

DO MACROECONOMIC VARIABLES IMPACT NUMBER OF IPO IN INDIA?

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Abstract:

Capital market plays a very important role in channelizing the investment. Capital market in India is prone to movements of the economy or the factors present in the economy. The study has been carried out to see whether Bank rate and Stock Index Return impact number of IPO in India or not. The study has used ARDL after checking the stationary of the data. The results revealed that the primary market is prone to changes in bank rates and stock index returns.

Introduction:

Capital Market of any economy is very crucial for the growth of the economy. Capital market not only provides fund to the companies serves as an investment alternative for the investor. In India, capital Market is controlled by Securities Exchange Board of India (SEBI). Earlier Controller of Capital Issue used to operate the market, but in 1992, CCI was abolished and SEBI was given special power to protect the interest of the investor and build a robust infrastructure

for smooth capital formation. Capital Market has been categorized in to two main markets – primary and Secondary market. Primary market is the place where securities are born or originated. It helps in issuing securities for the first time. Secondary market is the one where already issued securities are traded. Every Capital market is impacted by the economic factors available in the country. These factors are prevalent in the economy and affect not only a firm but the industry as a whole. These factors are known as macroeconomic variables. These variables impact firms either positively or negatively; either significantly or insignificantly.

Literature Review:

A research was conducted by La Porta, Lopez-De-Silanes, Shleifer and Vishny (1997) on analyzing the impact of economic conditions on the number of Initial public offering. They conducted this study considering data of 49 countries. All the countries considered for this research were emerging economies. The variables they considered were the quality of law enforcement, which they said is highly correlated with the level of GDP per capita. The results of the study showed a positive correlation between GDP and number of IPOs and a statistically significant impact of GDP growth rate on number of IPOs in specifications controlling legal origin. The coefficient results indicated that 1 percent change in GDP growth rate would result in .2 percent change in the number of IPOs so it concluded that GDP growth has a positive influence on number of IPOs in the country. It concluded that if the country's GDP is growing than the number of IPO activities in the economy would be more.

In another study by Chang(2009) on studying the impact of macroeconomic variables on the number of IPOs, significant relationships were confirmed. The macroeconomic variables used in the study were interest rates; GDP (Gross Domestic Product), inflation rate and the unemployment. It was indicated that these independent variables contain meaningful information

for investors investing in stock market. The study was conducted in China. Co integration and vector error corrections models were used to test the hypotheses formed. The results of this study supported a significant positive impact of industrial production on number of IPOs and a significant negative relationship between interest rates and the number of IPOs.

Anh L. Tran & Bang Nam Jeon (2011), also conducted a study to check the relationship between macroeconomic factors and IPO activities taking place in a developed economy like US for a period from 1970 to 2005. The study not only argued that the macroeconomic variables have an excellent impact on the number of IPOs but also stated that changes in macroeconomic variables also affect the net cash flows with the companies. The factors considered for the study were stock market performance and interest rates. For studying the factor, stock market performance, S & P 500 index was used and for studying the variable interest rates, Fed funds rate and the 10-year US Treasury bond yield were used. Econometric techniques like Vector Error Correct model (VECM) and Granger causality were the statistical tests used to study both the long term and short term relationship. The study concluded that there in an impact of macroeconomic variables on IPOs activities and the most dominating variable was S & P index i.e. stock market performance. According to the empirical results, it was concluded that if the stock market is performing well, than investors will feel confident about it and will invest more in the stocks thus resulting in more stock returns and more IPOs activities. The VEC model predicted the IPO activities in a good manner. The study could be used by policymakers too. The results also indicated a significant impact of Fed funds rate and the 10-year US Treasury bond (TB) yield on the amount of IPOs proceeds. A high interest rates prevailing in the US economy would result in a lower discount adjusted cash flows which in turn would result in low value of the companies. This would result in decreased IPOs activities. The impact of these macroeconomic variables on IPOs activities was proved for both long term and short term dynamics.

In another research on studying the influence of local macroeconomic variables on the number of IPOs, Rashid Ameer (2012) described that some of these variables have significant impact on the IPOs numbers. The study was conducted in an emerging economy, Malaysia for a period of 18 years from 1990 to 2008. The two main independent variables used in his study were interest rates and business cycle. Ameer argued that the central bank of a country can affect the IPOs activities through monetary policy. If the central bank increase the interest rate than the company's future cash flows have to be discounted at higher interest rates resulting in lowering the net cash flows of the companies. For studying business cycle, industrial production figures were used. The methods used in the study were VECM and Markov switching regression. The author confirmed a negative impact of interest rates on IPOs activities i.e. if the interest rates are low, IPOs activities would be high and vice versa. The study also concluded a positive relationship between business cycle and IPOs activities. This result was explained on the grounds that if the industrial production is high, companies need more capital to meet this increased production thereby increased number of IPOs.

A study was conducted in Sri Lanka by DAI & AWGCN to examine the long term dynamic relationship between IPOs activities and macroeconomic variables for a period of 27 years from 1989 to 2014. The period was considered with an intention to cover both very disturbed period of Sri Lanka and very peaceful environment after the civil war. For studying the dependent variable, IPO activities, three proxies were considered- number of IPOs per year, total IPOs proceeds, and Average IPOs proceeds. The independent variables considered for the study were Gross domestic product, Colombo consumer price index, 91 days interest rates, and exchange rate. Statistical tests used to check the hypotheses are Johansen cointegration test and Granger causality test. It could be concluded that Total Proceeds and Average Proceeds have long run

relationship with macro-economic variables. However, of Granger causality test results indicated insignificant relationship between total IPO proceeds and macroeconomic variables.

Research methodology:

Research Methodology provides the framework with which research is carried out. It provides a blue print for carrying out the research. It mainly focuses on selection of research problem, formulating objectives and finally testing the hypotheses to draw meaningful conclusion.

Statement of the problem:

Capital market is the most important component of any country. The way it performs shows the health of the economy. What factors impact these capital markets specially the primary market and in what manner is a question for concern.

Objectives:

1. To check whether interest rate affects the number of IPO In India
2. To check the influence of stock market return on number of IPO in India

Research hypothesis:

H01: There is no significant relationship between interest rate and number of IPO

H02: There is no significant relationship between stock market return and number of IPO.

Research Design: Research design is the blue print of the techniques and tools used to draw conclusion about the objectives undertaken. The research Design used is causal in nature as it is undertaken to see the relationship between number of IPO and bank rate & Stock index return.

Sample Size: The present study has been performed using data of number of IPO, bank rates and Stock Index return. Sample Size has been taken for 8 years starting from 2011-2018.

Data Collection: Data for number of IPO has been Collected from National Stock Exchange, for bank rate data has been taken from Reserve Bank of India, and for stock index return data has been taken from National Stock Exchange.

Descriptive Statistics:

Table 1 Results of Descriptive Statistics

	NIPO	BR	SIR
Mean	1.697917	7.618542	0.687573
Median	1.000000	7.750000	0.060926
Maximum	9.000000	10.25000	10.44958
Minimum	0.000000	6.000000	-0.898552
Std. Dev.	1.925561	1.246414	1.744318
Skewness	1.465598	0.083557	2.722623
Kurtosis	5.287905	1.481097	13.12847
Jarque-Bera	55.30566	9.339980	528.9463
Probability	0.000000	0.009372	0.000000
Sum	163.0000	731.3800	66.00703
Sum Sq. Dev.	352.2396	147.5870	289.0512
Observations	96	96	96

The descriptive statistics of the variables have been calculated and shown in Table 1. Results show that average number of IPO is 1.69 or 2 with a standard deviation of 1.92. The average number bank rate is 7.61% with a standard deviation of 1.24. The average stock index return is 0.68 with a standard deviation of 1.74.

The normality has been checked using Jarque Bera statistics shown in Table 1. It is clear from the table that the data is not normal for the variables taken for the study as the probability is significant which is less than 5% allowing us to reject the null hypothesis of data is normal.

Test of stationary: stationary is an important assumption of Time series analysis. The stationary of the data has been calculated using Augmented Dickey Fuller Test (ADF) at trend and intercept. The results have been displayed in Table 2. The results show that the data for NIPO and SIR was stationary at level where as the data for BR was non stationary. The data has been made stationary using first level of difference.

Table 2 Results of ADF Estimation

P Value of ADF	NIPO	BR	SIR
AT Level	0.0000	0.4985	0.0000
At First Difference	NR	0.0000	NR

Auto Regressive Distributive Lags: ARDL is a technique to determine whether long run relationship exist between the variables or not. The property of ARDL is the data should be stationary at different levels. Hence, we use ARDL as our data is stationary at level 1 and level.

Table 3 Results of Long Run ARDL

Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
SIR	0.244055	0.109909	-2.220524	0.0289
BR	-0.774206	0.149615	-5.174663	0.0000
C	7.776343	1.161235	6.696613	0.0000

Table 3 reflects the results of long run ARDL clearly indicates that there exist long run positive and significant relationship between SIR and NIPO and long run negative relationship between NIPO and BR.

Findings:

Our analysis helped us to reject the null hypothesis which stated that no significant relationship exist between variables. From the table 3, we can say, there exists a significant and long run relationship between the variables. Here, bank rate has a negative relation and Stock index return has a positive relation with the number of IPO.

Conclusion:

The study helped us to identify the factors present in the economy and seek their interaction with the number of IPO. The results obtained are in line with the literature review done.

Bibliography:

- ✓ Jeon, Bang & Tran, Anh. (2011). “The dynamic impact of macroeconomic factors on initial public offerings: Evidence from time-series analysis”. *Applied Economics*. 43. 3187-3201.
- ✓ Rashid Ameer (2012) “Macroeconomic factors and Initial Public Offerings (IPOs) in Malaysia”. *Asian Academy of Management. Journal of Accounting and Finance. AAMJAF*, Vol. 8, No. 1, 41–67, 2012
- ✓ Dayaratne, D.A.I. & Wijethunga, A.W.G.C.N.. (2015). Initial and After Market performance of Initial Public Offerings: New Evidence from Colombo Stock Exchange. *International Journal of Accounting & Business Finance*. 2. 14-27.
- ✓ https://nseindia.com/products/content/equities/indices/historical_index_data.htm dated 15 January’2019.
- ✓ <https://www.nseindia.com/products/content/ipos/ipos.htm>
- ✓ <https://m.rbi.org.in/scripts/WSSviewDetail.aspx?TYPE=Sections&PARAM1=4%0A>