

Causal Relationship Between Lending Rate And Consumption In India For Inclusive Growth

Dr. A. Ravi Kumar

Associate Professor of Management Studies
Bharath Institute of Science and Technology,
Selaipur, Chennai, Tamil Nadu 600 073
Bharath Institute of Higher Education and Research

ABSTRACT

The study of dynamic relationship between real consumption expenditure and lending rates in a developing country like India keeps a wide relevance for the academicians, researchers, and policy makers. Economists in developing countries often consider the economic performance of their country in terms of consumption level as it constitutes the largest Gross Domestic Product (GDP) component. Lending rates has an immediate impact on consumption. An increase in lending rates causes positive private consumption to rise by the same amount, other things being unchanged. Consumption led growth is when the consumption increases, which leads to higher demand in the economy while Investment led growth is when private investment is increased, it leads to capacity expansion in the economy and hence output is increased. Inclusive Economic growth in India is based on consumption rather than investment as in countries like China.

1. INTRODUCTION

This growth is not Inclusive because Consumption-led growth relies on higher consumer spending — via the Seventh Pay Commission and one rank, one pension pay out, for instance to raise aggregate demand and lead to higher investment and faster economic growth. Without investment in economy, its production capacity cannot be raised. Job creation which is important to reap the benefit of demographic dividend is possible only with private investment. Creation of 10 million jobs every year would not be possible without requisite investment. In the short term, consumption-led demand could result in an increase in imports (in response to higher demand) and, possibly, a higher current account deficit as well. In the long term, it could also lead to inflation, unless there is sufficient spare capacity in sectors. When economic recovery begins, demand pressures from rising incomes and the sudden release of pent-up demand could, in the absence of an adequate supply response, lead to overheating of the economy and inflation. Resolving twin balance sheet problem is required to boost private investment. For a country like India with high proportion of population in the working age, investment led growth is required to unleash the benefits of demographic dividend.

- With the increase in India's national income, the consumption growth in India has increased rapidly. The development of networks such as Telecom, financial and road network has acted as enablers of consumption which has further intensified the consumption growth in India. However, even after the slowdown in income growth, employment growth as well as networks' growth, consumption growth remained strong in India. The major reason behind this is the increasing reach of retail credit facility. Due to improvement in credit

availability, the consumption growth did not decline even after lower national income growth. The issue is that such credit based consumption growth is not inclusive specifically when income, employment as well as networks growth are declining. The prime reason is that consumption growth in India is not backed by investment growth. Consumption booms accompanied by investments growth tend to be inclusive and sustainable as more investments will help in job creation, thereby fuelling the demand in the economy. On the other hand without proper investment growth, the economic calibre of the nation, as well as employment opportunities will be limited.

2. OBJECTIVES OF THE STUDY

- To analyse India's Inclusive Growth.
- To investigate India' Lending rate and Private Consumption and its effect on Economy

3. HYPOTHESIS

- **H1:** There is no significant difference of Lending rate and Consumption.
- **H2:** There is no significant difference of Consumption and Lending rate.

4. DATA SOURCE AND METHODOLOGY

The source of secondary data used in this study has been collected from RBI handbook of Statistics. The methodology adopted in this study is Granger Causality test has been applied to find the Consumption lead to lending interest rate or Lending interest rate lead to consumption and its impact on Inclusive Growth. The consumption includes only the private consumption and excludes government consumption because it does not depend on lending rates. This paper used the ADF (2difference) test for data stationary.

TABLE1 : INDIA'S CONSUMPTION EXPENDITURE AND LENDING RATE

Year	Private Consumption (Rs.Billion)	Average Lending rate
2002-03	17212	11.125
2003-04	18232	10.625
2004-05	19175	10.625
2005-06	20833	11.50
2006-07	22598	13.50
2007-08	24713	14.00
2008-09	26496	14.125
2009-10	28453	13.375
2010-11	30923	08.875
2011-12	33785	10.375
2012-13	51702	09.975
2013-14	55200	10.125
2014-15	58642	10.125
2015-16	63011	09.50

Source Handbook of statistics RBI

CONSUMPTION EXPENDITURE

There is Inverse relationship between consumption expenditure and lending rates in a developing country like India. The consumption Expenditure increases Rs17212 billion to Rs. 63011 billion, when interest rate fall from 11.125% to 9.50% during 2002-03 to 2015-16 with little volatility in interest rate. But there is steady rise in consumption expenditure.

LENDING RATES

Banks have largely been reluctant to pass on the rate cut announced by the RBI in October 2016. India's real rates — the interest rates that banks actually hand out loans at — have remained above RBI's own assessment range of 11.25-0.950 % since the last time the central bank lowered the interest rate during 2002-03 to 2015-16. This shows that RBI has room to cut rates without hurting savers, who benefit from the interest on deposits.

ADF RESULTS

Null Hypothesis: D(CONSUMPTION,2) has a unit root
Exogenous: None
Lag Length: 0 (Automatic - based on SIC, maxlag=2)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.345273	0.0001
Test critical values:		
1% level	-2.792154	
5% level	-1.977738	
10% level	-1.602074	

*MacKinnon (1996) one-sided p-values.

Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 11

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(CONSUMPTION,3)

Method: Least Squares

Sample (adjusted): 2005 2015
Included observations: 11 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CONSUMPTION(-1),2)	-1.482467	0.277342	-5.345273	0.0003
R-squared	0.740726	Mean dependent var	91.27273	
Adjusted R-squared	0.740726	S.D. dependent var	11370.12	
S.E. of regression	5789.551	Akaike info criterion	20.25201	
Sum squared resid	3.35E+08	Schwarz criterion	20.28818	
Log likelihood	-110.3860	Hannan-Quinn criter.	20.22920	
Durbin-Watson stat	2.322311			

GRANGER CAUSALITY RESULTS

Null Hypothesis: D(LR,2) has a unit root
Exogenous: None
Lag Length: 0 (Automatic - based on SIC, maxlag=2)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.633946	0.0001
Test critical values: 1% level	-2.792154	
5% level	-1.977738	
10% level	-1.602074	

*MacKinnon (1996) one-sided p-values.

Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 11

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(LR,3)
Method: Least Squares

Sample (adjusted): 2005 2015
Included observations: 11 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LR(-1),2)	-1.522041	0.270155	-5.633946	0.0002
R-squared	0.760277	Mean dependent var		-0.102273
Adjusted R-squared	0.760277	S.D. dependent var		4.253828
S.E. of regression	2.082739	Akaike info criterion		4.391752
Sum squared resid	43.37800	Schwarz criterion		4.427925
Log likelihood	-23.15464	Hannan-Quinn criter.		4.368951
Durbin-Watson stat	2.215702			

Pairwise Granger Causality Tests

Sample: 2005 2016
Lags: 2

Null Hypothesis:	ObsF-Statistic	Prob.
LGLR does not Granger Cause LGCONS	10 25.5725	0.0024
LGCONS does not Granger Cause LGLR	0.17611	0.8435

Ho: There is no significant difference of Lending rate and Consumption.
Ho1 There is significant difference of Lending rate and Consumption
H2: There is no significant difference of Consumption and Lending rate.
Ho2: There is significant difference of Consumption and Lending rate.

The p - value is less than 0.05 and hence the null hypothesis is rejected. Accept the alternative hypothesis there is significant effect of lending rates lead to consumption. But in case of consumption leads to change in lending rates The p - value is greater than 0.05 hence we cannot reject the null hypothesis. This means consumption will not cause any impact on lending rates.

5. CONCLUSION

The paper concludes Consumption increases, which leads to higher demand in the economy. This in turn will lead to higher output and inclusive growth. This model is applicable in an economy where income is well distributed among the people with very little or no inequality. So, the consumption and demand is always high. For example, USA is based on consumption-led economic growth. In countries like India, the growth tends to be more driven by the savings and is thus called Savings driven growth. India's growth has mostly come from its internal sources unlikely to that of China, which is modelled on foreign investment. India has a large trade deficit: yet India has managed to grow at reasonably high rates. India will achieve inclusive growth with help of strong equality of distribution of Income.

6. REFERENCES

- [1] Abu, N. (2010). "Saving –Economic Growth Nexus in Nigeria, 1970-2007: Granger Causality
- [2] and Co- Integration Analyses," Review of Economic & Business Studies, Vol. 3, p.
- [3] 93-104.
- [4] Banerjee, A., Dolado, J., Galbraith, J. W., Hendry, D., (1993). Co-integration, Error-Correction,
- [5] and the Econometric Analysis of Non-Stationary Data, Advanced Texts in
- [6] Econometrics. Oxford, UK: Oxford University Press.
- [7] Barro, R. J., and X., Sala-i-Martin (1995). Economic Growth. New York: McGraw-Hill.
- [8] Dickey, D. A., and W.A., Fuller. (1981). "Likelihood Ratio Statistics for Autoregressive Time
- [9] Series With a Unit root," Econometrica, Vol. 49, p. 1057-1072.
- [10] Dipendra, S. (2009). "Saving and Economic Growth in India", Munich Personal RePEc
- [11] Archive, Vol. 199, p. 1-18.
- [12] Engle, R.F. and C.W.J., Granger (1987). " Co-Integration and Error Correction :
- [13] Representation
- [14] Estimation and Testing," Econometrica , Vol. 55, p. 251-276.
- [15] Hemmi, N. et al. (2007). "The Long-Term Care Problem, Precautionary Saving, and
- [16] Economic Growth," Journal of Macroeconomics, Vol 29, p. 60–74.
- [17] Inder, B. (1993) "Estimating Long-run Relationships in Economics", Journal of
- [18] Econometrics, 57, 53-68.
- [19] Johansen, S., and K. Juselius (1992). "Testing Structural Hypothesis in a Multivariate CoIntegration Analysis of the PPP and UIP for UK," Journal of Econometrics, Vol. 53, p. 211 –244.