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FINANCIAL PERFORMANCE ANALYSIS OF INDIAN BANKS - A SELECTIVE STUDY

Case
Study

Keywords

*Regression;
NPAs;
Deposit;
Profit;
Financial services;*

JEL Classification

G21; C23

Abstract

The function and importance of the banking sector play an important role in the development of the economy. This study suggests the calculation and examination of selected variables considered for the study. This paper attempts to analyze five major public, private and foreign banks. The purpose of writing the paper is to find out what measures banks can take to reduce NPAs. Profits decrease when NPA increases, using the Manova model and panel regression in this paper. The analysis is performed using the R software. In this paper, the author has used two methods, random effects and fixed effects. The current study describes the various financial data used in this article. If the definite effect and random impact resistance executed by the Houseman test were to be properly selected, it was concluded that there was a significant effect on deposits, advances, interest, other income, total NPAs, net NPAs, total assets.

INTRODUCTION

This study aims to show the effect of financial sector changes on the performance of the Indian commercial banks and the performance of the measurements. A developing country's economic progress depends on key factors such as industrial development, development status, farm innovation, internal and external trade. The role of the banking sector in the development of one country cannot be indifferent. The sound banking industry represents a major component of the financial services sector. Banking performance plays a very important role in measuring the performance of any economy. In the last decade, many changes have been made in the Indian banking sector. The banking sector has shown significant sensitivity to meet the needs of the planned economy.

Interest rates on these deposits have been kept for growth, and recent measures have been taken to increase the deposit rate. Reserve Bank of India (RBI) has made several attempts to make progress in this area. Some banks have established a good track record for innovation and growth.

Evaluation of banks performance based on financial growth and financial stability suffer from the problem that financial growth might increase over the performance because of wrong-way reporting of non-performing assets (NPAs). In this study, the researcher has analyzed five major banks which are working in India. The researcher has chosen five different bank types like public sector banks, old private banks, new private bank and foreign bank.

The objective of the study

To analyze the performance of public, private and foreign banks of India.

To find out trends in NPA Level.

Performance of Banks

State Bank of India (SBI) is an Indian multinational public sector banking and financial services company. In 1955 the Imperial Bank of India became a nationalized bank and renamed as State Bank of India (SBI). In 1969 and 1980, India's Government has nationalized 14 of the first phase and six banks in the second phase. On 1st April 2017, State Bank of India, which is India's largest bank, merged with five of its Associate Banks (State Bank of Bikaner & Jaipur, State Bank of Hyderabad, State Bank of Mysore, State Bank of Patiala and State Bank of Travancore) and Bharatiya Mahila Bank with itself. With the merger, the State Bank of India will enter the league of top 50 global banks with a balance sheet size of Rs.33 trillion. Table 1 and Figure 1 show the financial status of the bank between 2009 to 2017.

Industrial Credit and Investment Corporation of India (ICICI) is an old private sector banking and financial services company. The bank has a network of 4,850 branches and 14,404 ATMs in India and has a presence in 19 countries, including India. Table 2 and Figure 2 show the financial status of the bank between 2009 to 2017.

Housing Development Finance Corporation (HDFC) is an Indian Multinational old private banking and financial services company. The Housing Development Finance Corporation Limited (HDFC) was amongst the first to receive an 'in principle' approval from the Reserve Bank of India (RBI) to set up a bank in the private sector as part of RBI's liberalization of the Indian Banking Industry in 1994. The bank was incorporated in August 1994 in 'HDFC Bank Limited', with its registered office in Mumbai, India. HDFC Bank commenced operations as a Scheduled Commercial Bank in January 1995. Table 3 and Figure 3 show the financial status of the bank between 2009 to 2017.

YES BANK is India's fifth-largest new private sector bank, founded in 2004. Yes, the bank is the only Greenfield Bank licensee awarded by the RBI in the last decade. YES BANK is a full-service commercial bank and has gradually made a corporate retail & SME Banking franchise, financial markets, investment banking, corporate finance, branch banking, business and transaction banking, and wealth management business lines across the country. Table 4 and Figure 4 show the financial status of the bank between 2009 to 2017.

The Development Bank of Singapore (DBS) bank is a multinational banking and financial services corporation headquartered in Marina Bay, Singapore. The bank was known as The Development Bank of Singapore Limited before the present name was adopted in July 2003 to reflect its changing role as a regional bank. In India, Headquartered in the commercial capital of Mumbai, DBS operates via a network of 12 bank branches across India in Bangalore, Chennai, Cuddalore, Hyderabad, Kolhapur, Kolkata, Moradabad, Mumbai, Nashik, New Delhi, Pune, Salem and Surat. Table 5 and Figure 5 show the financial status of the bank between 2009 to 2017.

LITRATURE REVIEW

According to Mohan et al. (2005), focused on the efficiency and productivity changes in Indian banking, it concluded that the examples of performances and technological changes in Indian banking could be seen. According to Vradi (2006), in their study on "Measurement of efficiency of bank in India, concluded that the banking performance is more important to stabilize the economy". To see the efficiency of Indian banks,

one needs to look at the following indicators, profit, productivity, assets, quality and financial management, to compete with all Indian banks for the period 2000-01 and 2002-2003. Das, Nag & Ray (2005) observed the average scores of efficiency of the Indian banks classified in the different groups based on the number of the attributes. Taking the study period at the last seven years of the post-reform period, however, finds that the Indian banks are still not much differentiated in terms of input-oriented or output-oriented technical efficiency and cost-efficiency. Verma & Gupta (2008), in their article on an evaluation of the financial of Indian private sector banks, wrote Private sector performance banks play an important role in the development of the Indian economy. After liberalization, the banking industry underwent significant changes. Mohan & Ray (2004), Indian public sector banks (PSBs) compared private sector counterparts, domestic and foreign of PSBs. Pal and Malik (2007) examined the differences between the financial features of public, private and foreign banks, such as profits, currency capabilities, risks and performance. Brooks (2003), which studies Indian banks during financial note, has said that new empirical evidence analysis on the effect of financial liberalization on the performance of Indian commercial banks focuses on the behaviour and determination of the bank's transaction costs and profits during the liberalization period. Debnath & Shankar (2008) said that a stable and efficient banking sector is the prerequisite for the economic growth of the country. Inefficiency can be analyzed for each evaluated element. The aim of this paper is to estimate and compare the efficiency of the banking sector in India. Financial reforms have completely changed the banking sector. RBI has allowed private sector banks to start new banks as per the recommendation of the Narashiman Committee. Public sector banks dominated the Indian banking industry.

RESEARCH METHODOLOGY

Research designed the present study implements analytical and descriptive research method design. The sample size of particular banks has been selected for the study by market capitalization. Sources of data the relevant secondary data has been collected from financial reports & websites—the current study base on five banks, which are chosen from reporting banks to RBI. The banks are selected by two parameters.

- 1) Bank type (public, private and foreign Banks)
- 2) one bank from each category by eight different variables.

The primary emphasis of this research is focused on analyzing different variables of different sector

banks in India during the period 2009 to 2017. To look at the financial soundness and conclude about convergence banks operating in India in this analysis, the eight indicators which reflect the soundness of the institutional framework are considered. The study is for a period of nine years, from 2009 to 2017. The analysis has done by panel regression and MANOVA model on the R statistical system. The financial parameters are compared, and eight major components are studied for the analysis. The parameters are investigated Deposits, Advances, Profit, Interest Income, Other Income, total funds, Gross NPAs, Net NPAs, and Total assets. The study covered selective foreign bank and purely based on the secondary data source from the financial report and RBI Annual bulletin. The banks considered for the study are the State bank of India (Public sector Bank), HDFC, ICICI (Old private sector bank), YES Bank (New private Sector Bank), DBS (Foreign Bank).

RESULTS

This study represents the calculation and analysis of selected variables taken into reflection for the study purpose. The statistical tool used Manova Model and Panel regression. The analysis is performed by using R software. In this research paper applying two methods of panel regression, the result is:

R squared value is 73%; that's why this model is an effective model. This model showed that when the Net NPA is increasing, the net profit decreasing. The dependent variables are profit. Normally the bank's profit depends on the loan given by banks, but given the loan is recovered within the period. The performance of the banking sector depends on how effectively you manage the non-performing assets. The fixed-effects model was used according to the Hausman test's result for the banking sector. The fixed effect and random effect regression were run, and the Hausman test was carried out the choose the proper specification random effect estimates concluded that deposit, advances, interest earned, other income, gross NPAs, Net NPAs, Total asset significantly affected profit. If the overall multivariate test is significant, the author concludes that the respective effect is significant. This study shows the calculation and analysis of the selected variables reflected for the purpose of the study.

The statistical tool used the MANOVA model, and analysis was performed by using R software. The researcher studied a different test for the manova in this study. In table 6 the author showed Wilks Lamda (λ) and its associated F value. The length changes between one and zero, and the author wants it to be zero near length one and zero, and the author wants it to be zero. In the fourth case,

the name of the bank is Wilms' lambda .001, and it is related to F 21.095, which is P is significant. <001. One way MANOVA banks disclose the main effects of a significant multivariate.

CONCLUSIONS

The aim of this study is to investigate the impacts of profitability, growth on the financial performance of four different types of banks in India. In brief, the average has increased at a faster rate during the period under study. The increase is significant, especially in the case of business and operating expenses. The paper uses the Manova model to examine the financial performance of the Indian banking sector in India. The Hausman test is used to decide, using either the fixed-effects or random-effects model. Commercial banks depend on deposits received from all types of depositors. Achieving and maintaining the faith of depositors is key to the bank's success. Commercial banks need to check the credit appraisal process to reduce non-performing assets. It has been seen that couples of banks depend on borrowing for giving advances. Banks are better if they depend on deposit money rather than borrowed money for disbursing advances. It was seen that though the overall deposits of commercial banks have gone down, the credit growth has slowed down. This is not reflected in the banks analyzed for the study. The objective of the government to create bigger national level banks by merging smaller banks is justified by this study.

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- [12] <https://www.hdfcbank.com/>
- [13] <https://www.yesbank.in/>
- [14] <https://www.dbs.com/in/index/default.page>

LIST OF TABLES AND FIGURES

Table 1
The main indicator of SBI bank

Year	Deposit	Advances	Profit	Interest Earned	Other Income	Gross NPAs	Net NPAs	Total Asset
2009	742083	542503	9121	63788	12690	15588	9552	964432
2010	804116	631914	9166	70993	14968	19534	10870	1053413
2011	933932	756719	8264	81394	15824	25326	12346	1223736
2012	1043647	867578	11707	106521	14351	39676	15818	1335519
2013	1202739	1045616	14105	119655	16036	51189	21956	1566261
2014	1394408	1209828	10891	136350	18552	61605	31096	1792234
2015	1576793	1335424	13101	152397	25575	56725	27590	2048079
2016	1730722	1463700	9950	163685	28158	98172	55807	2259063
2017	2044751	1571078	10484	175518	35460	112342	58277	2705966

[15]Source: Bank annual report (<https://www.rbi.org.in/>)

Table 2
The main indicator of ICICI bank

Year	Deposit	Advances	Profit	Interest Earned	Other income	Gross NPAs	Net NPAs	Total Asset
2009	218347	218310	3379	31092	7603	96493	45539	379300
2010	202016	181200	4843	25706	7477	94806	38411	363399
2011	225602	216360	6318	25974	6647	100342	24073	406233
2012	255499	253720	7937	33542	7502	94753	18608	489069
2013	292613	290249	10129	40075	8245	96077	22340	536795
2014	331914	338703	11677	44178	10427	105058	32979	594642
2015	361563	387522	12942	49091	12176	150945	62555	646129
2016	421426	435264	10926	52739	15323	262121	129630	720695
2017	490039	464232	11340	54156	19504	421593	252168	771791

Source: Bank annual report (<https://www.icicibank.com/>)

Table 3
The main indicator of HDFC bank

Year	Deposit	Advances	Profit	Interest Earned	Other income	Gross NPAs	Net NPAs	Total Asset
2009	142811	98883	2244	16332	3470	19880	6276	183270
2010	167404	125830	2948	16172	3807	18167	3920	222458
2011	208586	159982	3926	19928	4335	16943	2964	277352
2012	246706	195420	5167	27286	5243	19993	3523	337909
2013	296246	239720	6726	35064	6852	23346	4689	400331
2014	367337	303000	8478	41135	7919	29892	8200	491599
2015	450795	365495	10215	48469	8996	34383	8962	590503
2016	546424	464593	12296	60221	10751	43938	13203	708845
2017	643639	554568	14549	69305	12296	58856	18439	863840

[16]Source: Bank annual report (<https://www.onlinesbi.com/>)

Table 4
The main indicator of YES bank

Year	Deposit	Advances	Profit	Interest Earned	Other income	Gross NPAs	Net NPAs	Total Asset
2009	16169	12403	303	2003	435	84	41	22900
2010	26798	22193	477	2369	575	60	12	36382
2011	45938	34363	727	4041	623	80	9	59006
2012	49151	37988	977	6307	857	83	17	73662
2013	66955	46999	1300	8294	1257	94	7	99104
2014	74192	55632	1617	9981	1721	174	26	109015
2015	91175	75549	2005	11572	2046	313	0	136170
2016	111719	98209	2539	13533	2712	748	284	165263
2017	142873	132262	3330	16424	4156	2018	1072	215059

[17]Source: Bank Annual Report (<https://www.yesbank.in/>)

Table 5
The main indicator of DBS bank

Year	Deposit	Advances	Profit	Interest Earned	Other income	Gross NPAs	Net NPAs	Total Asset
2009	60229	27423	4482	8086	3022	344	149.3	125646
2010	66,371	40512	4,620	8,798	1,549	760	399.95	158,564
2011	73680	75522	2272	10658	961	834	233	237461
2012	129220	128442	5701	17971	3110	2146	774	363859
2013	154876	138580	4965	25591	1287	5820	3289	407081
2014	174718	151548	1753	25605	2553	21156	15440	454626
2015	173949	158448	4795	23327	2266	12838	6575	359360
2016	234275	176530	143	20918	2800	16327	7666	438454
2017	269909	218382	231	25779	6226	8383	4624	445420

[18] Source: Bank annual report (<https://www.dbs.com/in/index/default.page>)

Table 6
Result of Statistics

	Fixed Effect				Random Effect			
	Estimate	Std. Error	t-value	Pr(> t)	Estimate	Std. Error	t-value	Pr(> t)
Deposit	-0.0365255	0.014252	-2.5629	0.0151282 *	-3.65E-02	1.35E-02	-2.7137	0.0100417 *
Advances	-0.0152695	0.015993	-0.9548	0.3466296	-1.53E-02	1.51E-02	-1.011	0.3185853
Interest earned	0.4833382	0.104431	4.6283	5.492e-05 ***	4.83E-01	9.86E-02	4.9008	1.916e-05 ***
Other Income	0.8399175	0.230327	3.6466	0.0009061 ***	8.40E-01	2.18E-01	3.8613	0.0004376 ***
Gross NPAs	0.1718149	0.041146	4.1757	0.0002038 ***	1.72E-01	3.89E-02	4.4215	8.284e-05 ***
Net NPAs	-0.264943	0.059712	-4.437	9.587e-05 ***	-2.65E-01	5.64E-02	-4.6982	3.569e-05 ***
Total Asset	-0.006435	0.008345	-0.7711	0.4461431	-6.44E-03	7.88E-03	-0.8165	0.4194513
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1					Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1			
Total Sum of Squares: 312730000					Total Sum of Squares: 312730000			
Residual Sum of Squares: 83551000					R-Squared: 0.73284			
R-Squared: 0.73284					Adj. R-Squared: 0.68229			
Adj. R-Squared: 0.64378					F-statistic: 14.4988 on 7 and 37 DF,			
F-statistic: 12.9314 on 7 and 33 DF, p-value: 7.2097e-08					p-value: 6.6402e-09			

Source: calculated by Author

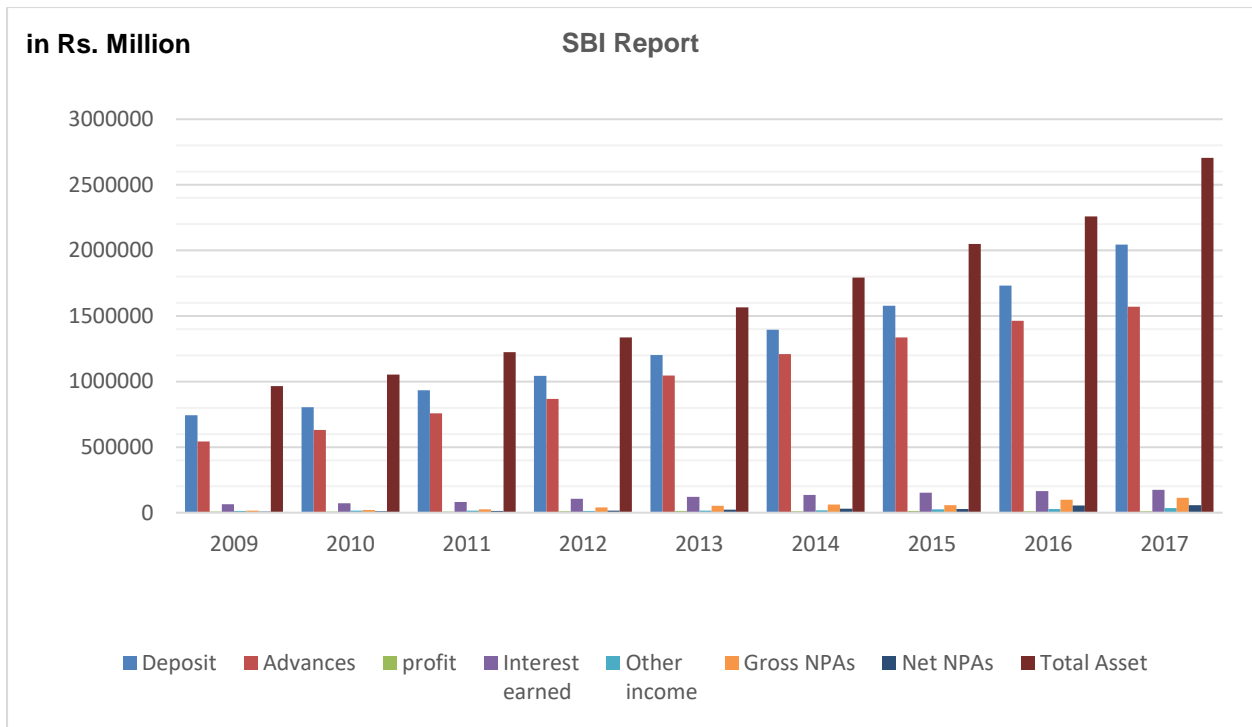


Figure 1
The main indicator of SBI bank (2009-2017)
Source: Prepared by Author

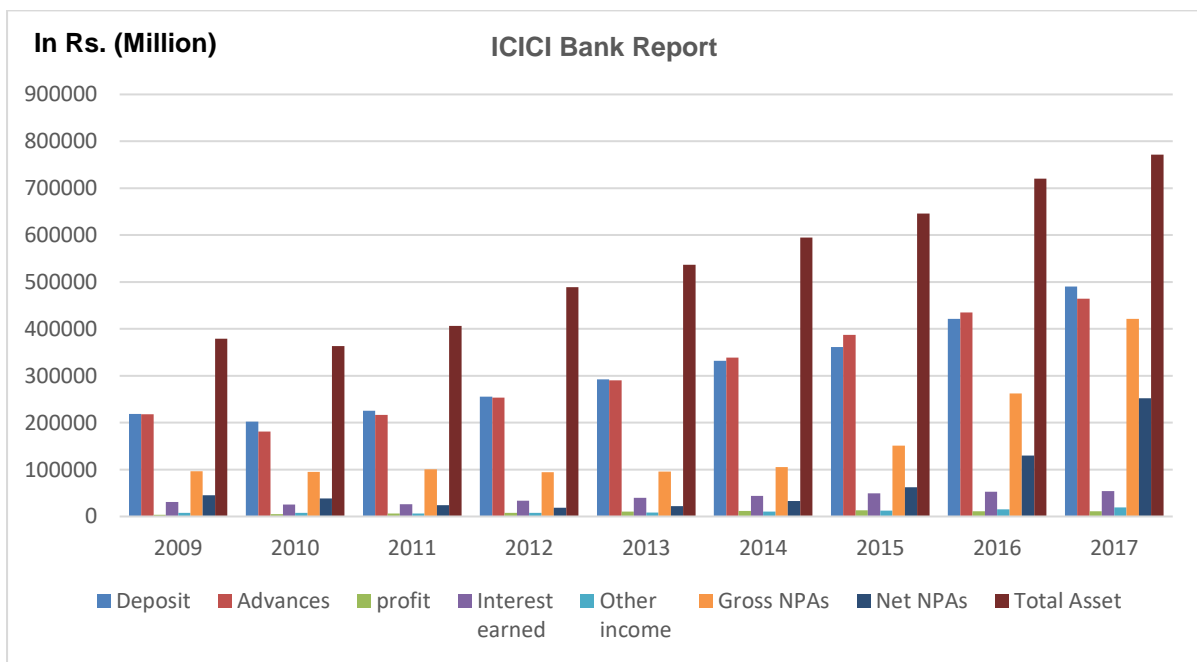


Figure 2
The main indicator of ICICI bank (2009-2017)
Source: Prepared by Author

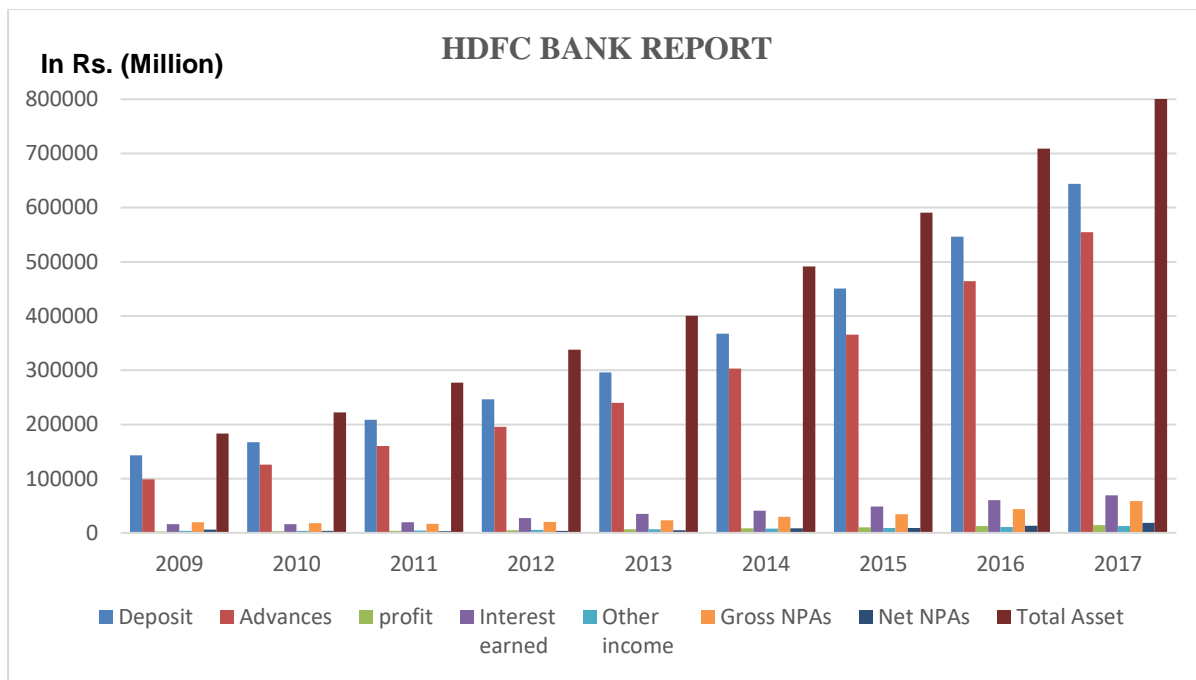


Figure 3
The main indicator of HDFC bank (2009-2017)
 Source: Prepared by Author

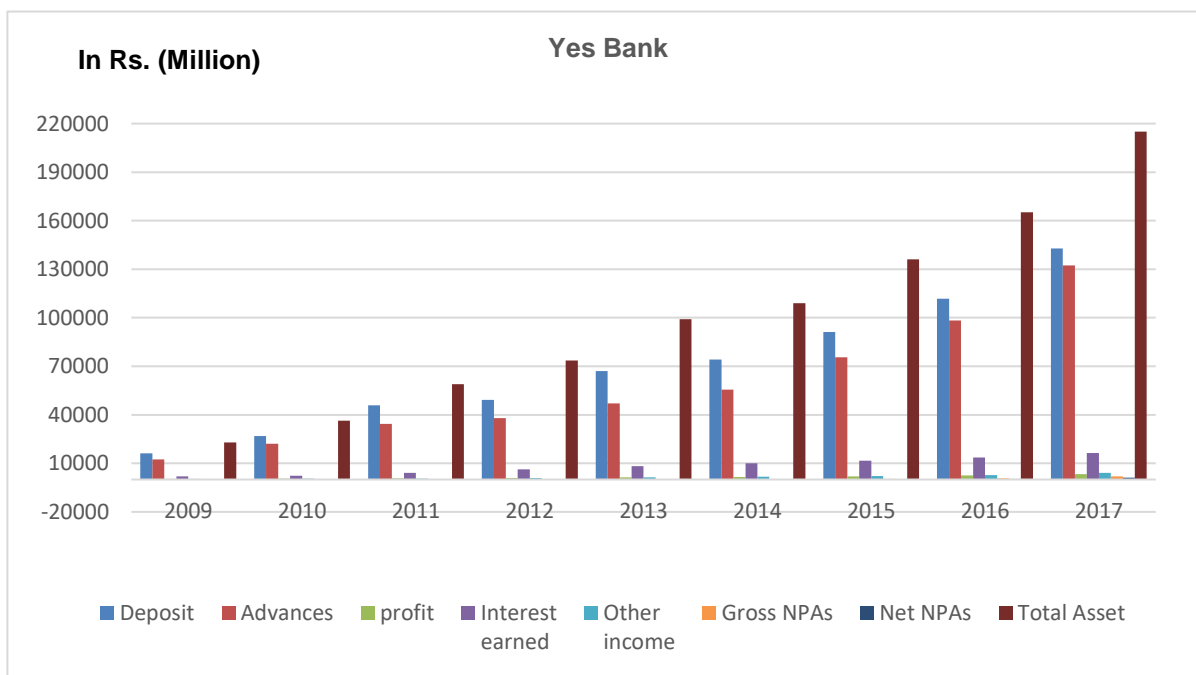


Figure 4
The main indicator of YES Bank (2009-2017)
 Source: Prepared by Author

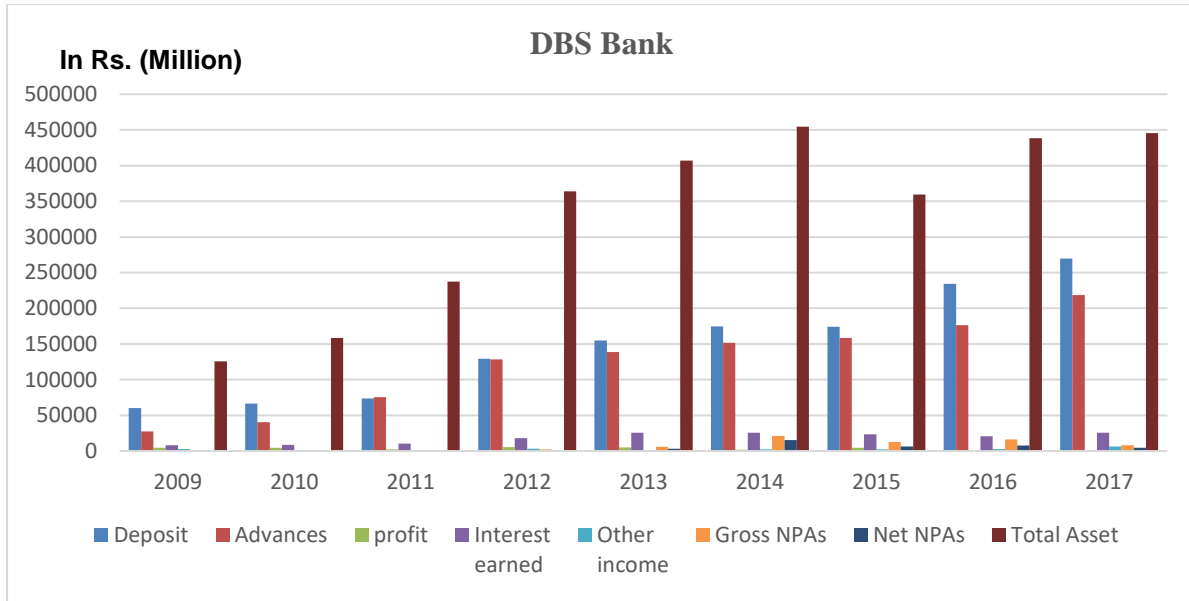


Figure 5
The main indicator of DBS Bank (2009-2017)
Source: Prepared by Author