

**A COMPARATIVE STUDY ON RETURN ON ASSETS (ROA) AND RETURN ON EQUITY (ROE) OF  
JAMMU AND KASHMIR BANK AND HDFC BANK LTD.**

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**Abstract**

The present study is conducted to analyze the ROA and ROE of J&K Bank and HDFC Bank Ltd. were selected for the study period from 2007-08 to 2016-17. The study is mainly based on secondary data collected from annual reports, journals, websites, RBI and other related articles. Ratio Analysis, trend analysis, growth rate, mean, standard deviation, and cumulative variance are used as a tool for evaluation the ratio of Return on assets and Return on equity and they are two important and vital parameters through which performance can be judged and strength ,weakness are know of the management. ROE examines and undermines the efficiency level of a company. It has been found from the study that HDFC Bank shows better efficiency management performance than J&K Bank in terms of the ratio net profit to total assets and the ratio of net profit to net worth is more in J&K Bank than HDFC Bank so we can conclude that more ROA and ROE more will be profits. In other words, it reflects a bank's efficiency at generating profits from every unit of shareholder's equity.

**Keywords: ROA, ROE, efficiency management and shareholder's equity**

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## **Introduction**

Indian Banking system has helped in rising vital sectors of the economy and to lead in a new crack of dawn of progress on the Indian prospect. Banking sector has translated the hopes and aspirations of millions of people into actuality. Today, Indian banks can aggressively challenge with modern banks of the world. Indian financial and economic conditions are much better than in many other countries of the world. According to the RBI, the banking sector in India is sound, effectively capitalized and well synchronized. In the present banking rivalry banks have been permitted to take on new important core activities i.e, trading business, issuance business, investment banking, and securities and trading activities.

Indian banking industry has the prospective to turn into the fifth largest banking industry in the world by 2020 and third largest by 2025 valued at Rs 81 trillion (US\$ 1.81 trillion) according to business reports, India's banking and financial sector is increasing rapidly. Indian economy is rising as a one of the strongest economy of the world with the GDP growth of more than 8 % every year. The most important events of economic development and financial expansion of a country has been the reliability of its banks. Soundness of the banking sector is identical with effectiveness, efficiency, profitability, steadiness and a shock free environment

The brilliance of earnings being a vital criterion determines the ability of a bank to earn consistently in future. It mainly determines the class of bank's profitability and its capability to uphold quality, sustainability and growth in earnings in the future. Profitability of the banks can be evaluated with the no. of various parameters. But one of the important parameters is ROA and ROE. Return on assets is an important indicator that measure of how profitable a company is relative to its total assets. It gives an idea of the efficiency of the management in using its assets to generate earnings. ROE examines and undermines the efficiency level of a company. The more is ROE, the better the growth ratio of benefit with least investment of capital. Such profitability ratios measure the financial performance and the managerial efficiency of the bank.

### **Jammu and Kashmir Bank Ltd.**

Jammu and Kashmir Bank (J&K Bank) was founded on 1st October 1938 underneath letters official document issued by the Maharaja of Jammu and Kashmir, Hari Singh. The bank commenced the banking business on 4 July 1939 and was measured the first of its character and work as a State owned bank in the country. In the year 1971 that J&K Bank was the mark of the 'Scheduled Bank'. Five years later, it was confirmed as "A" Class Bank, by the Reserve Bank of India (RBI). Jammu and Kashmir Bank (J&K Bank) headquartered at Srinagar and has nationwide business centre at Mumbai and north zone headquarters at Gurgaon and Haryana.

The government of Jammu & Kashmir owns a 53% stake in the bank. The bank is listed on the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) as well. J&K Bank is the only bank in private sector that has been elected as agent of RBI for banking. J&K Bank acts as a one and only investment banker and lender to government of Jammu & Kashmir. The bank celebrated

its platinum jubilee in the year 2013 to make the year outstanding, achieved a total business of Rs 1000 billion and earned a net profit of Rs 10 billion.

### **HDFC Bank Ltd**

The Housing Development Finance Corporation Limited (HDFC), founded in 1977, is India's leading finance company. It was among the first few companies to obtain an 'in principle' authorization from the Reserve Bank of India (RBI) to set up a bank in the private sector. The bank was incorporated in August 1994 in the name of HDFC Bank Limited with its registered office in Mumbai, India. HDFC Bank started operations as a Scheduled Commercial Bank in January 1995. They also have one overseas wholesale banking branch in Bahrain, a branch in Hong Kong and two representative offices in UAE and Kenya.

The Bank has three key business segments, which are retail banking, wholesale banking and treasury. HDFC Bank deposit programs rated by two ranking agencies credit analysis and research limited (CARE) and Fitch ratings India private limited.

Bank is the second largest private bank in India as calculated by assets. It is the leading bank in India by market capitalization as of February 2016. It was ranked 69th in 2016 BrandZTM Top 100 Most precious Global Brands.

### **Review of literature**

Alpher.D, (2011) in their study *"Bank specific and macroeconomic Determinants of Commercial Banks Profitability: Empirical Evidence from Turkey"* examine that on bank performance through bank loan have positive impact. In the study it was anticipated to be the main source of income, a negative relationship was also found between loan and profitability and asset size has positive and significant effect on profitability and larger banks attain a higher ROA and ROE. Chen and Lin (2007) analyzing the efficiency of Australian banks for the period from 1996 to 2004 pointed out that return on assets (ROA) is an vital important financial factor affecting positively the performance of Australian banks. They further reported that Australian banks showed better operational efficiency than their American counterparts for the period 2001 - 2004. Subhendu Dutta etal( 2013) examining the study determinants of return on assets of public sector banks in india: An empirical study pointed out that the most significant factors influencing ROA of public sector banks are spread, operating expenses, provision and contingences and non interest income. The study further indicates that public sector banks must focus and decreasing the operating expenses, provisions and contingences and NPAs in order to improve their ROA. Mohan & Baruah, (2015), Conducted study on the title *"A Study on Pattern of ROE of Selected Indian Private Banks"* investigated that ROE of selected 13 Private Banks of India by using Du point analysis and tries to make out the impact exerted by margin on sales, Asset turnover and leverage on ROE. Based on five years of period from 2008-09 to 2012-13. The study find out through ratios that Yes Bank, Axis Bank, City union Bank, HDFC, Indusind Bank, JK Bank, Karur Vysya Bank, Karnataka Bank and South Indian have managed a good ROE of 15-20% but a big private bank ICICI managed low ROE

than most of its competitors and further study points out that the Asset Turnover exerts the impact on ROE followed by Margin on sales and leverage exerts the least impact. Mishra (2016), conducted study on research paper "Efficiency and Performance: A study of private Banks" investigated to facilitate impact of bank performance on profitability and efficiency. Different parameters are employed on data to know the impact i.e., Return on Assets, Return on equity, Net interest margin, Profit per employee, Business per employee etc, and statistical tools mean, standard deviation, coefficient of correlation are used to test the significance for the period from 2011-2015. Researcher selected three private banks Axis, HDFC and Indusind. It was found that ROA and NIM is highest in HDFC bank followed by Axis bank and Indusind bank show low ratio and in other ratios performances of selected banks remain similar. He further recommended improving in operating efficiency Indusind bank has to take efficient steps for growth and performance of business in ROA and NIM.

### **Objectives of the study**

1. To study the ratio of Return on Assets and Return on Equity of J&K Bank and HDFC Bank Ltd.
2. To analyze the performance of both Banks from 2007-08 to 2016-17 based on the ratio of ROA and ROE

### **Period of the study**

The study covers a period of ten years from 2007-08 to 2016-17

### **Research design and sample design**

The design of the present study is descriptive in nature two private sectors banks were selected for the study namely J&K Bank and HDFC Bank Ltd and the study period from 2007-08 to 2016-17. Data of the study have been collected from annual reports, journals, websites, and publications of reserve bank of India. Trend and progress reports of banks published by RBI from 2007-08 to 2016-17. Ratio analysis, Mean, standard deviation, growth rate, trend percentage and cumulative variance were used for analysis of the study.

### **Results and Discussion**

#### **(ROA) Return on Assets of J&K Bank and HDFC Bank Ltd.**

Profitability of the banks can be evaluated with the help of number of parameters. One of such important parameter is ROA. Return on assets is an important indicator that measure of how profitable a company is relative to its total assets. It gives an idea of the efficiency of the management in using its assets to generate earnings. A high ROA indicates that management is effectively utilizing the company's assets to generate profit. ROA is used by companies and banks to furnish them with a valuable tool for their progress including use of resources and financial strength. The ratio of ROA is calculated by Net Profit divided by Total assets multiply by hundred

are as under

$$\text{Return on Assets (ROA)} = \frac{\text{Net Profit}}{\text{Total Assets}} \times 100$$

**Table 1. Ratio of Return on Assets of J&K Bank and HDFC Bank Ltd. (2007-08 to 2016-17)**

Rs in crores

Years	J&K BANK				HDFC BANK			
	Net Profit	Total Assets	Ratio	Trend percentage	Net Profit	Total Assets	Ratio	Trend percentage
2007-08	360.00	32755.96	1.09	100	1590.2	133177.06	1.19	100
2008-09	409.84	37693.24	1.08	99.08	2245.0	183270.74	1.22	102.52
2009-10	512.37	42546.77	1.20	110.09	2948.7	222458.85	1.32	110.92
2010-11	615.20	50508.12	1.21	111.00	3926.4	277350.57	1.41	118.48
2011-12	803.25	60269.32	1.33	122.01	5167.1	337909.49	1.52	127.73
2012-13	1055.10	71743.29	1.47	134.86	6726.3	400331.87	1.68	141.17
2013-14	1182.47	78619.7	1.50	137.61	8478.4	491599.48	1.72	144.53
2014-15	508.59	78295.41	0.64	58.71	10215.9	590503.05	1.73	145.37
2015-16	416.03	80954.44	0.51	46.78	12296	708845.54	1.73	145.37
2016-17	(1632.29)	82018.64	-1.99	-182.56	14550	861072.32	1.68	141.17
<b>Total</b>			<b>8.04</b>					<b>15.2</b>
<b>Mean</b>			<b>0.804</b>					<b>1.52</b>
<b>St.dev.</b>			<b>0.978263</b>					<b>0.20746</b>
<b>C.V</b>			<b>143.644</b>					<b>13.6487</b>

Source: Compiled from Annual Reports of respective banks 2007-08 to 2016-17

Graph 1

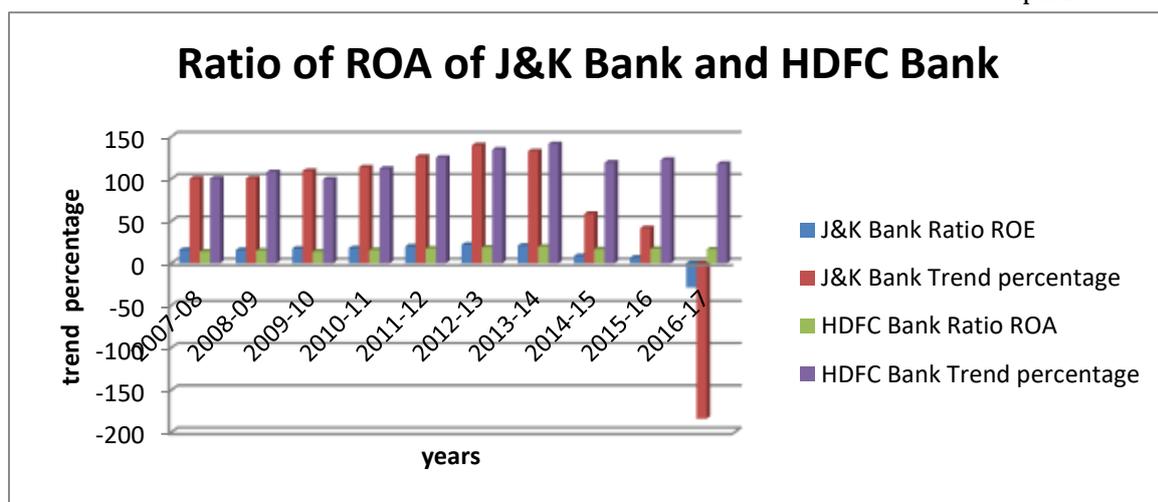


Table 1 and graph 1 indicates the position of ratio ROA of J&k Bank and HDFC Bank Ltd. The amount of total assets of J&K Bank in the year 2007-08 was Rs 32755.96cr and increased year

after year reaches to a maximum of Rs 82018.64cr in the year 2016-17. The net profit earned by Bank Rs360.00cr in the year 2007-08 and reaches to a maximum of 1182.47cr in the year 2013-14 and the ratio of total assets to net profit shows silently increasing trend from a minimum 1.08 percent to a maximum of 1.50 percent during the period of study and fall down 0.64 percent and 0.51 percent due to the stoppage by nature flood in the year 2014-15 and disturbance in 2015-16 and bank suffered huge bad debts from customers and also suffered deceasing trend in the net profit as well. On the other hand in HDFC Bank the total assets of the bank Rs133177.06cr in 2007-08 registered a maximum growth in total assets and reaches to 861072.32cr in 2016-17 during the study period and the bank also registered impressive growth in net profit and earned a profit of Rs1590.2cr in 2007-08 and maximum in 2016-17 Rs14550cr. shows consistency in the net profit and the ratio of total to net profit is also better compared to J&k Bank from a minimum 1.19 percent in 2007-08 to high of 1.73 percent in 2015-16 respectively. Mean value of J&K Bank is 0.804 percent and standard dev. value is 0.978263.while in HDFC Bank mean value is 1.52 percent and standard dev. value is 0.20746 HDFC Bank shows better efficiency management performance and utilized the assets very well than J&K Bank in terms of ratio net profit to total assets during the period of study.

#### **Return on Equity of J&K Bank and HDFC Bank Ltd**

Return on equity (ROE) indicates how well a bank uses shareholder's investment fund to generate profit. In other words, it reflects a bank's efficiency at generating profits from every unit of shareholder's equity. ROE examines and undermines the efficiency level of a company. The more is ROE, the better the growth ratio of benefit with least investment of capital. Such profitability ratios measure the financial performance and the managerial efficiency of bank.

$$\text{Return on Equity (ROE)} = \frac{\text{Net Profit}}{\text{Net Worth}} \times 100$$

**Table 2. Ratio of Return on Equity of J&K Bank and HDFC Bank Ltd.  
(2007-08 to 2016-17)**

Rs in crores

Years	J&K BANK				HDFC BANK			
	Net Profit	Net Worth	Ratio	Trend percentage	Net Profit	Net Worth	Ratio	Trend percentage
2007-08	360.00	2308.92	15.59	100	1590.2	11497.23	13.83	100
2008-09	409.84	2622.86	15.62	100.19	2245.0	15052.73	14.91	107.80
2009-10	512.37	3010.46	17.01	109.10	2948.7	21522.49	13.70	99.06
2010-11	615.20	3478.68	17.68	113.40	3926.4	25379.27	15.47	111.85
2011-12	803.25	4093.18	19.62	125.84	5167.1	29924.68	17.26	124.80
2012-13	1055.10	4846.69	21.76	139.57	6726.3	36214.14	18.57	134.27
2013-14	1182.47	5723.61	20.65	132.45	8478.4	43478.63	19.50	140.99
2014-15	508.59	6110.05	8.32	58.36	10215.9	62009.42	16.47	119.08
2015-16	416.03	6423.97	6.47	41.50	12296	72677.77	16.91	122.27
2016-17	(1632.29)	5676.50	- 28.75	-184.41	14550	89462.35	16.26	117.57
<b>Total</b>			<b>103.97</b>					<b>162.88</b>
<b>Mean</b>			<b>10.397</b>					<b>16.288</b>
<b>St.dev.</b>			<b>14.9347</b>					<b>1.7933</b>
<b>C.V</b>			<b>143.644</b>					<b>11.00</b>

Source: Compiled from Annual Reports of respective banks 2007-08 to 2016-17

Graph 2

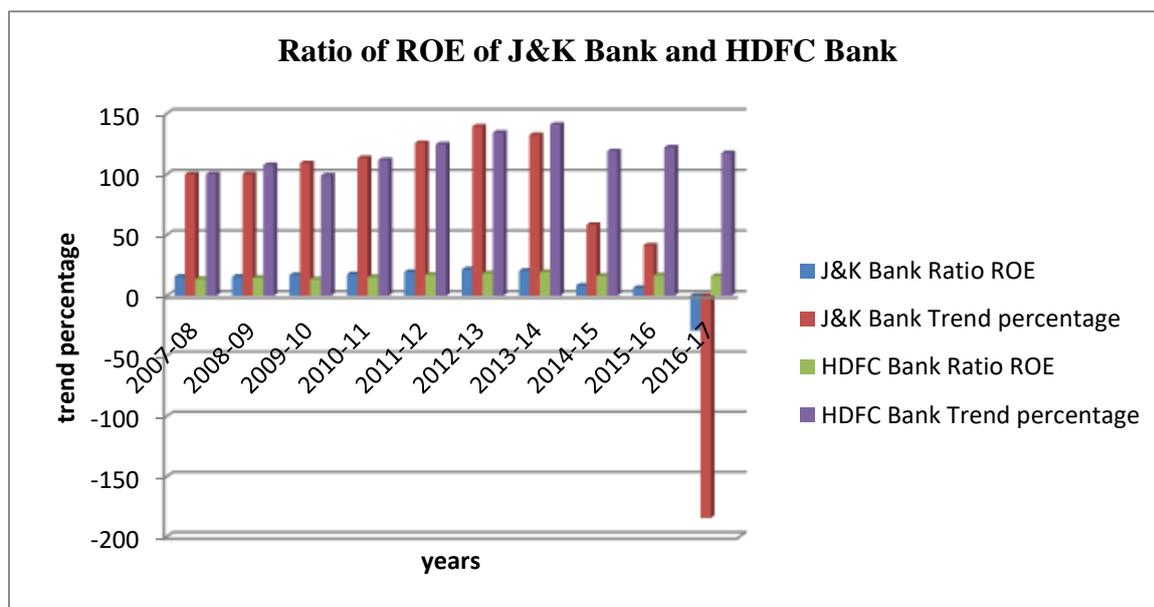


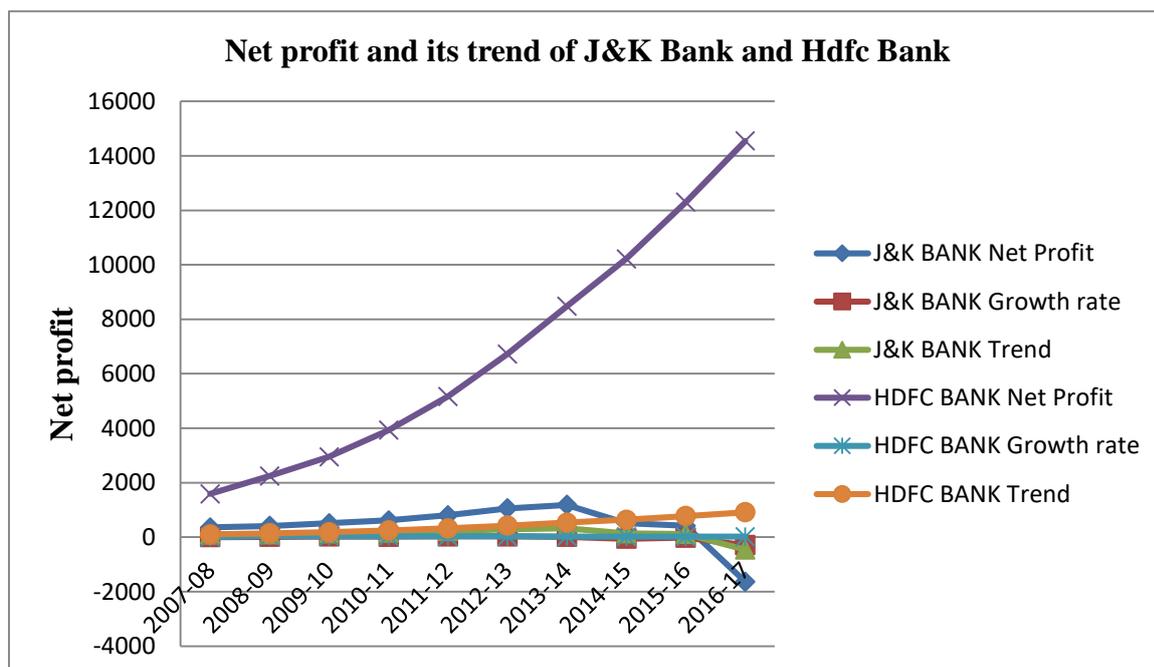
Table 2 and graph 2 indicates the position of ratio of ROE of J&k Bank and HDFC Bank Ltd. from the period 2007-08 to 2016-17. The amount of net profit of J&K Bank in the year 2007-08 was Rs 360.00cr and increased year after year reaches to a maximum of Rs 1182.47cr in the year 2013-14. and the net worth of the bank increasing from the year 2007-08 was Rs2308.92cr and highest in the year 2015-16 was Rs 6423.97cr and the ratio of net profit to net worth shows silently increasing trend from the year 2007-08 was 15.59 percent to a maximum of 21.76 percent during the period of study and shows decreasing trend 6.47 percent and 8.32 percent due to nature flood in the year 2014-15 and disturbance in 2015-16 and bank suffered huge bad debts from customers and also deceasing in the net profit as well. While on the other hand in HDFC Bank the net profit of the bank registered impressive growth in net profit and earned a profit of 1590.2cr in 2007-08 and maximum in 2016-17 14550cr shows consistency in the net profit and the net worth of the bank increased from11497.23cr to reach maximum Rs89462.35cr during the period of study and the ratio of net profit to net worth compared based on year wise is more in J&K Bank than HDFC. Hdfc bank enjoying high mean value of 16.288 than J&K Bank which is 10.397 and in overall HDFC bank shows better efficiency management performance than HDFC Bank in terms of net profit to net worth during the period of study.

**Table.3 Net profit and its trend of J&K Bank and HDFC Bank Ltd.****(2007-08 to 2016)****Rs in crores**

Years	J&K BANK			HDFC BANK		
	Net Profit	Growth rate	Trend	Net Profit	Growth rate	Trend
2007-08	360.00	—	100	1590.2	—	100
2008-09	409.84	13.84	113.84	2245.0	41.17	141.17
2009-10	512.37	25.04	142.32	2948.7	31.34	185.42
2010-11	615.20	20.06	170.88	3926.4	33.15	246.91
2011-12	803.25	30.56	223.12	5167.1	31.59	324.93
2012-13	1055.10	31.35	293.08	6726.3	30.17	422.98
2013-14	1182.47	12.07	328.46	8478.4	26.04	533.16
2014-15	508.59	-56.98	141.27	10215.9	20.49	642.42
2015-16	416.03	-18.19	115.56	12296	20.36	773.23
2016-17	(1632.29)	-292.34	-453.41	14550	18.33	914.97

Source: Compiled from Annual Reports of respective banks 2007-08 to 2016-17

Graph 3



From the table 3 and graph3 it clearly indicates growth rate and trend percentage of both banks during the period of study. Comparing both banks Hdfc bank performance is better than J&K Bank if we look on year wise and also net profit of hdfc bank is also impressive than J&K bank. J&K bank trend percentage rises from 113.84 percent in the year 2008-09 and reaches to a maximum of 328.46 percent in the year 2013-14 and after that it showed declined trend while in hdfc bank it showed rising moment from beginning to end during the period of study years its trend was 141.17 percent in the year 2008-09 and reach to maximum 914.97 in the year 2016-17.

**Table.4 Net worth and its trend of J&K Bank and HDFC Bank Ltd.**

**(2007-08**

**to**

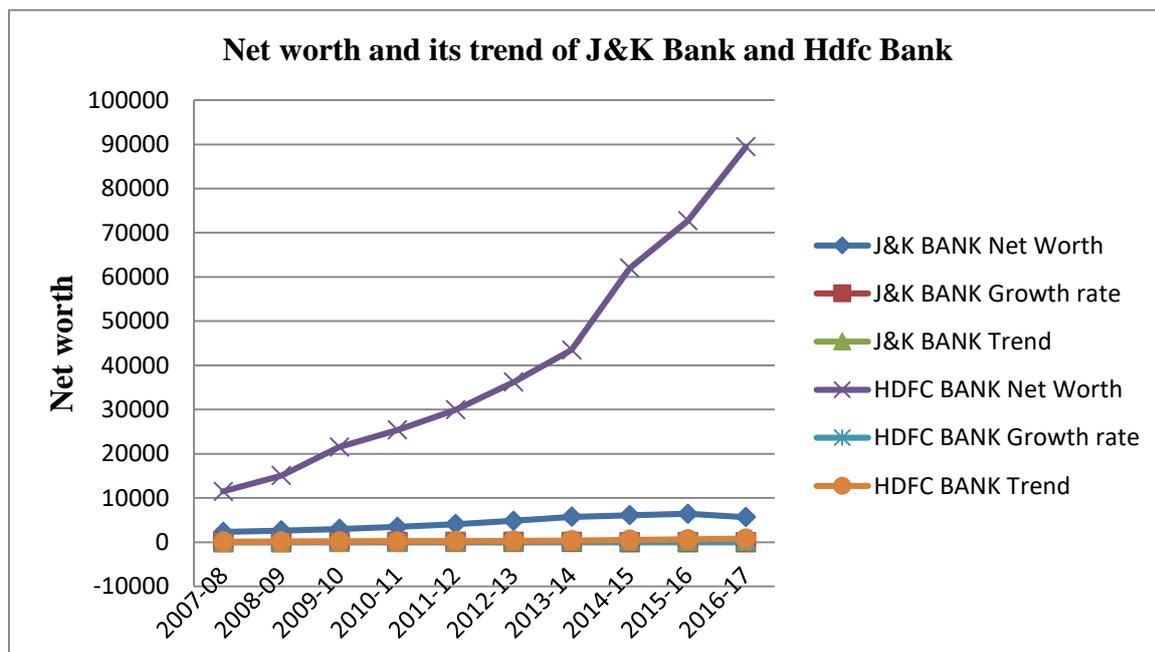
**2016**

**Rs in crores**

Years	J&K BANK			HDFC BANK		
	Net Worth	Growth rate	Trend	Net Worth	Growth rate	Trend
2007-08	2308.92	---	100	11497.23	---	100
2008-09	2622.86	13.59	113.59	15052.73	30.92	130.92
2009-10	3010.46	14.77	130.38	21522.49	42.98	187.27
2010-11	3478.68	15.55	150.66	25379.27	17.91	220.74
2011-12	4093.18	17.66	177.27	29924.68	17.90	260.27
2012-13	4846.69	18.40	209.91	36214.14	21.01	314.98
2013-14	5723.61	18.09	247.89	43478.63	20.05	378.16
2014-15	6110.05	6.75	264.62	62009.42	42.62	539.34
2015-16	6423.97	5.13	278.22	72677.77	17.20	632.13
2016-17	5676.50	-11.63	245.85	89462.35	23.09	778.12

Source: Compiled from Annual Reports of respective banks 2007-08 to 2016-17

Graph 4



From the above table 4 and graph 4 we can see the position of net worth of J&K Bank and Hdfc bank during last ten years of the study. Comparing both banks each other the net worth of Hdfc Bank is too much good than J&K Bank and the growth is also impressive. The trend percentage of J&K bank starts from 113.59 percent in the year 2008-09 and maximum 278.22 percent in 2015-16 and the growth rate of net worth was 13.59 percent during 2008-09 and reaches to maximum of 18.40 percent during 2012-13 but adversely decreased from 2014-15 to 2016-17 which challenging years for bank suffered huge stoppage of business because of flood, disturbance during past three years and finally bank had to face loss of Rs 1632.29cr instead of profit. While in

Hdfc Bank it shows every year impressive performance compared to J&K Bank. Hdfc bank trend starts from 130.92 percent and finally reach during the period of study which was highest than other year 778.12percent in 2016-17 and the growth was minimum during the year 2015-16 was 17.20percent and maximum was 42.98percent during the period of study.

### **Conclusion and findings**

The above study indicates the comparative position and performance of J&K Bank and HDFC Bank during the last ten years in terms of ratio ROA and ROE. From the analysis it was concluded that the mean value of J&K Bank was 0.804 percent and standard dev. value was 0.978263.while in HDFC Bank that enjoying more mean value i.e, 1.52 percent and the standard dev. value was 0.20746 in terms of net profit to total assets. Hdfc Bank shows better efficiency management performance and utilized the total assets very well than J&K Bank and in terms of net profit to networth Hdfc bank mean value was 16.288 than J&K Bank which is 10.397 during the period study. HDFC bank enjoys outstanding of ROA and ROE. So in order to improve in profitability especially in the ratio of ROA and ROE J&K Bank has to increased productivity and have to work hard on effective assets utilization and share capital and further bank should be able to face challenges in the present competitive business world and to contend like hdfc bank, icici and many other banks and also should focus on reducing burden ratio which is important factor that influencing the profitability of business.

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