

A Comparative Analysis of Human Capital Efficiency of Public and Private Banks in India

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Abstract

The purpose of the study is to make a comparative analysis of the human capital efficiency (HCE) of the private and public banks in India for the period 2005-06 to 2009-10. The study is based on the secondary data taken from the financial statements of the banks. Value added method has been used to measure the human capital efficiency of the banks. Exponential trend method, ANOVA and GAP Analysis has been used to measure the variation in the human capital efficiency of the private and public sector banks. The main finding of the study is that there is a reduction of 839.32 per cent in gap index of HCE between public and private banks. The Annual Compounded Growth Rate of public banks are more than the private banks which shows that public banks have made great efforts to be competent with private banks; by focusing on Business Process Re-engineering, providing Voluntary Retirement Scheme (VRS) options to employees, competent compensation, and incurring development expenditures on employees to improve their skills and knowledge etc. But still the public banks need to adopt flexible recruitment policy to retain the talented staff and expansion in decision making powers to terminate the unproductive employees and elimination of overlapping branches. The study also suggests that there is a need of accounting standard for measuring, reporting and disclosing of the intellectual capital of the banks in the financial statements.

Keywords: Human capital efficiency, Value added, Business Process Re-engineering, Compensation and GAP Analysis.

Introduction

In our economic history we have seen three eras: the agrarian era, the industrial era, and the knowledge era. Each era has been defined by the factor of production that has served as the foundation for wealth creation. In the agrarian era, land was the primary source of wealth. In the industrial era, the primary sources of wealth were machinery and, to a lesser extent, natural resources. In the knowledge era, human capital is the source of wealth. Pulic (1998) stated "in a knowledge based economy the responsible party for the achieved market results are definitely the employees". The human intellectual ability is a key intellectual and strategic asset which increases the efficiency of firms. Intellectual Capital (IC) is a knowledge and information which create the value added efficiency to create wealth of corporations argued by Stewart (1997).

The operating environment in which the firm works is very competitive and different from the traditional operating environment. The role of financial and physical assets owned by a firm is losing its importance in an economy which is dominated by service sector. Intangible assets that create value for the firm are quickly gaining importance. As a result every organization now finds logic in measuring, valuing and reporting its intangibles, as they also have become one of the important performance indicators and a strategy to gain competitive advantage. Globalization, deregulation and advances in information

technology during last 15 years have brought about significant changes in the operating environment for banks. Human capital is getting very much importance in this knowledge era. Mavridis (2004) stated “the banking sector in general offers an ideal area of intellectual capital research because the business nature of the banking sector is intellectually intensive”. The share of intangibles as a proportion of the total assets is also showing tremendous increase in the recent years.

Table 1 clearly indicates that the amount of human capital in both the private and public sector banks is increasing during the period 2006 to 2010. Public sector banks have an increase of 49.83 per cent in the human capital while the private sector banks have an increase of 131.22 per cent in their human capital. The amount of value added has also increased with the increase in the human capital of the banks. Public sector banks have shown an increase of 80.54 per cent in the value added during the studied period while private sector banks have shown an increase of 178.78 per cent in their value added. In both the public and private banks the value added has shown increase more than human capital.

Table 1 Human Capital and Value Added of Private and Public Banks

Amount in Rupees Crore

Year	HUMAN CAPITAL		VALUE ADDED	
	Public	Private	Public	Private
2006	27378	4077	65345	13846
2007	27803	5276	70071	19328
2008	28660	7114	78967	26348
2009	34564	8526	101168	32721
2010	41032	9427	117977	38600

(Author’s Computation)

Human capital is all the Expenses incurred on Compensation and development of employees. Value added is the difference between the Output and Input. It is the value created by the organization during the particular financial year. Output is the total of all income/revenue generated during the fiscal by an organization by selling its goods or services. Input is the sum of all the costs that is incurred by the organization towards purchase of inputs for operating and continuing the business. Here, the employees’ compensation and other costs incurred on them for training and development would be deducted from total expenses, as they are treated as investment, not the expenditure.

Human Capital includes all the aspects related to the employees in the organization, their training, development, their contribution to the organizational development and also value creation, generation and sustenance. Thus, just by having a large work force with good qualification and experience does not amount to being efficient, Value creation Efficiency mainly depends on the contribution of these employees towards value creation of the organization (Edvinsson, 1997).

Efficiency in using resources plays an important role in determining the strength of the organization. Increase in the value is the major objective of most commercial firms; banks are no exception to this. Measuring the increase in value also becomes challenging when the value itself is being created by intangibles. Human Capital is the skill and creativity of employees which can be further encourage by investing more in their training programs. Human Capital is experience and expertise of employees which increases the efficiency of organizations. More efficient employees will boost Value Added (VA) efficiency of the organisation.

The present accounting system does not support the measurement and reporting of intellectual capital in India. It has also been found in various studies that there is a general absence of well defined guidelines for the intellectual capital disclosure in the annual reports from the national or international accounting bodies and Australian professional accounting associations. Accordingly, companies are lagging behind in the reporting and disclosure of intellectual capital in their annual reports. (Abeysekera and Guthrie, 2005; Brennan, 2001; Bontis, 2003 and Pablos, 2003). Therefore there is a need to develop a new accounting standard that takes into account the growing importance of Intellectual capital. These changes are more compelling in some sectors with specific reference to service sectors like banks and financial institutions, Hotels, Tourism sector, Information and Technology Industry, Education etc, where the role of Human capital is much more evident among the other components of intellectual capital. Thus the main aim of the study is to make a comparative analysis of the human capital efficiency of the private and public sector banks in India.

Review Literature

Pulic (2004) was the first to study the impact of intellectual capital on the banking industry. He measured Australian banks' intellectual capital performance (1993 to 1995) and Croatian banks' capital performance (1996 to 2000) with the VAIC model. His findings show that, performance rank and classic accounting rank give banks significantly different positions. A study measuring the intellectual capital of 98 Indian banks with the VAIC model indicates that, different types of banks performed differently (Kamath, 2007). According to the final results of the model, foreign banks, which made the best use of the intellectual capital and financial capital, out-performed. The banks which failed to reach the effective operant level; ceased to operate, merged or got liquidated. Cheng and Xie (2001) and Feng and Li (2001) discussed the impact of human capital, a component of intellectual capital, on performance, from different perspectives. Feng and Li (2001) emphasized the human capital of the senior managers who control the core technology. Both studies indicate that, human capital has a special impact on performance. Fang et al. (2002) concentrated on how changes in human capital affect performance and concluded that loss of human capital property rights results in low efficiency, Liu and Zhang (2003) pointed out that, incentives on human capital property rights could improve national enterprises' performance. Xu (2003) examined the effect of human capital operation on improved competitive power and proposed that, businesses should implement incentive mechanisms in order to maximize the power of human capital. Maditinos et al. (2011) attempted a study to investigate the empirical relation of Intellectual Capital (IC) with firms' market and financial performance, of 96 listed firms in Athens Stock Exchange and argued that only (HCE) has significant and substantive positive relation with financial performance (ROE) of firms. Laing, Dunn and Lucas (2010) examined the empirical relation of IC performance and financial performance of hotel industry of Australia over the period of 2004-2007 conducting VAIC™ methodology. They concluded that (ICE) Intellectual Capital Efficiency is based on Human Capital Efficiency (HCE) of hotel industry of Australia, which positively encourages financial performance (ROA) of hotel industry. Firer and Williams (2003), Shiu (2006b), and Chan (2009b), all found that HCE has a significant positive relationship with asset turnover and market to book ratio. Additionally, Appuhami (2007) found that the relationship between HCE and the capital gains made by investors was positive but not significant. Mavridis (2004) have made study on 141 Japanese banks between 2000 and 2001 using VAIC and found that banks with high human capital were the highest performers. He concluded that HC is important for a bank's performance; however physical assets are less important

Objectives

The objective of the study is to make a comparative analysis of human capital efficiency of the private and public sector banks in India for the period 2006 to 2010.

Research Methodology

The study is based on the secondary data collected from the financial statements of the banks from the database of Reserve Bank of India for the period 2006 to 2010. The dataset consists of 22 private sector and 27 public sector banks. The list of the banks included in the study is provided in the appendix 1.

Value added method has been used to measure the human capital efficiency of the banks. Exponential trend method has been used to measure the ACGR (Annual compounded growth rate) in the human capital efficiency of the banks. ANOVA and GAP Analysis has been used to measure the variation in the human capital efficiency of the private and public sector banks. The purpose of Gap Index analysis is to see whether or not the gap between Private and Public Banks are reduced after several initiatives taken by the Public Sector banks to meet the challenges and competition from Private Sector banks.

Human Capital Efficiency (HCE): Human capital efficiency is the ratio of value added to human capital. This ratio shows the value added by the every unit of money spend on the human resources of the banks in the form of compensation and development expenses. This ratio is an indicator of the performance of the employees.

$$\text{HCE} = \text{Value Added} / \text{Human Capital (VA/HC)}$$

Where; Value Added= Value of Output – Value of Input

Value Added: Value added is the difference between the Output and Input. It is the value created by the organization during the particular financial year. Output is the total of all income/revenue generated during the financial year by an organization by selling its goods or services. Input is the sum of all the costs that is incurred by the organization towards purchase of inputs for operating and continuing the business. Here, the employees' compensation and other costs incurred on them for training and development would be deducted from total expenses, as they are treated as investment, not the expenditure.

Human Capital (HC): Human capital is all the Expenses incurred on Compensation and development of employees.

GAP Index Analysis: The Gap Index has been defined as the percentage of difference in the value of variables between Private Sector Banks (PVB) and Public Sector Banks (PUB) as a ratio of their aggregate value. Gap Index of Human Capital Efficiency (HCE) can be worked out as:

$$\frac{\text{HCE (PVB)} - \text{HCE (PUB)}}{\text{HCE (PVB)} + \text{HCE (PUB)}} \times 100$$

Data Analysis & Interpretation

Human capital efficiency (HCE) of the private sector banks has been measured in the Table 2 for the period 2006 to 2010. The highest mean value of HCE is 5.1272 of ICICI; while the lowest mean value of HCE is 1.4961 of CSB. The annual compound growth rate is highest for the DCB i.e. 1.21 per cent which shows that although the DCB is having a Rank 21 out of 22 for HCE but it has achieved the highest growth in HCE during 2006 to 2010. The lowest annual compounded growth rate is of SBICB i.e. 0.79 per cent with Rank 7. The overall annual compounded growth rate of all the private sector banks during the period of 2006 to 2010 is 1.02 per cent.

Table 2 Human Capital Efficiency (HCE) of Private Sector Banks

BANK	2006	2007	2008	2009	2010	Mean	RANK	ACGR (%)	Percentile
ICICI	4.5928	4.6335	4.8293	5.5267	6.0536	5.1272	1	1.07	100.00%
AXIS	5.1375	4.5731	4.3210	4.7336	5.1730	4.7876	2	1.00	95.20%
FB	2.9801	3.3536	5.6556	4.9684	4.4554	4.2826	3	1.13	90.40%
CUB	4.0041	3.9633	4.7610	4.4896	4.1926	4.2821	4	1.02	85.70%
HDFC	5.0646	4.6107	3.8935	3.3139	3.8087	4.1383	5	0.91	80.90%
KVB	3.6172	3.9535	4.0237	4.4024	3.8371	3.9668	6	1.02	76.10%
SBICB	7.5212	2.3355	4.1476	3.7759	1.7137	3.8988	7	0.79	71.40%
JKB	3.2314	3.5247	3.8873	3.7781	3.6155	3.6074	8	1.03	66.60%
KB	3.8265	3.7623	3.1582	3.5220	2.2613	3.3060	9	0.90	61.90%
YES	2.9771	2.4679	2.7296	3.4202	4.3607	3.1911	10	1.15	57.10%
INB	3.2089	2.7821	2.6094	2.9678	3.4225	2.9981	11	1.02	52.30%
NB	2.0171	2.6344	3.4936	3.4726	3.3541	2.9944	12	1.14	47.60%
TMB	1.4338	3.5980	3.2130	3.1333	3.1941	2.9144	13	1.16	42.80%
SIB	2.1223	2.8901	2.8493	2.6747	2.8141	2.6701	14	1.05	38.00%
KMB	3.5519	2.1122	1.5267	2.0208	3.2229	2.4869	15	0.98	33.30%
RB	1.8939	1.4312	2.9790	3.2361	2.4605	2.4001	16	1.14	28.50%
LVB	1.6687	2.3091	2.4304	2.3874	2.7974	2.3186	17	1.11	23.80%
ING	2.2286	1.9616	2.0167	2.0831	2.4969	2.1574	18	1.03	19.00%
DB	1.5524	1.8840	1.9388	2.4051	1.3546	1.8270	19	1.00	14.20%
BOR	1.1142	2.1892	1.9791	1.9279	0.9270	1.6275	20	0.95	9.50%
DCB	0.6245	1.5817	2.1283	1.7215	1.5482	1.5208	21	1.21	4.70%
CSB	1.3297	1.6773	1.7466	1.6610	1.0659	1.4961	22	0.96	0.00%
Mean	2.9863	2.9195	3.1963	3.2555	3.0968	3.0909		1.02	

(Author's Computation)

Table 3 depicts the Human capital efficiency (HCE) of the public sector banks for the period 2006 to 2010. IDBI is having highest mean value of HCE i.e. 5.590 while the lowest mean value of HCE is 2.0788 of UBOI. The annual compound growth rate is highest for the IB i.e. 1.26 per cent which shows

that although the IB is having a Rank 18 out of 27 for HCE but it has achieved the highest growth in HCE during 2006 to 2010. The lowest annual compound growth rate has been found for the IDBI i.e. 0.90 per cent which is having a Rank 1. The growth rate for all the public sector banks for the period 2006 to 2010 is 1.05 per cent which is more than the growth rate of private sector banks for the same period.

Table 3 Human Capital Efficiency of Public Sector Banks

Bank	2006	2007	2008	2009	2010	Mean	RANK	ACGR (%)	Percent
IDBI	5.2343	7.9084	6.8294	3.4206	4.6024	5.5990	1	0.90	100.00%
CO.B	3.6232	4.0135	3.9241	4.4146	4.3825	4.0716	2	1.05	96.10%
UBI	2.6918	3.2901	4.0526	3.6756	3.7016	3.4823	3	1.08	92.30%
OBC	3.3818	3.4895	3.2190	3.1655	3.4931	3.3498	4	1.00	88.40%
SBH	2.3875	3.0409	3.1127	3.3598	3.8558	3.1513	5	1.11	84.60%
SBP	2.9677	2.9728	3.0269	3.1748	3.6124	3.1509	6	1.05	80.70%
SBIIn	2.8168	2.7382	3.0598	3.4515	3.6005	3.1334	7	1.07	76.90%
AI.B	2.5037	2.7721	3.1446	3.1754	3.5199	3.0231	8	1.08	73.00%
BOI	2.2809	2.4839	3.2337	3.8165	3.0491	2.9728	9	1.11	69.20%
CB	2.6828	2.8098	2.7814	3.1116	3.3070	2.9385	10	1.05	65.30%
AB	2.4254	2.6969	3.0749	3.0640	3.1962	2.8915	11	1.07	61.50%
SBT	2.6644	2.7328	2.7061	3.1652	2.9864	2.8510	12	1.04	57.60%
PNB	2.3793	2.5377	2.6275	2.9458	3.3473	2.7675	13	1.09	53.80%
SBM	2.4794	2.4849	2.6812	2.6995	3.2412	2.7172	14	1.06	50.00%
DB	2.6948	2.6542	2.8509	2.5524	2.6431	2.6791	15	1.00	46.10%
BOB	2.2584	2.4689	2.6790	2.8334	3.0993	2.6678	16	1.08	42.30%
IOB	2.5071	2.6755	3.1079	2.9843	2.0633	2.6676	17	0.98	38.40%
IB	1.4471	1.3538	4.4662	2.7834	3.2661	2.6633	18	1.26	34.60%
VB	2.6709	2.7749	2.6321	2.5045	2.4979	2.6161	19	0.98	30.70%
SBB&J	1.9735	2.4247	2.4793	2.9377	2.8009	2.5232	20	1.04	26.90%
SBI	2.3910	2.2606	2.6835	2.8380	2.4364	2.5219	21	1.09	23.00%
SB	1.9718	2.5457	2.5806	2.4922	2.4006	2.3982	22	1.04	19.20%
PSB	1.7399	2.2528	2.2902	2.3741	2.6569	2.2628	23	1.03	15.30%

BOM	1.8600	2.3214	2.3859	2.3690	2.2426	2.2358	24	1.04	11.50%
UCO	1.8665	2.1340	2.0664	2.2046	2.6127	2.1768	25	1.03	7.60%
CBI	1.9364	2.0768	2.0444	2.1290	2.3331	2.1039	26	1.04	3.80%
UBOI	2.0246	2.2898	1.7278	2.0299	2.3221	2.0788	27	1.02	0.00%
Mean	2.5134	2.8224	3.0173	2.9508	3.0841	2.8776		1.05	

(Author's Computation)

Classification of banks on the basis of Percentile of Human Capital Efficiency (HCE)

Both the public sector and private sector banks have been classified into four categories on the basis of percentile, calculated by using mean value of HCE of the banks.

Table 4: Public Sector Banks

(100-76)	(75-51)	(50-26)	(25-0)
Excellent	Good	Average	Poor
IDBI	Al.B	SBM	SBI
CO.B	BOI	DB	SB
UBI	CB	BOB	PSB
OBC	AB	IOB	BOM
SBH	SBT	IB	UCO
SBP	PNB	VB	CBI
SBIIn		SBB&J	UBOI

Table 5: Private Sector Banks

(100-76)	(75-51)	(50-26)	(25-0)
Excellent	Good	Average	Poor
ICICI	SBICB	NB	LVB
AXIS	JKB	TMB	ING
FB	KB	SIB	DB
CUB	YES	KMB	BOR
HDFC	INB	RB	DCB
KVB			CSB

(Author's Computation)

ANOVA Results: ANOVA has been used to measure the variation in the values of the HCE of private and public sector banks for the studied period. The F ratio (10.09888) is significant at 5% level ($P < 0.05$) which shows that the groups are independent and there is a significant difference between the HCE of two groups i.e. Public and Private Banks. The mean squares, indicates the amount of variance (sums of squares) for that "effect" divided by the degrees of freedom for that "effect." The MS is higher in case of between groups, which show that variation is more in the private and public banks for the studied period.

Table 6 ANOVA between Public and Private Sector Banks

Source of Variation	SS	df	MS	F	P-value
Between Groups	235.0351	1	235.0351	10.09888	0.01304
Within Groups	186.187	8	23.27338		
Total	421.2221	9			

(Author's Computation)

GAP INDEX ANALYSIS:

The Gap index has been calculated in the table 7 using the mean values of the HCE of the private and public banks for the period 2006 to 2010. In the year 2006 the gap was highest but the gap is getting reduced year by year. A reduction of 839.32 per cent has been found in the gap index during the studied period, which shows that the public sector has made efforts to improve their human capital efficiency.

Table 7 GAP Index of Mean HCE of Private and Public Banks

Year	Private Banks	Public Banks	GAP Index
2006	2.99	2.51	8.5990
2007	2.92	2.82	1.6912
2008	3.20	3.02	2.8794
2009	3.26	2.95	4.9093
2010	3.10	3.08	0.2058

Percentage Reduction in Gap Index of HCE between Private and Public Banks is 839.32 per cent during 2006 to 2010.

(Author's Computation)

Findings & Recommendation:

Public sector banks have employed a number of measures to face the competition from private and foreign banks. Public banks have offered the VRS (Voluntary Retirement Scheme), competitive compensation to retain the talented employees, training and retraining of employees.

The public sector banks have focused on the BPR (Business Process Re-engineering) to enhance their human capital efficiency. In the banking industry, the Business Process Re-engineering (BPR) means transforming the select processes and procedures with a view to empower the bank with contemporary technologies, business solutions and innovations that enhances the competitive advantage. Employees of the public sector banks got benefited through empowerment leading to higher job satisfaction, effective job rotation as an additional incentive and effective interface with customers as work load is evenly distributed.

The public sector banks should be able to attract entry level talent by making the recruitment policy less rigid. The public banks should be able to reward and accelerate the track of high performers. Public banks must have freedom to affect changes related to personnel without any interference from the unions. More accountability to government restricts the decision making of the employees in public banks, which should be reduced.

Conclusion:

It can be concluded from the above analysis that the private sector banks have outperformed than the public sector banks with regard to human capital efficiency. The gap between the human capital efficiency of both the public and private banks are reducing year by year. Public sector banks have made great efforts to be competent with private banks; by focusing on BPR, VRS options to employees, competent compensation, and development expenditures on employees to improve their skills and knowledge etc. The main reason behind the lower performance of public banks in HCE is the interference from the government, rigid organisational structure and bureaucratic practices.

References

- Appuhami, R. (2007). The impact of intellectual capital on investors' capital gains on shares: an empirical investigation of Thai banking, finance & insurance sector. *International Management Review*, 3 (2), 14-25.
- Bontis, N. (2001). Assessing knowledge assets: a review of the models used to measure intellectual capital. *International Journal of Management Reviews*, 3 (1), 41-60.
- Chan, K.H. (2009). Impact of intellectual capital on organisational performance: An empirical study of companies in the Hang Seng Index (Part 1). *The Learning Organization*, 16 (1), 4-21.
- Chen, M.C. Cheng, S. J. and Hwang, Y. (2005). An empirical investigation of the relationship between intellectual capital and firms' market value and financial performance. *Journal of Intellectual Capital*, 6 (2), 159-76.
- Deol, H.S. (2009). Strategic environment and intellectual capital of Indian banks. *Journal of Intellectual Capital*, 10 (1), 109-120.
- Edvinsson, L. (1997). Developing intellectual capital at Skandia: Long Range Planning. *Journal of Human Resource Cost Accounting*, 30 (3), 366-73.
- Edvinsson, L. (1999). Global knowledge Nomad, universal networking intellectual capital. *Journal of Human Resource Cost Accounting*, 4 (1), 21-33.
- El-Bannany, M. (2008). A study of determinants of intellectual capital performance in banks: The UK case. *Journal of intellectual Capital*, 9 (3), 487-498.
- Feng, T. and Li, Q.J. (2001). How high technology company's human capital privatization affect property rights system and performance. *Modern Economic Science*, 7, 24-29.
- Firer, S. and Williams, S.M. (2003). Intellectual capital and traditional measures of corporate performance. *Journal of Intellectual Capital*, 4 (3), 348-60.
- Kamath,G.B.(2007). Intellectual capital performance of Indian banking sector. *Journal of Intellectual Capital*, 8 (1), 96-123
- Laing, G., Dunn, J. & Lucas, S.H. (2010). Applying the VAIC model to Australian hotels. *Journal of Intellectual Capital*, 11 (3), 269-283.

Liu, D.L. (2009). Listed Commercial Banks' Intellectual Capital Performance Positive Analysis. *Modern Corporate Culture*, 26, 169-171.

Liu, L.L. and Zhang, G.L. (2003). Corporate human capital performance and property right incentive. *Shandong University Finance Journal*, 2, 59-64.

Mavridis, D. (2004). The intellectual capital performance of the Japanese banking sector. *Journal of Intellectual Capital*, 5 (1), 92-115.

Pulic, A. (2004). Value creation efficiency analysis of Croatian banks 1996-2000. available online at www.vaic-on.net (accessed October 2010).

Pulic, A. (1998). Measuring the performance of intellectual potential in knowledge economy. available at: www.vaic-on.net (accessed October 2010).

Shiu, H.-J. (2006b). The application of the value added intellectual coefficient to measure corporate performance: evidence from technological firms. *International Journal of Management*, 23 (2), 356-65.

Williams, S.M. (2004). Downsizing: Intellectual capital performance anorexia or enhancement. *Learn. Organ*, 11 (4), 368-379.

Xu, X.L. (2003). Study on Chinese enterprisers' performance evaluation and pay system design. *Northeast Normal University Master Thesis*.

Zhu, X.Z. (2003). Human capital and corporate performance. *Guangxi Social Science*, 1, 75-77.

Appendix 1:

Private Sector Banks

AXIS: Axis Bank, BOR: Bank Of Rajasthan, CUB: City Union Bank, CSB: Catholic Syrian Bank, DCB: Development Credit Bank, DB: Dhanalakshmi Bank, FB: Federal Bank, HDFC: Housing Development Finance Corporation, INB: Indusind Bank, ICICI: Industrial Credit and Investment Corporation of India, ING: ING Vysya Bank, JKB: Jammu & Kashmir Bank, KMB: Kotak Mahindra Bank, KVB: Karur Vysya Bank, KB: Karnataka Bank, LVB: The Lakshmi Vilas Bank, NB: Nainital Bank, RB: Ratnakar Bank, SBICB: SBI Commercial and International Bank, SIB: South Indian Bank, TMB: Tamilnad Mercantile Bank.

Public Sector Banks

SBI: State Bank of India, SBB&J: State Bank of Bikaner & Jaipur, SBH: State Bank of Hyderabad, SBIn: State Bank of Indore, SBM: State Bank of Mysore, , SBP: State Bank of Patiala, SBT: State Bank of Travancore, Al.B: Allahabad Bank, AB: Andhra Bank, BOB: Bank of Baroda, BOI: Bank of India, BOM: Bank of Maharashtra, CB: Canara Bank, CBI: Central Bank of India, CO.B: Corporation Bank, DB: Dena Bank, IB: Indian Bank, IDBI: Industrial Development Bank of India, IOB: Indian Overseas Bank, OBC: Oriental Bank of Commerce, PSB: Punjab & Sind Bank, PNB: Punjab National Bank, SB: Syndicate Bank, UCO: Union Commercial Bank, UBI: Union Bank of India, UBOI: United Bank of India, VB: Vijaya Bank.

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