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Global Liquidity And Foreign Portfolio Investment- How Are They Tied Up With Indian Macroeconomic Indicators?

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Abstract:
Global liquidity has a sincere concern with respect to an economy's growth. Here, the country's macroeconomic indicators play a major role in directing and channelising the liquidity in correct direction towards upliftment of the health of the economy. In this respect, also, Foreign Portfolio Investment (FPI) is considered as the key driver of the economy. Hence, the focus of the research is to measure the nexus between global liquidity, main indicators of economy and FPI for India applying Auto Regressive Distributed Lag (ARDL) model. Apart from Global Liquidity (EFFR) as one of the regressors, this paper considers following Indian macroeconomic variables as other regressors - Index of Industrial Production (IIP), Large Cap Index (LC), Mid Cap Index (MC), Small Cap Index (SC), Long run Money supply(M3), Nominal Exchange Rate (NER), Short Run Interest Rate (less than twenty-four hours) (SINT), and trade openness (TO). The study starts with proving a long run cointegration between the dependent variable FPI and above mentioned regressors through Bound Testing Approach. Among the long run coefficients, LC affects FPI in India significantly. While analysing the short run causality, apart from EFFR and TO all other regressors show significant impact on FPI. Additionally, the Granger Causality test also substantiates short run observations of ARDL i.e. IIP, LC, MC, SC, M3, NER, and SINT granger cause FPI. The result shows unidirectional causality proving the absence of any cyclic relationship due to dependent variable granger causing the regressors. Following are the conclusions – (1) the paper finds out the 'hot-money' nature of FPI by observing absence of impact of any regressors (except LC) in the long run at 5% significance level. The same conclusion is corroborated by presence of impact of almost all regressors in the short run at equivalent significance level. (2) It is surprising to find out that global liquidity has no impact on FPI in the short run. Rather, India's internal macro-economic variables have higher influence in attracting FPI. (3) There is contradiction to the theoretical expectation that FPI would influence country's macro-economic variables – specifically, FPI inflow in India has no short-term causal effect on volatile variables like equity indexes and currency exchange rate.

Keywords: *Foreign Portfolio Investment equity inflow (FPI), Global liquidity, Indian macro-economic variables, Auto Regressive Distributor Lag (ARDL) cointegration, Granger Causality*
JEL Classification: C22, F31, F62, F63

1. INTRODUCTION:

The benefits of FPI have increased the international capital inflows in less developed countries in recent past years. The emergence of FPI have not only increased the depth and breadth of the secondary market, but also helped to ease the global liquidity. It has helped to reduce the trade deficits occurred due to bilateral trade in the emerging market economies. Thus, it is pertinent to understand which are the macroeconomic variables that have an influence on FPI inflow to a country. On the other hand, it is important to find out to what extent FPI can induce causal effect to the macroeconomic variables of that country. As FPI is considered as 'Hot Money' (Yahya Waqas, et al,2015)) in an economy, both short run and long run relationship between macroeconomic variables and FPI inflows are currently emerging as prospective area of research.

The analysis of Foreign Capital can be categorised into two segments: the first, long term foreign capital which are invested for the span of multiple years, decades e.g. Foreign Direct Investment is of direct production based (Quan Li and Adam Resnick ,2003) and inclined towards reaping long term benefits from the host countries. Whereas, the second, the short-term foreign capital is always in the form of daily, monthly as well as quarterly counted values. Now focusing specifically into Foreign Portfolio Investors - as per World Bank definition, it includes bonds, equity (comprising of direct stock market purchases, Global Depository Receipt (GDR) and country funds) and money market instruments such as certificates of deposits and commercial papers.

Less Developed Countries (LDC) are in huge requirement of foreign capital throughout their economic development. This need is not only because of improving productivity of human capital in these countries (Shiva S. Makki and Agapi Somwaru,2004), (Kulwant Rai, N R Bhanumurthy,2004) but also to reduce the gap of foreign exchange reserve in terms of trade deficits (Kulwant Rai, N R Bhanumurthy,2004). The lack of percentage of saving and a high amount of capital requirements also created the need of foreign capitals in LDCs. Furthermore, many developing countries attract Foreign capital for acquisition of high technology-based production unit. In the early 1980s, until the emergence of the international debt crisis, the foreign private capital flows to developing countries were in the form of commercial bank loans. But recently, the trends in international cross-border flows of foreign capital to developing countries show a downturn of commercial bank lending (R.N. Agarwal,1997).

Considering the benefits of Foreign Portfolio Investment in LDCs, one must also examine the impact on FPI on country's macro-economic variables. Specifically, impact analysis of FPI on Equity market and currency market in the host country has special need. The theoretical expectation is - FPI in the form of increased inflow of foreign capital will have a positive impact on the price of the equity share. The upward thrust of Price Earning (P/E) Ratio will induce lower cost of acquisition of capital for the company. The lower cost of acquisition of capital and a booming inflated price of share market will call for new investment and inflow of new share in the equity market (Parthapratim Pal,1998). Similar theoretical expectation is - FPI in the form of increased inflow of foreign currency strengthens the exchange rate in the host countries. (Cambazoglu, B., & Günes, S. ,2016) . This paper investigates the plausibility of such theoretical propositions in the context of Indian economy.

The research is frames as follows: section two explains the literature, section three analyses the sources of the data and description of the variables, section four discusses the results and section five concludes the same.

2. LITERATURE REVIEW AND RESEARCH GAP ANALYSIS:

Several researchers have analysed relationship between single macro-economic variable and FPI. Darby, Hallett, Ireland, and Piscitelli (1999) determined exchange rate fluctuation significantly affect FPI. The inverse relationship between exchange rate and FPI is detected in different studies (Eun &Resnick, 1988; Froot & Stein, 1991, Bleaney & Greenaway, 2001; Ersoy, 2013). Currency devaluation in host country improves FPI inflow because of cheaper cost of acquisition of local assets. Bekaert &Harvey, 1998; Froot et al., 2001; Gordon & Gupta, 2003 explained stock market performance was providing a considerable impact on FPI. There exists a positive correlation between stock returns and FPI during specific stages of stock market development (Choong, Baharumshah,2010). Broner and Rigobon (2004) found that FPI volatility was explained typically by economic development of a country. Index of Industrial production provides sufficient explanation to the inflow of FPI in developed countries. (Chuhan, Claessens, & Mamingi, 1998; Daude & Fratzscher, 2008; Neumann, Penl, and Tanku (2009) examined that a stable industrial production growth rate would result in less volatility in FPI. On the other hand, growth of Foreign Direct Investment inflow also causes lesser inflow of FPI due to investors' confidence towards host country economy (Gozgor & Erzurumlu,2010). On contrary, Iyer, Rambaldi, and Tang (2003) found that FDI created positive impact on FPI while FPI did not cause FDI. Deviation from Purchasing Power Parity also creates an influence towards the decision of international capital flows to different countries. The reason behind this is to hedge the portfolio and inflation (Adler and Dumas,1983) and (Uppal 1993). Hasan and Nasir (2008) observed in their study that in the long run, Money supply(M2), interest rate(IR) and exchange rate are significant factors for determining the FPI inflow. Kaur and Dhillon (2010)

considered domestic country(India) financial factors(Monthly returns on Sensex, Market capitalization of Bombay Stock Exchange in million US$, Stock market turnover of BSE in million US$), foreign country (US) financial factors(Returns on S&P 500 Index, Variability of Sensex over S&P 500 Index), domestic country economic factors(Index for Industrial Production as proxy for economic growth, Wholesale Price Index representing host country inflation, Exchange rate of Indian Rupee in terms of US$ (ER)), and foreign country economic factors (Monthly Producer Price Index of US representing foreign country inflation, Monthly rate of US 3-month T-bill representing interest rate in US (USTBR)) for the determination of net FII in economy. Also, there are studies which concentrated on trade openness for determining the levels of FPI in the economy. Ekeocha et al. (2012) examined that Nigeria had a positive long-run relationship with market capitalization and degree of trade openness.

Following are the research gaps: (a) In the above-mentioned literatures, the impact of global liquidity has not been considered for the study. (b) None of the existing literature focuses different segment of the equity index (like large, mid and small cap) separately. (c) Many of the studies have made FPI net as indicator for inflow. However, the present paper explicitly differentiates between inflow and net. FPI net is residual after deduction of FPI outflow from FPI inflow. Thus, FPI net as timeseries has two independent trends of two different timeseries i.e. FPI inflow and FPI outflow super imposed into it. (d) Existing literatures lack in showing comprehensive analysis of the effect of FPI on key indicators of India (e) Except for Kaur and Dhillon (2010), none of the study considers a comprehensive set of macro-economic variables taken together to determine the impact on FPI. This paper chooses most relevant Indian macro-economic variables in the context of the present problem. (f) Barring few existing papers, majority of authors have developed their model on basis of quarterly or yearly data. This paper analyses on monthly timeseries data to extract a more granular view of the relationship. The gap of the study specifies the liquidity along with the variable description adjusted with FPI in India has not been considered rigorously. From here, the objectives of the study are framed as to find the impact of the macroeconomic indicators on FPI in India. Also, the objective includes the long run as well as short term relationship among the variables.

3. Sources of Data:

The paper considers following monthly time series data – namely, FPI, Nominal Exchange Rate(NER) – Indian-Rupee/US Dollar, Effective Fed Fund Rate(EFFR), Index of Industrial Production(IIP), S&P Bombay Stock Exchange (BSE) 500 Large Cap Close values(LC), S&P BSE 500 Mid Cap Close values(MC), S&P BSE 500 Small Cap Close values(SC), Money supply(M3), Short term Interest Rate(SINT), and Trade Openness(TO). The study is spanning over the period May 2006 – May 2017. The data have been gathered from several sources – (a) FPI data is collected from archive of Central Depository Services (India) Limited , whereas EFFR is considered from Federal Bank of Louiis .c) Indian export, import and IIP is extracted from RBI hand book of statistics. TO is calculated indirectly from these three timeseries data as explained below. (d) All other monthly time series data on India is collected from Monthly Economic Indicators (Main Economic Indicators) stat-database of the Organisation for Economic Co-operation and Development (OECD).

The description of the independent variables/regressors are as follows: Effective Fed Fund Rate(EFFR) is proxy variable of the measurement of global liquidity. EFFR is the interest rate at which depository institutions trade federal funds (balances held at Federal Reserve Banks) with each other on overnight basis. Based on the statement of Bank for International Settlements report 2011, the term, global liquidity is categorised into two parts: Official Liquidity, which is dealt by the respective Central banks of the countries, and, the other is Private Liquidity, which is broadly categorised as Interbank Lending. As FPI is mobilised by Foreign private and Institutional Investors, we consider interbank rates as EFFR in our study. IIP is proxy variable of the measurement of Indian economic growth rate. S&P BSE 500 Large Cap Close values (LC), S&P BSE 500 Mid Cap Close values (MC), S&P BSE 500 Small Cap Close values (SC) are used for the measurements of performance of capital market. The S&P BSE 500 Large Cap is designed to represent the large-cap segment of India's stock market. The definition of trade openness (TO) taken here for the study is the value of the summation of export and import divided by IIP in India. Money supply(M3) in India is the amount of money base that is required for the current economy. Nominal Exchange Rate(NER) shows the direct exchange rate (One unit of foreign currency expressed in

terms of local currency) between Rupees and Dollar. Short term Interest Rate(SINT) are at which short term funds are borrowed and lent in the Indian money market within less than 24 hours. Foreign Portfolio Investment equity inflow (FPI) is the dependent variable in the study. taken as further study. Because of the different scales of the individual time series data, series are transformed through natural logarithmic scale. Hereon, such logarithmic rescaled series will be represented as L (series name / indicator).

4. Econometric method and empirical results

4.1 Unit Root Tests:

Table 1: Result of Unit Roots at Level:

	Aug. Dicky F	Tabular Values (5 percent)	Phill P		Dicky F GLS	Tabular Values (5 percent)
Var	t-Stat		t-Stat	5%	t-Stat	
L(FPI)	-4.085778*	-2.883579	-6.893822*	-2.883408	-1.896413	-1.943304
L (EFFR)	-1.845818	-2.883579	-1.758940	-2.883408	-0.671796	-1.943285
L(IIP)	-4.229745*	-2.883579	-9.016786*	-2.883408	-3.265848*	-1.943285
L(LC)	-1.397404	-2.883408	-1.611797	-2.883408	0.276306	-1.943266
L(MC)	-1.516066	-2.883579	-1.298330	-2.883408	-0.771725	-1.943285
L(SC)	-1.831037	-2.883579	-1.750296	-2.883408	-1.419564	-1.943285
L(M3)	-6.927383*	-2.883930	-12.03496*	-2.883408	-0.229943	-1.943406
L(NER)	-0.690824	-2.883579	-0.385097	-2.883408	-0.158925	-1.943285
L(SINT)	1.943096	-2.884109	0.118589	-2.883408	2.461942*	-1.943344
L(TO)	-11.90971*	-2.883408	-11.92475*	-2.883408	-11.95337*	-1.943266

* Result is significant at 5 percent level

Table 2: Result of Unit Roots at 1st Diff:

	Aug. Dicky F		Phill P		Dicky F GLS	
Var	t-Stat	5%	t-Stat	5%	t-Stat	5%

L (EFFR)	-7.396941*	-2.883579	-7.369541*	-2.883579	-7.383292*	-1.943285
L(LC)	-10.12116*	-2.883579	-10.20125*	-2.883579	-10.15771*	-1.943285
L(MC)	-9.159823*	-2.883579	-9.240342*	-2.883579	-1.829849	-1.943344
L(SC)	-9.399541*	-2.883579	-9.518895*	-2.883579	-1.667160	-1.943344
L(NER)	-8.242580*	-2.883579	-8.235833*	-2.883579	-7.449000*	-1.943285
L(SINT)	-8.492261*	-2.884109	-16.61214*	-2.883579	-7.977426*	-1.943344

* Result is significant at 5 percent

4.2 Result for Cointegration:

The co-integration equation applied in this study is as follows:

$$\Delta \ln Y_t = \alpha + \sum_{i=1}^{n} \beta_i \, \Delta \ln Y_{t-i} + \sum_{j=0}^{n} \gamma_j \, \Delta \ln X_{t-j} + \sum_{k=0}^{n} \phi_k \, \Delta \ln Z_{t-k} + \sum_{l=0}^{n} \rho_l \, \Delta \ln A_{t-l} + \sum_{m=0}^{n} \omega_m \, \Delta \ln B_{t-m} + \sum_{p=0}^{n} \delta_p \, \Delta \ln C_{t-p} + \sum_{q=0}^{n} \mu_q \, \Delta \ln D_{t-q} + \sum_{r=0}^{n} ¥_r \, \Delta \ln E_{t-r} + \sum_{s=0}^{n} \eta_s \, \Delta \ln F_{t-s} + \sum_{u=0}^{n} \Omega_u \, \Delta \ln G_{t-u} + \gamma_1 \ln(Y_{t-1}) + \gamma_2 \ln(X_{t-1}) + \gamma_3 \ln(Z_{t-1}) + \gamma_4 \ln(A_{t-1}) + \gamma_5 \ln(B_{t-1}) + \gamma_6 \ln(C_{t-1}) + \gamma_7 \ln(D_{t-1}) + \gamma_8 \ln(E_{t-1}) + \gamma_9 \ln(F_{t-1}) + \gamma_{10} \ln(G_{t-1}) + e_t$$ ***Equation (1)***

Where all the variables employed here are ln(.) or Logarithmic operator.

Y_t = Foreign Portfolio Investment in equities (FPI)
X_t = Effective Federal Fund Rate(EFFR)
Z_t = Index of Industrial Production(IIP)
A_t = Large Cap index(LC)
B_t = Mid Cap Index(MC)
C_t = Small Cap Index(SC)
D_t = Large Time Deposits of money(M3)
E_t = Nominal Exchange Rate(NER)
F_t = Short Run Interest Rate(SINT)
G_t = Trade Openness (TO)

Following the description of the variables, the result of cointegration is shown in table 3.

Table 3: Results from ARDL Bound Test

Dependent Variable	Independent Variables	Calculated F Statistic	Critical Values at 1% level at I(0) and I (1) level	Critical Values at 5 % level at I(0) and I (1) level	Critical Values at 10% level	Decision
FPI	EFFR, IIP, LC, MC, SC, M3, NER, SINT, TO	11.37309*	2.5 3.68	2.04 3.08	1.8 2.8	Cointegration

The result shown in table 3 proves the existence of cointegration between the variables. The analysis of long run model of FPI, EFFR, IIP, LC, MC, SC, M3, NER, SINT, and TO is expressed in the next table.z

Table (4): Long Run Analysis:

Var	Coeff	t-stat	Prob
Const.	0.734816	0.532518	0.5955
Ln(EFFR)	0.010352	0.159589	0.8735
Ln(IIP)	0.116844	1.159840	0.2487
Ln(LC)	**2.965742****	**4.180247**	**0.0001**
Ln(MC)	**-2.169518***	**-1.730678**	**0.0864**
Ln(SC)	1.005207	1.220094	0.2251
Ln(M3)	-0.759528	-1.551514	0.1238
Ln(NER)	**1.013712***	**1.876013**	**0.0634**
Ln(SINT)	**-0.156746***	**-1.730761**	**0.0864**
Ln(TO)	0.079439	1.227937	0.2222

** indicates significance at 5% level, * indicates significance at 10% level

The estimated coefficients of the long run equation show positive and negative values. The long run impacts of Global Liquidity, Index of Industrial Production, Small Cap Index, and Trade Openness on FPI are positive but insignificant. The impact of Nominal Exchange Rate on FPI is also positive, meaning that domestic currency depreciation would bring FPI inflow in India. This result is significant at 10% level, but not at 5%. The effect of long term money supply is negative and insignificant. Also, the effect of Mid Cap Index is negative, meaning that the lesser value of index of Mid Cap, the higher will be FPI inflow. It is significant at 10 % level but not at 5%. Short Run Interest Rate gives a negative impact on FPI at 10% significance level. Higher is the percentage of interest rate (less than twenty-four hours), the lesser will be FPI. Finally, the coefficient of Large Cap Index is positive with statistically significant results. It describes the fact that, higher indexation values of Large Cap funds in India would bring FPI into India. According to Odhiambo (2009) and Narayan and Smyth (2008), the short run parameters are calculated by estimating Error Correction Model associated with the long run estimates, which is determined by F statistic and the lagged Error Correction Term(ECT).

Table (5): Results of Eq. (3), ARDL (1, 3, 3, 4, 2, 0, 0, 0, 0, 0)

Variables	Coefficients	t- Statistic	Probability
Δ (ln (EFFR))	-0.308175**	-1.991166	0.0490
Δ (ln (EFFR (-1)))	0.401610**	2.403913	0.0180
Δ (ln (EFFR (-2)))	-0.525142**	-3.466938	0.0008
Δ (ln (IIP))	-0.132962**	-2.510932	0.0136
Δ (ln (IIP (-1)))	0.002289	0.033322	0.9735
Δ (ln (IIP (-2)))	0.115936**	2.163334	0.0328
Δ (ln (LC))	1.057866**	2.714988	0.0077
Δ (ln (LC (-1)))	-1.818549**	-4.481310	0.0000
Δ (ln (LC (-2)))	-1.165068**	-2.750275	0.0070
Δ (ln (LC (-3)))	-1.144558**	-2.835323	0.0055
Δ (ln (M3))	6.469598**	3.175927	0.0020
Δ (ln (M3(-1)))	7.136314**	3.283793	0.0014
Δ (ln (MC))	-2.101805*	-1.687739	0.0944
Δ (ln (SC))	0.973833	1.202151	0.2320
Δ (ln(NER))	0.982072*	1.849017	0.0672
Δ (ln(SINT))	-0.151853*	-1.704517	0.0912
Δ (ln(TO))	0.076959	1.225766	0.2230
ECT (-1)	-0.968789**	-0.968789	0.0000

** Result is significant at 5 percent level, * Result is significant at 10 percent level

Table 6: Results of Diagnostic Tests

		Probability
Breusch-Godfrey Serial Correlation LM Test	F – Statistic: 1.403139	0.2504
Ramsey RESET Test	F- Statistic: 1.523617	0.2198
Heteroskedasticity Test: Breusch-Pagan-Godfrey	F – Statistic:0.781200	0.7417

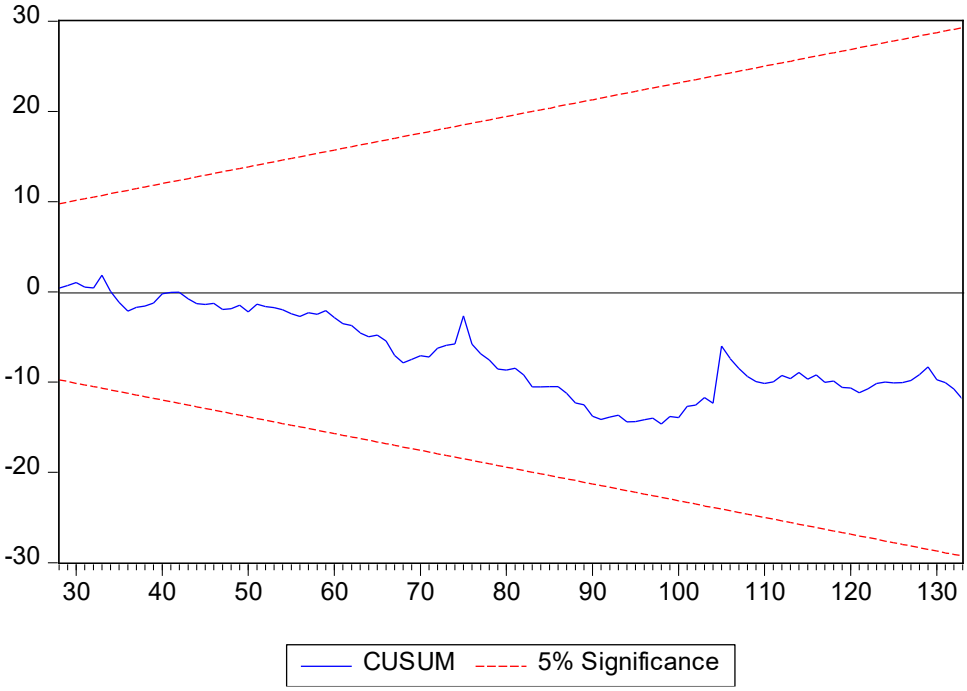

Fig. 1. Plot of CUSUM test for Equation -3 (coloured)

Table 5 shows the error correction term that is significant, implying a chance of 97 percent for the disequilibrium to be corrected in short run. The explanation of the short run coefficients are as follows: The overall Impact of global liquidity on FPI is negative and significant. It means that decrease in global liquidity encourages FPI to move to Indian capital market. The impact of growth rate on FPI is also negative and significant, explaining that decrease in growth rate of Indian economy bring FPI in India. The large cap index will also promote FPI inflows in the country. The similar effect can be found for Mid Cap Index and Short Run Interest rate. They both show a negative and significant impact on FPI (at 10% significance level). The effect of long run money supply is positive at 5 % level of significance. The effect of Nominal Exchange Rate is positive at 10 % significant level. It describes that a depreciation in nominal exchange rate positively influences FPI inflow in India. Apart from these, Small Cap Index and Trade Openness in short run give positive impact on FPI inflow, but the result is insignificant. The model also passes through all the diagnostic tests: The Autocorrelation check is tested through Breusch-Godfrey Serial Correlation LM Test. The Ramsey RESET test also suggests that the model is well specified. Heteroskedasticity Test is considered by testing Breusch-Pagan-Godfrey test.

Cumulative Sum (CUSUM) is tested at the next level to check the stability performance of the model. The result is shown in figure 1.

4.3 Testing Directional Causality

The checking for short run granger causality is known as Granger causality test. If we find Granger causality in only one direction, we can prove that the case for "real" causality is stronger if there is no instantaneous causality. (Sørensen, B. E, 2005).

$Y_t = a_0 + \sum_{i=1}^{n}(a_i \times y_{t-i}) + \sum_{j=p}^{q}(b_j \times x_{t-j}) + E_t$ ⋯⋯⋯ ***Equation (2)***

And $x_t = a_{01} + \sum_{j=1}^{q}(b_{j1} \times x_{t-j}) + \sum_{i=r}^{s}(a_{i1} \times y_{t-i}) + E_{1t}$ ⋯⋯⋯ ***Equation (3)***

Table (7): Analysis of Granger Causality Test

Independent Variables	F- statistic Value (Granger Causality)- Dependent Variable- FPI	Direction of Causality
FPI	-	
EFFER	0.76539	NA
IIP	4.73726**	IIP- FPI
LC	15.5519**	LC- FPI
M3	3.54807**	M3-FPI
MC	13.6626**	MC-FPI
SC	10.8844**	SC-FPI
NER	3.10259**	NER-FPI
SINT	2.52871*	SINT-FPI
TO	0.10755	NA

**** Result is significant at 5 percent level**

*** Result is significant at 10 percent level**

Table (8): Result of Granger Causality

Variables for Dependence	F- statistic Value (Granger Causality)-Independent Variable- FPI	Direction of Causality
FPI	-	
EFFER	0.06326	NA
IIP	2.22959	NA
LC	0.68632	NA
M3	0.65738	NA
MC	0.23966	NA
SC	0.24170	NA
NER	1.45840	NA
SINT	0.58668	NA
TO	0.03387	NA

The above result (Table 7) explains the results of Granger Causality. In short run, the independent variables, such as, Index of Industrial Production(IIP), Large Cap Equity Index(LC), Long run money supply(M3), Mid Cap Equity Index(MC), Small Cap Equity Index(SC), Nominal Exchange Rate(NER), and Short Run Interest Rate(SINT) granger cause FPI at 5% and 10% level. Evidently, the granger cause, here, is unidirectional in nature. While, FPI cannot granger cause the other variables(shown in Table 8).

CONCLUSION:

The paper finds out the relationship of Indian and global macroeconomic variables with FPI inflow in India. Also, the existence of short run causality from the independent variables proves the importance of their influence on the 'Hot Money' (Yahya Waqas, et al.,2015), Although the variables play an important role to determine FPI inflow, the impact is not significant the other way around. FPI inflow is not significant enough to stimulate the macroeconomic variables. This proves that policy which is relevant to Asian countries regarding FPI may not be consistent with European countries. Foreign Portfolio Investment is supportive tool for the development of emerging market economies (Stijn Claessens,1995). It diversifies the external sources of finance, reduces host country's cost of capital, strengthen the performance of the stock market. By lowering the capital flow barriers further, it can bring the higher

volume of Foreign Capital inflow which in turn will impact favourably in the economy (Stijn Claessens,1995).

In our analysis, the pattern of FPI equity inflow has not shown any trend. The data chosen in this study reveals that there is no deterministic pattern in the inflow of FPI in India from the period of 2006 to 2017. The further scope of the study, hence, may be to find out the reasons behind those indeterministic trends in FPI inflow in India. If we can detect the reasons behind this scenario, policies may be created on clearing those imperfections in Indian Capital Market by which proper impact of FPI can be observed in future.

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