2012 it reached highs of 8.50 percent only to decline to a pandemic low in 2020 and later were again increased to 6.50 percent in 2023 (RBI, 2025). The co-movement between the two series poses a question of direct applicability to the monetary policy as well as investment promotion. Is the interest rate

position of the RBI relevant to the ability of the country to attract and retain foreign investments?

Literature has been very clear in theoretical justification of a negative relationship potential. Under the investment theory applied on Keynesian basis, the expected net rate of return on invested projects in a host country is reduced by increase in borrowing rates and repo rates which make a host country less appealing to foreign investments (Keynes, 1936). According to the hypothesis of cost of capital, the expectation of returns of the multinationals would be compared against the cost of financing in the hosting country (Froot and Stein 1991). Trilemma of the Mundell-Fleming states

that open emerging economies can never have monetary independence and experience exchange rate stability and allow free capital movement (Mundell, 1963). Collectively, these portfolios show a definitive directional forecast that, increasing repo rates diminish the inbound of FDI. Conversely, empirical data in other countries with similarities to Pakistan is a far-fetched one. According to research conducted in G7 and GCC economies, it was found that there are positive long-run relationships between interest rates and FDI that are taken as a credibility signal by AlShubiri (2022) and Morina et al., (2023) because of the institutional maturity of these economies. These studies were carried out in 2023 and are from Pakistan and Turkey. The studies conducted in Zimbabwe, Iraq and Nigeria show that there are negative experiences in research.

It is on that gap that this paper is about. Based on the 26 indicators of annual observation, a five variable OLS regression model with first differenced robustness test and rolling correlation test, it offers the first specialized empirical test to the relationship between the repo rate and FDI in post-reform India. The research has three contributions. On the one hand, it satisfies the gap in the empirical literature that is found by Hamid (2023): it models interest rates as a central variable in the Indian FDI determinant model and considers the latest 25-year interval. Second, it shows by rolling correlation analysis that the relationship between monetary policy and FDI in India turns out to be episode-specific instead of constant and, consistently negative, which contributes to contextual learning of the role of Keynesian mechanisms in the structurally changing emerging markets. Third, it offers some feasible policy recommendation to the

RBI and DPIIT based on the existing discourse on investment promotion in India in the Viksit Bharat@2047 framework.

### **Literature Review and Theoretical Framework**

The empirical design and hypothesis development in the study involve three theoretical frameworks, namely the investment theory introduced by Keynes, the capacity of foreign direct investment and availability of funds in the country. The investment theory of Keynes predicts the extent of investment to be based on the Marginal Efficiency of Capital (MEC) considering the interest rates. When the repo rates go higher the expense of borrowing will go up and the dissimilarity between the envisaged returns on a venture and the cost of funding will go down, therefore, making investments that would have been considered as economically viable, no longer feasible (Keynes, 1936). Hence, such negative rate of output expectation of FDI, and so is clearly found in the case of Pakistan (e.g., Khan and Ahmad, 2023), where asymmetrical negative impacts on FDI are determined with a non-linear ARDL model.

Capital in costing hypothesis is an extension of the Keynesians, and hence it establishes a micro-economic complementarity to the Keynesians. It is theorized by Froot and Stein (1991) that the relative cost of capital in a home country and host country determines the decision by multinationals whether to invest or not. In such a manner, the capital costs within the host countries may not be appealing compared to the local financing because of the relatively high hurdle rate on overseas projects. In India, as the interest rate began to go up with an action by the RBI, it raised the rate of capital in rupee. As well, when

rupee weakens versus dollar that as well will cost more (in rupee) to bring the capital goods in and less (in rupee) to give the profits back to the dollar out of India via FDI, both of those factors will decrease the value of the profits sent abroad to the dollar.

A macroeconomic framework is defined by the Mundell-Fleming trilemma (Mundell, 1963; Obstfeld, 2015) to examine the situation of India. Since the country has a highly open capital account and inflation targeting, it is unable to enjoy a stable exchange rate, a free monetary policy and free movement of all capital simultaneously. Increase in interest rates to attract short term portfolio investment though might create more volatility in the exchange rate which might discourage long term foreign direct investment (FDI). Rey (2015) posited that globally, countries that maintain open economies face a trilemma of their own, that is, there are limits that will restrict capability of the Reserve Bank of India (RBI) to make domestic interest rate decisions in terms of externalities. Kalemlı-Ozcan (2020) demonstrated that global effects of tightening industries in the U.S. Federal Reserve are that risk appetite is decreased, and FDI flows to emerging markets are constricted irrespective of the domestic policy pursued.

Many empirical studies present evidence of the fact that the interest rate-FDI relationship can be affected by a number of contexts producing inconsistent findings based on the environment to which they provide the results. This is a long-term positive relationship in developed, institutionally perceived credible countries. Indicatively, AlShubiri (2022) conducted a study in the G7 and GCC nations, and found that a rise in real interest rates led to inflow of foreign direct investment (FDI) since the

foreign investors interpreted a rise in interest rate as a signal of a proper monetary policy and not a rise in costs. Upon analysis of 35 OECD countries applying a technique of interest rate variation (vector autoregressive, or VAR), Morina et al. (2023) discovered that there were positive and continuing relationships over multiple quarters between interest rates and FDI. Each of these cases favors the credibility channel; rises of rates in sound institutional settings are mainly cues of confidence, not of constraint.

The emerging markets are different in terms of picture. A moderate negative relationship between interest rates and FDI in Iraq was written by Al-Barmani (2019) between 2004 and 2023. Khan and Ahmad (2023) observed that increases in the rate produced much greater dampening effects on FDI in Pakistan than did similar rate reductions produced stimulating effects, which is that asymmetric monetary transmission. In Turkey, negative effects of national rates on FDI were discovered by Ozkan and Erden (2022). Nzeh et al. (2024) discovered a bidirectional relationship between interest rates and FDI in Nigeria using 2010- 2022 quarterly data, indicating that the relationship between the monetary and investment aspects is not unidirectional in capital-constrained economies.

In India, growth in GDP is particularly the most powerful macroeconomic FDI driver. An ARDL test of annual data, 1980-2016 indicated that there was a strong long-run cointegrating relationship between GDP growth and FDI inflows (Hamid, 2023). Gao et al. (2024) have confirmed the strong dependence of FDI on the trends of output growth relative to annual growth readings with regard to a sectoral analysis of Bangladesh alone. The

images of the macroeconomic policy stability are quite delicate to Indian FDI and abrupt change in the URR increases the uncertainty, and discourages the long-gestation investments. It also found out that monetary growth was associated with reduced FDI in Zambia due to the inflationary expectations, which justified the indirect association of monetary condition with investment self-confidence.

### RESEARCH HYPOTHESES

Based on the reviewed theoretical frameworks and patterns of empirical directions, the following three directional hypotheses are put to test:

**H<sub>1</sub>:** The RBI repo rate and FDI inflows in India are strongly negatively related where an increase in the interest rates is found to correlate with a reduction in foreign investment.

**H<sub>2</sub>:** The real GDP growth clearly shows a strong positive correlation with the FDI inflows in India in the presence of controlled variables such as interest rates and other macroeconomic factors.

**H<sub>3</sub>:** In a negative correlation, exchange rate depreciation (an increase in the rate of INR/USD) is strongly correlated with FDI inflows, whereby more the rupee is weak, the less attractive India will be as an investment destination.

### DATA AND METHODOLOGY

#### Data

The research spans across 2000 to 2025 using 26 annual reports. The information source (i.e., data from DPIIT, Reserve Bank of India) will be validated for its integrity/delivery timeline, along with cross-referencing different data sources of monetary policy & macro variables from the Reserve Bank of India Handbook of Statistics 2024-25. In addition, GDP & inflation will also have

room to grow, again using World Bank Development Indicators as a benchmark with variable level correlations of all three metrics above 0.98 confirming its consistency in IRS. 2000 is therefore the chosen baseline year because as of that time, the FDI liberalization process was well established and had begun yield reliable, consistent and useable information regarding foreign investment into India. Lastly, by continuing this analysis through 2025, thus will allow an oversight of the full post-reform cycle with consideration of both the previously mentioned 2022-23 tightening phase and the FDI influx due to PLI.

#### Regression Model

The main estimation equation is a multiple OLS regression given as:

$$\ln(FDI_t) = \alpha + \beta_1 Repo_t + \beta_2 GDP_t + \beta_3 CPI_t + \beta_4 \ln(EXR)_t + \beta_5 M3_t + \varepsilon_t$$

The dependent variable is the log of the annual foreign direct investments (FDIs) in USD millions which is  $\ln(FDI_t)$ . In the case of log transform, the right skewness is significantly reduced when considering the raw FDI data such that the coefficients will be seen to reflect about equal percent change of one unit change as the predictor variables. All these 6 variables are represented in Table 1.

#### Estimation Strategy and Structural Context

OLS is estimated in SPSS and cross-validated in Python in the Enter method with all five predictors keyed in at the same time. Common diagnostic methods are Durbin-Watson autocorrelation test, Shapiro Wilk test of residual normality and Variance Inflation Factors (VIF) used to check Multicollinearity. Distance is calculated to determine the observations that are influential.

The three major structural events throughout the course of this study are believed to have impacted the Indian FDI climate in such a way that they could cause structural changes to the monetary-FDI relationship across the entire sample. These events include, the Insolvency and Bankruptcy Code (2016), Goods and Services Tax (2017), and the COVID-19 pandemic (2020). While they are treated as contextual variables in the explanatory design of this study, they will be described through trend analysis and 8 years circular correlations to track changes in the repo rate-FDI association over differing policy regimes.

The first-difference OLS regression was conducted to determine if the associations found from the first-differenced form of the model would be similar to those in the level form of the model. First differencing created year-to-year change data, removed the deterministic time trend, and allowed for the elimination of the autocorrelation that is in the levels model (Durbin-Watson = .941). The purpose of comparing levels and first-differenced results is to assess whether or not the associations represent real policy-FDI relationships or if they are also significantly affected by the common long-run trend.

## RESULTS

### Descriptive Statistics

The calculation of FDI is given at 10.14, which corresponds, to approximately USD 25,000 million. Moreover, the standard deviation of 1.03 log points signifies the remarkable growth path India's FDI has undertaken. From 2000 till date that is USD 2.16 billion in 2000 to USD 84.83 billion in 2024. The estimate of the repo rate stood at 6.59 per cent and a standard deviation of 1.20 percentage points. The range has fluctuated from a low of 4 per cent in the

pandemic to a high of 8.50 per cent in 2012. Such parameters give the statistical range of the variation we need to establish links with the FDI. COVID is primarily responsible for the adverse contraction in the GDP growth, which has a skewness of -2.53.

### Trend and Phase Analysis

Patterns of phase wise are summarised in Table 3. The phase with the lowest average repo rate (phase IV, 5.62 per cent) also shows the highest average FDI (US\$64.7b) during the phase. In addition, phase II, the highest rate phase, has the most volatile and lower inflows with 7.04%. Requiring careful reading as these 'directional' alignments.

### Correlation Analysis

The Pearson correlation matrix of six variables is given in Table 4. Three effects are directly relevant to the hypotheses. Initially, the repo price doesn't correlate significantly with  $\ln(\text{FDI})$ . Hence, the single correlation influence of the repo price, cash reserve ratio and FDI is weak and insignificant. Second,  $\ln(\text{FDI})$  most effectively is correlated with GDP growth at  $r = -0.047$  ( $p = 0.82$ ), thus suggesting that annual GDP fluctuations is a poor bivariate predictor of FDI. The correlation coefficient for  $\ln(\text{EXR})$  and  $\ln(\text{FDI})$  is  $r = 0.683$ , at a probability level of  $p < 0.01$ , in the opposite are suggested by H3. This, however, merely represents a spurious correlation that is a result of both the series having a similar long run upward trend. The rupee 2025 is lower at INR 84.50 per dollar against INR 44.94 in the year 2000. Meanwhile, FDI has gone up from USD 2.16 billion to over USD 80 billion. The M3- $\ln(\text{EXR})$  correlation of  $-0.856$  is a further manifestation of common time trends that the regression addresses directly.

### OLS Regression Results

A model explains 72% of the variation in FDI ( $R^2$  0.721) and 65% when sampled to correct for sample size (adjusted  $R^2$  0.652), thus demonstrating substantial explanatory capability. The F statistic (10.349) indicates joint significance of model variables ( $p < 0.001$ ). VIFs for all explanatory variables are well below 5.0. Durbin-Watson value of 0.941 reflects positive autocorrelations within variables.

### Hypothesis Evaluation

The first hypothesis, or H1, fails to get supported through our findings. We found that our repo rate coefficient ( $\beta_1$ ) was 0.039 ( $t = 0.351$ ,  $p = 0.730$ ) and statistically insignificant, plus carrying a positive sign rather than a negative sign as anticipated, which further compounds its lack of support from our findings. After controlling for GDP growth, consumer price index (CPI), exchange rate, and money supply, repo rates showed that repo rates had no statistically significant independent effect on foreign direct investment (FDI) inflows in annual levels. The second hypothesis (H2) also does not receive any support from our findings; the GDP growth coefficient ( $\beta_2$ ) was found to be 0.021 ( $t = 0.535$ ,  $p = 0.598$ ), while the positive sign sufficiently met expectations, it did not achieve statistical significance. The third hypothesis (H3) has the same outcome of not getting supported by our findings, but in this case the exchange rate coefficient ( $\beta_4$ ) was statistically significant ( $\beta_4 = 4.755$ ;  $t = 4.723$ ,  $p < 0.001$ ), however the sign was in the positive range which was contrary to what we expected to see. A likely cause for this is due to a spurious common upward time trend exhibited between each variable ( $\ln(\text{EXR})$  and  $\ln(\text{FDI})$ ), which lasted 25

years. CPI appears to have achieved statistical significance ( $\beta_3 = 0.175$ ;  $p = 0.003$ ) and carries a positive sign which was also due to an artefact in trend behaviour within the years 2006 - 2014 when both FDI and inflation were above their output long run averages at the same time.

### DISCUSSION

#### Why the Repo Rate Shows No Stable Annual Effect (H1)?

The repo rate coefficient was found to be not statistically significant in the levels or first-differenced model, which is the most important finding emanated from this study. This does not mean that monetary policy does not matter for FDI. It might be the case that the 26-year pooled sample covers profoundly different structural regimes with the consequence that the monetary-FDI relationship differs in sign and magnitude raising a near-zero net magnitude under pooled OLS. According to the rolling 8-year correlations, the repo rate-FDI relationship was indeed negative and strongest during Phase III (2013-19) when the RBI deliberately cut the repo rate from 8.00 percent to 5.15 percent during its easing cycle. The Make in India initiative during this period registered a jump in average annual FDI at USD 43.9 billion. Conversely, the tightening cycle of 2022-23 which raised the repo rate from 4.00 percent to 6.50 percent in less than 18 months witnessed a FDI softening from the FY2022 peak of USD 81.97 billion to USD 46.03 billion in FY2022-23.

The results reported here are in contrast with those of Khan and Ahmad (2023), who find significant negative effects for Pakistan, and with those of Al-Barmani (2019), who find a mild negative correlation for Iraq. Two factors unique to India explain the contrast. First, the post-

2014 uptick in FDI can be largely attributed to the confidence-boosting policy reforms like GST, IBC, and the PLI scheme. Essentially, structural factors that are generating demand for foreign capital are driving this uptake, rather than year-to-year changes in the cost of financing. Next, since formal inflation targeting was introduced in 2016, it has established a degree of credibility for Indian monetary policy, and it is possible that investors have become less responsive to the signal value of a specific rate decision. Taylor (1993) argues that monetary policy credibility helps stabilise investment expectations and so this latter explanation is consistent. The finding aligns with the findings of Morina et al (2023), who show that the impact of monetary policy on FDI in institutionally and politically stable settings typically takes years to manifest and thus may.

For example, the implementation of GST in 2017, IBC in 2016, and COVID in 2020 caused structural breaks in Indian time series. DSGE estimates indicate a significant break in the mean values of key macro variables around August 2019. This break creates a sub-regime in our 26-year analysis. The sub-regimes are (a) pre-GST sub-regime till 2016; (b) post-IBC but pre-COVID sub-regime from 2017 to middle of 2020; and (c) COVID sub-regime. The uniting of these regimes in a single OLS averages out the monetary policy signal. It does this in a constellation where this signal showed more variation in intensity and orientation in the regimes. In other words, it is this methodological reality and not the absence of a monetary transmission mechanism that gives rise to the null finding.

## **Structural Reform as the Dominant FDI Driver (H2)**

The fact that annual GDP growth does not significantly influence both regression models provides no evidence against the existence of an association between growth and FDI; it merely indicates that the relationship has a lengthy time activity. Hamid (2023) discovered a robust long-term cointegrating relationship between GDP and FDI for India using ARDL Bounds test on annual data from 1980 through 2016. Our OLS approach tests for contemporaneous and yearly correlation but not the long-term relationship between these two variables. Thus, the two interactions do not contradict each other. Rather, they both suggest that GDP and FDI are related over the long term but that the relationship is not reflected in annual co-movement, which is consistent with Gao et al.'s (2024) findings which suggest that FDI reacts to trend growth rather than yearly growth values. Given that multinational companies who entered the Indian market have multi-year entry strategies ranging from 5-10 years, an estimate of Indian GDP for any given year may be viewed as irrelevant due to the broader structural opportunity.

This interpretation of Phase III Evidence supports the above conclusion. Phase III (2014 to 2019) achieved a sustained average annual amount of foreign direct investment of USD \$43.9 billion which represented an increase of 33% from Phase II although the average rate of gross domestic product growth was not significantly different (7.3% compared to 6.8%). Rather, the explanation for the increase in FDI in Phase III was as a result of the changes made to India's Investment Risks through the institutions' allocation of

resources after implementing the endorsed reforms. The Make in India Initiative, Production-Linked (PLI) Schemes and improvements made to the enforcement of contracts caused a significant decrease in the politically and operationally perceived risks of making long-term FDI commitments, which could not be achieved through a change of one basis point in the repo rate, or in the rate of gross domestic product growth.

### **Exchange Rate: Spurious in Levels, Real in First Differences (H3)**

According to Granger and Newbold (1974), the positive value of the exchange rate coefficient estimated via the levels regression is clearly an example of spurious regression caused by both  $\ln(\text{EXR})$  and  $\ln(\text{FDI})$  being non-stationary time series that have trended and exhibited parallel trends over a 25-year period; for example,  $\ln(\text{EXR})$  increased sharply due to a structural depreciation of the rupee, while  $\ln(\text{FDI})$  has also increased as India continues to be viewed as an attractive place to invest. The positive correlation between these two variables, as well as the positive coefficient value when  $\ln(\text{EXR})$  and  $\ln(\text{FDI})$  are entered into the levels regression, suggest that there is a common trend over time that is reflected in both  $\ln(\text{EXR})$  and  $\ln(\text{FDI})$  rather than a causal relationship. The negative first-differenced exchange rate coefficient, which is consistent with the theoretical relationship proposed by H2, Froot and Stein (1991) and AlShubiri (2022), supports the assumption that rupee depreciation negatively impacts short-run FDI through the repatriation value channel (Froot & Stein [1991]). The rupee has depreciated nearly 88% against the U.S. dollar since the year 2000, and this ongoing structural drag on effective dollar returns is a significant and sustained risk for all foreign investors, yet hedging against this risk

will not eliminate it.

### **CONCLUSION**

Using 26 Years of Data to Examine the Relationship between RBI Repo Rate and FDI Inflows. This study looked at the use of 26- years of annual data from 2000 to 2025 and a five-variable OLS regression model to determine whether there was any relationship between the foreign direct investment (FDI) equity inflows into India and the repo rate set by India's Reserve Bank (RBI). The answer to this question is no; all three of the research hypotheses failed to pass the 5% level of significance. A robustness check on the results using first-differenced estimations showed that the results for short-run changes were exactly the same. Although there has been no relationship between FDI equity inflows into India and the repo rate set by the RBI in the long-run, there was a real relationship between 2013 and 2019. This relationship can be observed by examining the correlation between these two variables over an 8-year time span. Between 2013 and 2019, there was a statistically significant negative relationship between the two variables. However, over the 26-year sample period, there was no relationship between the two. This lack of a relationship can be attributed to the fact that institutional variables have historically driven India's FDI inflows. For example, the introduction of GST, IBC, PLI, and the Make in India initiative have created an unprecedented level of confidence for FDI into India that cannot be matched by a 25-basis point reduction in the repo rate set by the RBI. In other words, the impact of RBI policy is only truly realised when it is one of a series of reforms that have a macroeconomic coherent theme that foreign investors closely examine.

It is the predictability of monetary policy stance that matters most, rather than the current value of monetary policy. The best way for DPIIT to move forward with the vision of Viksit Bharat@2047 would be to continue to improve the overall business climate rather than being concerned with interest rate cycle timeframes. The decrease in the rupee has been 88 per cent since 2000, thereby making the exchange rate channel of monetary policy transmission most significant. The limitations of this study are (1) annual data frequency and (2) the geographical constraint to one nation for monetary transmission; both limitations do not capture the typical monetary transmission lag of 6 to 18 months. Future research should use quarterly data, employ ARDL or VECM models, and segregate FDI into sectors before testing the results using a panel analysis of BRICS/ASEAN-5 nations and the US Federal Funds Rate or Global Financial Conditions Index to filter the effects of global spillover; as evidenced in research by Kalemli-Özcan (2020) and Rey (2015).

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**Table 1: Defining the Variables and the Expected Sign**

Variable	Definition	Units	Expected Sign
$\ln(\text{FDI}_t)$	Log of FDI equity inflows (actual receipts)	USD mn (ln)	Dependent
$\text{Repo}_t$	RBI repo rate (annual end-of- year)	%	- (H1)
$\text{GDP}_t$	Real GDP growth rate	%	+ (H2)
$\text{CPI}_t$	Consumer price inflation rate	%	-
$\ln(\text{EXR}_t)$	Log of annual average INR/USD exchange rate	Levels (ln)	- (H3)
$\text{M3}_t$	Broad money supply growth rate (M3)	%	+/-

Note: Log transformation applied to FDI (USD million) and EXR to lower the skewness and improve coefficient interpretability.

**Table 2: Descriptive Statistics of Study Variables (n = 26, 2000–2025)**

Variable	Mean	Std Dev	Min	Median	Max	Skewness	n
$\ln(\text{FDI})$ , USD mn	10.14	1.03	7.68	10.50	11.35	-1.08	26
Repo Rate (%)	6.59	1.20	4.00	6.50	8.50	-0.55	26
GDP Growth (%)	6.55	3.28	-6.60	7.34	10.26	-2.53	26
CPI Inflation (%)	6.15	2.46	3.33	5.27	12.11	1.03	26
$\ln(\text{EXR})$ , INR/USD	4.05	0.24	3.72	4.02	4.44	0.26	26
M3 Growth (%)	13.60	3.73	8.60	13.30	21.40	0.53	26

Note: FDI and EXR are in the natural logarithm. The contraction of -6.60% in FY2020-21 due to the COVID-19 effect provides a skewness of -2.53 to the analysis since these are considered crisis years as per the policy.

**Table 3: Phase-wise Trend Analysis: Repo Rate and FDI Inflows**

Phase / Period	Avg. Repo (%)	Avg. FDI (USD bn)	FDI Trajectory	Key Economic Context
Phase I: Pre-Crisis (2000–07)	6.88	10.6	Rising	Capital liberalisation; IT and services FDI begins scaling; global liquidity expanding
Phase II: GFC & Recovery (2008–13)	7.04	33.0	Volatile	Crisis shock; aggressive rate cycle; FDI dipped 2009, then recovered on global rebound

Phase III: Reform & Consolidation (2014–19)	6.73	43.9	Sustained rise	Make in India; IBC 2016; GST 2017; RBI easing cycle from 8.00% to 5.15%
Phase IV: COVID & post-pandemic (2020–25)	5.62	64.7	Surge then moderate	Ultra-low rates; PLI scheme; 2022–23 rate hike cycle (4.00%→6.50%) accompanies FDI moderation

Note: The average FDI is based on the annual DPIIT equity inflows (USD billion). Phase IV average is comprised of the FY2022 peak of USD

81.97 billion. Table RBI Handbook, Table 148 Repo averages are values at end of financial year.

**Table 4: Pearson Correlation Matrix (n = 26)**

Variable	ln(FDI)	Repo	GDP	CPI	ln(EXR)	M3
ln(FDI)	1.000	-0.191	-0.047	0.315	0.683**	-0.431*
Repo Rate	-0.191	1.000	0.219	0.089	-0.361	0.311
GDP Growth	-0.047	0.219	1.000	0.076	-0.179	0.123
CPI	0.315	0.089	0.076	1.000	-0.205	0.308
ln(EXR)	0.683**	-0.361	-0.179	-0.205	1.000	-0.856**
M3 Growth	-0.431*	0.311	0.123	0.308	-0.856**	1.000

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$  (2-tailed). The high positive relationship between  $\ln(\text{EXR})$ - $\ln(\text{FDI})$  ( $r = 0.683^{**}$ ) indicates a regular time trend of this relationship and not a relationship. The trend is also shown in the correlation value of  $-0.856^{**}$  of  $\text{M3}-\ln(\text{EXR})$ . The regression of these artefacts is done using the first-differenced robustness check where  $n = 26$ .

**Table 5: OLS Regression Results: Determinants of ln(FDI), India 2000–2025**

Variable	Coeff. B	Std. Error	Std. Beta $\beta$	t-stat	p-value	VIF
(Constant)	-11.978	4.991	N/A	-2.400	0.026*	-
Repo Rate (%)	0.039	0.110	0.045	0.351	0.730	1.18
GDP Growth (%)	0.021	0.038	0.065	0.535	0.598	1.07
CPI Inflation (%)	0.175	0.052	0.419	3.349	0.003**	1.13
ln(EXR): INR/USD	4.755	1.007	1.116	4.723	< 0.001**	4.01
M3 Growth (%)	0.103	0.066	0.374	1.572	0.132	4.05

Note: Dependent variable =  $\ln(\text{FDI equity inflows, USD mn})$ . \*\*  $p < 0.01$ , \*  $p < 0.05$ . Std. Beta ( $\beta$ ) = standardised coefficient. VIF = Variance Inflation Factor; all values < 5.0.  $n = 26$ . Estimated using Enter method, SPSS; independently verified in Python.

**Table 6: Summary of the Model**

Model	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F-statistic (Prob.)	D-W
<b>OLS: ln(FDI) on 5 predictors</b>	0.849	0.721	0.652	10.349 (< 0.001)	0.941

Note: D-W = Durbin-Watson = statistic. D-W 0.941 shows that the first-order autocorrelation of the residuals is positive, and it is solved by using first-differenced robustness check. Shapiro-Wilk  $W = 0.982$ ,  $p = 0.914$ ;  $p$  is not less than 0.05; it does not reject the test of residual normality.

#### Robustness Check: First-Differenced OLS

**Table 7: First-Differenced OLS Regression: Robustness Check (n = 25)**

Variable	Coeff. B	Std. Error	Std. Beta $\beta$	t-statistic	p-value
<b>(Constant)</b>	0.160	0.078	-	2.044	0.055
<b><math>\Delta</math>Repo Rate</b>	0.011	0.067	0.037	0.167	0.869
<b><math>\Delta</math>GDP Growth</b>	-0.026	0.017	-0.329	-1.520	0.145
<b><math>\Delta</math>CPI Inflation</b>	-0.004	0.048	-0.019	-0.084	0.934
<b><math>\Delta</math>ln(EXR)</b>	-0.896	1.499	-0.133	-0.598	0.557
<b><math>\Delta</math>M3 Growth</b>	0.044	0.035	0.270	1.266	0.221

Note: Dependent variable =  $\Delta$ ln(FDI).  $\Delta$  = year-on-year first difference.  $R^2 = 0.222$ , Adj.  $R^2 = 0.018$ ,  $F = 1.087$  ( $p = 0.399$ ),  $D-W = 1.498$ .  $n = 25$  (one observation lost to differencing).

None of the predictors attained the significance in the first-differenced model ( $F = 1.087$ ,  $p = 0.399$ ) confirming that annual variation in monetary changes is no longer predictive of changes in annual FDI. The Durbin-Watson increases to 1.498. The exchange rate coefficient turns to -0.896, whose theoretical value is as H3 would have suggested, albeit not significant with such small sample.