

International Multidisciplinary Research Journal

Golden Research Thoughts

Chief Editor
Dr.Tukaram Narayan Shinde

Publisher
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor
Dr.Rajani Dalvi

Honorary
Mr.Ashok Yakkaldevi

Golden Research Thoughts Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

Regional Editor

Dr. T. Manichander
Ph.d Research Scholar, Faculty of Education IASE, Osmania University, Hyderabad

International Advisory Board

Kamani Perera Regional Center For Strategic Studies, Sri Lanka	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken	Hasan Bakfir English Language and Literature Department, Kayseri
Janaki Sinnasamy Librarian, University of Malaya	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Dept of Chemistry, Lahore University of Management Sciences[PK]
Romona Mihaila Spiru Haret University, Romania	Ecaterina Patrascu Spiru Haret University, Bucharest	Anna Maria Constantinovici AL. I. Cuza University, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pinteau, Spiru Haret University, Romania
Anurag Misra DBS College, Kanpur	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Titus PopPhD, Partium Christian University, Oradea,Romania	George - Calin SERITAN Faculty of Philosophy and Socio-Political Sciences Al. I. Cuza University, IasiMore

Editorial Board

Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India Ex - VC. Solapur University, Solapur	Iresh Swami N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University,Solapur	Narendra Kadu Jt. Director Higher Education, Pune	R. R. Yalikal Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	K. M. Bhandarkar Praful Patel College of Education, Gondia	Umesh Rajderkar Head Humanities & Social Science YCMOU,Nashik
Salve R. N. Department of Sociology, Shivaji University,Kolhapur	Sonal Singh Vikram University, Ujjain	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	Maj. S. Bakhtiar Choudhary Director,Hyderabad AP India.	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary,Play India Play,Meerut(U.P.)	S.Parvathi Devi Ph.D.-University of Allahabad	S.KANNAN Annamalai University,TN
	Sonal Singh, Vikram University, Ujjain	Satish Kumar Kalhotra Maulana Azad National Urdu University



A COMPARATIVE STUDY OF NON-FUND BASED INCOME OF SELECT PRIVATE SECTOR BANKS IN INDIA

Vikas Jaiswal

Assistant Professor, Department of Commerce , Guru Ghasidas Vishwavidyalaya, Bilaspur,C.G.

ABSTRACT

India has over the last decades experienced different degree of responsive policies in the banking sector. Modernization in banking is changing banking services, products and operational methods of banking system it depends upon man force but modern banking is partially or totally machine and technology based banking. Increasing competition is going to be the major problem for the banking sector will have to face. Due to market competition in Indian banking industry, the pattern of banking business is changing phenomenally. Bank can differ obviously in their sources. The major income of the bank is interest income. Some focus on business lending, some on household lending and some on fee-earning activities. But now-a-days bank are also offering wide range services like, Shopping. Ticket booking, Fund transfer and also entered into mutual fund, insurance, financing export services. In present age banking sector provide a world class non-fund based facilities to the customer. To survive in this modern market every bank implements so many new innovative ideas, strategies, and advanced technologies. For taking into consideration of innovative sources, this study aims to analyse the Non-fund Based Income of select private sector banks for the period of eight years from the year 2007 to 2014. The study concludes that the Non-fund Based Income plays significant role in their total revenue and must be pondering for in long-run of business.

KEYWORDS :Non-fund based income, ticket booking, fund transfer, fee-earning activities.

INTRODUCTION

The financial sector reforms in India are an integral part of the overall program of economic reforms aimed at



improving productivity and efficiency. The financial sector reforms in India are now about seventeen years old an appropriate time to make a medium term appraisal. Moreover having initiated fundamental changes, the financial sector, particularly the banking sector is now under an obligation to demonstrate the efficiency of the reforms undertaken so far. Especially banking sector gives a new vision to Indian economy. Banking industry is a part of the changing business paradigms across the globe. Banking sector plays a very important role in the growth of Indian economy. Banking sector is one of the largest contributing forces to the growth of economy.

In a market driven banking sector, competition is the most dynamic elements. Increasing competition is going to be the major problem for

the banking sector will have to face. Due to market competition in Indian banking industry, the pattern of banking business is changing phenomenally. Continuous exploration of scope in market would demand a brilliant focus on emerging opportunities and convert that opportunities into competitive strength that calls for the competitive strategy. Moreover banks have to provide a world class services to the customer to their door. Due to this type of quality services and facilities, income is increasing day to day. The major income of the bank is interest income. But now-a-days bank are also offering wide range services like, Shopping. Ticket booking, Fund transfer and also entered into mutual fund, insurance, financing export services. In present age banking sector provide a world class non-fund based facilities to the customer. Due to providing this type of facilities, non-fund based income is increasing day by day. So, non-fund based is an interesting area for the researcher. To survive in this modern market every bank implements so many new innovative ideas, strategies, and advanced technologies.

CONCEPT OF NON-FUND BASED INCOME

Banks are the main participants of the financial system in India. Banks also execute certain activities which are ancillary to this business of accepting deposits or lending. There are major two types of income for the banks like, Fund based income and Non-fund Based income. In the face of declining net interest margins, depository institutions have entered new product areas over the past two decades, moving from traditional lending to Areas that generate Non-fund Based Income. The change is of importance for financial stability. The more unstable is a bank's earnings stream, the more risky the institution is. The predictable perception in the banking industry is that earnings from fee-based products are more stable than loan-based earnings and those fee-based activities reduce bank risk via diversifications.

MEANING

1. "Non-Fund Based Income is earned by providing a variety of services, such as trading of securities, assisting companies to issue new equity financing, securities commissions and wealth management, sale of land, building, profit and loss on revaluation of assets etc."

2. "Bank and creditor income derived primarily from fees. Examples of non-interest income include deposit and transaction fees, insufficient funds (NSF) fees, annual fees, monthly account service charges; inactivity fees, check and deposit slip fees, etc. Institutions charge fees that provide non-interest income as a way of generating revenue and ensuring liquidity in the event of increased default rates"

COMPONENTS OF NON-FUND BASED INCOME

Income on Remittance of Business:

Apart from accepting deposits and lending money, Banks also carry out, on behalf of their customers the act of transfer of money - both domestic and foreign and from one place to another. This activity is known as "remittance of business".

Cheque:

A cheque, also spelled check, is a negotiable instrument, instructing a financial institution to pay a specific amount of a specific currency from a specified demand account held in the maker/depositor's name with that institution. Specifically, cheques are order instruments, as reflected in the formula "Pay to the order of...".

Traveler's Cheque

A Traveler's Cheque is a printed piece of paper that you sign and use as money when you are travelling. It can be replaced if it is lost or stolen. The Traveler's Cheque issued by a financial institution which functions as cash but is protected against loss or theft. A charge or commission is usually incurred when a person exchanges cash for a traveler's cheque though some issuers provide them free of charge.

Demand Draft

A demand draft or "DD" is an instrument most banks in India use for effecting transfer of money. It is a Negotiable Instrument. A method used by individuals to make transfer payments from one bank account to another. Demand drafts are marketed as a relatively secure method for cashing checks. The major difference between demand drafts and normal checks is that demand drafts do not require a signature in order to be cashed.

Mail Transfer/ Mail Orders

This is the mode used when you wish to transfer money from your account in Center 'A' to either your own account in Center 'B' or to somebody else's account. In this mode of transfer, you are required to fill in an application form similar to the One for DD, sign a charge slip or give a cheque for the amount to be transferred plus exchange and collect a receipt. The Bank will, on its own, send an order to its branch at center 'B' to deposit the said amount in the account number designated by you.

RTGS

Real time gross settlement systems (RTGS) are a funds transfer mechanism where transfer of money takes place from one bank to another on a "real time" and on "gross" basis. Settlement in "real time" means payment transaction is not subjected to any waiting period. The transactions are settled as soon as they are processed. "Gross settlement" means the transaction is settled on one to one basis without bunching with any other transaction. Once processed, payments are final and irrevocable.

NEFT

National Electronic Fund Transfer (NEFT) is a nation-wide system that facilitates individual to electronically transfer funds from any bank branch to any other bank branch in the country. NEFT is an application development to facilitate customers to transfer funds from one bank account to another bank account. It is an efficient, secure, economical, and reliable and expenditure system of fund transfer between banks.

SWIFT

The Society for Worldwide Interbank Financial Telecommunication (SWIFT) operates a worldwide financial messaging network which exchanges messages between banks and other financial institutions. SWIFT transports financial messages in a highly secure way, but does not hold accounts for its members and does not perform any form of clearing or settlement. SWIFT does not facilitate funds transfer, rather, it sends payment orders, which must be settled via correspondent accounts that the institutions have with each other. Each financial institution, to exchange banking transactions, must have a banking relationship by either being a bank or affiliating itself with one (or more) so as to enjoy that particular business features.

OBJECTIVES OF THE STUDY:

Objective is a base for any work. The objectives determine the future and outcome of the research. No one work is started without any objectives. The present work has also some objectives. The present research work has been under taken keeping in view the following objectives:

- 1.To study of non-fund based income of the select private sector banks;
- 2.To make a relative comparison of the non-fund based income of the select banks.

HYPOTHESES OF STUDY:

H₀: There is no significant difference in non-fund based income of select private sector banks.

RESEARCH METHODOLOGY

In the present study, an attempt has been made to measure, evaluate and analyse the non-interest income of select private banks. The study is based on secondary data that has been collected from annual reports of the respective banks, magazines, journals, documents and other published information. The study covers the period of 8 years i.e. from year 2007 to year 2014. Descriptive Statistics and F test and Tukey Post hoc test is used to test the hypothesis.

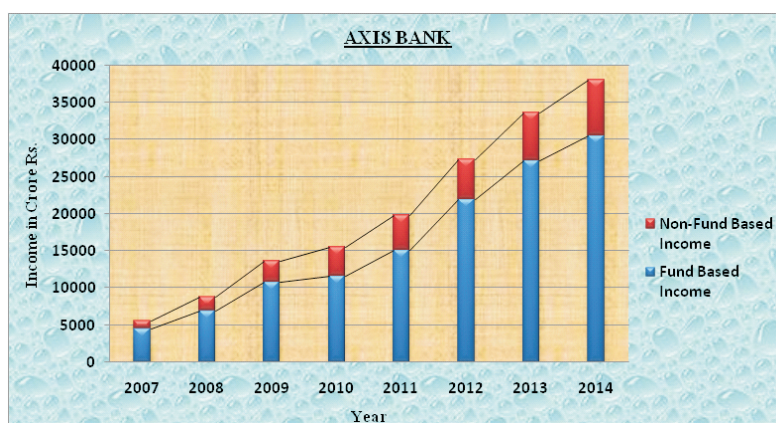
Table-1 Non-Fund Based Income of AXIS Bank

(Rs. in crore)

Year	Fund Based Income	Percentage	Non-Fund Based Income	Percentage	Total Income	Percentage
2007	4560.40	81.87	1010.11	18.13	5570.52	100
2008	7005.32	79.60	1795.49	20.40	8800.80	100
2009	10835.49	78.90	2896.88	21.10	13732.36	100
2010	11638.02	74.68	3945.78	25.32	15583.80	100
2011	15154.81	76.59	4632.13	23.41	19786.94	100
2012	21994.65	80.23	5420.22	19.77	27414.86	100
2013	27182.57	80.58	6551.11	19.42	33733.68	100
2014	30641.16	80.54	7405.22	19.46	38046.38	100
Mean	16126.55	79.12	4207.12	20.88	20333.67	100

Source: Various issues of annual reports of the bank

Figure-1 Non Fund Based Income of AXIS Bank



The table 1 shows the Non-fund Based Income of AXIS Bank from the year 2007 to 2014. Non-fund Based income was highest ` 7405.22 crore in Year 2014, and it was lowest ` 1010.11 crore in the year 2007. As the actual value of Non-fund Based income shows the increasing trend and compound growth of ` 6395.11 crore. The Non-fund based income plays a crucial role in the year 2010 with the 25.32% contribution in the total income of the bank. The Average Non Fund based income is ` 4207.12. Non fund based income from Year 2007 to 2010 was lower than average Non fund based income.

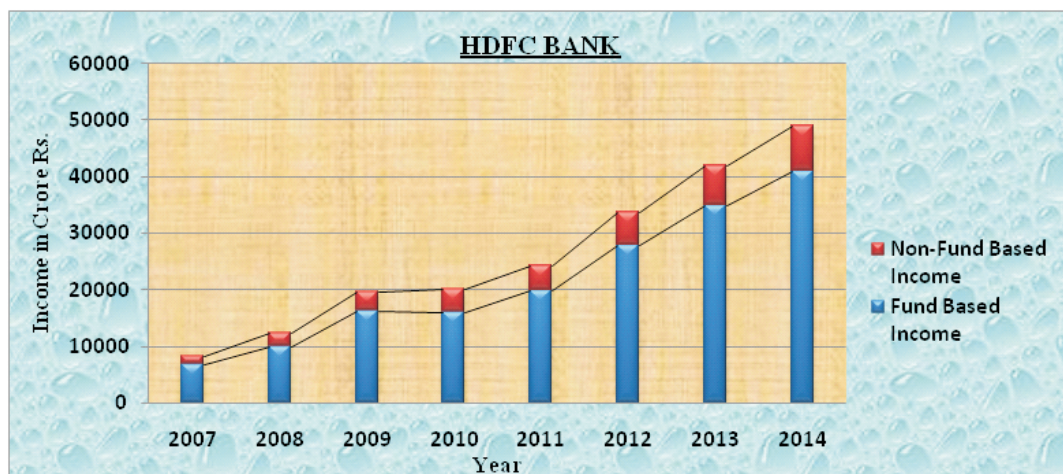
Table-2 Non Fund Based Income ofHDFC Bank

(Rs. in crore)

Year	Fund Based Income	Percentage	Non-Fund Based Income	18.04	Total Income	Percentage
2007	6889.02	81.96	1516.23	18.42	8405.25	100
2008	10115.01	81.58	2283.14	16.77	12398.15	100
2009	16332.26	83.23	3290.60	19.76	19622.86	100
2010	16172.72	80.24	3983.11	17.87	20155.83	100
2011	19928.21	82.13	4335.15	17.18	24263.36	100
2012	27874.19	82.82	5783.63	16.35	33657.82	100
2013	35064.87	83.65	6852.62	16.14	41917.50	100
2014	41135.53	83.86	7919.64	17.57	49055.18	100
Mean	21688.98	82.43	4495.52	18.04	26184.49	100

Source: Various issues of annual reports of the bank

Figure-2 Non Fund Based Income of HDFC Bank



The table 2 shows the Non-fund Based Income of HDFC Bank from the year 2007 to 2014. Non-fund Based income was highest ` 7919.64 crore in Year 2014, and it was lowest ` 1516.23 crore in the year 2007. As the actual value of Non-fund Based income shows the increasing trend and compound growth of ` 6403.41 crore. The important role of Non-fund based income was in the year 2010 with

19.76% contribution in the total income of bank. The Average Non Fund based income was ` 4495.52 crore. Non fund based income from Year 2007 to 2011 was lower than average Non fund based income.

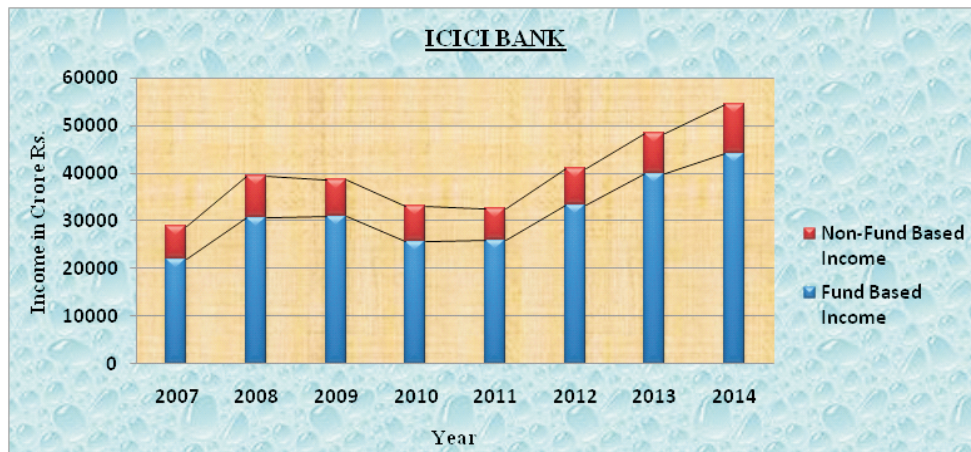
Table-3 Non Fund Based Income of ICICI Bank

(Rs. in crore)

Year	Fund Based Income	Percentage	Non-Fund Based Income	Percentage	Total Income	Percentage
2007	21995.59	76.05	6927.87	23.95	28923.46	100
2008	30788.34	77.75	8810.76	22.25	39599.11	100
2009	31092.55	80.35	7603.73	19.65	38696.28	100
2010	25706.93	77.47	7477.65	22.53	33184.58	100
2011	25974.05	79.62	6647.89	20.38	32621.95	100
2012	33542.65	81.72	7502.76	18.28	41045.41	100
2013	40075.60	82.76	8345.70	17.24	48421.30	100
2014	44178.15	80.90	10427.87	19.10	54606.02	100
Mean	31669.23	79.58	7968.03	20.42	39637.26	100

Source: Various issues of annual reports of the bank

Figure-3 Non Fund Based Income of ICICI Bank



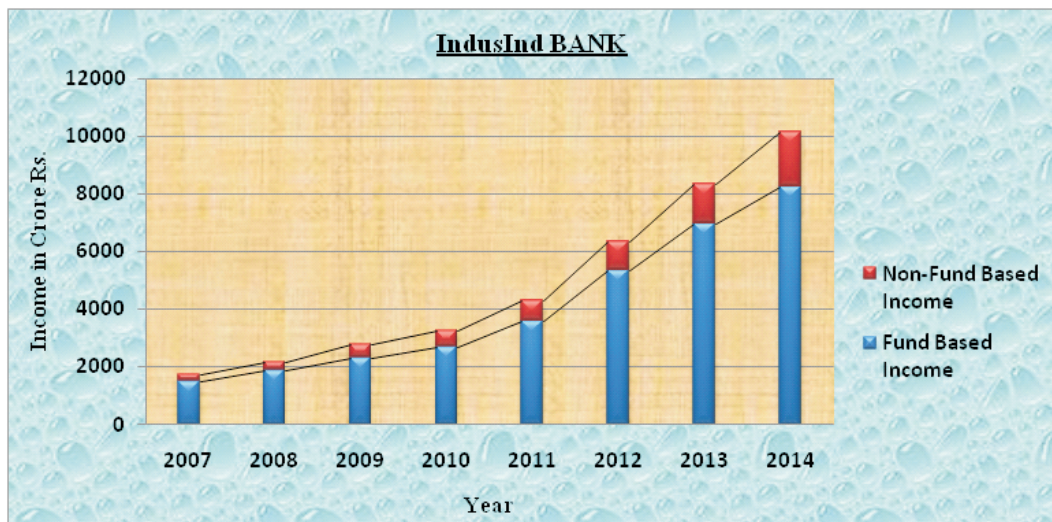
The table 3 shows the Non-fund Based Income of ICICI Bank from the year 2007 to 2014. Non-fund Based income was highest `10427.87 crore in Year 2014, and it was lowest ` 6647.89 crore in the year 2007. As the actual value of Non-fund Based income shows the mixed trend and compound growth of ` 3500 crore during the study period. The important role of Non-fund based income was in the year 2007 with 23.95% contribution in the total income of bank. The Average Non Fund based income was `7968.03 crore. Non fund based income in the year 2007, 2009, 2010, 2011 and 2012 was lower than average Non fund based income.

Table- 4 Non-fund Based Income of IndusInd Bank

(Rs. in crore)

Year	Fund Based Income	Percentage	Non-Fund Based Income	Percentage	Total Income	Percentage
2007	1500.25	86.00	244.13	14.00	1744.38	100
2008	1880.66	86.34	297.58	13.66	2178.24	100
2009	2309.47	83.50	456.25	16.50	2765.73	100
2010	2706.99	83.02	553.48	16.98	3260.47	100
2011	3589.36	83.41	713.66	16.59	4303.02	100
2012	5359.19	84.12	1011.78	15.88	6370.98	100
2013	6983.23	83.67	1362.96	16.33	8346.19	100
2014	8253.53	81.36	1890.53	18.64	10144.06	100
Mean	4072.84	83.93	816.30	16.07	4889.13	100

Source: Various issues of annual reports of the bank

Figure-4 Non Fund Based Income of IndusInd Bank

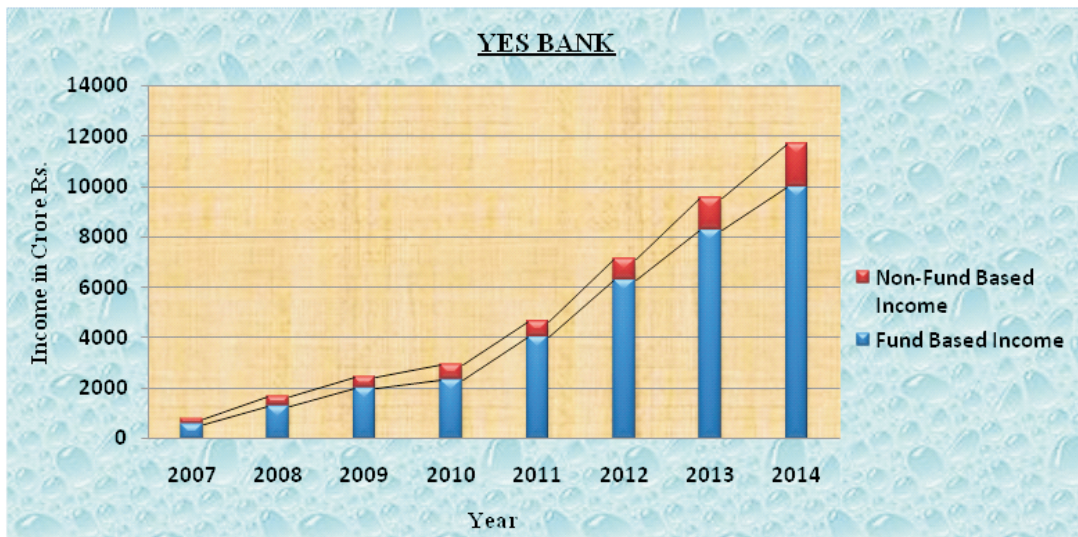
The table 4 shows the Non-fund Based Income of IndusInd Bank from the year 2007 to 2014. Non-fund Based income was highest `1890.53 crore in Year 2014, and it was lowest ` 244.13crore in the year 2007. As the actual value of Non-fund Based income shows the increasing trend and compound growth of ` 1646.40 crore during the study period. The Average Non Fund based income was `816.30 crore. Non fund based income in the year 2007 to 2011 was lower than average Non fund based income.

Table-5 Non Fund Based Income of YES BANK

(Rs. in crore)

Year	Fund Based Income	Percentage	Non-Fund Based Income	Percentage	Total Income	Percentage
2007	587.61	75.12	194.57	24.88	782.18	100
2008	1304.69	78.34	360.67	21.66	1665.36	100
2009	2003.32	82.16	435.02	17.84	2438.34	100
2010	2369.71	80.46	575.53	19.54	2945.24	100
2011	4041.75	86.64	623.27	13.36	4665.02	100
2012	6307.36	88.04	857.12	11.96	7164.48	100
2013	8294.00	86.84	1257.43	13.16	9551.43	100
2014	9981.35	85.29	1721.58	14.71	11702.93	100
Mean	4361.22	82.86	753.15	17.14	5114.37	100

Source: Various issues of annual reports of the bank

Figure-5 Non Fund Based Income of YES Bank

The table 5 shows the Non-fund Based Income of YES Bank from the year 2007 to 2014. Non-fund Based income was highest ` 1721.58 crore in Year 2014, and it was lowest ` 194.57 crore in the year 2007. As the actual value of Non-fund Based income shows the increasing trend and compound growth of ` 1527.01 crore. The Non-fund based income plays a crucial role in the year 2007 with the 24.88% contribution in the total income of the bank. The Average Non Fund based income is ` 753.15 Non fund based income from Year 2007 to 2011 was lower than average Non fund based income.

Table- 6 Analysis of Variance (ANOVA)

Source of Variation	SS	df	MS	F	F crit
Between Groups	288738063.9	4	72184515.99	30.04	2.64
Within Groups	84080255.74	35	2402293.021		
Total	372818319.7	39			

The above Table-6 expresses the one way ANOVA statistical analysis of the Non-fund Based Income of 5 selected private Sector Banks in India. This study carried out the null hypothesis that there is no significant difference in Non-fund Based Income of selected private sector banks in India. So, it needs to be tested by one way ANOVA. Analysis of Variances brings out the value of F i.e. F= 30.04. This value reflects that score of Non-fund Based Income among sampled private sector banks at 5% level of significant.

As per the above table the calculated value (30.04) of F is greater than the tabulated value (2.64) in case of between the columns treatment and in case of between the raw treatments. Therefore null hypothesis is rejected and there is a highly significant difference in Non-fund Based Income of private sector banks. From the table we can easily define that there is a significant mean difference.

Table-7 Multiple Comparisons of Non-Fund Based Income of Selected Private Sector Banks Tukey HSD

(I) Bank	(J) Bank	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
AXIS	HDFC	-288.39750	774.96661	.996	-2516.4733	1939.6783
	ICICI	-3760.91125*	774.96661	.000	-5988.9870	-1532.8355
	IndusInd	3390.82125*	774.96661	.001	1162.7455	5618.8970
	Yes	3453.96875*	774.96661	.001	1225.8930	5682.0445
HDFC	AXIS	288.39750	774.96661	.996	-1939.6783	2516.4733
	ICICI	-3472.51375*	774.96661	.001	-5700.5895	-1244.4380
	IndusInd	3679.21875*	774.96661	.000	1451.1430	5907.2945
	Yes	3742.36625*	774.96661	.000	1514.2905	5970.4420
ICICI	AXIS	3760.91125*	774.96661	.000	1532.8355	5988.9870
	HDFC	3472.51375*	774.96661	.001	1244.4380	5700.5895
	IndusInd	7151.73250*	774.96661	.000	4923.6567	9379.8083
	Yes	7214.88000*	774.96661	.000	4986.8042	9442.9558
IndusInd	AXIS	-3390.82125*	774.96661	.001	-5618.8970	-1162.7455
	HDFC	-3679.21875*	774.96661	.000	-5907.2945	-1451.1430
	ICICI	-7151.73250*	774.96661	.000	-9379.8083	-4923.6567
	Yes	63.14750	774.96661	1.000	-2164.9283	2291.2233
Yes	AXIS	-3453.96875*	774.96661	.001	-5682.0445	-1225.8930
	HDFC	-3742.36625*	774.96661	.000	-5970.4420	-1514.2905
	ICICI	-7214.88000*	774.96661	.000	-9442.9558	-4986.8042
	IndusInd	-63.14750	774.96661	1.000	-2291.2233	2164.9283

*. The mean difference is significant at the 0.05 level.

The above table 7 reflects the multiple comparisons of Non-fund Based Income of selected private sector banks in India. It shows comparison of one bank to another four banks. It was found from the table that almost all the banks were significantly different from each other, except AXIS bank with HDFC bank, who shows that there was no significant difference as their p value was 0.996 and IndusInd Bank with YES bank, who shows no significant difference between them as their p value shows 1. It was also impart from the Tukey post hoc test that the Non-fund Based Income of AXIS bank and HDFC bank was similar and the Non-fund Based Income of IndusInd and YES bank was similar. Whereas the ICICI banks revenue generated from Non-fund Based Income was totally different from the rest of the selected private sector banks.

CONCLUSION

This paper narrate that actual value of Non-fund Based Income in all selected private sector bank were showing the increasing trend, except in the case of ICICI. ICICI bank had the mixed trend during the study period. As the mean value of Non-fund Based Income contribute in AXIS bank 20.88, HDFC 17.57, ICICI 20.42, IndusInd 16.07 and YES bank 17.14 percent in the total revenue of banks. It was found that ICICI bank was the leading bank in between all the selected private sector banks, as its mean value of Non-fund Based Income is highest.

REFERENCES –

1. Agrawal, H.N. "A Portrait of Nationalized Bank- A Study with reference to their social obligation" Inter India Publication, Delhi.
2. Batra, Vinod. "Development Banking in India" Print well Publications.
3. Bedi, H.L. & Hardikar, V.K. "Practical Banking Advances" UBS Publishers Distributors Ltd.
4. Benerjee, A. & Singh, S.K. "Banking and Financial Sector Reforms in India" Deep & Deep Publication, New Delhi.
5. Chopra, K. "Profit, Profitability and Productivity in Public Sector Banking" ABS Publications, Jalandhar.
6. Desai, C.J. "Analyzing Productivity in banking, Concepts and Methodology" Prajanan Publications.
7. Ghosh, D.N. "Performance of Public Sector Banks in India" Allied Publications, New Delhi.
8. Gupta, S.C. "Fundamental of Statistics" Himalaya Publications, New Delhi, 2007
9. Gupta & Santosh. "Research Methodology and Statistical techniques" Deep & Deep Publication, New Delhi.
10. Kapton, S.S & Choubey, N.S. "Indian Banking in Electronic Era" Sarup & Sons Publication, New Delhi.
11. Kothari, C.R. "Research Methodology" New Age International Publishers, New Delhi, 2008, Page No. 32.
12. Rajagopalang, A.V. "Productivity in Banks- An Overview Trend & Challenges to Indian Banking" Deep & Deep Publication, New Delhi.
13. Rao, K.V. "Research Methodology in Commerce and Management" Sterling Publishers Pvt. Ltd, New Delhi-1989.
14. Sharma, K.R. "Research Methodology" National Publishing House. Jaipur, 2002
15. Subrahmanya, K.N. "Modern Banking in India" Deep & Deep Publications, New Delhi.
16. Tannan, M.L. "Banking Law and Practices in India" India Law House Publications, New Delhi. 2006
17. Vyas, M.R. "Financial Performance of Rural Banks" Arhint Publications Jaipur.

Publish Research Article

International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

Associated and Indexed, India

- * International Scientific Journal Consortium
- * OPEN J-GATE

Associated and Indexed, USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Golden Research Thoughts
258/34 Raviwar Peth Solapur-413005, Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.aygrt.isrj.org