# AN EMPIRICAL ANALYSIS OF MACRO ECONOMIC INDICATORS INFLUENCING INDIAN EXPORTS

Reema Monga & Sneha Chaudhry Assistant Professor, Gitarattan International Business School

# Abstract:

Exports are the most important elements for identifying the economic strength of any country but the exports are influenced by various factors which are also need to be understood in order to actually examine the economic growth of a country. The paper thus examines the export growth influenced by various macro-economic indicators (Gross Domestic Product, Foreign Direct Investment, Foreign Exchange Reserves, Balance of Trade, Consumer Price Index, Unemployment, Population, Exports, Imports, Unemployment and Population), using data from 2000 to 2017. The paper studies the relationship between exports and indicators by using multiple correlation, multiple regression and the future growth predictions are calculated through Compound Annual Growth Rate.

The paper concludes that the Indian exports are mainly affected by its Imports followed by the other indicators under study and in order to enhance Indian exports, the change in policies should be made in accordance with them.

Keywords: Exports, GDP, Macro Economic Indicators, etc.

## Introduction

Economy is the large set of interrelated production and consumption activities that aid in determining how scarce resources are allocated also known as an economic system which is further broken into two major areas of focus, micro-economics and macro-economics. Macroeconomics can be used on a national scale to a global scale. The Macroeconomics is a branch of the economics field that studies how the aggregate economy behaves. In macroeconomics, a variety phenomena is economy-wide of thoroughly examined such as inflation, price levels, the rate of growth, national income, gross domestic product and changes in unemployment. It focuses on trends in the economy and how the economy moves as a whole. Macroeconomic indicator is a piece of economic data that is used by analyst to interpret current or future investment possibilities or to judge the overall health of an economy. Economic indicators can be anything the investor chooses, but specific pieces of data released by the government and nonorganizations profit have become followed. widely Macroeconomic indicators are economic statistics

which are released periodically by Government agencies and private organisations. These indicators provide insight into the economic performance of a particular country or region and therefore can have a significant impact on the economy. For the purpose of the study following ten major influencing macroeconomic indicators were selected (Gross Domestic Product, Foreign Direct Investment, Foreign Exchange Reserves, Balance of Trade, Consumer Price Index, Unemployment, Population, Imports, Unemployment and Population) based on the literature reviewed. An attempt has been made to identify the relation and impact of these selected indicators on the exports of the Indian economy.

## Literature Review

Veeramani (2007) studied Sources of India's export growth in pre and post reform period providing a brief view of the pace of India's export growth in pre-liberalization period (1950-1990) and post-liberalisation period (1991-2005) on the bias of world trade effect, market composition and commodity composition. The study concluded that the pace of growth was increased due to world demand and real effective exchange rate after 1991.

Kumari (2010) researched the Effect of Economic Indicators on Export Performance of India in Pre and post-Liberalisation period (1986 to 2011). She studied the relationship between exports and various economic indicators: GDP, Imports, Per Capita Net National Income (PCCNI), Balance of Payment, Exchange Rate and Industrial Production. Diversification of India's exports is depicted through the export import ratio. It was found that the exports are mainly affected by three indicators: GDP, Imports AND PCCNI and the change in policies should be made in accordance with them.

Arize & Malindretos (2012) studied the impact of Foreign Exchange Reserves on Import Demand in Asia using various techniques like the dynamic error-correction model, econometric techniques organized around Johansen, Harris-Inder and Hansen co- integration analyses; fully modified OLS, dynamic OLS and ARDL to estimate long-and-short run demand elasticity's it was found that an increase in foreign reserves may have a positive effect on the demand for imports since it relaxes the excess demand liquidity restriction. It was concluded that the evidence points to the non stationary of all variables involved in the model. In addition, further test results suggest that there is a unique, statistically significant long- term equilibrium relationship among real imports, real income, relative price and real foreign exchange reserves.

Sweidan (2013) studied the Effect of Exchange Rate on Exports and Imports of Jordan in 1976–2009. Testing approach to co-integration and the error correction model was used and it was found that Jordan's competitiveness has a trend of deterioration. The influence of Jordan's exchange rate on exports and imports is active in the short-run only.

Genc & Artar (2014), Bhattarai (2011) in their study established a co-integrated relationship between effective exchange rates on Exports and Imports of selected emerging countries for the period of 1985-2012. The study concluded that there is co- integrated relationship between effective exchange rates and exports-imports of emerging countries in the long run.

Kaur & Sharma (2014) conducted an empirical research on the Impact of Foreign Direct Investment on macroeconomic Parameters of India. The Explanatory variables used in the study were Gross Domestic Product (GDP), Foreign Exchange Reserves (RES), Gross Capital formation (GCF), Exports (EXP) and Employment (EMP) and it was found that there is a positive and significant impact of FDI on GDP, GCF, EXP, EMP and RES.

UK essays (2015) have done macro economic analysis taking macroeconomic indicators, namely GDP, Unemployment, Fiscal Policy, Monetary Policy and Exchange Ratio. It can be concluded that in research paper the UK economy has a steady GDP growth, low unemployment and low inflation before 2008, which produces a steady environment for businesses to invest. However, due to the collapse of major banks and the housing markets, the UK economy shrunk significantly with unemployment rising to an unprecedented level.

Alotaibi (2016) tried to identify the influence of Exchange Rate on Country's Import and Export. It was concluded that the exchange rate of the currency occupies a portfolio that holds the bulk of its investments, which determine the portfolio are real return. As supply and demand for currencies change, the values of those currencies change.

Barua (2016) studied the impact of FDI inflows on exports and growth of Indian Economy for the period of 2000-2012. Using Simple Regression and Multiple Regression Models built on the hypotheses formulated and validating the results of the models based on ANOVA and Durbin-Watson test. The study clearly revealed that FDI not only acts as a vehicle for accelerating the pace exports but it is also an important variable that alters the level of GDP of the host country.

Hamzalouh, Ismail and Rahman (2016) studied the impact of the GDP and population on trade of Common Market for Eastern and Southern Africa (COMESA) using panel data approach where study aimed to uncover the increases in trade volume among the member countries of COMESA and identified the important factors that affect COMESA trade using panel data models. The results showed that in fixed effect model (FEM), an increase in GDP leads to a 65% increase in imports, and in Random effects model (REM), an increase in GDP leads to an 86% increase in exports.

Amadeo (2017) had presented an article

from 'The Balance' explaining the impact of population on exports. The article talked about the introduction of exports, its current scenario and how exports fit into the Balance of Payment. The Impact of Population on Bilateral Trade Flows in the case Organization of the Islamic of Conference has been taken as the base to the investigate bilateral trade flows and their determinants among six big Organization of the Islamic Conference economies by using panel data analysis and cross sectional data. Hence it was found that the impact of population on bilateral trade flows is positive for the exporter country, while it is negative for the importer country.

Giri & Joshi (2017) had done research on The Impact of Macroeconomic Indicators on Indian Stock Prices to examine the long run and the short run relationship between stock price and a set of macro-economic variables for Indian economy using annual data from 1979 to 2014. The method used was VECM to test the short and long run causality and variance decomposition and the results confirmed a long run relationship among the variables with evidence suggesting that Economic growth, inflation and exchange rate influence stock prices positively. However, crude oil price influences the stock price negatively. This implied that the increase in oil price induces inflationary expectation in the mind of investors and hence stock prices were adversely affected.

## Objectives of the Study

- (a) To identify various macroeconomic indicators affecting India's Exports through review of literature.
- (b) To understand the relationship between macro-economic indicators and Indian Exports.
- (c) To analyse the impact of macroeconomic indicators on Indian Exports.

## Scope of the Study

The scope of research is too wide since exports range has widened after the Indian economy became an open economy in 1991 and is expected to rise further based on certain macroeconomic indicators. There would be various factors that will be fruitful or vice versa when analysed with exports. The time period taken into consideration for the study is 17 years ranging from 2000 to 2017 (calendar year). The parameters identified on the basis of the literature reviewed are Gross Domestic Product, Foreign Direct Investment, Foreign Exchange Reserves, Balance of Trade, Consumer Price Index, Unemployment, Imports, Population, Exports, Unemployment and Population.

## Hypothesis

Ha1: There is a relationship between Macro-economic indicators and exports. Ha2: There is an impact of Macro-economic indicators on exports.

## **Research Methodology**

The research mainly focussed on the secondary sources of data collected from government websites like RBI, data.gov.in, mospi, Census, commerce ministers, United Nation, MHRD, World Bank, finance ministry, ibef.com etc.; Reports of all economic indicators have been taken into consideration separately for each indicator; besides this various journals like IOSR, Journal of International and Global Economic Studies, Indian Council for Research on International Economic Relations etc. were taken into consideration along with the various Newspapers articles like- Business today, economic times and Livemint.

The collected data for different parameters were analysed through CAGR i.e. Compound Annual Growth Rate, Multiple Correlation and Regression all calculated with the help of MS Excel 2007 and SPSS.

#### **Results and Discussion**

Macroeconomic indicators like interest rates, GDP, inflation are capable of driving the market into frenzy, causing a lot of money to be lost or made in an instant. So, it is very important for investors or country as a whole, to study and know about these indicators.

India's trade deficit touched a 56-month high in January; driven by a sharp rise in imports of petroleum, chemicals, silver, pearls and machine tools, even as exports expanded for the third consecutive month. A 9% rise in exports at \$24.3 billion was outweighed by a 26% increase in imports at \$40.6 billion, leaving a trade gap of \$16.3 billion, the highest since May 2013. It can be seen that exports increased in five years gap but the increase between 2010 -2015 is considerably less (Business Standard, 2013). While exports of both goods and services, still account for only about 22 percent of the Indian GDP, their multiplier effect for economic activity is quite large as the import content is not as high as for example in the case of Chinese exports (UNDP Report, 2013). The Growth Rate of exports was observed at 14.34 for the 17 years data collected.

**Exports** are component of aggregate demand (AD) and rise in exports will help increase AD and cause higher economic growth. Exports have been on a positive trajectory since August 2016 to January 2018 with a dip of 1.1 percent in the month of October 2017 and exhibited positive growth of 9.07 percent in dollar terms during January 2018.

**Gross Domestic Product**: With economic reforms adopted in the last few years start in, India is poised to remain the fastest growing large economy in the world, and its GDP is expected to reach \$5 trillion by 2025, a top Indian official has told the World Bank. In 2018, India is expected to grow at over 7.4% (Live mint, 2018) Taking into consideration the last 17 years from 2000 to 2016, the increase from 2010 to 2015 was 20.73% which is very less compared to the increase from 2005 to 2010 which was 51.71%. The major decline started after 2008 that have impacted the average of the next five years and the CAGR (2000-16) value is observed as 11.53. The ratio of exports plus imports to GDP increased by more than 50% between 1997–98 and 2007–08 from 21.2 % to 34.7%.

**Population**: India's population has already reached 1.26 billion in the current year and considering the present growth rate, by 2028, the country's population will be more than China, according to a recent report from the UN. The population is important for the growth of the economy as there is a need for skilled labour in the economy and for the country like India- having young population is also at benefit. The population from the year 2000 to 2015 is increasing considerably and expected to grow annually at the rate of 1.50 percent.

Foreign Direct Investment: Foreign direct investment promotes exports; foreign enterprises with their global network of marketing, possessing marketing information are in a unique position to exploit these strengths to promote the exports of developing countries. There is a constant increase in FDI inflow in India increasing at the rate of 26 percent in 2014 to an estimated \$35000 million with maximum growth in the services sector especially in electricity, gas, water, waste management and information and communication and it is further expected to grow at the rate of 17.65 percent.

Average Exchange Rate: The major change or fluctuation in the exchange rate is caused by the change in Inflation, Interest Rates, Current-Account Deficits, Public Debt, Terms of Trade, Political Stability and Economic Performance. The average exchange rate increased drastically from 45.72 (2010) to 64.15 (2015) and is also expected to increase at the rate of 2.61 percent in future.

**Imports**: Exporting and importing help grow national economies and expands the global market. In 2008, imports were 308500 US\$ Million which actually increased from 2006 data which was 190700 US\$ Million it was because to make economy stable in 2008, with the compound annual growth rate of 15.66 the imports will increase further.

Foreign Exchange Reserves: Foreign currency assets, a major component of the overall reserves, rose by USD 1.925 billion to USD 396.572 billion. The major increase was in 2005 in the year gap of 2000-05 which was more

than double and the trend continued till 2010 and thereafter with the annual growth rate of 15.07 percentage. There was fall in reserves after 2008 which became stable again in 2011. India has been among the more successful in this regard, with foreign exchange reserves rising to \$320.56 billion in August 2014, compared to \$274.80 billion in September last year. The foreign exchange reserves rose by USD 1.960 billion to USD 421.720 billion in the week to January 16, due to increase in foreign currency assets the reserves had declined by USD 2.154 billion to USD 419.760 billion.

**Balance of Trade**: The balance of trade data records the value of merchandise trade of India with its trading partners. India's largest trade partners include US, EU, and China. India has maintained an overall trade deficit since 1990 and in the past decade, the deficit has increased manifold. According to the World Trade Organization, India's share export of merchandise goods in 2015 was 1.5%. The balance of trade was negative from 2000 to 2015 which implies that the trade was in deficit. Foreign direct investment and foreign income have a significant positive impact on balance of trade whereas domestic consumption and real effective exchange rate impacted negatively on the balance of trade in India.

**Consumer Price Index**: The CPI has increased to 9.5 but a drastic decrease was observed in the year gap 2010 to 2015. As in 2015, the CPI reached to 5.88 from 9.5 in 2010 and is predicted to grow at the rate of 4.77 percent in future values.

 Table 1: Correlation of Exports and Macro Economic Indicators

	GDP	Popul- ation	FDI Inflow	Avg. Exchange Rate	Exports	Import	Foreign Exchange Reserves	Balance of Trade	Consumer Price Index	Interest Rate	External Debt	
GDP	Pearson Correlation	1	.987**	.841**	0.136	.967**	.942**	.951**	872**	.497*	-0.425	.967**
	Sig. (2-tailed)		0	0	0.602	0	0	0	0	0.042	0.089	0
	Ν		17	17	17	17	17	17	17	17	17	17
Population	Pearson Correlation		1	.853**	0.159	.934**	.904**	.950**	827**	0.454	-0.361	.965**
	Sig. (2-tailed)			0	0.541	0	0	0	0	0.067	0.154	0
	N			17	17	17	17	17	17	17	17	17
FDI Inflow	Pearson Correlation			1	0.282	.807**	.810**	.937**	787**	.615**	-0.341	.792**
	Sig. (2-tailed)				0.273	0	0	0	0	0.009	0.18	0
	N				17	17	17	17	17	17	17	17
Average Exchange Rate	Pearson Correlation				1	0.101	0.131	0.192	-0.16	.585*	0.05	0.102
	Sig. (2-tailed)					0.701	0.615	0.461	0.54	0.014	0.847	0.698
	Ν					17	17	17	17	17	17	17
Exports	Pearson Correlation					1	.992**	.938**	944**	.610**	557*	.913**
	Sig. (2-tailed)						0	0	0	0.009	0.02	0
	N						17	17	17	17	17	17

Imports	Pearson Correlation				1	.937**	978**	.659**	606**	.869**
	Sig. (2-tailed)					0	0	0.004	0.01	0
	Ν					17	17	17	17	17
Foreign Exchange Reserves	Pearson Correlation					1	901**	.614**	501*	.891**
	Sig. (2-tailed)						0	0.009	0.04	0
	N						17	17	17	17
Balance of Trade	Pearson Correlation						1	698**	.640**	779**
	Sig. (2-tailed)							0.002	0.006	0
	Ν		1	1				17	17	17
Consumer Price Index	Pearson Correlation							1	605*	0.381
	Sig. (2-tailed)								0.01	0.131
	Ν								17	17
Interest Rate	Pearson Correlation								1	-0.247
	Sig. (2-tailed)									0.338
	Ν									17
External Debt	Pearson Correlation									1
	Sig. (2-tailed)									
	Ν									

Interest Rate: India Interest Rate averaged 6.6 Percent reaching an all time high of 14.5 Percent in August of 2000 and a record low of 4.3 Percent in April of 2009. Due to tight cash conditions in the system, banks have been borrowing an average Rs. 80, 000 crore daily from RBI. Due to worsening liquidity conditions, bank borrowing shot up to Rs. 1.2 trillion from the central bank in December 2012, (economist.com, 2008).

**External Debt:** The external debt increased considerably from 2000 to 2015 in US Million Dollar approximately four times which is a huge amount and tension on Government to repay it back. The increase was not much from 2000 to 2005 and the future growth rate accounts to 12.42 percent.

There exists а strong positive correlation between exports and on particular Macro Economic Indicators. The correlation values always lies between +1 and -1 and if the value is positive, the variables are highly correlated or positively correlated and if value is negative then variables are negatively correlated. The value 17 in the above table no. 1 shows the number of years taken for the research and in this we have taken years from 2000 to 2016 to see the impact of Macro Economic Indicators on Export. This calculation has been done from SPSS after presenting the data in the form of tables above. Hence, the null hypothesis i.e. H01 is rejected and there is a significant relationship. Now, the impact of macroeconomic indicators is studied by Multiple Regression analysis. The R, R<sup>2</sup> and Adjusted R<sup>2</sup> are statistical measures which are used to show the relations between the variables.  $R^2$  tells about the goodness of fit and shows deviations in dependent variables explained by independent variable. Adjusted R<sup>2</sup> is used when there are more than two independent variables. It is taken because impact cannot be 100%, there are variations and they are adjusted. The difference is impacted by other factors also, hence the value is 0.999. When independent variables are increased than R<sup>2</sup> will also be increased, therefore, variation is 100% as per the value of R.

Unstandardized Coefficient									
Model	В	Standard Error	t	Significance					
Constant	-163418.103	62031.553	-2.634	.039					
GDP	015	.012	-1.278	.248					
Population	154.559	62.800	2.461	.049					
FDI Inflow	118	.178	662	.532					
Average Exchange Rate	-81.667	29.970	-2.725	.034					
Imports	.883	.065	13.549	.000					
Foreign exchange Reserves	034	.049	693	.514					
Balance of Trade	.752	.100	7.520	.000					
Consumer Price Index	1614.489	859.800	1.878	.109					
Interest Rate	878.668	591.561	1.485	.188					
External Debt	.044	.026	1.708	.139					
R - 1.000a									
R2 - 1.000									
Adjusted R2 - 0.999									

Table 2: Multiple Regression Coefficient Table

Exports = -163418.103 + 154.559 P+ 0.883 M + 0.752 BOT + 1614.489 CPI+ 878.66 ROI + 0.044 ED- 0.015 GDP - 0.118 FDI Inflow - 81.667 AER - 81.667 FER

Where, P = population, M = Imports, BOT = Balance of Trade, CPI = Consumer Price Index, ROI = Interest Rate, ED = External Debt, GDP = Gross Domestic Product, AER= Average Exchange Rate, FER= Foreign Exchange Rate.

Hence, Result show that 1% increase in Macro Economic Indicators will lead to an increase in Population by 154.559, Imports by 0.883, Balance of Trade by 0.752, Consumer Price Index by 1614.489, Interest Rate by 878.66, External Debt by 0.044 and decrease in GDP by 0.015, FDI Inflow by 0.118, Average Exchange Rate by 81.667 and Foreign Exchange Reserves by 0.034. The significance value with t-test which shows the significant relation of the model and proves that Null Hypothesis i.e. H02 (There is no impact of Macro Economic Indicators on Exports) is rejected which means there is significant impact of some Economic Indicators Macro on Indian Exports. Those indicators are

Population, Average Exchange Rates, Imports and Balance of Trade. Rest of the indicators does not reject the null hypothesis.

F significance value also shows the impact of variables. F - Value is used when we need to know that the whole model is significant or not and also when we need to compare two models. However, t test will tell you if a single variable is statistically significant and an F test will tell you if a group of variables are jointly significant. It also contains a single value of dependent variable and there more than two independent variables. This is where the F- test is used. F - Value is 3108.094 with 0.000 significance value which is less than 0.05, hence the model is found to be perfectly significant which shows that the impact of different indicators can be studied.

The R and R2 value of 1.000 signifies that the variables under study have a 100 percent impact on Indian exports and no other factor influences the same, but in reality this is not possible as there are various other factors which influences extorts but are not considered under study which can also be noticed through the value of adjusted R square (0.999) which shows that there exists various other factors (not included in this study) which may influence Indian exports.

# Findings

Variations and some indicators may not be showing significant impact on exports, the indicators like GDP, Indian Economy observed a slow growth for almost all the indicators under study between 2010- 2015. Exchange Rate immediately reached to 64.15 from 45.72. The figure was 44.94 only in 2000 which rose to 250 in 2009. Accompanied by 100 million increases in FDI from 2010 to 2015, Foreign Exchange Reserves increased from 2005 which means there was little impact of Crises on Indian Economy, on the other hand Balance of Trade remained negative from last 17 years, Consumer Price Index decreased from 9.5 to 5.88, a major decline, Interest Rate decreased but it again took its position to 8.08 from 8.34 and the External Debt increases from 2010 to 2015 which a concern area for the economy. The CAGR was also calculated to ascertain the growth rates in all the indicators and Growth Rate was maximum in case of Imports which is 15.66 and the lowest was observed in case of the population where growth rate is 1.50.

#### **ABS** International Journal of Management

The correlation result shows the strong relation between all the macroeconomic indicators and exports and the Multiple Regression analysis where there is high significant relationship between Population Exports, & Average Exchange Rates & Exports, Imports & Exports and Balance of Trade & Exports. The R value is 100% which means that there is impact of all the indicators on exports but adjusted R2 is 0.999 which implies that there could be FDI Inflow which does not have significant relation or impact on exports.

#### Conclusion

The present study was conducted to identify the impact of various macroeconomic indicators on Indian exports, and it was observed that during 2010-15 almost all the indicators had a slow growth. The CAGR value predicts the growth trend in the coming future for all the influencing indicators. The Correlation and Multiple Regression analysis also showed a significant impact on the all the variable with some having strong impact. Hence, with the results it could be concluded that all the indicators under study have the impact on the Indian exports but the major impacting indicator are Population, Average Exchange Rates, Imports and Balance of Trade. Hence, by regulating these indicators the Indian exports can also be regulated.

#### **Managerial Implications**

a highly competitive global In environment, the functioning and competitiveness of an economy is highly influenced by its trade. The more the country is involved in the trade, the more it will lead to growth of the economy a as whole, while there are certain factors influencing the effective working. Thus, the government, organisations or researchers involved need to have such an effective plan which would foster the growth, and for this planning, they need to have a thorough understanding of the trends

in all the influencing indicators for a specific time frame. Consequently, the research could be a reference for the organisations and the researchers to identify the major influencing indicators and also their impact on the Indian Exports which will further help them in defining effective working plans.

#### References

- Tendulkar, D. S. (2000).Indian Export and Economic Growth Performance In Asian Perspective. Indian Council for Research on International Economic Relations, Working Paper No. 54. Abugri, B.A. (2008). Empirical Relationship between Macroeconomic Volatility and Stock Return: Evidence from Latin American Markets. International Review of Financial Analysis, 17(2), 396-410.
- Sweiden (2013). The Effect of Exchange Rate on Exports and Imports: The Case of Jordan. *International Trade Journal, 27(2)*, 156-172.
- Cheung, Y. and Sengupta, R. (2013). Impact of Exchange Rate Movements on Exports: An Analysis of Indian Non-Financial Sector Firms. BOFIT Discussion Papers Institute for Economies in Transition Bank of Finland.
- Kapur and Mohan (2014). India's Recent Macroeconomic Performance: An assessment and way forward. *IMF working papers*. Working Paper No. 14/68.
  - Tomar, S.D. (2014). Selected Macro – Economic Variables and its Impact on Chinese and Indian Exports. IOSR *Journal of Business and Management, 16(3).*
- Kumari and Malhotra (2014). Trade-Led Growth in India and China: A Comparative Analysis. Journal of International and Global Economic Studies, 68-88.
- Mugge, D. (2015). Studying Macroeconomic Indicators as

Powerful Ideas. *IOSR Journal, 23,* 410-427.

- Gondaliya and Dave (2015). The Impact of Exports and Imports on Exchange Rates in India. International Journal of Banking, Finance & Digital Marketing, 1(1), 01-08.
- Shaikh, S.A. and Hongbing, O. (2015). Exchange rate Volatility and trade flows: Evidance from China, Pakistan and India, *International Journal of Economics and Finance, 7(11)*, 121-127.
- Panda, S. and Mohanty, R. K. (2015). Effects of Exchange Rate Volatility on Exports: Evidence from India. *Economics Bulletin*, 35(1), 305-312.
- Kaur and Gupta (2016). Impact of Macroeconomic Variables on Stock Market. JABER, 14(14).
  - Hunjra, Chani and Shahzad (2016).The Impact of Macroeconomic Variables on Stock Prices in Pakistan. International Journal of Economics and Empirical Research, 2(1), 13-21. Solgaonkar and Dubey (2017). A Study on The Impact Of FDI on Macro Economic Parameters. International Journal of Research in Economics and Social Sciences, 7(5), 459-466.