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A STUDY ON BRANCHLESS BANKING IN INDIA

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ABSTRACT

As new developments continue to expand the traditional boundaries of banking, the interface between banks and customers, have also changed drastically from being operations-centric to servicing clients. The shift during this period has been from branch to Branchless such as ATM, Internet and mobile. Consumers and businesses are looking to their financial institution for user-friendly services; users expect instant access to account information and a full range of self-service banking tasks. Mobility and customer convenience seen as keys to growth, banks are busy exploring new technologies. Branchless banking is a modern mechanism to facilitate financial services in developing regions. There is a considerable growth taken place in branchless banking services in India, despite this, branches are unlikely to die, despite ATMs, laptops and smart phones becoming primary platforms for daily banking. Branches will continue even after the new modes spread to rural areas. This paper studies the Branchless banking, its performance, cost structures and issues and challenges on selected parameters.

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INTRODUCTION

Finance is about exchanging the cash people need on a daily basis for promises of value, and vice versa, Bank are linked by a common secure technology platform, they can transact with sufficient certainty. The present Rs 64 trillion (US\$ 1.17 trillion) Indian banking industry is governed by the Banking Regulation Act of India, (1949) and is closely monitored by the Reserve Bank of India (RBI). RBI manages the country's money supply and foreign exchange and also serves as a bank for the Government of India and for the country's commercial banks. As of now, public sector banks account for 70 per cent of the Indian banking assets.

Important facts about Indian Banking

- The banking sector is highly correlated with the economy of the country. The GDP growth is estimated at 7.6 per cent for FY13, so the economy is expected to recover and be back on the growth track in FY13. This will also result in the banking space witnessing a spurt in growth in business next fiscal.
- Financial Inclusion Program: Currently, in India, 41% of the adult population don't have bank accounts, which indicates a large untapped market for banking players. Under the Financial Inclusion Program, RBI is trying to

tap this untapped market, and the growth potential in rural markets by volume growth for banks.

- Increasing disposable income and increasing exposure to a range of products, have led consumers towards a higher willingness to take credit, particularly, young customers.
- Increasing spread of mobile banking, which is expected to become the second largest channel for banking after ATMs, will accelerate growth of the sector
- The Indian economy will require additional banks, and expansion of existing banks to meet its credit needs.

According to an IBA-FICCI-BCG report, India's gross domestic product (GDP) growth will make the Indian banking industry the third largest in the world by 2025. According to the report, the domestic banking industry is set for an exponential growth in coming years with its assets size poised to touch USD 28,500 billion by the turn of the 2025.

Objectives

- To study the Performance of Indian Banking.
- To measure the Performance of Selected models of Branchless banking
- To study the cost benefit in branchless banking

Scope of the study

Data from July 2012 to April 2013 is taken in to consideration from banking sectors (selected parameters) for the research

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Data sources

Secondary data. Secondary data collected from among the available sources such as journals, magazines, and website.

Data analysis

The data collected from the research are classified and tabulated. Descriptive statistics such as percentages, dispersion charts, diagrams and graphs Etc. are used for presentations.

Literature Review

Almost 4 billion people are unbanked—more than two-thirds of the population in the world's low- and middle-income countries. They are the huge unserved majority today. In recent years, there has been growing effort and interest in measuring financial inclusion, but as yet we have no globally consistent datasets that can give us a clear sense of how this proportion has changed over the past decade. However, evidence from countries like Brazil, South Africa, India, and Kenya strongly suggests that there has been an upward trend (Fin Mark Trust 2003 and 2008; FSD Kenya 2009a; Kumar 2005; World Bank 2008a). Technology has played a role in this expansion, though we should not overstate its role to date. Information technology has primarily helped to enable expansion through more conventional banking channels, such as branch and ATM. For example, in growing from 0 to 8 million deposit customers in five years, Mexico's Banco Azteca used a robust electronic banking system to connect a large network of mini-branches in stores of its parent Elektra, a large seller of consumer durables, and other retail chains (Rhyme 2009). The task of financial inclusion in a country like ours with large population and geographical spread is, indeed, challenging. The data released from the recent census of India indicates that only 58.7% of households in India avail of banking services with the figure being 54.4% for rural areas and 67.8% for urban areas. The opening of bank accounts is only the first stage and the focus now is not just on improving access but also on better use of the financial infrastructure.

Overview on Branchless Banking

Branchless banking systems are becoming prevalent in the developing regions of the world as a mechanism to extend financial services to the economically deprived populations. Instead of setting up formal bank branches, these systems use a network of human agents to facilitate banking transactions, thereby reducing the cost of banking for people with small cash holdings. Today, over 50 million people in the developing world rely on branchless banking services to meet their financial needs and together they transact more than \$100 million on a daily basis

Criteria for constitute branchless banking

- Non-bank retail outlets are used as customer touch-points, at least for cashing in or out of the accounts.
- Technology, such as payment cards or mobile phones, is used to identify customers and authorize transactions electronically and, in some cases, to allow customers to initiate transactions on their own.
- Transactions can be processed against an electronic store of value (although cash-based services for non-customers may also be offered in addition)

- Accounts are issued by institutions recognized and explicitly or implicitly authorized by the banking regulator, although they may not be formally licensed and regulated

This represents a fairly expansive definition of branchless banking, since it may involve three types of "outsourcing" of activities typically conducted by banks to non-bank players: the customer interface, where customers at the very least cash in and cash out from their electronic accounts; the operation of the accounts; and the issuance of the accounts and the investment of the float.

Drivers of branchless banking

- The retail network, composed of the collection of retail outlets where transactions are originated
- The payment network, which aggregates the transactions from the collection of retail outlets and routes them to the appropriate issuer
- The account platform, which manages the service logic by authorizing individual transactions and maintaining the value of accounts Each of these elements has very different economics, and each presents key tradeoffs that providers need to face. An understanding of the economic drivers helps establish the roles of the value chain and the types of partnerships that are most likely to achieve the necessary scale, and ensures that the service can be delivered at an end-to-end transaction cost that poor customers can afford.

Advantages

1. Economies of Large Scale Operations
2. Spreading of Risk
3. Economy in Cash Reserves
4. Diversification on Deposits and Assets
5. Cheap Remittance Facilities
6. Uniform Interest Rates
7. Proper Use of Capital
8. Better Facilities to Customers
9. Banking Facilities in Backward Areas
10. Effective Control

Data analysis and Interpretations

I. The Performance of Indian Banking measured through the following parameters

- a. Performance of banks in India during 2012 Q-3
- b. Financial soundness of Banks of selected countries During 2012
- c. banking sector efficiency through Gross NPAs as % of gross advances and CRAR
- d. banking sector efficiency through
 - ROA- Return on assets
 - NIM - Net Interest Margin
 - CIR-Cost-income ratio (%)
 - BPE - Business per employee (Rs. lakh)*
 - BPB- Business per branch (Rs. lakh)*

II. Performance of Selected models of Branchless banking during 2012-2013 are measured by using following parameters such as

- Bank-wise Mobile Banking Transaction.
- Bank Wise RTGS Inward -2013
- Bank Wise RTGS Outward -2013
- NATIONAL ELECTRONIC FUND TRANSFER (NEFT) - 2013
- ECS - All Centers' Transaction Details

Table 1. Performance of Central bank of India in Third Quarter 2012

Total Business	370695 Crores	15.29%
Total Deposits	212201 Crores	12.74%
Total Core Deposits	157628 Crores	22.76%
Advances	158494 Crores	18.89%
Net Profit	180 Crores	59.29%

Source: RBI Website

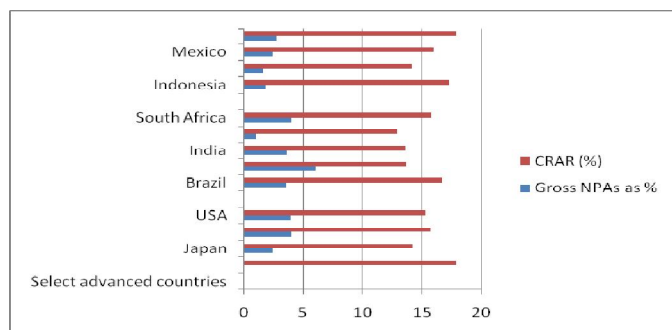
Table 2. Indicators of financial soundness, 2012

Sr. No.	Country Select advanced countries	Gross NPAs as % of gross advances	CRAR (%)
1	Germany	3.0*	17.9
2	Japan	2.4	14.2
3	UK	4	15.7
4	USA	3.9	15.3
BRICS			
5	Brazil	3.5	16.7
6	Russia	6	13.7
7	India	3.6	13.6
8	China	1	12.9
9	South Africa	4	15.8
EMEs			
10	Indonesia	1.8	17.3
11	Korea	1.6	14.1
12	Mexico	2.4	16
13	Turkey	2.7	17.9

CRAR: Capital to risk-weighted assets ratio. *: Data pertains to 2011.

Source: IMF, Financial Soundness Indicators.

Graph 1. Indicators of financial soundness, 2012



Source: IMF, Financial Soundness Indicators

Table 3. Select parameters of banking sector efficiency

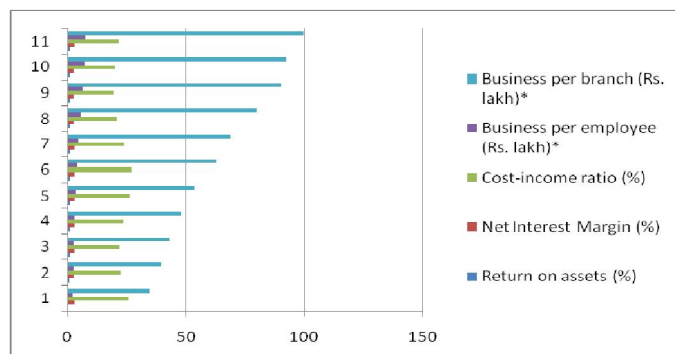
Year-ended March	Return on assets (%)	Net Interest Margin (%)	CIR (%)	BPE (Rs. lakh)*	BPB (Rs. lakh)*
2001	0.54	3.1	25.9	2.1	34.7
2002	0.82	2.8	22.3	2.5	39.5
2003	1.05	2.9	22.1	2.8	43
2004	1.21	3.1	23.7	3.1	47.7
2005	0.97	3.1	26.1	3.5	53.6
2006	0.96	3	26.8	4.1	62.6
2007	1	2.9	24	4.6	68.6
2008	1.1	2.6	21	5.6	79.8
2009	1.1	2.6	19.2	6.5	90.1
2010	1.01	2.5	20.2	7.1	92.1
2011	1.06	2.9	21.6	7.7	99.5
2012	1.05	2.9	18.5	8.3	99.3

* At 2004-05 prices, Note: NIM refers to net interest income as per cent of average total assets. RoA refers to net profits as per cent of average total assets. Cost to income ratio is worked out as operating costs as per cent of total income.

Source: Statistical Tables relating to Banks in India.

The above table represents the performance of central bank of India during December 2012, the total business recorded 370695 Crores, Total Deposits 212201 Crores, Total Core Deposits 157628 Crores Advances 158494 Crores. The financial soundness of banks is measured through Gross advance, Gross NPA percentage of NPA to Gross Advance and Capital to risk-weighted assets ratio of selected countries in which Gross NPAs as % of gross advances 3.6% and Capital to risk-weighted assets ratio 13.65 recorded for India

Graph 2. Select parameters of banking sector efficiency



Source: Statistical Tables relating to Banks in India.

The profitability of the Indian banking sector has been maintained at about 1.0 per cent in terms of Return on Assets (ROA), even in the post-crisis period. The banks have also shown significant improvement in other efficiency indicators such as cost to income ratio, business per employee and business per branch. However, net interest margin (NIM) has gone up indicating deterioration in allocative efficiency

Table 4. Indicators of banking access

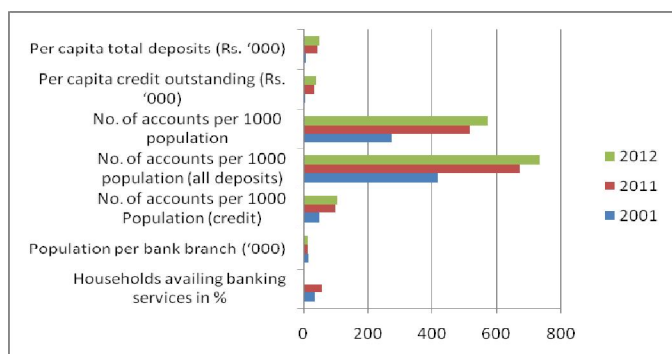
Item	All-India			Eastern-region		
	2001	2011	2012	2001	2011	2012
Households availing banking services in %	35.2	58.7	-	28.8	47.3	-
Population per bank branch ('000)	15.6	13.3	12.5	19.5	18.1	17.3
No. of accounts per 1000 Population (credit)	51	100	106	37	54	54
No. of accounts per 1000 population (all deposits)	416	669	734	321	476	540
No. of accounts per 1000 population	272	516	571	202	367	423
Per capita credit outstanding (Rs. '000)	5.2	33.7	39.1	2	12.1	13.9
Per capita total deposits (Rs. '000)	9.2	44.5	49.4	5.5	22.8	26.5

Source: RBI Website

In 2001, the all-India average population per bank branch was 15,600, which has fallen steadily to 12,500 by 2012 again suggesting an increased penetration of the branch network. For the eastern-region population per branch has declined from 19,500 in 2001 to 17,300 in 2012. While the eastern region has witnessed an increase in banking outreach since 2001, its average has remained lower than the all-India average underlining considerable scope for expansion. The profitability of the Indian banking sector has been maintained at about 1.0 per cent in terms of Return on Assets (ROA), even in the post-crisis period. The banks have also shown significant

improvement in other efficiency indicators such as cost to income ratio, business per employee and business per branch. However, net interest margin (NIM) has gone up indicating deterioration in allocative efficiency

Graph 3. Indicators of banking access



Source: RBI Website

Performance of Selected models of Branchless banking during 2012-2013

1. Bank-wise Mobile Banking Transaction.
2. Bank Wise RTGS Inward -2013
3. Bank Wise RTGS Outward -2013
4. NATIONAL ELECTRONIC FUND TRANSFER (NEFT) - 2013
5. ECS - All Centers' Transaction Details

Table 5. Bank-wise Mobile Banking Transaction (July 2012- April 2013)

Month	Volume (actual)	Value (in Rs.'000)	% Changes	% Changes
April	6326770	9890082.21	-1.159245633	-0.294485059
March	6400973	9919293.046	17.62982889	22.90487681
Feb	5441624	8070707.448	-2.029102716	29.16143752
Jan	5554327	6248542.60	6.384209023	4.466522691
Dec	5221007	5981382.782	10.59414672	10.98116705
Nov	4720871	5389547.56	6.392898232	8.300555183
Oct	4437205	4976472.70	13.84413644	21.24374836
Sept	3897614	4104519.009	-1.779434941	15.66497048
Aug	3968226	3548627.55	7.08467249	4.997835691
July	3705690	3379714.95		
Total	49674307	61508889.86		
Average	4967430.7	6150888.986		

Source: Tabulated Data

Table 6. Bank Wise RTGS Inward -2013

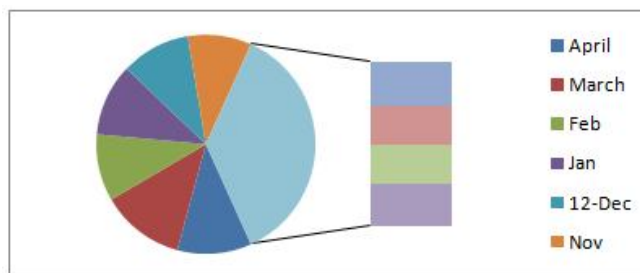
Inward								
Month	Volume				Value (Rs. Billion)			
	Interbank	Customer	Total	%	Interbank	Customer	Total	%
April	424219	6039055	6463274	100	15698.95	45362.17	61061.12	100
March	462327	6832069	7294396	100	17372	60038	77410	100
Feb	360804	5460592	5821396	100	12165.99	40716.72	52882.71	100
Jan	403862	5880830	6284692	100	14288.39	43713.67	58002.05	100
Dec-12	383321	5649279	6032600	100	13157.67	44120.23	57277.9	100
Nov	361953	5187798	5549751	100	11057.25	35717.32	46774.57	100
Oct	376857	5456508	5833365	100	12533.55	41925.28	54458.83	100
Sept	351118	4746863	5097981	100	12641.1	45355.91	57997.01	100
Aug	340156	4785783	5125939	100	11898.22	40468.32	52366.54	100
July	368022	5107327	5475349	100	12832.02	41903.25	54735.28	100

Source: Tabulated Data

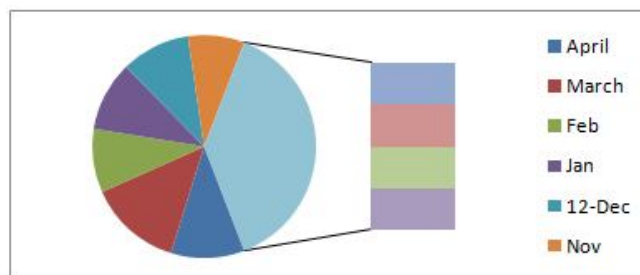
The Bank-wise Mobile Banking Transaction during July 2012 to April 2013 recorded in the above Table. The total volume 49674307 and value accounted for 61508889.86 (in Rs.'000) during 10 months period and average value accounted for 6150888.986 (in Rs.'000) and when we measure the percentage changes highest changes of 17.62% taken place in

march in terms of Value and in terms of value during February 2013.

Graph 4 A. Bank Wise RTGS Inward -2013 (Volume)



Graph 4 B. Bank Wise RTGS Inward -2013 (Value)



The (RTGS) Real Time Gross Settlement inward during July 2012 to April 2013 recorded in above mentioned table in terms of value and volume for Interbank, Customer and Total. ATM is the oldest of the alternative banking channels and enjoys the highest level of acceptance among customers. The number of ATMs in India has doubled in the past three years. Currently, there are more than 100,000 ATMs, around 70% of them in urban locations. Global research firm Celent expects the number of ATMs to double by 2016, with more than 50% being set up in small towns. During 2011-12, the volume of online fund transfers through NEFT (National Electronic Funds Transfer, used for low-value transactions) and RTGS (Real Time Gross Settlement, used for high-value transaction) grew by 71% and 11.7 %, respectively, Paper-based payments accounted for 52.4% of non-cash transactions in terms of volume, but it accounted for only 8.4% in terms of value.

Cost Structure

According to RBI, there were around 1, 47,000 bank outlets for more than 6, 00,000 villages in India. Some banks though are using the business correspondent model. The day of the big branch doesn't make sense for the customer or the bank. "There is a tendency to discourage customers from visiting

Table 7. Bank Wise RTGS Outward -2013

Month	Outward							
	Volume				Value (Rs. Billion)			
	Interbank	Customer	Total	%	Interbank	Customer	Total	%
April	424219	6039055	6463274	100	15698.95	45362.17	61061.12	100
March	462327	6832069	7294396	100	17372	60038	77410	100
Feb	360804	5460592	5821396	100	12165.99	40716.72	52882.71	100
Jan	403862	5880830	6284692	100	14288.39	43713.67	58002.05	100
Dec-12	383321	5649279	6032600	100	13157.67	44120.23	57277.9	100
Nov	361953	5187798	5549751	100	11057.25	35717.32	46774.57	100
Oct	376857	5456508	5833365	100	12533.55	41925.28	54458.83	100
Sept	351118	4746863	5097981	100	12641.1	45355.91	57997.01	100
Aug	340156	4785783	5125939	100	11898.22	40468.32	52366.54	100
July	368022	5107327	5475349	100	12832.02	41903.25	54735.28	100

Source: Tabulated Data

The (RTGS) Real Time Gross Settlement outward during July 2012 to April 2013 recorded in above mentioned table in terms of value and volume for Interbank, Customer and Total.

Table 8. National Electronic Fund Transfer (NEFT) – 2013

Month	Total outward debits		Received inward credits	
	No. of transactions	Amount	No. Of transactions	Amount
		(Rs. Mn)		(Rs. Mn)
Jan	38364041	2,814,875.27	38364041	2,814,875.27
	38.36	2,814.88	38.36	2,814.88
Feb.	38293445	2560347.82	38293445	2560347.82
	38.29	2,560.35	38.29	2,560.35
Dec-12	35537622	2667676.653	35537622	2667676.653
	35.537622	2667.676653	35.537622	2667.676653
Nov	33709717	2301551.972	33709717	2301551.972
	33.709717	2301.551972	33.709717	2301.551972
Oct	34843661	253421.0722	34843661	253421.0722
	34.843661	2534.210722	34.843661	2534.210722
Sept	29430373	227293.8908	29430373	227293.8908
	29.430373	2272.938908	29.430373	2272.938908
Aug	29279962	210775.5282	29279962	210775.5282
	29.279962	2107.755282	29.279962	2107.755282
July	29254732	210899.7379	29254732	210899.7379
	29.254732	2108.997379	29.254732	2108.997379

Source: Tabulated Data

National electronic fund transfer (NEFT) – 2013 July 2012 to April 2013 recorded in above mentioned table in terms of no. of transactions and amount (Rs. Mn) for outward debits and received inward credits

Table 9. ECS - All Centers' Transaction Details

Month	ECS(CREDIT)			ECS(DEBIT)		
	No. Of Users	Volume	Value	No. Of Users	Volume	Value
Feb-13		8702583	131060.4011		14990149	92731264629
Jan-13		7484302	1.33692E+11		14878490	90792584548
Dec-12	9845	6887980	124796.773	5708	14998111	90107.41
Nov		8866243	146613.5771		14682062	88027.80641
Oct		14071845	163168.6687		15070846	88512.34535
Sept		14730884	136373.6426		14365541	85479.84116
Aug		13636248	179672.8935		14695901	83294.29039
July		13341581	207275.1653		14697088	83496.27768

Source: Tabulated Data

ECS (CREDIT and ECS (DEBIT recorded in above table in terms of No. of Users, Volume and value during July 2012 to February 2013.

branches since it adds to the cost of the bank and is also inconvenient for customers. Moving to alternative channels is

Table 7. Online Transfers

Particulars	Growth
Online fund transfers through NEFT	71%
RTGS (Real Time Gross Settlement	11.7 %,
Paper-based payments accounted	52.4% of non-cash transactions

Source: RBI Website

a win-win for both sides," When a customer walks into a branch to withdraw money, the cost to the bank may be as high as Rs 200 whereas an ATM transaction would cost around Rs 20 or even less. Banks are also discouraging direct interface with customers by levying charges for some transactions such as payment of credit card bills through cash or depositing cheques at bank counters instead of putting them in drop boxes. Technology-based banking has also reduced the space required to set up bank branches. "Earlier, the physical

infrastructure needed for a branch was, on an average, around 4,000 to 5,000 square feet. Now, we are managing with an average of 1,000 to 1,500 square feet,"

Suggestions and conclusions

- In order to tap the untapped Indian banks has to accelerate the financial inclusion through Branchless banking.
- Financial accessibility should be ensured to the Indians through new models of branchless banking.
- Measures should be taken to ensure the security in branchless banking transactions and promote the awareness programme for users.
- The information on cost and benefit in branch and branch less banking should be passed to users and some percentage of benefit should be given to users who are availing branchless banking.

As per the broad estimates from the Reserve Bank, public sector banks would require a common equity of Rs1.4-1.5 trillion in addition to Rs 2.65-2.75 trillion as non-equity capital to meet the full Basel III norms by 2018. Banks, therefore, need to design appropriate strategies for meeting these capital norms.

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