



Impact of Saving Deposits of Commercial Banks on GDP

KEYWORDS

Saving Deposits, Commercial Banks, GDP at Fc (Gross Domestic Product at factor cost),

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ABSTRACT

The present paper is an attempt to highlight the impacts of total saving deposits with commercial banks on Indian GDP. The study is purely based on secondary data which covers 13 financial years (2000-01 to 2012-13), and the analysis of which was made through the application of Karl Pearson's coefficient of Correlation and Multi Regression OLS model (Ordinary Least Square). The study exhibited a strong positive correlation between total saving deposits with commercial banks and GDP ($r=0.991$) and indicated that total saving deposits with commercial banks is the most important predictor of GDP with R square value of 0.983 which showed that total saving deposits with commercial banks accounts for 98.3 per cent of variations in GDP; and b-value {Unstandardized co-efficient ($B=2.124$)} indicated that as saving deposits with commercial banks increases by one unit (1 billion), GDP increases by 2.124 units. It was further indicated through the results that if impact of saving deposits with commercial banks remain constant, then there are other factors which are explaining GDP up to 20119.046 units.

INTRODUCTION

The saving rate of any country is an important indicator of economic development since the domestic saving rate is directly related with the investment rate and the lending capacity of the banking system. Banks further use the deposited money by the public and other depositors (Companies, other banks, Government, other financial institution etc.) for credit creation in the economy which results in increasing GDP. Saving and investment are two key macro variables with micro foundations, which play a significant role in economic growth. Global emerging economies are experiencing record savings at a time when the developed world has been witnessing a decline in gross domestic saving rates, having a positive impact on the investment climate in these countries. Higher savings and investment rates eventually help in boosting GDP. This is another reason why GDP is growing faster in the emerging world than in the developed world.

Savings is defined by economists as that part of after tax income that is not spent; hence, it equals disposable income less consumption (McConnell-Brue, 7th edition). The close relationship between saving rate and economic growth is explained by many economic growth models. A large body of literature on economic growth tends to support the traditional Solow (1956) growth model and the "New Growth Models" of David Romer's and others in which higher savings leads to higher growth.

REVIEW OF LITERATURE:

Alex Ehimare (2012) investigated the role of banks in capital formation and economic growth and found that the commercial banks have significant role to play in capital formation in the Nigerian economy. This implies that commercial banks have the potential to increase the nation's capital formation through their activities. The commercial banks also have vital roles to play in the nation's economic growth. The results also show that commercial banks deposit liabilities only have immediate impact on capital formation and not on economic growth. However, the research findings support the notion that commercial banks are agents of both capital formation and economic growth of the country.

Shafaqat Mehmood (2012) exhibited the affect of thirteen selected factors (independent variables) on Gross Domestic Product (GDP) in Pakistan and Bangladesh economy and found that in Pakistan gross national expenditures, goods exports, gross saving and final consumption expenditure have a positive effect on the GDP. But the factors such as external debts total stock and services exports have a negative effect on the GDP of Pakistan. In case of Bangladesh, this study found that factor such as gross national expenditures, external debts stock total, goods imports and exports have positive effect on the GDP of Bangladesh but the factor as final consumption expenditure has negative effect on the GDP of Bangladesh.

Dr. Aurangzeb(2012) investigated the contributions of banking sector in economic growth of Pakistan. Regression results indicate that deposits, investments, advances, profitability and interest earnings have significant positive impact on economic growth of Pakistan. The study also confirms the bidirectional causal relationship of deposits, advances and profitability with economic growth.

Ritesh Kumar Singhal(2008) analyzed the effects of changes in Gross Domestic Product and the Rate of Interest offered by the banks on their deposits on the Gross Domestic Savings in India. The time-period is divided into pre-reform period from 1980-81 to 1990-91 and the post-reform period from 1991-92 to 2005-06. The regression analysis shows that in both the time periods Gross Domestic Savings has increased consistently irrespective of changes in the rate of interest. The analysis also shows that in the post-reform period, the Marginal propensity to save has increased even though the interest rates have softened. This model traces the relationship between three variables viz, Gross Domestic Product, Savings and the Rate of Interest.

Suman Bahadur Khatri (2008) examined the relationship of financial development and economic growth in her project entitled "Financial Institutions and Economic Growth: The case of Nepal". The relevant ratios of commercial banks such as deposit, investment, and profitability are found to be in increasing trend. The growth rate of GDP/

capita is however volatile in the study period, the regression result of Deposit/GDP is weakly significant under the study period (0,06). The investment growth rate is not significant at all possibly due to the time lag of the effect of investment on the economic development. It is also revealed from the study that the Growth rate of GDP and investment over GDP is positive related.

OBJECTIVES OF THE STUDY

The present study was attempted to attain the following objectives:

1. To assess the correlation between saving deposits with commercial banks and gross domestic product at factor cost (GDP at Fc) of India
2. To study the impact of saving deposits with commercial banks on GDP in India.

HYPOTHESES OF THE STUDY

The null hypotheses are stated below:

1. H_{01} : There is no significant relation between saving deposits with commercial banks and GDP in India
2. H_{02} : There is no significant impact of saving deposits with commercial banks on GDP in India.

RESEARCH METHODOLOGY

DATA COLLECTION

The present study is purely based on secondary data which covers 13 financial years (2000-01 to 2012-13) which was collected from Hand Book of Statistics of India. The data related to two variables (Saving Deposits and GDP at fc) are taken. Saving deposits with commercial banks includes Indian as well as foreign banks deposits and domestic income at constant prices are taken for the study which is at factor cost means do not includes the impact of net indirect takes on GDP.

Table 1

YEAR	GDP at FC (Rs. In Billion)	Total saving Deposits with commercial banks (Rs. In Billion)
2000-01	23484.81	2229.82
2001-02	24749.62	2791.07
2002-03	25709.35	3115.65
2003-04	27757.49	3853.69
2004-05	29714.64	4586.18
2005-06	32530.73	5751.3
2006-07	35643.64	6723.67
2007-08	38966.36	7722.82
2008-09	41586.76	9009.67
2009-10	45161	11366.76
2010-11	49370	13772.88
2011-12	52435.82	15391.77
2012-13	55054.37	17547.36

STATISTICAL TOOLS & TECHNIQUES

In order to analyze the collected data, the statistical tools such as Karl Pearson's coefficient of Correlation and Multi Regression OLS model (Ordinary Least Square) is used. Here, an attempt is made to study the impact of Independent Variables- saving deposits with commercial banks on dependent variable- GDP.

ANALYSIS AND INTERPRETATION

Karl Pearson's Coefficient of Correlation was applied to study the statistical relationship of the independent variable- saving deposits with commercial banks and dependent variable -GDP for 13 years and the output are expressed through Table 2. A strong positive correlation between saving deposits with commercial banks and GDP ($r=.991$) was observed which is found to be significant at 1 per cent level of significance. Which means as saving deposits increases GDP also increases because with the help of the deposits banks are able to create more credit and can provide credit for different economic activities which results in growth of domestic income of the nation.

Table 2: Correlation Coefficients

Correlations			
		GDPatFC	Saving deposit
GDPatFC	Pearson Correlation	1	.991**
	Sig. (2-tailed)		.000
	N	13	13
Savingdeposit	Pearson Correlation	.991**	1
	Sig. (2-tailed)	.000	
	N	13	13

** . Correlation is significant at the 0.01 level (2-tailed).

To achieve the second objective of the study Multi Regression OLS model (Ordinary Least Square) is applied

Which shows the extent to which the saving deposits are able to explain the variations in GDP

Table 3 Coefficients

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		Std. Error	Beta			
1	(Constant)	20119.046	789.705		25.477	.000
	Saving deposit	2.124	.084	.991	25.201	.000

a. Dependent Variable: GDP at FC

The analytical Table 3 exhibits the estimates of b-values (Unstandardized coefficients) which explicate the individual contribution of each independent (predictors) variable to the model. The positive value depicts positive relationship between the predictors and outcome variable and vice-versa. The b-values also explain to what degree each predictor affects the outcome variable if the effects of the other predictors are held constant. If we replace the b-values in equation, we can define the models as follows:

$$GDP_i = b_0 + b_1 \text{ saving deposits with commercial banks } i$$

$$= 20119.046 + 2.124 \text{ saving deposits with commercial banks } i$$

Saving deposits with commercial banks (b= 2.124):

These values indicate that as saving deposits with commercial banks increases by one unit (1 billion), GDP increases by 2.124 units. Therefore, it is explained by the above table that for every additional unit (1 billion) of saving deposits with commercial banks is associated with an extra 2.124 increment in GDP respectively.

Table 4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.991 ^a	.983	.981	1487.28953	.983	635.090	1	11	.000	.410
a. Predictors: (Constant), saving deposit										
b. Dependent Variable: GDP at FC										

Model Explanation

Impact of flow of saving deposits with commercial banks on GDP in India:

Independent Variables: Saving deposits with commercial banks

Dependent Variable: GDP at factor cost in India

Table 4 exposed the strength of relationship between the model and the dependent variable. The values of R depict the multiple correlation coefficients between the predictors (independent variables) and the outcome (dependent variable). When GDP was used as predictor, a strong correlation ($r=.991$) between GDP and saving deposits with commercial banks was observed. The next column gives the value of r^2 , which tells us a measure of how much of the variability in the outcome (GDP) is accounted for the predictors (saving deposits with commercial banks). For present model its value is .983 (Table 3), which means that saving deposits with commercial banks accounts for 98.3% per cent variations in GDP.

TESTING OF HYPOTHESES

1. H01: There is no significant relation between saving deposits with commercial banks and GDP in India

The p-value related to correlation of Saving Deposits with commercial banks and GDP is less than 0.05 as shown in the table 2 so null hypotheses H01 is rejected. Hence, it is concluded that Saving Deposits with commercial banks into India and GDP are strongly related to each other and their relation is significant

2. H02: There is no significant impact of Saving Deposits with commercial banks on GDP.

The p-value related to Saving Deposits (Table 3) with commercial banks is less than 0.05 (.000) so null hypotheses H02 is rejected. Hence, it is concluded that Saving Deposits with commercial banks into India and GDP trends are dependent and Saving Deposits with commercial banks has significant impact on GDP.

CONCLUSION AND SUGGESTIONS

The study which was conducted to assess the correlation and impact of Saving Deposits with commercial banks into India on GDP exhibited a strong positive correlation between Saving Deposits with commercial banks into India and GDP ($r=.991$) and concluded that Saving Deposits with commercial banks are the most important predictor of GDP with R square value of 0.983 which showed that Saving Deposits accounts for 98.3% per cent of variations in GDP; b-value {Unstandardized co-efficient ($B=2.124$)} indicated that as saving deposits with commercial banks increases by one unit (1 billion), GDP increases by 2.124 units. It was further indicated through the results that if impact of saving deposits with commercial banks remain constant, then there are other factors which are explaining GDP up to 20119.046 units as discussed in review. In India Govt. should attract more and more savings of the general public, corporate world, financial institutions and foreigners so that more credit can be created and the that credit can be used for improving the growth of GDP and can be used further for the development of the economy. It is therefore recommended that efforts should be made by the monetary authorities to effectively manage the banks' maximum lending. This policy thrust will most likely result into increased investment activities which will enhance capital formation in India.

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