Determinants of Foreign Portfolio Investment: Evidences from China

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Abstract—The study attempts to examine the relationship between foreign portfolio investment and its determinants. As Foreign Portfolio Investment (FPI) affects the real economy through stock market, so the research study analyzes the impact of FPI on the national economy of China. Regression was applied in order to see the relationship with the dependent variable. Export and Foreign exchange reserve all of the variables were significant

Keywords—Market Capitalization; Portfolio Investment; competitive market structure

I. INTRODUCTION

Even though it is known that capitalizing globally internationally offers prospects for broadening, the investors completely don’t use the opportunities they have. The encompassing of transfer of financial assets i.e. investments in bonds, notes, money market instruments and financial derivatives for the sake of earning profit alright the overseas referred to as Foreign Portfolio Investment. Regarding economy politics and finance specifically since the 1980’s prominence of foreign investment has amplified for the reason that liquidity that occurred comprehensively and the liberalization associated economically (Beck et al., 2002). Foreign Portfolio Investment has pretentious home countries regarding currency, the interest rates and economic stability as it is to be considered as an appropriate foundation of economic progression and financial fluidity (Beck et al., 2005). There can be a direct or indirect contribution to the development of capital of foreign portfolio investment. FPI is not particularly associated to any firm- or specific to a certain sector. It can be used by domestic enterprises and foreign-owned enterprises. By swaying the quantity of finance obtainable for local enterprises, it can enrich their effectiveness. Through addition to the liquidity of domestic capital markets FPI can also bring additional profits, thus preferring its expansion. This paper will focus on the impact of foreign portfolio investment and its determinant on the growth of China.

II. LITERATURE REVIEW

Regarding the foreign investment flows understanding it is vital for the one who associated for designing the policies along with the forecasters and researchers, this is specifically refers to the situation for the developing markets. Investment flows make up a significant part of the balance of outflows, and the hefty volatilities in such flows, among emerging economies, kindled a number of balance-of-payment catastrophes over the past years. Corporate governance can also be led by FPI, because from different companies they will need more pellucidity and revelation by the foreign investors. These sorts of developments regarding the local capital markets can enhance the quantity of risk capital accessible for new enterprises.

According to a study by Erol (2000) and Pazarlıoglu and Gulay (2007) proposed that foreign capital contain many benefits like input to the countries in which they going to invest, capital accretion and manufacturing ability, innovative know-how and awareness, as far as the country’s balance of payments concern it also put contribution to its improvement, new sales and marketing techniques, innovative opportunities for new businesses, and high tax returns. The host country also been getting affected regarding the country’s production, employment, income, balance of payments and always its development by the introduction of foreign capital. Another study by Siamwalla et al (1999) preach that in order to motivate the western investors to relocate their funds to money and capital markets to developing markets because of moderately low yields in industrial countries unruffled with striking economic growth and striking returns in unindustrialized economies. He also suggested that the trend towards trade globalization, international financial connexions and extension of production bases overseas interconnected well with the international flow of portfolio investment. Foreign Portfolio Investment as comparison to advancing countries shifted to the developing countries before the 2008 financial predicament. The earlier literature shows that FPI flows have a long term and positively strong relationship with market capitalization and trade degree of openness in the case of Nigerian market. There is also a positive or negative impact on capital flows to the specific country in which investment with the neighboring countries. The one who are willing to invest in any country are always very much fretful to the protection of their funds. As far as the return associated to any portfolio is mainly dependent on the political situation of that host country. Because the investors always prefer to shift their funds to the countries having more stability due to which they can rely on the maximum return for their investment. The Impartial individualities of the capital market of the countries in which investments going to be made play a crucial role in the process of decision making for the apportionment of funds in the country. However on the other side foreign portfolio equity stakeholders keep in view plentiful aspects similar to, size, trading cost and market liquidity while capitalizing overseas. They always prefer to invest in larger more liquid and more growing markets and they also focus on the minimum interchange cost. There are different prevailing factors in the development of capital flows like maturity associated to the population, money; institution and nonconformity from uncovered interest parity. As far as the trading among the countries, common linguistic and religion between the two countries have always an optimistic influence on the FPI prosperities of both debt and equity.
Mainly the foreign investors’ focus on the maximum profitability by investing in the abroad country, for this purpose they relatively focused on the stability of the past country. For this they conduct an in-depth research regarding the past economic and political situations of any country in which they going to invest, with keeping in mind and focusing on the previous year outcomes or situations they can make the predictions for the future outcomes.

Another study by Agarwal (2006) in which he examined determinants of FPI and its impact on six developing Asian countries. The result showed that among the other entire variables inflation rate, real exchange rate, index of economic activity and the share of domestic capital market in the world stock market capitalization were the significant determinants of FPI. The first variable has a negative coefficient while the last three variables possess positive coefficients. Foreign direct investment, total foreign trade and current account deficit variables are found to be statistically insignificant. Concerning the impact of FPI on the national economies, it is observed that the index of economic activities and inflation rate show a rising tendency. Foreign exchange reserves of any country also highlight the monetary stability of the country. The investors can take decisions on the basis of data regarding the financial reserves of any country. They can mainly focus on where the investment can be made and from where they able to earn the maximum revenue. As far as the researches for FPI major studies are on the developing countries, very few of the studies focused on the developed nations. In this study we will focus on china by keeping in view the determinants associated to FPI to see the impact on china’s economy. The study conducted by Garg & Dua (2014) in which they revealed that, the portfolio equity flows concern to the countries that are in developing stage are augmented five times during the period of five years from fourteen billion dollars to sixty seven billion dollars.

The determinants from the previous studies on which researchers focused were Real exchange rate, Inflation rate, rate of return, market capitalization and others. These researches were mainly focused on the Nigerian market.

**Equation**

Following the literature discussed previously, the determinants of FPI inflow can be specified as shown in the relation below

\[
FPI = \beta_1 + \beta_2 GDPcap + \beta_3 CPI + \beta_4 GDPR + \beta_5 TO + \beta_6 CAB + \beta_7 MC + \beta_8 FER + \beta_9 EXP + U1
\]

**Where**

- **FPI**: Foreign Portfolio Investment
- **GDPcap**: GDP per capita
- **CPI**: Consumer Price Index
- **GDPR**: Real Gross domestic Product
- **TO**: Trade Openness
- **CAB**: Current account balance
- **MC**: Market capitalization
- **FER**: Foreign Exchange reserve
- **EXP**: Exports

### III- ACCRONYMS

**Foreign Portfolio Investment**: Securities and other financial assets passively held by foreign investors. This type of investment is relatively fluid; subject to the volatility of the market invested in, this includes short-term positions in financial assets of international market.

**GDPcap**: A rise in per capita GDP signals growth in the economy and inclines to interpret as an upsurge in efficiency, higher per capita GDP being interpreted as having a higher standard of living. It is premeditated by either adding up income of each individual during the period or by adding the value of all final goods and services produced in the country during the year.

**CPI**: It is a statistical guesstimate of the variation in price of goods and services swallowed for consumption. The CPI is calculated by calculating the prices of a sample of deputees’ items for a definite retro of time.

**GDPR**: Through this we able to show the economic output of country subtracting the effect of inflation. In order to calculate real GDP is by divining the deflator trough the nominal GDP. This will let us know that how much the economy is producing. It also used to calculate the economic growth of economy.

**TO**: It can be referred as the economy’s intensity of trade. International trade openness is a network due to which FDI, capital inputs, goods and services drift to the host countries. It basically refers to as the orientation of a given country’s economy whether outward or inward. It is a measure of economic policies that both limit or offer trade between countries.

**CAB**: The balance of the current account let us know the situation of a country either having deficit or surplus. It necessarily does not mean that the country is weak if the current account balance shows deficit. As far as china concerns there is no deficit for the current account balance. In order to calculate current account balance data of few variables needed as exports of goods and services, imports of goods and services, net income abroad and net current transfers.

**MC**: It is referred as market value of any company’s shares that are outstanding. In order to calculate market capitalization we need to take the stock price or the share value and multiply it by the total numbers of share outstanding.

**FER**: these are normally referred as the assets or foreign money held by the central bank or any other monetary authority. If central bank implements monetary policy than quantity of FER can change.

**EXP**: It occasionally referred to as the country’s balance of payments. Net exports are basically the difference between the country’s total value of imports and exports. It can be negative or positive depends on whether country imports more or exports more.
IV- HYPOTHESIS

H₀⁻ GDPR significantly not have an impact on the Foreign Portfolio Investment
H₁⁻ GDPR significantly have an impact on the Foreign Portfolio Investment
H₀⁻ CPI significantly not have an impact on the Foreign Portfolio Investment
H₂⁻ CPI significantly have an impact on the Foreign Portfolio Investment
H₀⁻ GDPR significantly not have an impact on the Foreign Portfolio Investment
H₁⁻ GDPR significantly have an impact on the Foreign Portfolio Investment
H₀⁻ TO significantly not have an impact on the Foreign Portfolio Investment
H₁⁻ TO significantly have an impact on the Foreign Portfolio Investment
H₀⁻ CAB significantly not have an impact on the Foreign Portfolio Investment
H₁⁻ CAB significantly have an impact on the Foreign Portfolio Investment
H₀⁻ MC significantly not have an impact on the Foreign Portfolio Investment
H₁⁻ MC significantly have an impact on the Foreign Portfolio Investment
H₀⁻ FER significantly not have an impact on the Foreign Portfolio Investment
H₁⁻ FER significantly have an impact on the Foreign Portfolio Investment
H₀⁻ EXP significantly not have an impact on the Foreign Portfolio Investment
H₁⁻ EXP significantly have an impact on the Foreign Portfolio Investment

V- METHODOLOGY

The linear regression will be applied in order to see the relation and impact of determinants on the dependent variables. Linear relationships are the simplest non-trivial relationships that can be fictional. The linear regression is suitable because the "true" relationships between our variables are often at least roughly linear over the range of values that are of interest to us and even if they're not, we can often transmute the variables in such a way so that he relationships can be linearize. A tailored linear regression model can be used to recognize the association among a single forecaster variable and the rejoinder variable, when all the other predictor variables in the model are static. The regression was applied to observe the relationship of each variable as far as the FPI concerns. We will be able to aware from the results that in future where the particular country has to put more efforts. Yearly data of GDP per capita was used whereas; quarterly data was used for Current account balance and GDP. Actually simple linear regression in parametric statistics that is usually used for investigating reaction of a mean variable Y which vicissitudes as per the scale of a mediation variable X. It formulate the origin for one or more vital forms of inferential statistics analysis. In a regression analysis the variation of Y values around the regression line is a measure of how well the two variables X and Y interact. This method of apportioning the distinction is normally recognized as the variance analysis.

VI- DATA SOURCES

Secondary method of data collection was adopted in this study. This method necessitates attaining the mandatory data from the archives of institutions that gather and publish data or statistics as part of their tedious onuses. We obtain our data from wind and Bloomberg global data sources for the time period from January 2011 to December 2014.

VII. RESULTS AND ANALYSIS

The analysis was in detailed performed according to all selected variables. The variables were sorted out from the previous studies. Each variable represented the true picture of overall economy. The data was dispersed as far as the few variables and also uniformity was missing among the variables but data was collected as available.

Detailed analysis were performed and different tests were applied in order to observe the strong relationship between the independent and dependant variables.

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<th>Source</th>
<th>SS</th>
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<td>8</td>
<td>2813.0514</td>
<td>F(  8,    28) =    4.29</td>
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<tr>
<td>Residual</td>
<td>18380.2184</td>
<td>28</td>
<td>656.65482</td>
<td>R-squared = 0.5504</td>
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<tr>
<td>Total</td>
<td>40956.8355</td>
<td>36</td>
<td>1136.0321</td>
<td>Root MSE = 25.624</td>
</tr>
</tbody>
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| FPI | Coef. | Std. Err. | t  | Pr(>|t|) | [95% Conf. Interval] |
|-----|-------|-----------|----|---------|---------------------|
| GDPcap | 0.0134572 | 0.0044338 | 3.04 | 0.005 | 0.003748 | 0.025595 |
| CPI | -14.18337 | 9.231678 | -1.54 | 0.136 | -33.09361 | 4.726885 |
| GDP | 53.25714 | 16.97065 | 3.14 | 0.004 | 18.49436 | 88.01995 |
| TO | -331.855 | 274.4774 | -1.20 | 0.239 | -694.091 | -65.6191 |
| CAB | 0.004821 | 0.003529 | 2.50 | 0.019 | 0.001550 | 0.00805 |
| MC | 6.4448 | 2.190824 | 3.03 | 0.005 | 2.15512 | 11.33461 |
| FER | 0.030464 | 0.047326 | 0.64 | 0.524 | -0.006292 | 0.007724 |
| Exports | 0.071563 | 0.055959 | 1.29 | 0.207 | -0.042051 | 0.185637 |
| cons | -510.9155 | 289.5955 | -1.76 | 0.089 | -1104.125 | 82.29403 |

A simple linear regression established that market size, country conditions, liquidity, trade openness and market capitalization could statistically significantly predict Foreign portfolio investment for China, F(8, 28) = 4.29, p =
and these variables accounted for $R^2=55\%$ of the explained variability in Foreign portfolio investment.

- **Trade openness** is statistically significant as $P$-value $0.05>0.02$ ($H_0$ rejected).

- **Market size** (GDP/Capita) is statistically significant as $P$-value $0.05<0.005$ ($H_0$ rejected).

- **Country condition** (GDP Growth rate & Exports) where GDP growth is statistically significant as $P$-value $0.05>0.004$ but export is insignificant at $P$-value $0.05<0.2$ ($H_0$ partially rejected).

- **Liquidity** (Foreign exchange reserve) is statistically insignificant at $P$-value $0.05<0.524$ ($H_0$ Accepted)

- **Risk** (external debt) is significant at $P$-value $0.05>0.019$ ($H_0$ rejected) Market capitalization is significant at $P$-value $0.05>0.005$ ($H_0$ rejected)

**RECOMMENDATIONS**

The result from the analysis reflects that all of the variables were significant except FER and Exports. The authority referred as government has to take convinced steps and project firm strategies in order to enhance the FPI. This will also dominate others depending on the circumstances; the effect of exchange rate reduction on FPI and by leeway, also on the gross domestic investment which is capital creation would have been elucidated. Further research can be focused with an observation of FPI determinants for the cross country comparison in order to analyze the impact on FPI in the developed countries as a whole. A set of policy lessons can be deduced from the results reported in the preceding section, chief among which is the need to moderate, through a combination of a carefully thought out and assiduously implemented monetary and fiscal policies, the rate of foreign exchange. As far as the sustainability of Foreign Portfolio Investment and to achieve other objectives of the government which contain macroeconomic factors concerns. There is the need for greater foreign contribution in the stock market which could be accomplished by greater candidness. There should be investment friendly policies designed by the concerned authorities.

**References**