



# MEASURING FOREIGN PORTFOLIO INVESTMENT VOLATILITY IN INDIA: DOES SECTORAL STOCK MARKET PLAY ANY ROLE?



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## Abstract

Foreign Portfolio Investment (FPI) plays an important role in determining the economic status of countries. In this respect, this study analyses the pattern of FPI flow in India. Focusing on the short-run investment pattern, the trend of FPI has been highly volatile in nature. The analysis, thus, tends to examine FPI volatility and correlate it with one of the short-run Indian investment markets, i.e., the S&P BSE stock index, for the period 2006-2019. Taking monthly data, the analysis chooses the Generalised Auto Regressive Conditional Heteroskedasticity (GARCH) approach to measure volatility and judge the impact of three sectors of the S&P BSE index, which are FMCG, BANKEX and POWER, on it. The study explores the considerable significant positive influence of the first two sectors during this period. The consideration of the above three sectors is justified, as consumption, investment and government purchase are the three major contributors of national income measurement in any economy. The study inculcates policy frameworks which need to be formulated to strengthen the performance of sectors associated with consumer goods networks and investment markets through banking operations. This will subsequently result in improved control and resistance to FPI volatility, even during periods of increased inflow into India.

**Keywords:** *Banking; FPI; GARCH; India; Volatility*

## Introduction

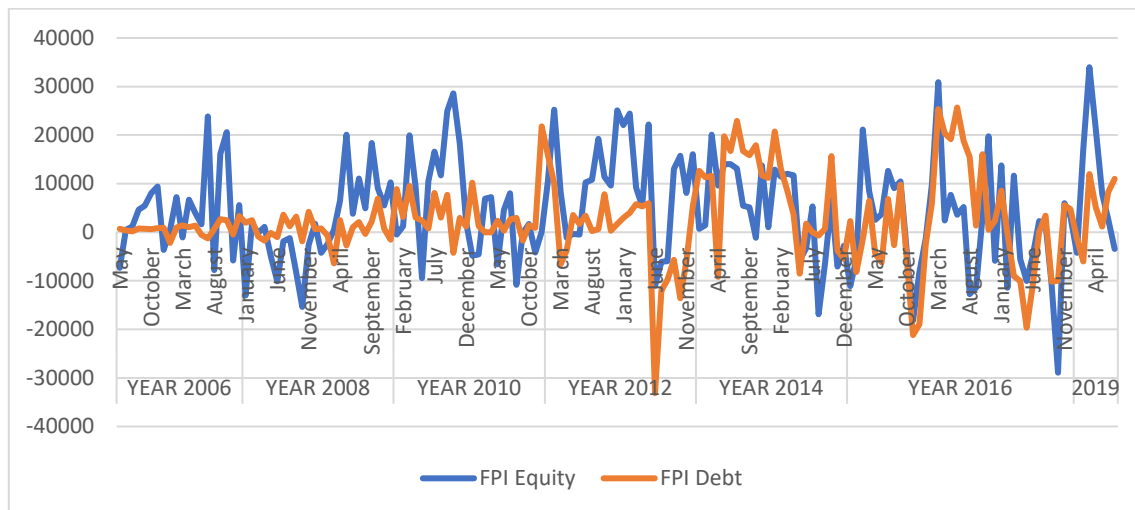
The benefits of diversifying portfolio risk across countries have emerged from the concept of foreign portfolio investment (FPI) in recent times. The cross-border capital flows assist the developing economies to grow as well as seek higher returns from them. As analysed by De Santis & Gerard [1], US investors earned profits out of international diversification consistently over periods. The destination countries of receiving foreign investment are especially Latin American and East Asian economies. Liberalisation of those economies has further created opportunities for foreign markets and their return from host country economies. Among various developing economies of Asia, India, Russia, South Africa, China and Brazil are the few which received most of the foreign portfolio flows as per the analysis by Garg & Dua [2]. The advantage of consistent foreign investment inflows can be secured only with specific macroeconomic factors like lower inflation, higher interest rates, currency depreciation, etc., as discussed by Waqas, Hashmi & Nazir [3]. Another important factor as analysed by Wang [4] is host country valuation of the stock market. Most of the host country economies originated from the Asian subcontinent, and the majority of them have an underweighted stock market. This comparative arbitrage significantly enhances the success of foreign investment inflows in these countries.

The current study is based on one of the fastest-growing Asian economies, India. The trend in foreign portfolio investment in India, as shown in Figure 1, exemplifies the maximum drop-down of FPI equity that occurred in and



around 2017-18. For debt, the largest fall is seen around 2012-13. Garg & Dua [2] discovered the maximum setback for FPI in 2008. To uncover the reasons, they set their objectives to find out the factors which influence FPI so that by controlling those factors, India may not hinder inflow from foreign markets.

**Figure 1: Trend in Foreign Portfolio Investment (FPI) Equity and Debt from 2006-2019**



*Source: Collected by Author*

The significant fluctuations in FPI facilitate the measurement of its volatility. The trend shown in Figure 1 indicates that FPI debt is more consistent than equity in measuring volatility. Apart from determining the factors to regulate FPI, it is also important to locate factors influencing the volatility in FPI. Hiremath & Kattuman [5] explained the relationship of foreign investment and the stock market through an endogenous model. The importance of foreign investors in shaping local equity markets is discussed by Albuquerque, Bauer & Schneider [6].

Literature supporting finding the relationship between foreign investment and the stock market is enormously active in studies. The volatility measurement in foreign markets has not been discussed much. The current study, hence, focuses on the following objectives:

- to analyse FPI volatility in the Indian economy for a period of 2006-2019.
- to measure the impact of Indian stock market sectoral indices on FPI volatility in India.

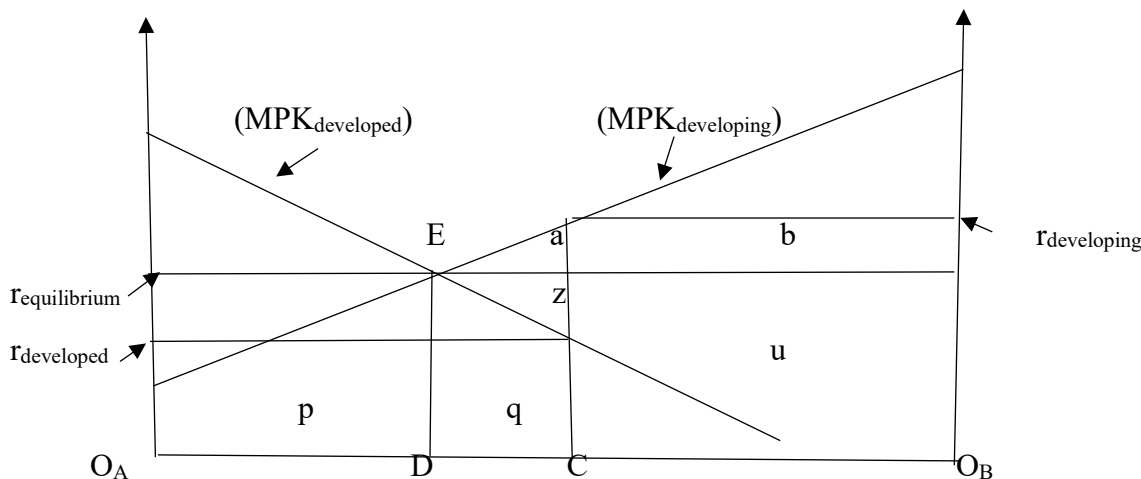
The study takes Generalised Auto Regressive Conditional Heteroskedasticity (GARCH) approach to measure the same. For sectoral stock market analysis, three basic sectors have been identified. They are named the Fast-Moving Consumer Goods (FMCG) sector, the Banking sector (BANKEX) and the power sector (POWER).

The analysis is based on the following sections. Section 2 explains the relevant review of literature. Section 3 elucidates research methodology. Section 4 describes the analysis, results, and discussion. Section 5 concludes the analysis.

## Literature Review

Foreign investment in a nation is broadly categorised into two categories: foreign direct investment (FDI) and foreign portfolio investment (FPI). Where direct investment focuses on long-term assessment, portfolio investment emphasises short-term capital gain from foreign markets. The positive and welfare effect model of portfolio investment as specified by Sodersten & Reed [7] explained the impact of capital mobility from a capital-intensive economy to a labour-intensive economy. The below-mentioned model explains the benefits of the movement of foreign capital from the home country to the host country's economies.

**Figure 2: Capital mobility between capital-intensive economy and labour-intensive economy**



Source: Author's own calculation

Figure 2 explains the model of capital mobilisation movements between developed and developing economies. Comprising a higher capital endowment ( $MPK_{developed}$ ) with a lower interest rate when a country moves to an economy with a higher interest rate and lower capital endowment ( $MPK_{developing}$ ), the benefit stands in large volume for both. In Figure 2, it is depicted that the transfer of capital from a developed country to a developing country can help generate more capital income for developed economies.

The capital endowment in a developed economy, as shown in Figure 2, is OAC, and in a developing economy, it is OBC. The capital-intensive economy, at first, can earn capital income amounting to areas p and q with a lower rate of interest as  $r_{developed}$ . Comparatively, the developing economy has a higher interest rate as  $r_{developing}$  and can earn area b and u from its capital investment. The lucrative return from developing economies empowers developed economies to make transfers of funds and gain profit from comparatively higher interest rates. The gradual flow of foreign funds to a developing economy leads to a reduction of interest rates in this economy. Thus, an equilibrium in the rate of interest ( $r_{equilibrium}$ ) between the two economies takes place with the end of further transfer of foreign capital inflow from developed nations. The above figure explains the equilibrium point as E and the benefit of the developed nation as the additional earnings from capital (area, z) and the advantage of the developing economy as the gain in workers (areas a and b). The capital endowment has now changed to equal proportions as OAD and OBD.

The theoretical model of FPI provides an opportunity to further explore thorough descriptions, trends, and advantages of FPI across different countries. The detailed literature specifying FPI in different economies, giving special importance to Asian countries, is discussed below.

Garg & Dua [2] analysed volatility in the Foreign Portfolio Investment (FPI) market and its factors in India. The study found the strength of the domestic equity market as one of the determinants that always results in attraction in FPI. On the contrary, a strong foreign equity market will disrupt the flow of FPI in India. Waqas, Hashmi & Nazir [3] ensured a stable macroeconomic environment with a steady exchange rate, depreciation in home currency, less inflationary pressure and a growth rate in Gross Domestic Product (GDP) that enhances FPI flow and its volatility in Asian countries. Hiremath & Kattuman [5] explicated the association between Foreign Institutional Investment (FII) volatility and equity market return in India. Although FII is one of the components of FPI, it hardly creates an impact on Indian equity markets. The analysis gave importance to existing general guidelines to attract FPI to the Indian subcontinent. Dhingra, Gandhi & Bulsara [10] explained the relationship between FII and equity market returns and its volatility in the Indian economy. The analysis indicated that FII makes the equity market unstable while selling the shares.

Agarwal [9] analysed factors affecting foreign portfolio investments (FPI) in Asian countries. The study found the real exchange rate, share of the domestic financial market and performance index of economic activity play crucial roles in

determining the volume of FPI in Asia. Lipsey et al. [10] explained the changing role of foreign investment in designing countries' economic structures. De Vita & Kyaw [11] investigated the impact of FPI and Foreign Direct Investment (FDI) on lower, lower-middle & upper-middle-income economies. The analysis concluded that economies with minimum capacity for growth are only capable of reaping the benefits of the two forms of foreign investment. Felices & Orskaug [12] explained the factors determining FPI inflow and outflow in emerging market economies. Factors such as economic spread, global economic growth, and the high US yield spread bound the supply side of FPI. Fernandez-Arias [13] observed that among the push and pull factors influencing foreign investment in emerging economies, the foreign interest rate is a significant push factor that impacts private capital flows in these economies. Edison et al. [14] analysed how international financial institutions influence economic growth by controlling the financial and economic structures of various economies.

Gupta & Gordon [15] assessed external and internal factors influencing FPI in developing economies. LIBOR and satisfactory emerging market equity returns play dominant roles in FPI inflow decisions. Whereas lagged equity returns in the domestic market of developing economies determine the flow and volatility of FPI. Griffin, Nardari & Stulz [16] examined whether push or pull factors influence cross-border foreign portfolio equity investment flows into emerging market economies. The study proved that unexpected, better performances of the world equity market and a specific equity stock ensure foreign investment equity inflows into developing economies. Caporale et al. [17] demonstrated exchange rate volatility as one of the determinants of foreign portfolio investment in developing economies. The study analysed that high volatility in the foreign exchange market attracts FPI equity flow in developing countries. On the contrary, a stable exchange rate influences FPI in debt markets in the form of investment in bonds in these economies.

Badhani & Kumar [18] examined the effectiveness of FPI in the Indian stock market. The analysis focused on the expertise of time management in the investment process of the benchmark indices of India. Yaha, Singh & Rabanal [19] investigated the impact of external global shocks on FPI in the context of the Indian stock market. The analysis revealed that the effect is insignificant even in the age of the global financial crunch that happened in 2008. Bodnaruk, Massa & Yadav [20] analysed the usefulness of foreign investment with the help of domestic firm performance. Family ownership with strong political help leads to augmented foreign investment in the form of portfolio investment. Rangarajan [21] has analysed two arenas of capital flows in India. One is specified as the impact of capital flows on economic growth and formation of capital, and the other as various channels of flows into the Indian economy.

Reinhart & Reinhart [22] explained a capital bonanza is not beneficial for either developed or developing economies. Higher capital flows subsequently lead to economic crises in both structures of the economy. Neumann, Penl & Tanku [23] analysed FPI influences on liberalisation of capital with little impact. But it is FDI which influences and takes a permanent responsibility in influencing financial liberalisation in any economy. Wei [24] explored a relation between the threshold hypothesis and the composition hypothesis. The basic quality of financial institutions and allowance of various channels of portfolio correlate highly among them in different countries. This result was fruitful in designing the policies and structure of a developing economy especially. Alfaro, Kalemli-Ozcan, & Vadym [25] supported the above analysis.

Claessens, Dooley, & Warner [26] explained that foreign investment is unstable in any economy. It was found that, regardless of the economic structure, foreign investment is volatile in any of its forms. Though FDI relates to an economy for the long term and is supposed to be more stable than the nature of FPI, foreign investment is vulnerable and unmeasurable for the wellbeing of any economy. Chuhan, Perez-Quiros & Popper [27] and Albuquerque [28] contrasted with the above analysis and explained FDI to be more stable and requirement-oriented in the formation of the basic structure of a developing economy.

The hypotheses proposed for this analysis are:

H<sub>01</sub>: The volatility in FPI is absent during the first lagged period, meaning that the GARCH effect is not present.

H<sub>02</sub>: The impact of FMCG, BANKEX, and POWER is insignificant in influencing volatility in FPI.

H<sub>03</sub>: The existence of additional effects indicates that the Generalised Autoregressive Conditional Heteroskedasticity (GARCH) model is not applicable for exploring the volatility of the Indian economy.

The above hypotheses were postulated by Nwosa, Philip & Omolade [29].

The study employs effects that employ the Generalised Autoregressive Conditional Heteroskedasticity (GARCH) model to further explore the volatility of the Indian stock market. The reason behind choosing the GARCH model is the data being specifically non-linear in nature.

The previous studies were designed specifically to determine the factors that contribute to FPIs. Other than different push and pull factors, these studies found several macroeconomic factors to be major contributors to FPI and its volatility. Studies also explored the stock market as being one of the important factors to measure stability in FPI. The gap in the existing literature, thus, is formulated to measure FPI volatility with respect to Indian stock market sectoral indices. Precisely, the study focuses on identifying the influences of three specific sectors of the Indian stock market, which are the FMCG, BANKEX and POWER indices. The reason behind taking only three sectors is influenced by the explanation of the national income of an economy. As it considers consumption, investment and government infrastructure in its calculation, the idea of taking these three basic sectors and measuring their influences on FPI volatility comes into consideration.

## Methodology

This analysis measures the influences of stock market indices on FPI debt and FPI equity. To analyse volatility, the EGARCH (1,1) model has been selected for a period spanning from 2006 to 2019. Monthly data have been collected for further analysis. The different sectors of the Indian stock market have been identified for the specific analysis of the study. The three major sectors of an economy have been considered here as consumption, investment and government expenses in India. The S&P BSE Fast Moving Consumer Goods index as a choice of consumption sector, the S&P BSE BANKEX as an investment sector and the S&P BSE POWER as a government expenses sector have been taken into consideration in this article. On the other side, Foreign Portfolio Investment (FPI) in the debt market and in the equity, market has been considered for monitoring its volatility.

Finally, the impact analysis of the said indices on FPI volatility was judged over thirteen years with respect to the Indian economy.

## Sources of Data

The National Securities Depository Limited (NSDL) has provided data on Foreign Portfolio Investment (FPI). According to the Reserve Bank of India (RBI), FPI is categorised as investments made by foreign nationals who have a share of less than ten per cent of post-issue fully paid-up equities in a listed company in India. The indices – S&P BSE Fast Moving Consumer Goods, S&P BSE BANKEX and S&P BSE POWER – are described as the performance of stocks based on the consumption sector, the overall banking and financial environment, and the energy sector of the Indian market.

## Econometric Model:

The specification of EGARCH model is the extension of GARCH (1,1) proposed by Bollerslev [30]. The model associated with EGARCH is described as:

$$\log (S_t / S_{t-1}) = \alpha_{1i} + \epsilon_{ti} \dots \dots \dots (1)$$

The above equation (1) is classified as mean equation,

where  $S_t$  = closing value of the index

Log ( $S_t / S_{t-1}$ ) = monthly return of the FPI debt and equity measured compound return basis

$\alpha_{1i}$  = constant term for i-th market index component, where  $i=1,2,3$

$\epsilon_{ti}$  = residual term at time t for i-th market

The variance equation is denoted as:

$$\log (\sigma_t)^2 = \alpha_{2i} + \beta_i \log (\sigma_{t-1})^2 + \gamma_i |\varepsilon_{ti-1} / \sigma_{t-1}| + \delta_i \left( \frac{\varepsilon_{ti-1}}{\sigma_{t-1}} \right) + \varnothing_i \log (F_i) \dots \dots \dots (2)$$

The above equation (2) explains the volatility regime for the said period.

$(\sigma_t)^2$  and  $(\sigma_{t-1})^2$  = Variance of FPI at period t and t-1.

$\alpha_{2i}$  = Coefficient of the constant for i-th market

$\beta_i$  = Coefficient of variance at period t-1 for i-th market

$\gamma_i$  = Coefficient of the absolute value of ratio of residual and variance at period t-1 for i-th market

$\delta_i$  = Coefficient of the actual value of ratio of residual and variance at period t-1 for i-th market

$\varnothing_i$  = Coefficient of the variance regressors measured as an independent variable in the equation for i-th market

$F_i$  = i-th stock market index as variance regressors.

## Result

The standardised descriptive statistics of the variables under measurement are listed below in Table 1.

**Table 1: Descriptive Statistics**

	log (FPI)	log (FMCG)	log (BANKEX)	log (POWER)
Mean	0.000457	3.688265	4.137528	3.342240
Median	0.009927	3.772044	4.116507	3.321217
Maximum	2.646205	4.106248	4.547332	3.657902
Minimum	-2.361847	3.240325	3.627376	3.141951
Standard Deviation	0.327860	0.273180	0.234958	0.098323
Skewness	0.918969	-0.212000	-0.154953	0.799135
Kurtosis	44.66007	1.592375	2.208750	3.478566
Jarque- bera	11448.02	14.31784	4.784031	18.44065
Prob	0.00	0.000778	0.091445	0.000099

Source: Author's own calculation

The volatility of FPI can be judged through the range of its maximum and minimum values. The disparity in the dataset can also be visible from the score of standard deviation. The kurtosis is very high, explaining the thick tail with outliers. The other variables, such as FMCG, BANKEX and POWER, have consistency in the dataset, which is proved by the range of values they are contained within. These variables also have low values of kurtosis, explaining the long tails and absence of outliers in them. The above Table 1 hence confirms the variability in FPI and thus entails checking the impact of other stable variables on it. The correlation among the variables has been considered in the next level.

**Table 2: Correlation Matrix**

	log (FPI)	log (FMCG)	log (BANKEX)	log (POWER)
log (FPI)	1			
log (FMCG)	-0.004349 (0.9567)	1		
log (BANKEX)	-0.011792 (0.8831)	0.937859** (0.00)	1	
log (POWER)	-0.015039 (0.8512)	-0.414009** (0.00)	-0.120894 (0.1303)	1

Source: Author's own calculation

\*\* indicates significant at 5 percent level



Table 2 above explains the correlation matrix between FPI, FMCG, BANKEX, and POWER. The importance of correlation can be justified by checking the multicollinearity of the dataset. It can be proved that two sets of independent variables, such as (FMCG, BANKEX) and (FMCG, POWER), are highly correlated with each other.

After analysing the correlational matrix, the study demonstrates the extent of the influence of the stock market FMCG index on FPI volatility, as depicted in Table 3. The consumer goods sector index indicates all the fast-moving consumer non-durable items and consumptions considered for mass usage.

**Table 3: Result showing impact of FMCG index on FPI volatility by GARCH (1,1)**

Variable		Coefficient	z- statistic	Probability
Mean Equation	$\alpha_{11}$	-0.030860	-1.358317	0.1744
Variance Equation	$\alpha_{21}$	-5.515159**	-4.351978	0.0000
	$\beta_1$	0.765538**	3.279022	0.0010
	$\gamma_1$	-0.336434	-1.630677	0.1030
	$\delta_1$	0.460436**	4.183574	0.0000
	$\theta_1$	0.986327**	3.384213	0.0007

Source: Author's own calculation

\*\* indicates significant at 5 percent level

Table 3 above elucidates the coefficients of the variance equation as being statistically significant. The last coefficient,  $\theta_1$ , explains the impact of FMCG on FPI volatility. The result proves that performance in consumer goods markets is positively influencing volatility in FPI. The rejection of the null hypothesis ( $H_{02}$ ) is relevant here, as the corresponding probability value is smaller than 0.05 (0.0007). Therefore, the performance of the Indian consumer market significantly impacts foreign nationals. The GARCH effect is significant as we reject the null hypothesis ( $H_{01}$ ), which proves the data taken for this analysis is nonlinear and the variance is heteroskedastic in nature. The corresponding probability value is 0.0010. Table 6 shows the further absence of heteroskedasticity in variance in the ARCH-by-ARCH LM test for the FPI and FMCG sectors. The null hypothesis of the absence of the ARCH effect ( $H_{03}$ ) is accepted. Overall, the results indicate that FPI volatility is present only in the current period and the immediately preceding period. This is because the probability value exceeds five percent (0.9036). Overall, the results demonstrate that FPI volatility is present only in the current period and the immediately preceding period. Volatility was not present before that period. In this case, the focus on checking and measuring volatility is limited to the current period and the one immediately prior to FPI inflow.

Table 4 illustrates the effect of banking and investment markets on FPI at the next level.

**Table 4: Result showing impact of BANKEX index on FPI volatility by GARCH (1,1)**

Variable		Coefficient	z- statistic	Probability
Mean Equation	$\alpha_{12}$	-0.029442	-1.215158	0.2243
Variance Equation	$\alpha_{22}$	-6.633300**	-4.088947	0.0000
	$\beta_2$	0.674656**	2.447745	0.0144
	$\gamma_2$	-0.334961	-1.537309	0.1242
	$\delta_2$	0.481813**	3.584272	0.0003
	$\theta_2$	1.176630**	3.666171	0.0002

Source: Author's own calculation

\*\* indicates significant at 5 percent level

Table 4 demonstrates a significant and positive impact of BANKEX on FPI volatility. It explains that when Indian banking sector performance goes high, the FPI market becomes unstable and volatile. Here also, the null hypothesis of absence of impact ( $H_{02}$ ) is rejected as the probabilistic value is 0.0002. While judging the impact, here also it is observed that FPI volatility exists for the current period and one period prior to it. Hence, here also, the concern regarding FPI needs to be taken care of only for two periods. The null hypothesis ( $H_{01}$ ) of the absence of GARCH is rejected. The absence of further volatility is negated by accepting the null hypothesis ( $H_{03}$ ) specified in it. The result is depicted in Table 6 with the probability value as more than five percent (0.9883).

The impact of power sector stock index on FPI Volatility has been analysed in Table 5.

**Table 5: Result showing impact of POWER index on FPI volatility by GARCH (1,1)**

Variable		Coefficient	z- statistic	Probability
Mean Equation	$\alpha_{13}$	-0.045256	-1.872391	0.0612
Variance Equation	$\alpha_{23}$	1.474321	0.403503	0.6866
	$\beta_3$	0.765457**	3.138056	0.0017
	$\gamma_3$	-0.503473**	-3.494872	0.0005
	$\delta_3$	0.483204**	4.272482	0.0000
	$\theta_3$	-0.974360	-0.878719	0.3796

Source: Author's own calculation

\*\* indicates significant at 5 percent level

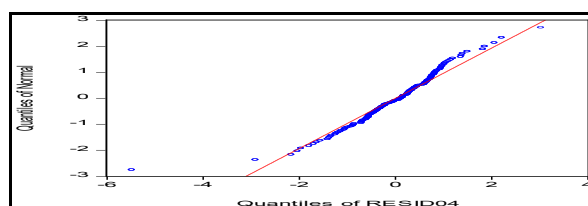
Table 5 corresponds to the impact of the POWER index on FPI volatility. The result indicates that the impact is negative and insignificant. This leads to acceptance of the null hypothesis ( $H_{02}$ ) of the absence of any impact of POWER on FPI volatility. The volatility measurement is necessary for consideration of the current period of its inflow and just the period of it. This amounts to rejection of the null hypothesis ( $H_{01}$ ) as the probabilistic value is 0.0017. The ARCHLM test shown in Table 6 proves the absence of volatility in the other periods with a probability value of 0.7460, which is more than five per cent. This proves that the proposed null hypothesis ( $H_{03}$ ) of absence of further ARCH LM impact is accepted.

**Table 6: Heteroskedasticity Test (ARCH LM)**

	F statistic	Probability
FPI volatility and FMCG	0.014704	0.9036
FPI volatility and BANKEX	0.000216	0.9883
FPI volatility and POWER	0.105309	0.7460

Author's own calculation

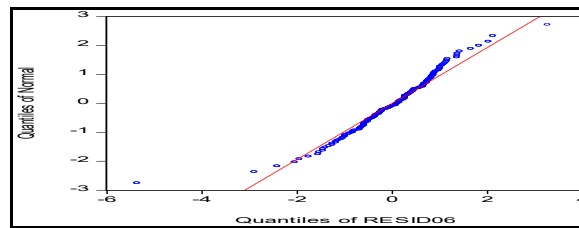
**Figure 3: Tests for Normality of data structure measured for FPI and FMCG index**



Source: Collected by Author

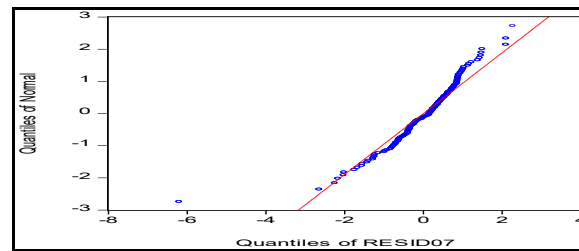


**Figure 4: Tests for Normality of data structure measured for FPI and BANKEX index**



Source: Collected by Author

**Figure 5: Tests for Normality of data structure measured for FPI and POWER index**



Source: Collected by Author

The above figures (Figures 3, 4 and 5) explain that large negative shocks are driving the data from the normality structure and hence proving the presence of nonnormality in it. This, in return, proves the measurement of volatility by considering the GARCH model.

Finally, it should be noted that all measurements were taken using the GARCH (1,1) model to capture the immediate period's influence.

## Discussion

The findings of this study demonstrate that sector-specific stock market indices play a differentiated role in explaining the volatility of Foreign Portfolio Investment (FPI) in India, reaffirming the evolving interconnectedness between foreign capital flows and domestic financial markets. The significant positive influence of FMCG and BANKEX on FPI volatility aligns with recent empirical evidence indicating that foreign investors increasingly respond to sectoral performance signals rather than broad market indicators [30]. The FMCG sector is driven by consumption and is relatively stable, which means that demand is stable and corporate fundamentals are strong. This often attracts foreign funds. However, when more money comes in, the sector becomes more sensitive to news from the global market, which makes short-term volatility worse.

The positive association between BANKEX and FPI volatility is also consistent with the current literature, which emphasises that banking sector performance serves as a barometer of both economic strength and systemic risk [31]. As foreign investors closely monitor credit expansion, asset quality, and financial reforms, any positive sectoral movement encourages short-term speculative positioning, amplifying volatility. Recent studies highlight that foreign institutional investors exhibit herding behaviour in emerging markets' banking stocks, making the sector highly sensitive to cross-border fluctuations [32]. The results here similarly reinforce the notion that financial sector performance shapes investor expectations and consequently contribute to volatility clustering in FPI [33].

Conversely, the power sector's insignificant impact on FPI volatility suggests that infrastructure-related industries continue to be less attractive to short-term portfolio investors. This outcome is supported by recent findings showing that foreign investors prefer sectors with rapid turnover and market liquidity, rather than capital-intensive and policy-dependent industries such as power [34]. The absence of significant influence may also reflect structural challenges within India's energy sector, including regulatory delays, debt burdens, and project execution risks that deter speculative capital flows. Thus, unlike FMCG and banking, the power sector does not transmit meaningful price signals capable of altering short-term foreign investment behaviour.

Finally, the confirmation of volatility persistence in FPI, especially in immediate and lagged periods, aligns with recent findings on volatility clustering in emerging markets [35, 36]. The reliance on EGARCH further validates the asymmetric nature of shocks, demonstrating that negative shocks disproportionately influence foreign investor reactions—an observation well documented in modern volatility literature.

These findings highlight the need for targeted policy interventions aimed at stabilising sector-sensitive capital flows, strengthening market fundamentals, and reducing FPI's vulnerability to short-term fluctuations.

## Conclusion

Though stock indices related to FMCG and BANKEX provide satisfactory results, imposing a positive influence on FDI volatility, the power sector emphasises a contradictory outcome. Analysing the statistical data, the study aims to conclude that the stock index related to the power sector is not influential in attracting foreign investment from abroad. Surprisingly, the power sector is considered as one of the priority-orientated sectors because of its contributions to infrastructural development in India. The future scope, hence, is laid upon in finding out the reasons for the absence of such influence and formulating policies so that distinct effects can be analysed thoroughly. It is seen that the other two sectors chosen for the study give relevance to considering them, as they have significant impacts on measuring FPI volatility. Also, it proves to strengthen the consumer market and Indian banking sector performance to be in a steady state while there arises a volatility in FPI. Hence, economic policies must be formed by giving higher priorities to the consumer goods market and banking operations channel so that the higher flow-higher volatility mode of FPI can be better managed. Thus, the motto is, in this volatility regime, the Indian economy can ultimately handle and resist the external shock of foreign investments. Finally, the analysis of the study is justifiable, as it considers the two most important sectors in an economy accountable for determining the national income of it and measures the influence of them on foreign investment instability in the Indian market.

## Conflict of Interest

The author declares that she has no conflict of interest.

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