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FINANCIAL PERFORMANCE EVALUATION OF PRIVATE SECTOR AND PUBLIC SECTOR BANKS IN INDIA: A COMPARATIVE STUDY

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ABSTRACT

Banking, the world over has been changing at a spectacular pace. This change is due to multifarious factors like the need to be efficient in functions, thirst for becoming finance superpower than mere banks, growing importance of private banks, the rise in high networth individuals etc. The present decade has witnessed a sea change in the way banking is done in India. In the present study, an attempt is made to evaluate the financial performance of top 5 public and private sector banks of India. The entire study is based on the secondary data, procured and extracted from the financial statements of the selected banks covering a period of five years from 2007 to 2011. For the purpose of analyzing the financial performance of the banks under study and to test the hypothesis, two kinds of tools have been used. They are statistical tools and financial ratios. The tests have been conducted at 5% level of significance. The critical value of F with 1 and 8 degrees of freedom is 2.87. The statistical tools used in this study are: Arithmetic Mean, Standard Deviation, and Coefficient of Variation, Correlation and Analysis of Variance (ANOVA). Various kinds of ratios have been used as the financial tools for the purpose of analysis. The study covers a period of five years from 2007 – 2011. The study clearly showed that there is significant difference among public and private sector banks with regard to the financial performance.

KEYWORDS

Public sector Banks, Private Sector Banks, Financial Performance.

INTRODUCTION

In the current global order, where the world has become a big village, consumers take a global look at the products and services in terms of price, quality, delivery and after sales services. This trend has sown the seeds of competition in every sector of the economy and banking sector is no exception to this. Banking, the world over has been changing at a spectacular pace. This change is due to multifarious factors like the need to be efficient in functions, thirst for becoming finance superpower than mere banks, growing importance of private banks, the rise in high networth individuals etc. The present decade has witnessed a sea change in the way banking is done in India. Technology has made tremendous impact in banking. "Anywhere banking" and "anytime banking" have become a reality.

PUBLIC SECTOR BANKS IN INDIA

Banking system in India is dominated by nationalized banks. The nationalization of 14 privately owned banks in India took place on 19th of July 1969 by Mrs. Indira Gandhi, the then Prime Minister with an installment of nationalization of 6 banks on 15.04.1980. The major objectives of nationalization was to ensure mass banking as against class banking with banking infrastructure aimed at hilly tracts and terrains of the country. Prior to 1969, State Bank of India was the only public sector bank in India. SBI was the only public sector bank in India. SBI was nationalized in 1955 under the SBI ACT of 1955.

PRIVATE BANKS IN INDIA

Prior to nationalization, banks in India with the sole exception of SBI were in private hands with community and trade orientation. Nationalisation of 14 banks in the year 1969 and another set of 6 banks in the year 1980 reduced the importance of private sector banks and public sector banks started playing a major role in extending the horizon of banking services to the nook and corner of the country.

With the history repeating itself, private sector banking got a fillip with the Government of India releasing the conditions for opening of private sector banks in the year 1994, as a part of their liberalization programme. Housing Development Finance Corporation of India (HDFC) was amongst the first to receive an 'in principle' approval from the Reserve Bank of India to set up a bank in the private sector. As of now there are 30 private sector banks operating in the country. Private banks have been playing a crucial role in enhancing customer oriented products with no choice left with the public sector banks except to innovate and compete in the process.

OBJECTIVES OF THE STUDY

The prime objective of this study is to compare the financial performance of public sector and private sector banks in India. However in order to achieve the prime objective the following subsidiary objectives have been framed by the researchers:

- To examine the key financial performance indicators such as net worth, total assets, total revenue, total debt, net profit of the banks under study
- To find out the correlation between various financial indicators
- To identify fluctuations in financial ratios of public sector banks and private sector banks for the period of five years

HYPOTHESIS

In addition to the above objectives, the researchers formulated the following Hypothesis:

Hypothesis: It clearly indicates that there is significance difference among public and private sector banks with regard to the financial performance. Hence, the null hypothesis is rejected.

METHODOLOGY OF THE STUDY

The entire study is based on the secondary data, procured and extracted from the financial statements of the selected banks covering a period of five years from 2007 to 2011. For the purpose of analyzing the financial performance of the banks under study and to test the hypothesis, two kinds of tools have been used. They are statistical tools and financial ratios. The tests have been conducted at 5% level of significance. The critical value of F with 1 and 8 degrees of freedom is

2.87. The statistical tools used in this study are: Arithmetic Mean, Standard Deviation, Coefficient of Variation, Correlation and Analysis of Variance (ANOVA) have been used extensively. Various kinds of ratios have been used as the financial tools for the purpose of analysis.

SCOPE OF THE STUDY

The present study is an attempt made by the authors to compare the financial performance of public sector banks with the financial performance of private sector in India. Study covers five public sector banks like SBI, Canara Bank, IDBI, Corporation Bank and Punjab National Bank and five private sector banks like ICICI, Kotak Mahindra Bank, Axis Bank, HDFC and City Union Bank. The study covers a period of five years from 2007 – 2011.

RESULTS AND DISCUSSION

TABLE 1: NET WORTH OF BANKS UNDER STUDY (Rs. in Crores)

Bank/ year	2007	2008	2009	2010	2011	Average growth in %	SD of growth in %	CV of growth in %
PUBLIC BANKS								
SBI	31298.56	49032.66	57947.7	65949.2	64986.04	21.79	24.72	113.41
PNB	10435.46	12318.35	14653.63	17722.92	21508.56	19.82	1.59	8.00
CORP	3765.45	4228.51	4896.51	5774.87	7137.81	17.41	4.74	27.22
CANARA	10353.99	10500.49	12207.77	14671.78	20039.82	18.61	14.46	77.67
IDBI	8299.86	8821.97	9423.86	10164.84	14567.58	16.07	18.17	113.07
Average	12830.67	16980.39	19825.89	22856.72	25647.96	18.74	12.74	67.87
PRIVATE BANKS								
ICICI	24663.26	46820.21	49883.02	51618.37	55090.94	26.65	42.15	158.20
Kotak	1661.93	3593.71	3905.53	4539.92	6833.39	47.92	49.05	102.36
Axis	3402.21	8770.69	10214.8	16044.62	18998.83	62.44	66.27	106.13
HDFC	6433.15	11497.23	15052.73	21522.49	25379.27	42.64	26.14	61.31
City Union	365.71	566.86	660.92	825.64	1006.62	29.61	17.28	58.34
Average	7305.252	14249.74	15943.4	18910.22	21461.81	41.852	40.18	97.27

Source: Annual reports of the banks

As per Table 1 it is clear that among the public sector banks under study, SBI has the highest growth rate (21.79%) in net worth and also has highest coefficient of variance in growth rate of net worth. Similarly, among the private sector banks, Axis Bank has the highest growth rate (62.44%) in net worth and also has highest coefficient of variance in growth rate of net worth. Growth rate of net worth of private sector banks is higher (41.85%) than the growth rate of net worth of public sector banks (18.74%).

TABLE 2: TOTAL ASSETS OF THE BANKS UNDER STUDY (Rs. in Crores)

Bank/ year	2007	2008	2009	2010	2011	Average growth in %	SD of growth in %	CV of growth in %
PUBLIC BANKS								
SBI	566565.24	721526.32	964432.08	1053413.7	1223736.2	21.60	10.97	50.79
PNB	116938.82	143492.96	182019.7	217416.32	281692.14	24.64	4.47	18.12
CORP	38303.16	50085.3	61968.04	77142.92	100051.26	27.17	3.57	13.16
CANAR	118492.63	128512.26	159700.74	192931.45	250280.48	20.81	9.02	43.33
IDBI	76089.06	95824.59	120297.59	158126.8	183143.78	24.69	6.50	26.31
Average	183277.78	227888.29	297683.63	339806.25	407780.77	23.78	2.39	10.06
PRIVATE BANKS								
ICICI	253210.6	288340.74	276242.65	242506.91	271547.71	2.365	12.65	536.12
KOTAK	19915.42	28312.36	28711.88	37436.31	50850.66	27.45	18.01	65.62
AXIS	46335.24	75744.27	101334.21	124615.8	170699.07	39.30	17.19	43.74
HDFC	60670.81	83783.06	124453.23	163850.95	206423.23	36.08	9.69	26.82
CITY UNION	5363.01	7348.97	9250.99	11559.4	14591.52	28.52	5.70	19.97
Average	77099.02	96705.88	107998.59	115993.87	142822.44	26.74	8.81	32.93

Source: Annual reports of the banks

It is clear from Table 2 that among the public sector banks under study, IDBI has the highest growth rate (24.69%) in total assets and SBI has highest coefficient of variance in growth rate of total assets. Similarly, among the private sector banks, Axis Bank has the highest growth rate (39.30%) in total assets and ICICI has highest coefficient of variance in growth rate of total assets. Growth rate of total assets of private sector banks is higher (26.74%) than the growth rate of total assets of public sector banks (23.78%).

TABLE 3: TOTAL DEBT OF BANKS UNDER STUDY (Rs. in Crores)

Bank/ year	2007	2008	2009	2010	2011	Average growth in %	SD of growth in %	CV of growth in %
PUBLIC BANKS								
SBI	475224.43	589131.35	795786.81	907127.83	1053501.8	22.29	9.54	42.80
PNB	152243.99	184222.13	228788.49	286315.09	365996.0	24.54	2.82	11.48
CORP	49143.35	61790.54	80952.82	107586.06	139850.7	29.91	3.03	10.14
CANAR	154309.79	167090.15	206156.89	257763.78	328274.1	21.01	8.64	41.13
IDBI	94058.28	120432.5	166241.92	225541.4	246623.0	27.77	13.00	46.82
Average	184995.97	224533.33	295585.39	356866.83	426849.3	25.11	7.41	30.47
PRIVATE BANKS								
ICICI	306429.48	356899.69	335554.53	347898.53	390247.32	6.59	9.92	150.7
KOTAK	16099.84	21542.9	21549	30026.98	40984.92	27.42	18.40	67.11
AXIS	67383.41	102020.95	137774.38	174514.39	234504.51	36.87	10.41	28.22
HDFC	77546.48	116744.69	160550.15	201842.63	248359.73	34.21	12.58	36.77
CITY UNION	4719.22	6427.6	8206.77	10324.62	13100.44	29.14	4.78	16.36
Average	94435.69	120727.17	132726.97	152921.43	185439.38	26.85	11.21	59.82

Source: Annual reports of the banks

It is crystal clear from Table 3 that among the public sector banks under study, in terms of total debt, Corporation Bank has the highest growth rate (29.91%) and IDBI has highest coefficient of variance in growth rate of total debt. Similarly, among the private sector banks, Axis Bank has the highest growth rate (36.87%) in total debt and ICICI has highest coefficient of variance in growth rate of total debt. Growth rate of total debt of private sector banks is higher (26.85%) than the growth rate of net worth of public sector banks (25.11%).

TABLE 4: TOTAL REVENUE OF BANKS UNDER STUDY (Rs. in Crores)

Bank/year	2007	2008	2009	2010	2011	Average growth in %	SD of growth in %	CV of growth in %
PUBLIC BANKS								
SBI	46937.79	58348.74	76479.78	85962.07	96329.45	19.96	9.35	46.82
PNB	12290.92	16157.27	22460.42	24961.37	30448.56	25.9	12.06	46.56
CORP	3826.15	5099.82	6929.51	8323.86	10173.3	27.88	7.86	28.20
CANARA	12240.49	16274.53	19022.09	21935.75	25723.99	20.61	8.28	40.16
IDBI	7205.38	9298.22	12782.08	17317.07	20310.14	29.82	9.10	30.51
Average	16500.15	21035.72	27534.78	31700.02	36597.09	24.83	9.33	38.45
PRIVATE BANKS								
ICICI	28766.3	39533.5	38581.03	33052.72	32376.96	4.66	22.58	484.33
KOTAK	1641.93	2845.84	3222.7	3676.59	4811.12	32.88	28.16	85.65
AXIS	5482.84	8764.54	13632.76	15609.9	19694.65	39.02	22.16	56.80
HDFC	8406.3	12397.45	19770.72	19976.49	24393.6	32.53	26.14	80.36
CITY UNION	459.75	691.43	928.08	1100.11	1375.81	32.05	13.82	43.10
Average	8951.42	12846.55	15227.04	14683.16	16530.43	28.23	22.57	150.04

Source: Annual reports of the banks

It is fact from Table 4 that among the public sector banks under study, IDBI has the highest growth rate (29.83%) in total revenue and also has highest coefficient of variance in growth rate of total revenue. Similarly, among the private sector banks, Axis Bank has the highest growth rate (39.02%) in total revenue and ICICI has highest coefficient of variance in growth rate of total revenue.

TABLE 5: NET PROFIT OF BANKS UNDER STUDY (Rs. in Crores)

Bank/year	2007	2008	2009	2010	2011	Average growth in %	SD of growth in %	CV of growth in %
PUBLIC BANKS								
SBI	4541.31	6729.12	9121.23	9166.05	7370.35	16.16	31.22	193.25
PNB	1539.33	2047.63	3089.11	3902.94	4430.44	30.94	15.56	50.28
CORP	424.15	605.24	802.19	1074.99	1206.66	30.37	12.89	42.43
CANARA	4025.44	3018.65	2071.59	1563.92	1420.32	30.41	9.42	-41.85
IDBI	451.69	728.64	845.26	1032.57	1653.01	39.89	24.16	60.58
Average	2196.38	2625.85	3185.88	3348.09	3216.16	29.55	18.65	60.94
PRIVATE BANKS								
ICICI	2995	4092.12	3740.62	3860.47	5110.21	15.9	22.08	138.80
KOTAK	141.37	293.93	276.1	561.11	818.18	62.72	53.85	85.86
AXIS	661.94	1086.21	1823.56	2518.4	3395.47	51.23	17.17	33.51
HDFC	1142.5	1586.48	2540.75	2944.68	3927.22	37.07	18.24	49.20
CITY UNION	71.81	101.73	122.13	152.76	215.05	31.89	10.97	34.40
Average	1002.52	1432.09	1700.63	2007.48	2693.226	39.762	24.46	68.35

Source: Annual reports of the banks

It is clear from Table 5 that among the public sector banks under study, IDBI has the highest growth rate (39.89%) in net profit and SBI has highest coefficient of variance in growth rate of net profit. Similarly, among the private sector banks, Kotak has the highest growth rate (62.72%) in net profit and also has highest coefficient of variance in growth rate of net profit. Growth rate of net profit of private sector banks is higher (39.76%) than the growth rate of net worth of public sector banks (29.55%).

TABLE 6: CORRELATION AMONG KEY FINANCIAL INDICATORS OF PUBLIC SECTOR BANKS (DATA OF FIVE YEARS FROM 2007 - 2011)

Banks/ Indicators	Net Worth & Total Assets	Net Worth & Total Debt	Net Worth & Total Income	Net Worth & N/P	Total Assets & Debt	Total Assets & Income	Total Assets & N/P	Total Debt & Income	Total Debt & N/P	Total Income & N/P
SBI	0.939	0.928	0.946	0.870	0.998	0.998	0.718	0.998	0.692	0.729
PNB	0.998	0.999	0.983	0.980	0.999	0.985	0.974	0.978	0.974	0.990
CORP	0.998	0.999	0.999	0.970	0.998	0.992	0.979	0.990	0.980	0.992
CAN	0.990	0.987	0.924	-0.792	0.999	0.965	-0.870	0.965	-0.873	-0.960
IDBI	0.882	0.833	0.877	0.976	0.995	0.999	0.948	0.996	0.913	0.943

Source: Annual reports of the banks

Table 6 reveals the fact that except in Canara Bank, in all other public banks under study, there is a strong positive correlation between various financial indicators. In case of Canara Bank, there is a strong negative correlation between Net Worth and Net Profit, Total Assets and Net Profit, Total Debt and Net Profit, and Total Income and Net Profit.

TABLE 7: CORRELATION AMONG KEY FINANCIAL INDICATORS OF PRIVATE SECTOR BANKS (DATA OF FIVE YEARS FROM 2007 - 2011)

Banks/ Indicators	Net Worth & Total Assets	Net Worth & Total Debt	Net Worth & Total Income	Net Worth & N/P	Total Assets & Debt	Total Assets & Income	Total Assets & N/P	Total Debt & Income	Total Debt & N/P	Net Income & N/P
ICICI	0.282	0.830	0.526	0.806	0.374	0.754	0.388	0.258	0.992	0.218
KOTAK	0.982	0.965	0.994	0.953	0.997	0.972	0.992	0.953	0.997	0.945
AXIS	0.977	0.978	0.968	0.976	0.999	0.988	0.994	0.987	0.997	0.988
HDFC	0.992	0.995	0.949	0.979	0.997	0.958	0.994	0.969	0.994	0.977
CITY UNION	0.995	0.993	0.995	0.983	0.996	0.996	0.992	0.995	0.992	0.981

Source: Annual reports of the banks

As revealed in Table 7 that all the private sector banks have positive correlation between various financial indicators.

TABLE 8: AVERAGE* STANDARD DEVIATION AND CO-EFFICIENT OF VARIATION*** OF VARIOUS RATIOS OF THE SELECTED PUBLIC BANKS (DATA OF FIVE YEARS FROM 2007 - 2011)**

Ratio/banks	SBI	PNB	CORPORATION	CAN	IDBI	AV*	SD**	CV***
ROLF	105.362	109.34	102	123.6	131.2	114.3004	12.52876	10.96126
RONW	14.32	20.946	17.49	20.86	10.86	16.8952	4.345621	25.72104
LTO	0.146	0.146	0.142	0.14	0.134	0.1416	0.00498	3.516921
TATO	0.086	15.234	0.082	0.086	0.082	3.114	6.775286	217.575
TDOF	14.01	1.288	14.378	17.46	13.23	12.0732	6.239784	51.68294
FCCR	1.2	1.288	1.25	1.222	1.102	1.2124	0.069934	5.768249
DPR	18.2	23.396	24.666	18.53	25.48	22.0544	3.450829	15.64689
ERR	82.27	76.592	71.054	81.75	72.27	76.7872	5.196231	6.767053

Source: Annual reports of the banks

According to Table 8, it is crystal clear that ROLF of IDBI is highest (131.2) compared to other public sector banks under study. PNB has highest (20.95) RONW, SBI and PNB have highest (0.146) LTO, PNB has highest (15.23) TATO, Canara Bank has highest (17.46) TDOF, PNB has highest FCCR, IDBI has highest (25.48) DPR, and SBI has highest (82.27) ERR compared to other public sector banks under study.

TABLE 9: AVERAGE* STANDARD DEVIATION AND CO-EFFICIENT OF VARIATION*** OF VARIOUS RATIOS OF THE PRIVATE BANKS UNDER STUDY (DATA OF FIVE YEARS FROM 2007 - 2011)**

Ratio/Banks	ICICI	KOTAK	AXIS	HDFC	CITY UNION	AV*	SD**	CV***
ROLF	57.84	49.69	85.37	67.31	101.4	72.322	20.99307	29.02723
RONW	9.366	10.1	16.57	16.37	19.66	14.4132	4.474586	31.04506
LTO	0.178	0.196	0.176	0.202	0.158	0.182	0.017493	9.611459
TATO	0.096	0.112	0.096	0.108	0.098	0.102	0.007483	7.336583
TDOF	5.396	4.948	11.50	9.026	12.37	8.648	3.405715	39.38153
FCCR	1.244	1.33	1.332	1.414	1.286	1.3212	0.063255	4.787696
DPR	35.23	9.918	22.31	22.33	19.87	21.9316	9.023942	41.14585
ERR	64.05	90.06	77.80	77.65	80.10	77.932	9.281642	11.90992

Source: Annual reports of the bank

It is clear from Table 9 that ROLF of City Union Bank is highest (101.4) compared to other private sector banks under study. City Union Bank has highest (19.66) RONW, Katak has highest (0.196) LTO and highest (0.112) TATO, City Union Bank has highest (12.37) TDOF, HDFC has highest FCCR, ICICI has highest (35.23) DPR, and Kotak has highest (90.06) ERR compared to other private sector banks under study.

TABLE 10: GROWTH RATES OF BANKS – A COMPARISON

Financial Indicator	Public Sector Banks (%)	Private Sector Banks (%)
Net Worth	18.74	41.85
Total Assets	23.78	26.74
Total Debt	25.11	26.85
Total Revenue	24.83	28.23
Net Profit	29.55	39.76
Average	24.402	32.686

It is clear from Table 10 that the growth rate of private sector banks in all the five financial indicators is higher than the growth rate of public sector banks and therefore the average growth rate of private banks in terms of financial indicators is higher (32.69%) than the average growth rate of public sector banks.

TESTING OF HYPOTHESIS

Hypothesis: There is no significance difference among public and private sector banks with regard to the financial performance.

Table 11 shows the fact that except in case of Net Worth all the calculated values of F are higher than the table value of F at 5% level of significance. It clearly indicates that there is significance difference among public and private sector banks with regard to the financial performance. Hence, the null hypothesis is rejected.

TABLE 11: ONE WAY ANALYSIS OF VARIANCE BETWEEN SELECTED COMPANIES (DATA OF 5 YEARS FROM 2007-2011) AND (CRITICAL VALUE OF F = 5.32)

Indicator	Sources of variation	d.f	SS	MSS	F Value
Net Worth	Between sample	1	41092187.38	41092187.38	1.52
	Within sample	8	215976229.8	26997028.73	
Total Assets	Between sample	1	83872063096	83872063096	19.73
	Within sample	8	34010076147	4251259518	
Total debt	Between sample	1	64413494533	64413494533	12.00
	Within sample	8	42934602042	5366825255	
Total revenue	Between sample	1	424180748.2	424180748.2	11.53
	Within sample	8	294340470.2	36792558.78	
Net Profit	Between sample	1	3290644.558	3290644.558	10.25
	Within sample	8	2568385.711	321048.21	

FINDINGS AND CONCLUSION

An attempt is made here by the authors to highlight the major findings of the study. It is found that among the public sector banks under study, SBI has the highest growth rate (21.79%) in net worth. Similarly, among the private sector banks, Axis Bank has the highest growth rate (62.44%) in net worth. Among the public sector banks under study, IDBI has the highest growth rate (24.69%) in total assets and among the private sector banks; Axis Bank has the highest growth rate (39.30%). Among the public sector banks under study, in terms of total debt, Corporation Bank has the highest growth rate (29.91%) and among the private sector banks, Axis Bank has the highest growth rate (36.87%) in total debt. Among the public sector banks under study, IDBI has the highest growth rate (29.83%) in total revenue and among the private sector banks; Axis Bank has the highest growth rate (39.02%) in total revenue. Among the public sector banks

under study, IDBI has the highest growth rate (39.89%) in net profit and among the private sector banks; Kotak has the highest growth rate (62.72%) in net profit.

It can be seen in the study that except in Canara Bank, in all other public banks under study, there is a strong positive correlation between various financial indicators. In case of Canara Bank, there is a strong negative correlation between Net Worth and Net Profit, Total Assets and Net Profit, Total Debt and Net Profit, and Total Income and Net Profit. All the private sector banks have positive correlation between various financial indicators.

Ratio analysis shows that among public sector banks, ROLF of IDBI is highest (131.2), PNB has highest (20.95) RONW, SBI and PNB have highest (0.146) LTO, PNB has highest (15.23) TATO, Canara Bank has highest (17.46) TDOF, PNB has highest FCCR, IDBI has highest (25.48) DPR, and SBI has highest (82.27) ERR compared to other public sector banks under study. Among the private sector banks, ROLF of City Union Bank is highest (101.4), City Union Bank has highest (19.66) RONW, Katak has highest (0.196) LTO and highest (0.112) TATO, City Union Bank has highest (12.37) TDOF, HDFC has highest FCCR, ICICI has highest (35.23) DPR, and Kotak has highest (90.06) ERR compared to other private sector banks under study.

It is also found that the growth rate of private sector banks in all the five financial indicators is higher than the growth rate of public sector banks and therefore the average growth rate of private banks in terms of financial indicators is higher (32.69%) than the average growth rate of public sector banks. The study clearly shows that there is a significant difference among public and private sector banks with regard to the financial performance. Finally it is concluded that the growth rate of private sector banks is higher than that of public sector banks. So public sector banks have to take initiative to improve their performance and growth so as to compete with highly growing private sector banks.

REFERENCES

1. Agrawal, N.P, (1983) Analysis of Financial Statements. National Publishing House. New Delhi
2. Barbara Casu, Claudia Girardone, Philip Molyneux, Introduction to Banking, Pearson Education, Canada.
3. Brigham E F and Gapenski L C (1991), Financial Management: Theory and Practice, 6th Edition, the Dryden Press, Orlando, Fl.
4. Chandra Prasanna (2010), Fundamentals of Financial Management, Tata McGraw Hill Education Pvt. Ltd., New Delhi
5. Chandra Prasanna, (2008) Financial Management, Seventh edition, Tata McGraw –Hill, New Delhi
6. Gupta. S. C., (1991), Fundamentals of Statistics, 6th revised and enlarged edition, Himalaya Publishing House, New Delhi
7. Khan M Y and Jain P K, (2010) Financial Management, Fifth edition, Tata McGraw –Hill, New Delhi
8. Khan M.Y., (2006), Indian Financial System, Tata McGraw Hill, New Delhi.
9. Khan M.Y., Jain P.K.(2002), Cost Accounting and Financial Management, Tata McGraw Hill, New Delhi.
10. Kuchhal, S.C.,(1985), Financial Management, Chitanya Publishing, Allahabad.
11. Kulkarni, P.V., Sathya Prasad B.G.(1999), Financial Management, Himalaya Publishing, Bombay.
12. Maheshwari S N (1996), Management Accounting and Financial Control, Sultan Chand & Sons, New Delhi.
13. Pandey I. M, (2004), Financial Management, Ninth edition, Vikas Publishing House, New Delhi
14. Parameshwaran (2010), Indian Banking, S Chand & Co. Ltd, New Delhi.
15. Pathak. V. Bharathi, (2008), The Indian Financial System: Markets, Institutions and Services, 2nd edition, Pearson Education, Delhi.
16. Van Horne J C and Wachowicz J M (2004), Fundamentals of Financial Management, 12th Edition, Prentice Hall Publishers, New York
17. Van Horne, James C.(2002), Financial Management and Policy, Prentice-Hall of India: New Delhi.
18. Vijayaragavan Iyengar (2007), Introduction to Banking, Excel Books, New Delhi.

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