

Reserve bank of India's net foreign exchange assets and their impact on reserve money in the country

Kabita Sharma

Corresponding Author: Kabitasharma

ABSTRACT: When reserve bank of India buys foreign currency, there is an increase in its net foreign exchange assets and which in turn results in to an increase in the volume of reserve money. This study focuses on the net foreign exchange assets of the reserve bank of India and their impact on the reserve money during the period of 1991-92 to 2017-18.

KEYWORDS: reserve money, net foreign exchange asset, sterilization

Date of Submission: 05-01-2019

Date of acceptance: 22-01-2019

I. INTRODUCTION

Reserve bank of India's net foreign asset increases when reserve bank of India buys foreign currencies. It is an asset for reserve bank of India whereas Reserve money is generated by reserve bank of India as a liability. It is also known as high powered money or base money as it forms a base for money supply in the country. In an economy supply of money stock depends upon the volume of the reserve money and before knowing the impact of net foreign exchange assets of the reserve bank of India on reserve money, we must know the components of the reserve money.

Components of the reserve money (Source: Handbook of statistics on the Indian economy (<https://dbie.rbi.org.in>)

Reserve Money = Currency in circulation + Bankers' deposits with the RBI + 'Other' deposits with the RBI – Net RBI Credit to the government + RBI credit to the commercial sector + RBI's claims on banks + RBI's net Foreign assets + Government's currency liabilities to the public – RBI's net nonmonetary liabilities

Net bank credit to government = Net RBI credit to the Government (i.e., Net RBI credit to the Centre + Net RBI credit to the state governments) + other banks' credit to the government

Net RBI credit to central government = Loans and advances to the Centre + Investment in Government securities/ T-bills + Rupee coins + Small coins - Centre's cash balances with the Reserve Bank

Bank credit to the commercial sector = RBI credit to the commercial sector + other banks' credit to the commercial sector.

Net foreign assets of the banking sector = RBI's net foreign assets + other banks' foreign assets.

Net non-monetary liabilities of the banking sector = RBI's net non-monetary liabilities + Net non-monetary liabilities of other banks.

Objective Of Study

To study the impact of reserve bank of India's net foreign exchange assets on reserve money in the country.

Research Hypothesis

H0: There is no significant relationship between RBI'S net foreign exchange assets and reserve money.

H1: There is significant relationship between RBI'S net foreign exchange assets and reserve money.

II. RESEARCH METHODOLOGY

Type of data collected: Secondary data

Tools opted for data analysis: Graphs, percentage and regression analysis.

Time period: From 1991-92 to 2017-18.

Research variables: Independent variable: -net foreign exchange assets of the reserve bank of India.

Dependent variable: -reserve money

III. DATA ANALYSIS & INTERPRETATIONS

Table: 1 (Value in Rs.billion)

Year	Net Foreign Exchange Assets of the RBI	Reserve money
1991-92	188.38	995.05
1992-93	226.47	1107.79
1993-94	514.22	1386.72
1994-95	747.20	1692.83
1995-96	740.92	1944.57
1996-97	948.17	1999.85
1997-98	1158.90	2264.02
1998-99	1379.54	2592.86
1999-00	1658.80	2805.55
2000-01	1971.87	3032.95
2001-02	2639.79	3379.52
2002-03	3582.49	3690.38
2003-04	4844.19	4364.90
2004-05	6127.95	4891.11
2005-06	6729.86	5719.32
2006-07	8661.52	7088.61
2007-08	12361.31	9282.75
2008-09	12801.08	9879.61
2009-10	12319.44	11556.53
2010-11	13285.69	13768.21
2011-12	14721.95	14263.44
2012-13	15580.59	15148.86
2013-14	18025.25	17327.42
2014-15	21272.79	19284.63
2015-16	23834.76	21807.40
2016-17	23972.10	19004.85
2017-18	27607.81	24187.79

Source: Handbook of statistics on the Indian economy (<https://dbie.rbi.org.in>)

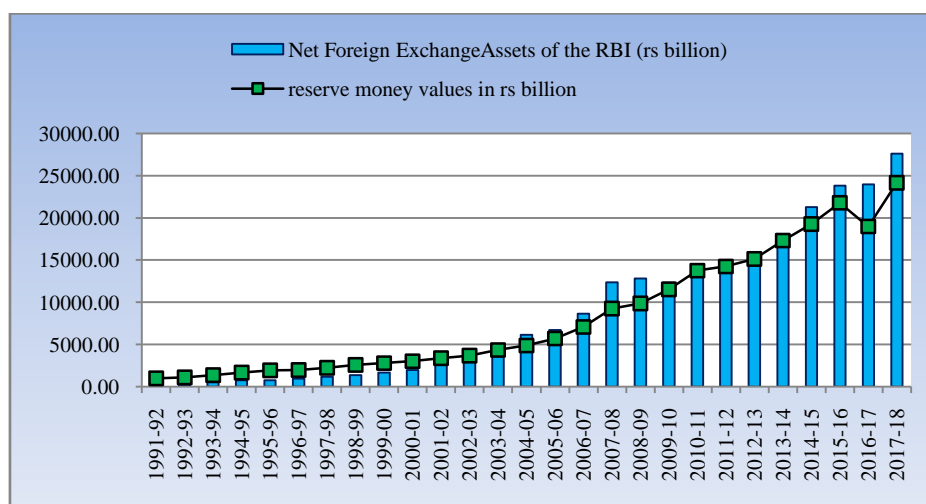


Figure 1: showing Net foreign exchange assets of RBI and reserve money

Source: author's compilation based on table 1

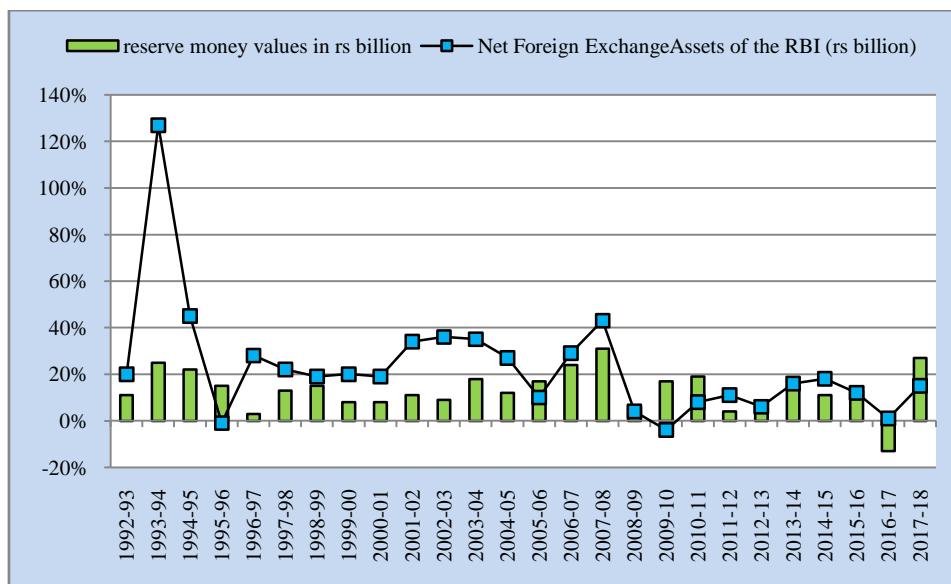


Figure 2: Percentage Growth in reserve money and net foreign exchange assets of the RBI

Source: author's compilation based on table 1

Interpretations

Percentage Growth in net foreign exchange assets of the reserve bank of India and reserve money was highest during the period of 1993-94 and 2007-08 with the values of 127% and 31% respectively whereas, percentage growth in net foreign exchange assets of the reserve bank of India and reserve money was lowest during the period of 2009-10 and 2016-17 with the values of - 4% and -13% respectively.

Table: 2 Hypothesis testing result

Regression Statistics					
Multiple R		0.99105			
R Square		0.98219			
Adjusted R Square		0.98148			
Standard Error		985.17			
Observations		27			

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	1.3E+09	1.3E+09	1378.63	2.2E-23
Residual	25	2.4E+07	970560		
Total	26	1.4E+09			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	927.115	274.814	3.37361	0.00242	361.126	1493.1	361.126	1493.1
Net Foreign Exchange Assets of the RBI (rs billion)	0.83831	0.02258	37.1299	2.2E-23	0.79181	0.88481	0.79181	0.88481

Linear Regression Analysis

$$y=b_0+b_1x$$

The null hypothesis is rejected if the P-value < α

Here P-value=2.17E-23, therefore reject the null hypothesis so there is significant relationship between RBI'S net foreign exchange assets and reserve money. There is strong positive linear relationship between RBI'S net

foreign exchange assets and reserve money and reserve money increases by 0.838305 for every one point increase in net foreign exchange assets of the reserve bank of India.

IV. CONCLUSION

With the increase in net foreign exchange asset there is an increase in reserve money. So it is important to consider that increase in reserve money is consistent with the required increase in reserve money or not. if increase in reserve money is consistent with the required increase in reserve money then no sterilisation may be required but if it is not consistent with the required increase in reserve money sterilisation is required and if there is a situation where increase in reserve money is less than the required increase in reserve money then in such situation the reserve bank of India may have to inject additional liquidity.

REFERENCES:

- [1]. Handbook of statistics on the Indian economy (<https://dbie.rbi.org.in>)
- [2]. <https://www.Economicstimes.com>
- [3]. <https://www.financialexpress.com>
- [4]. <https://www.thehindubusinessline.com>

Kabita Sharma" Reserve bank of India's net foreign exchange assets and their impact on reserve money in the country" International Journal of Business and Management Invention (IJBMI), vol. 08, no. 01, 2019, pp 46-49