

# Impact of Foreign Direct Investment on the Profitability: A Study of Scheduled Commercial Banks in India

Pallavi<sup>1</sup>, Gaurav Dhiman<sup>2</sup>

<sup>1</sup>School of Management Studies, Desh Bhagat University, Mandi Gobindgarh, India <sup>2</sup>Department of Computer Science and Engineering, Thapar University, Patiala, India

### **Email address**

gdhiman0001@gmail.com (Pallavi), gaurav.dhiman@thapar.edu (G. Dhiman)

#### Citation

Pallavi, Gaurav Dhiman. Impact of Foreign Direct Investment on the Profitability: A Study of Scheduled Commercial Banks in India. *Computational and Applied Mathematics Journal*. Vol. 4, No. 2, 2018, pp. 27-30.

Received: January 10, 2018; Accepted: February 3, 2018; Published: March 2, 2018

**Abstract:** Foreign direct investment (FDI) is an investment in a business by an investor from another country for which the foreign investor has control over the company purchased. This paper attempts to FDI on the performance of scheduled commercial banks. Multiple Linear Regression technique was adopted to study the impact. This paper found that FDI in scheduled commercial banks has no significant impact on the profitability of scheduled commercial banks in India.

Keywords: Multiple Linear Regression Technique, Profitability, Foreign Direct Investment

## **1. Introduction**

Foreign direct investment (FDI) is an investment in a business by an investor from another country for which the foreign investor has control over the company purchased. Cooperation The Organization of Economic and Development (OECD) defines control as owning 10% or more of the business. Businesses that make foreign direct investments are often called multinational corporations (MNCs) or multinational enterprises (MNEs). An MNE may make a direct investment by creating a new foreign enterprise, which is called a greenfield investment, or by the acquisition of a foreign firm, either called an acquisition or brownfield investment [1].

Profitability means ability to make profit from all the business activities of an organization, company, firm, or an enterprise. It shows how efficiently the management can make profit by using all the resources available in the market. Sometimes, the terms 'Profit' and 'Profitability' are used interchangeably [2]. But in real sense, there is a difference between the two. Profit is an absolute term, whereas, the profitability is a relative concept. However, they are closely related and mutually interdependent, having distinct roles in business.

The word profitability is composed of two words, namely,

profit and ability. The term profit has been explained above and the term ability indicates the power of a business entity to earn profits. The ability of a concern also denotes its earning power or operating performance. The profitability may be defined as the ability of a given investment to earn a return from its use. Profitability is a relative concept whereas profit is an absolute connotation. Despite being closely related to and mutually interdependent, profit and profitability are two different concepts. In other words, in spite of their generic nature, each one of them has a distinct role in business. As an absolute term, profit has no relevance to compare the efficiency of a business organization [3]. A very high profit does not always indicate sound organizational efficiency and low profitability is not always a sign of organizational sickness. Therefore, it can be said that profit is not the prime variable on the basis of which the operational efficiency and financial efficiency of an organization can be compared. To measure the productivity of capital employed and to measure operational efficiency, profitability analysis is considered as one of the best techniques [4, 5].

# 2. Objectives

The prime objective is to study the impact of FDI on profitability of Scheduled commercial banks in India.

**Research Hypothesis** 

H01 Regression Coefficient of profitability of SCBs in India on FDI inflows in banking sector is insignificant.

H02 Regression Coefficient of profitability of SCBs in India on FDI inflows in banking sector is significant.

## **3. Research Methodology**

The study is secondary based and the time period of the study is from 2001-02 to 2014-15. The various sources of data were: Statistical Tables Relating to Banks in India, Basic Statistical Returns of Scheduled Commercial Banks, Report on Trend and Progress of Banking in India published by RBI. Multiple linear regression analysis technique was used to study the impact of FDI on performance of scheduled commercial banks in India.

Model Used: Profitability was measured by taking into consideration the variables such as total business per branch, net profit per branch. Employee productivity is calculated on the basis of total business per employee, net profit per employee. DEP, ADV)

```
where,
Performance = Profitability
FDI = foreign direct investment
EMPLY = Employees
TEXP = Total Expenditure
TEA = Total Earnings
ASS = Assets
LIAB = Liabilities
DEP = Deposits
ADV = Advances
To study the impact of FDI on
```

To study the impact of FDI on performance of scheduled commercial banks, the following multiple linear regression model has been used:

 $y = \beta 0 + \beta 1X1 + \beta 2X2 + \dots + \beta nXn$ where,

y = Predicted or expected value of the dependent variables X123.n = Distinct independent or predicted variables

 $\beta 0$  = the value of  $\breve{y}$  when all of the independent variables (X1 to n) are equal to zero.

 $\beta$ 123.n = The estimated regression coefficients

Performance = f (FDI, EMPLY, TEXP, TEA, ASS, LIAB,

Table 1. Multiple Linear Regression Results of Impact of FDI on net profit as percentage of working funds of SCBs in India.

Model: NPWF= f{FDI, EMPLY, TEXP, TEA, ASS, LIAB, DEP, ADV}									
Model		Unstandardized Coefficients		Standardized Coefficients	t value		D.C	Adjusted R	
		В	Std. Error	Beta	t-value	p-value	K Square	Square	
	(Constant)	201	.350		574	.587	.896	.758	
	FDI	-5.014E-6	.000	302	-1.043	.337			
	EMPLY	3.372E-7	.000	.210	.826	.440			
	TEXP	-7.514E-7	.000	885	206	.844			
1	TEA	1.412E-6	.000	1.873	.425	.685			
	ASS	-6.233E-7	.000	375	-1.958	.098			
	LIAB	-7.421E-9	.000	020	129	.902			
	DEP	2.229E-5	.000	.175	.545	.605			
	ADV	-4.638E-5	.000	036	135	.897			

F Statistic: 6.474 on 8 and 6 DF, p value .018

Multiple Regression Equation: -.201-.000005 (FDI)+.0000003 (EMPLY)-.0000007 (TEXP)+.000001 (TEA)-.0000006 (ASS)-.000000007 (LIAB)+.00002 (DEP)-.00004 (ADV)

a. Dependent Variable: NPWF

Table 1 shows the multiple linear regression results of impact of FDI on net profit as percentage of working funds (NPWF) of SCBs in India. It can be seen from multiple linear regression results that FDI in banking sector is positive and t-value is -1.043 and p-value is .337 which is more than 0.05 (at 5% level of significance). Since p-value is more than 0.05, the null hypothesis is accepted. Hence it can be concluded that

FDI in banking sector has no statistical significant impact on the net profit as percentage of working funds of the bank. It is also inferred that one unit change in FDI lead to negative effect of .201 on net profit as percentage of working funds. The Rsquare value .896 states that the dependent variable of net profit as percentage of working funds is influenced by all the independent variables by 89.6 percent.

Table 2. Multiple Linear Regression Results of Impact of FDI Operating Profits as percentage of working funds of SCBs in India.

Model: OPWF= f{FDI, EMPLY, TEXP, TEA, ASS, LIAB, DEP, ADV}									
Model		<b>Unstandardized</b> Coefficients		<b>Standardized Coefficients</b>	t value		D.C	Adjusted R	
		В	Std. Error	Beta	t-value	p-value	k Square	Square	
1	(Constant)	214	.723		296	.777	.894	.753	
	FDI	-1.350E-5	.000	398	-1.361	.222			
	EMPLY	5.791E-7	.000	.176	.688	.517			
	TEXP	1.189E-6	.000	.685	.158	.880			
	TEA	4.652E-7	.000	.302	.068	.948			
	ASS	-1.164E-6	.000	342	-1.772	.127			

Model: OPWF= f{FDI, EMPLY, TEXP, TEA, ASS, LIAB, DEP, ADV}									
Model		<b>Unstandardized Coefficients</b>		Standardized Coefficients	- t valua	n valua	Deman	Adjusted R	
		В	Std. Error	Beta	t-value	p-value	k Square	Square	
	LIAB	-2.780E-8	.000	036	234	.823			
	DEP	5.316E-5	.000	.204	.630	.552			
	ADV	.000	.001	113	421	.688			

F Statistic: 6.341 on 8 and 6 DF, p value .018

Multiple Regression Equation: Y=-.214\_.00001 (FDI)+.0000005 (EMPLY)+.000001 (TEXP)+.000004 (TEA)-.000001 (ASS)-.00000002 (LIAB)+.00005 (DEP)+.000 (ADV)

a. Dependent Variable: OPWF

Table 2 shows the multiple linear regression results of impact of FDI on operating profit as percentage of working funds (OPWF) of SCBs in India. It can be seen from multiple linear regression results that FDI in banking sector is positive and tvalue is -1.361 and p-value is .222 which is more than 0.05 (at 5%level of significance). Since p-value is more than 0.05, the null hypothesis is accepted. Hence it can be concluded that FDI in banking sector has no statistical significant impact on the operating profit as percentage of working funds of the bank. It is inferred that one unit change in FDI leads to negative effect of .214 on operating profits as percentage of working funds. The R-square value .894 states that the dependent variable of operating profit as percentage of working funds is influenced by all the independent variables by 89.4 percent.

Table 3. Multiple Linear Regression Results of Impact of FDI on net profit as percentage of total income of SCBs in India.

Model: NPTI= f{FDI, EMPLY, TEXP, TEA, ASS, LIAB, DEP, ADV}									
Model		<b>Unstandardized</b> Coefficients		Standardized Coefficients	- t valua	n valua	D Sauana	Adjusted R	
		В	Std. Error	Beta	t-value	p-value	K Square	Square	
	(Constant)	.296	.918		.323	.758	.214	834	
	FDI	-6.851E-8	.000	004	005	.996			
	EMPLY	-3.842E-7	.000	251	359	.732			
	TEXP	-9.130E-6	.000	-11.285	955	.376			
1	TEA	8.613E-6	.000	11.988	.990	.361			
	ASS	-9.941E-8	.000	063	119	.909			
	LIAB	4.042E-8	.000	.113	.268	.798			
	DEP	-4.817E-5	.000	397	450	.669			
	ADV	.001	.001	.796	1.086	.319			

F Statistic: 204 on 8 and 6 DF, p value: .978

Multiple Regression Equation: Y=.296-.00000006 (FDI)-.0000003 (EMPLY)-.000009 (TEXP)+.000008 (TEA)-.00000009 (ASS)+.000000004 (LIAB)-.00004 (DEP)+.001 (ADV)

a. Dependent Variable: NPTI

Table 3 shows the multiple linear regression results of impact of FDI on net profit as percentage of total income (NPTI) of SCBs in India. It can be seen from multiple linear regression results that FDI in banking sector is positive and t-value is -.005 and p-value is .996 which is more than 0.05 (at 5%level of significance). Since p-value is more than 0.05, the null hypothesis is accepted. Hence it can be concluded that

FDI in banking sector has no statistical significant impact on the net profit as percentage of total income. It is observed that one unit change in FDI leads to positive effect of .296 on net profits as percentage of total income. The R-square value .214 states that the dependent variable of net profit as percentage of total income is influenced by all the independent variables by 21.4 percent.

Table 4. Multiple Linear Regression Results of Impact of FDI on Net Profits as percentage of Total Deposits.

Model: NPTD= f{FDI, EMPLY, TEXP, TEA, ASS, LIAB, DEP, ADV}									
Model		Unstandardized Coefficients		Standardized Coefficients	- t valua		De	Adjusted R	
		В	Std. Error	Beta	t-value	p-value	k Square	Square	
	(Constant)	477	.236		-2.020	.090	.659	.204	
	FDI	6.571E-6	.000	1.064	2.026	.089			
	EMPLY	5.548E-7	.000	.926	2.015	.091			
	TEXP	-3.459E-7	.000	-1.093	140	.893			
1	TEA	1.034E-7	.000	.368	.046	.965			
	ASS	-5.019E-8	.000	081	234	.823			
	LIAB	2.100E-8	.000	.150	.540	.609			
	DEP	-2.636E-5	.000	555	955	.376			
	ADV	.000	.000	377	782	.464			

F Statistic: 1.449 on 8 and 6 DF, p value .335

Multiple Regression Equation: Y= -.477+.000006 (FDI)+.0000005 (EMPLY)-.0000003 (TEXP)+.0000001 (TEA)-.00000005 (ASS)-.00000002 (LIAB)-.00002 (DEP)-.000 (ADV)

a. Dependent Variable: NPTD

Table 4 shows the multiple linear regression results of impact of FDI on net profit of total deposits (NPTD) of SCBs in India. It can be seen from multiple linear regression results that FDI in banking sector is positive and t-value is 2.026 and p-value is .089 which is more than 0.05 (at 5%level of significance). Since p-value is more than 0.05, the null hypothesis is accepted. Hence it can be concluded that FDI in banking sector has no statistical significant impact on the net profit of total deposits of the bank. It is also observed that one unit change in FDI leads to negative effect of .477 on net profits as percentage of total deposits. The R-square value .659 states that the dependent variable of net profit of total deposits is influenced by all the independent variables by 65.9 percent.

## 4. Conclusion

It is concluded from regression analysis that  $H_{02}$  that regression coefficient is profitability of SCBs in India is fully accepted on the basis of indicators of liquidity such as on net profit as percentage of working funds, Operating Profits as percentage of working funds of SCBs in India, net profit as percentage of total income of SCBs in India, Net Profits as percentage of Total Deposit.

### References

- Dabour M. D Nabil (2000) "The Role of Foreign Direct Investment in development and growth in OIC member countries", journal of economic corporation, Vol. 2, No. 3, pp. 27-55.
- [2] Gupta Ashish, Sundram V. S (2015), "profitability analysis of selected public sector banks in India", international journal of business economics and management research, Vol. 5, No. 9, pp. 53-62.
- [3] Kumari Nilanjana (2013) "A Study of FDI in India", Journal of Economics and Sustainable Development, Vol. 4, No. 3, pp. 25-40. Available on www.iiste.org
- [4] Mistry S. Dharmendra, Savani Vijay (2015), "A comparative Study of the profitability performance in the banking sector; Evidence from Indian private Sector bank", pp. 346-360. Available online in www.international conference.in.
- [5] Reserve Bank of India, Report on Trend and Progress of Banking in India 2014-15, RBI Mumbai.