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International Journal of Research in Finance and Marketing

Aims and Scope

The International Journal of Research in finance and marketing is aimed at providing a platform for researchers, engineers, scientists, or educators to publish their original research results, to exchange new ideas, to disseminate information in innovative designs, engineering experiences and technological skills. All papers submitted to the Journal will be blind peer-reviewed. Only original articles will be published. The papers for publication in The International Journal of Engineering & Scientific Research are selected through rigorous peer reviews to ensure originality, timeliness, relevance, and readability. Theoretical work submitted to the Journal should be original in its motivation or modeling structure. Empirical analysis should be based on a theoretical framework and should be capable of replication. It is expected that all materials required for replication (including computer programs and data sets) should be available upon request to the authors.

The current emphasis of the journal includes the following areas: Life Sciences: Agricultural, Biological Sciences, Biochemistry, Genetics, Molecular Biology, Environmental Science, Immunology and Microbiology, Neuroscience, Marine Biology. Physical Sciences and Engineering: Chemical Engineering, Chemistry, Computer Science, Earth and Planetary Science, Energy, Mathematics, Physics and Astronomy, Engineering, Material Science, Statistics. Health Science: Medicine and Dentistry, Nursing and Health Professions, Pharmacology and Toxicology, Pharmaceutical Science, Veterinary Science, Veterinary Medicine. Social Science and Humanities: Arts and Humanities, Business Management, Management, Accounting, Decision Science, Economics, Econometrics, Finance, Psychology, Social Sciences by publishing original research work, short communications and review articles.

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Implementation of Forensic Accounting – Needs and Applicability in Banks

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ABSTRACT

As Indian banks are subjected to many frauds since a few years, forensic accounting and its applicability has been explained in this paper. Forensic accounting conveys numerous advantages in managing banking activities to uncover issues along with checking accuracy and depictions of genuine activities. Rather than just checking books and records in parity, testing and insightful strategies can target offenses that can't be spotted by regular bank auditing process. Reserve Bank of India (RBI) communicated distress on the exacerbating nature of the resources which advances RBI to recommend banks to adopt measures that guarantee compelling investigations, observing and follow up of frauds from an operational perspective. The aim of these critical suggestions of Reserve Bank of India is to enhance the nature of fraud examinations. In this manner, forensic accounting secures the quality of financial accounts and banking transactions.

Keywords: *Forensic accounting, Indian banks and banking system*

1. INTRODUCTION

Challenging situations have been faced by the banks over the years due to scams. Banks undergo tremendous pressure in order to implement best practices owing to regulatory inspections. The scams in Indian banks have made the banking system volatile and vulnerable. Owing to the various un-surfaced scams, forensic accounting and auditing holds vital importance and needs to be addressed immediately.

Forensic accounting is an attempt to uncover dubious transactions from the monetary accounts of companies and banks. The importance and need of forensic accounting and accountants was first recognized by an economist named Kautilya. Over the years, the Indian prospect for the forensic accountants is growing manifold in recent years and is still emerging. Forensic accounting and audit has been mandated by the Reserve Bank of India, but banks are careful in approaching fraud examiners and certified scams, and are mostly reliant on internal auditors. Forensic accountants are in demand because of rising scams and frauds. Satyam scam was one of the jarring scams in India which caused a market

crash in 2009. Since then, companies have expressed their concern to identify early warning signals of a fraud or insolvency. Forensic accountants or examiners hence have gained demand as their need in companies has increased. RBI further says that examination of fraud needs capacity in 'forensic accounting and audit' and furthermore value-based expertise with respect to transactions. In such manner, banks should find a way to train staff with appropriate aptitude and give them vital preparation with respect to Forensic accounting and audit so that trained personnel carry out necessary investigation of frauds involving huge amount. To control the bank frauds, exceptional programmes are offered by Indian forensic institutions. These sessions are most likely committed towards banking frauds. In such conditions, forensic accounting is a valuable strategy investigating, and averting frauds in banks that were inappropriately dealt with. Complex banking activities encompass abnormalities and they can only be dealt with by successfully implementing forensic accounting.

2. REVIEW OF LITERATURE

With globalization, Kohler (2002) in his discourse at a meeting on humanizing the worldwide economy focused on the need to expand transparency of monetary structures and to raise the reconnaissance of international capital markets. In mid-1990s, the World Bank formulated a well defined technique to battle distinctive types of corruption and frauds, and together with the IMF made Financial Sector Assessment Program (FSAP), to survey, analyze and address potential monetary vulnerabilities. FSAP with its work has experienced a few changes and more extensive acknowledgment throughout the years, since its beginning in 1999.

Mergers of banking industry giants brought forth the idea of "too big to fail", which in the long run prompted profoundly risky financial goals and monetary crisis of 2008. In light of the 2008 crisis, Dodd-Frank wall-street reform and Consumer Protection Act (DFA) was enacted in 2010. DFA brought forth different new offices to encourage control and counteract deceitful practices. Volcker rule, a part of DFA, restricted banks from participating in exclusive trading activities for profit.

Indian banking framework has remained tormented with a manifold increase in NPAs amid late years, which brought about an endless loop influencing its maintainability. Chakrabarty (2013) mentioned that while most number of frauds has been credited to foreign and private banks, public sector banks involve highest sums of money.

Important findings in RBI (2014b) incorporated the stress of asset quality and marginal capitalization by public sector banks, and different suggestions to address these issues. Rajan (2014) focused on great administration and autonomy to be given to public sector banks to build their competitiveness and to

have the capacity to fund-raise from business sectors effortlessly. In light of the normal discernment that undeniably strict controls will make business opportunities take a hit, Raju (2014) expressed that, rules don't appear to be a bar in working of banks after the crisis.

Subbarao (2009) was of the supposition that without broad based trust and assumption of fair conduct, there wouldn't be a financial sector of the present scale and size. The researcher called the development of a moral hazard issue in the banking framework as privatization of profit and socialization of expenses.

To keep up consistency in fraud reporting, frauds have been characterized by RBI dependent on their types and arrangements of the Indian penal code, and reporting rules have been set for those as indicated by RBI (2014a and 2015a). Towards observing frauds by the board of directors, a circular was issued according to RBI (2015b) to help banks to set up a council to regulate internal investigation and examining, and plan on suitable preventive activities, following by survey of viability of those activities. Fair rules and whistle-blower policy are crucial to enable representatives to deal with frauds. RBI additionally issued a circular and presented the idea of Red Flagged Account (RFA), in light of the nearness of Early Warning Signals (EWS), into the present system, for early identification and aversion of frauds.

Gandhi (2014) examined the prime reasons for developing NPAs and perceived the absence of strong credit examination framework, inept supervision post credit disbursal, and insufficient recovery component as key hindrances tending to those viewpoints.

Gandhi (2015) focused on the fundamental rules that can go far in avoiding fraud, such as the standards of knowing the client and employees and the accomplices. The researcher called attention to the noteworthiness of a vigorous examination mechanism and persistent monitoring. Lokare (2014) uncovers that the share of retail advance segment in complete NPAs persists on remaining high, of which credit card loans (2.2 percent) have the third-most contribution after personal and housing advances. MacGee, Livshits, Tertilt (2015) observationally propose that the ascent in customer insolvency can to a great extent be accounted by the broad margin and lower stigma related with it. The researcher additionally recommended that monetary developments have prompted higher total borrowings, which has brought about higher defaults.

An investigation by Assocham (2014) finds a significant correlation between manageable credit development, prompting sound asset creation, and GDP development. The study stresses on strong credit evaluation and utilization of early cautioning frameworks to observe asset nature of structures.

3. OBJECTIVES:

The objectives of this paper are:

1. To understand the advantages of implementing forensic accounting in Indian banks.
2. To examine the current status of application of forensic accounting and relevance in curbing scams and frauds in the Indian banks.

4. HYPOTHESIS:

H0: The implementation of forensic accounting has not been successful in detecting banking frauds.

H1: The implementation of forensic accounting has been successful in detecting banking frauds.

5. FORENSIC ACCOUNTING: A BRIEF OUTLINE

The consideration of bookkeeping, auditing and insightful expertise is called 'Forensic Accounting'. "Forensic Accounting is the use of bookkeeping standards, concepts and order to theories at issues in a legal debate and includes each part of bookkeeping knowledge" as indicated by the American Institute of Certified Public Accountants (AICPA). In like manner, forensic accounting gives a bookkeeping examination reasonable to the court which will frame the basis for deliberation and at lastly dispute resolution. According to the Journal of Forensic Accounting, "Forensic accounting is adequately complete so a bookkeeper, in his/her thought about independent proficient judgment, can convey a finding as to records, inventories, or the introduction thereof that is of such quality that it would be maintainable in some antagonistic lawful continuing, or under some legal or managerial review."

There are two noteworthy types of Forensic accounting:

Legal services perceive the job of a bookkeeper as a specialist and Investigative services requires the utilization of forensic bookkeepers' skills and may require court declaration and judgment.

Necessities and relevance of forensic accounting in banks

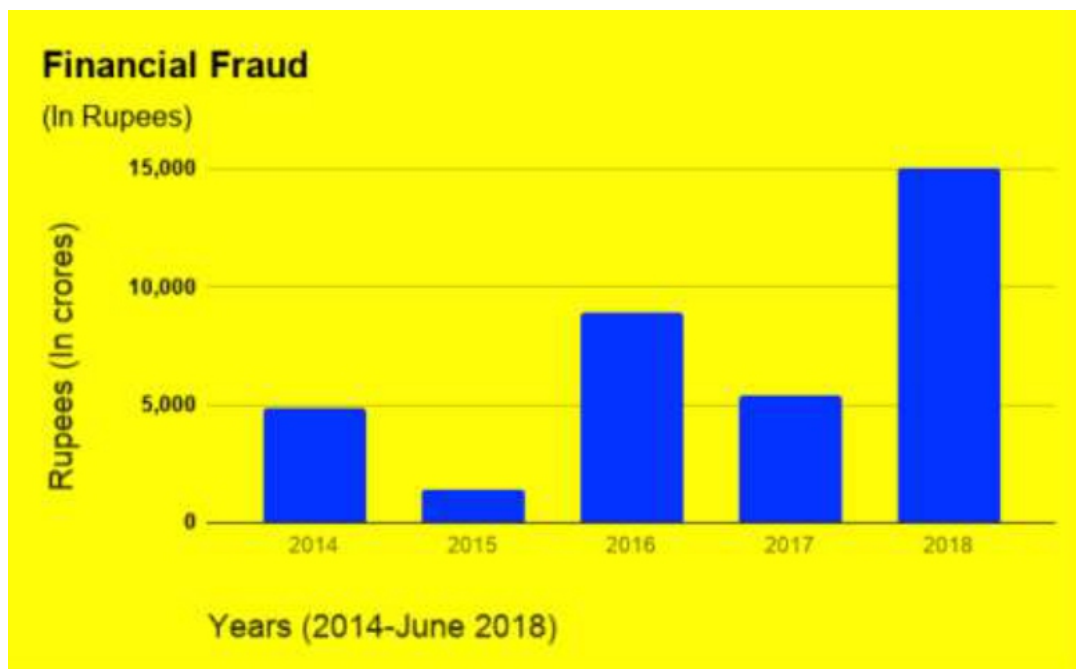
Forensic accounting has developed as an important way to recognize, arrange and trail banking dealings that were inappropriately grumbled or verify that monetary dealings were appropriate. Besides, the sensitive disposition of the accounting for banks and other monetary establishments, enterprises perform composite banking activities that may involve wrongdoings. In this manner forensic accounting possesses the honesty of banking transactions and financial statements.

Needs of Forensic Accounting in Banking Transactions:

Forensic accounting is very basic in the banking business in light of the fact that at one side, forensic bookkeeping methods of insight are asked for on the grounds that there is uncertainty of occurring of plausible losses or unlawful acts. At another side, forensic bookkeeping practices are expected to hopefully approve that all banking transactions in certainty performed effectively. In every single different business that have stock, items, licenses, and most different resources are changed over to a money value for bookkeeping purposes. In the banking industry, their inventories are cash. On one point, it makes the bookkeeping easier since value of gadgets and different things require not be changed over to cash. Then again, bookkeeping modifications like revaluing stock are exceptionally troublesome. Subsequently, incorrectness whether open errors or arranged manipulations, dependably retain genuine cash, not paper representations. That is the reason it is basic for all banks to adopt and follow forensic accounting.

Example of Financial Fraud in India

Figure 1: Financial Fraud statistics



A closer yearly comprehension of the losses brought about due to the money related frauds demonstrate that in 2014 frauds worth over Rs.4,800 crore were reported. The guilty parties' list makes reference to the industrialist Vinay Mittal in 6 cases. The aggregate figures from 2015 to 2016 show losses more than Rs. 9,000 crores, a noteworthy lump of which originates from the Vijay Mallya case.

Mallya is blamed for redirecting a major piece of the Rs. 6,027-crore loan taken from a consortium of 17 banks for his now not operational Kingfisher Airlines, to shell organizations in seven nations, including the UK, US, Ireland and France. While SBI suffered a loss of Rs.1,600 crore, other public sector banks that offered loans to Kingfisher are Punjab National Bank which sanctioned Rs.800 crore, Indian Overseas Bank (Rs.140 crore), Bank of Baroda (Rs.550 crore), Bank of India (Rs.650 crore), UCO Bank (Rs.320 crore), Central Bank of India (Rs.410 crore), State Bank of Mysore (Rs.150 crore), and Corporation Bank (Rs.310 crore).

Following these cases which indicated net infringement, the Lok Sabha had cleared the Fugitive Economic Offenders mandate in the monsoon session of the parliament in 2018. The bill was at first affirmed by the cabinet with expectations of enabling officers to attach and seize properties and assets of the said defaulters before the loan defaulters would flee the nation.

But, the current criminal component did not turn out to be a solid impediment when the PNB fraud was detected which prompted diamantaire Nirav Modi and Mehul Choksi fleeing the nation subsequent to committing frauds with respect to the Letters of Undertaking from the Punjab National Bank. In his most recent endeavor to evade extradition, Nirav Modi appealed to the Singapore government for a residence permit which was subdued; in spite of a red corner notice was issued. The PNB scam which purportedly started in 2011 was identified in 2018, after which PNB authorities announced it to the probe organizations. Actions were taken against the bank.

It was identified that 28 Indians were associated with money related frauds with banks. After this was known, the Central Bureau of Investigation (CBI) and the Enforcement Directorate (ED) worked on issuing legitimate actions against these outlaws, and endeavors were successful to a certain extent. Nonetheless, the current systems have turned out to be vain despite the seriousness of the issue. The escapism of wrongdoers and the administration's incapacity to seize them and remove them from foreign nations has prompted impediments for the probing authorities. For this purpose, the Indian government has signed extradition treaties with over 48 countries.

For dissuading defaulters, the government is planning to execute an appropriation of the returns of the crime in India and abroad to compel escapees to come back to India and to submit to the jurisdiction of the courts. In any case, the measures on the ground propose otherwise, because of the regulatory provisos and the absence of political will, outlaw defaulters have over and over again possessed the capacity to evade government investigations in light of the frail extradition activities taken by the government. The ongoing activities give a condemning knowledge into the idea of fraud committed by the corporates who were given a freeway to evade the nation.

Some statistics on scams and frauds in the Indian banking sector:

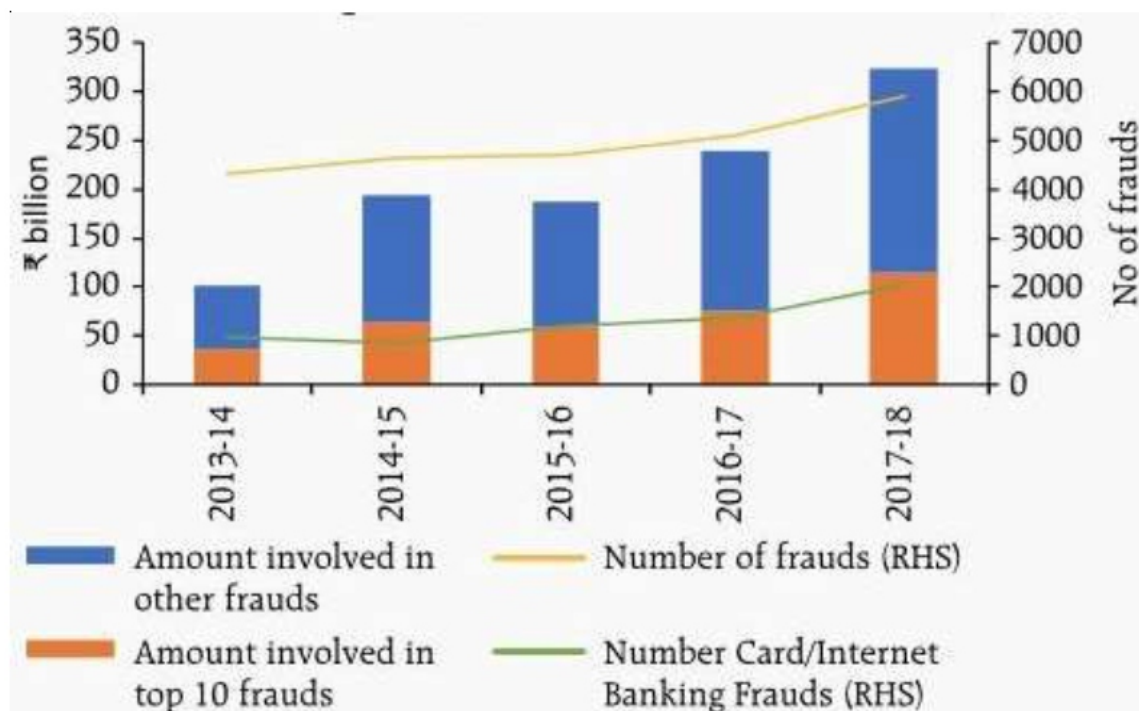
Fraud can be defined as any conduct by which one person experiences an unfair advantage over another. This definition was suggested in the perspective of electronic banking in the Report of RBI Working Group on Information Security, Technology Risk Management, Electronic Banking, and Cyber Frauds, as 'a measured act of oversight or commission by any person, done in during a banking transaction or in the transaction records maintained either manually or in a digital way in banks, ensuing into unjust gain to any person for a transitory period or otherwise, with or without any financial loss to the bank.'⁵ A year wise cases of fraud cases reported by the banking sector with the amount involved is given in Table 1.

Table 1: Year-wise fraud cases in banks

Year	Number of Frauds	Total Amount of Frauds (in million)	Number of Card/Internet Banking Frauds
2013-14	4500	100	1100
2014-15	4900	190	1000
2015-16	5000	180	1300
2016-17	5100	235	1700
2017-18	5900	320	2000
Total	25400	1025	7100

Source: <https://qz.com/india>

In table 1, the year wise fraud cases in banks from 2013-14 to 2017-18 is seen. There have been more than 20000 fraud cases reported in 5 years. With each passing year the frauds in banks are increasing. Similarly the amount involved in these frauds has been increasing over the years. The amount involved in frauds stood at 320 million in 2017-18. Since, significant efforts have been made by the government to go cashless and adopted digital payment systems, uses of cards, net banking, payment wallets, etc have been brought to usage. The people have shifted towards using digitized way to making payments, but related frauds have been noticed by the banks whose number increases with each passing year as also exhibited in figure 2.

Figure 2: Frauds reported (Amount involved \geq Rs. 1 lakh)

Source: <https://qz.com/india>

Table 2: Lok Sabha USQ No. 150 for 2nd Feb 2018 regarding “Fraud Cases in Banks”

2014-15 to 2016-17		
	Number of Frauds	Frauds where staff involved
Public Sector Banks	8,622	1,146
Private Sector Banks	4,156	568

As per data shared by the government in the Lok Sabha in Table 2, a total of 12,778 cases of fraud were reported in all scheduled commercial banks in the 3 years between 2014-15 and 2016-17. The Public Sector banks reported 8622 cases while the Private banks reported 4156 cases. The involvement of staff was reported in more than 13% of the fraud cases. It was also intimated to the Lok Sabha by the Government that legal action against fraudulent banks was taken against 5200 employees of the Public Sector banks between January 2015 and March 2017.

Table 3: Bank-wise data on Frauds reported during FY 2014-15 to FY 2016-17

Bank Name	2014-15		2015-16		2017-18	
	Net Profit/ Loss	Number of fraud cases	Net Profit/ Loss	Number of fraud cases	Net Profit/ Loss	Number of fraud cases
Allahabad bank	621	47	-743	23	-314	60
Andhara Bank	638	52	540	44	174	64
Bank of Baroda	3398	303	-5396	255	1383	224
Bank of India	2564	131	-6089	156	-1558	162
Bank od Maharashtra	451	50	101	45	-1373	75
Canara Bank	6950	114	-2813	94	1122	119
Central Bank of India	606	214	-1418	167	-2439	147
Corporation Bank	584	73	-506	135	561	83
Dena Bank	265	41	-935	21	-864	43
IDBI Bank Limited	873	56	-3665	129	-5158	107
Indian Bank	1005	95	711	87	1406	79
Indian Overseas Bank	-454	138	-2897	109	-3417	95
Oriental Bank of Commerce	497	127	156	114	-1094	56
Punjab & Sind Bank	121	30	336	12	201	16
Punjab National Bank	3062	180	-3974	131	1325	160
UCO Bank	1138	87	-2799	85	-1851	59
Union Bank of India	1782	111	1352	146	555	111
United Bank of India	256	128	-282	67	220	30
Syndicate Bank	4936	208	-1643	178	359	166
State Bank of India	15970	893	11589	770	-1383	803
Vijaya Bank	447	35	382	21	750	58

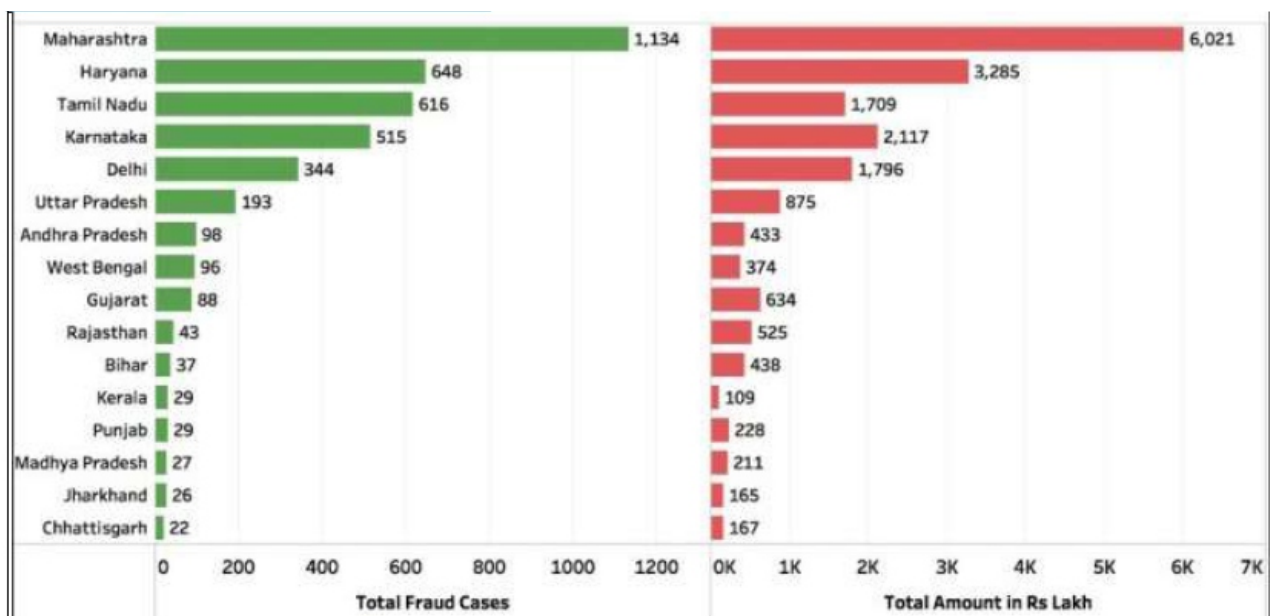
Table 3 shows bank-wise data on frauds reported during FY 2014-15 to FY 2016-17. All banks have reported various frauds over the years. State Bank of India showed the highest profits of all banks Rs. 15970 crores in 2014-15. Of all the banks, 893 fraud cases were reported by SBI in the same year. The profit of SBI in 2015-16 reduced to 11,589 crores from the previous year and the fraud cases reported in the year were 770. In 2017-18, SBI reported a loss of 1,383 crores and the fraud reported in 2017-18 was 803. Punjab National Bank showed profits of all banks Rs. 3,062 crores in 2014-15. Of all the banks, 180 fraud cases were reported by Punjab National Bank in the same year. The loss of Punjab National Bank in 2015-16 reduced to 3,974 crores from the previous year and the fraud cases reported in the year were 131. In 2017-18, Punjab National Bank reported a profit of 1,325 crores and the fraud reported in 2017-18 was 160. Owing to the fraud, a scam related to letter of undertaking in Punjab National Bank surfaced in India. It was a Rs. 13,000-crore fraud in the bank which was committed by diamantaire Nirav Modi and his uncle Mehul Choksi who was the promoter of Gitanjali Gems.

In 2017-18, Punjab & Sind Bank reported the least number (16) of frauds. Allahabad Bank and Andhra Bank also reported less number of frauds during the year. Since, 2014-15 most banks have shown negative balances (loss) on their financial statements. Types of frauds surfaced were accounting frauds, uninsured deposits, demand draft fraud, bill discounting fraud, forged documents, fraudulent and

suspicious loans, etc. Hence, cases of fraud were reported in the country's largest bank, the State Bank of India. The highest amount of gross Non-Performing Assets (NPAs) was reported by the State Bank of India, at Rs. 2,01,560 crore. A total of industry loans followed by those in the agriculture and services sectors amounted to the gross NPA of Rs. 8,40,958 crore in 2017.

Among the others, the NPA for PNB stood at Rs. 55,200 crore and for IDBI Bank, Rs. 44,542 crore. Bank of India had NPAs worth Rs. 43,474 crore; Bank of Baroda, Rs 41,649 crore; Union Bank of India, Rs. 38,047 crore; Canara Bank, Rs. 37,794 crore and ICICI Bank, Rs 33,849 crore. More than four Public Sector banks stated more than 500 cases each while more than 200 fraud cases were seen in 15 banks.

Figure 3: Number of Credit Card/Debit Card/Cheque Frauds (involving Rs. 1 Lakh and above from 2014-15 to 2016-17)



As evident from Figure 3, over 4000 cases of Credit Card/Debit Card/Cheque related fraud cases, have been reported by the banks between 2014-15 and 2016-17. Rs. 200 crore was the amount involved in above mentioned frauds and the highest number of cases was detected from Maharashtra (1134). Tamil Nadu, Haryana & Karnataka are the only states to have reported more than 500 such cases. In 2016-17, 5,076 cases of fraud were reported by the banks involving Rs. 23,933 crore. A shocking Rs. 28,459 crore, being the highest ever amount in 2018 to have been involved in these cases of fraud was mentioned by the Government. However, RBI ensured to have administered an action on individual cases.

Table 4: Statement showing action taken by Public sector banks against delinquent employees for their involvement in cases of frauds and corrupt practices

Sl. No.	Bank	2015 (Jan- Dec)	2016 (Jan-Dec)	2017 (Jan-Dec)
1	State Bank of India	888	547	103
2	State Bank of Hyderabad	67	78	48
3	State Bank of Mysore	36	17	4
4	State Bank of Patiala	26	38	4
5	State Bank of Travancore	98	129	45
6	State Bank of Bikaner & Jaipur	11	12	5
7	Bank of Baroda	21	39	9
8	Allahabad Bank	121	76	7
9	Bank of India	19	20	0
10	Bank of Maharashtra	0	33	9
11	Canara Bank	28	39	4
12	Dena bank	85	39	9
13	Indian Bank	15	34	7
14	Indian Overseas Bank	245	160	44
15	Central Bank of India	248	130	28
16	Union Bank of India	125	72	17
17	Punjab National Bank	115	58	11
18	United Bank of India	73	42	26
19	UCO Bank	78	53	7
20	Syndicate Bank	92	105	0
21	Andhra Bank	119	84	16
22	Corporation Bank	10	28	9
23	Oriental Bank of Commerce	77	74	27
24	Punjab & Sind Bank	43	27	3
25	Vijaya Bank	10	4	0
26	Bharaitya Mahila Bank Ltd.	0	0	0
27	IDBI Bank Limited	98	56	16
	Total	2748	1994	458

Note: Action taken includes employees convicted, awarded major/minor penalties including dismissed /discharged/removed from service

As evident from Table 4, the action taken by Public sector banks against delinquent employees for their involvement in cases of frauds and corrupt practices has been shown. SBI initiated major number of actions against its employees during 2015 and 2016. State Bank of India group took action against 209

employees in 2017 (Jan-Mar) who was involved in frauds. Indian Overseas Bank took action against 44 of its employees. Central bank of India took action against 28 of its employees and only Bank of India, Vijaya Bank, Bharatiya Mahila Bank (BMB), Syndicate Bank, etc did not initiate action against its employees in the same year. The actions taken against the employees refer to conviction, penalties such as dismissal, discharge from jobs and service.

To detect frauds at an early stage, RBI has mandated the banks to adopt forensic accounting. But it has been observed that the banks are hesitant in approaching the examiners of fraud who are certified and chiefly depend on internal auditors. The fraud cases were observed as above in banks since 2014 to 2018 and it was found that the forensic accounting is still in its developing stage in India. There is a lack of forensic accounting skill sets in India and hence, it is being used as a tool for examination and not as a preventive tool. Hence, it can be stated that Indian banks have not successfully implemented forensic accounting in its audit framework which concludes that the null hypothesis is accepted and the alternate hypothesis is rejected. This implies to the fact that in future there are more chances of banking frauds and increase in the number of defaulters if forensic accounting is not implemented in the Indian banking system.

6. CONCLUSION

The effect of frauds on banks in financial transactions is increasingly huge as their activities include funds transaction. Abreast, frauds can have a possibly debilitating impact on assurance in the banking framework and may harm the soundness of the economy. They can bring down banks; undermine the Reserve Bank of India's decisions, etc. Forensic accounting would give the central investigating agencies such as the CBI and the ED to detect various big-ticket fraud cases in banks which involve industrialists and others. Forensic accounting is not being implemented in the banking framework which concludes that the implementation of forensic accounting has not been successful in detecting banking frauds accepting the null hypothesis.

The growth in sum involved is to a great extent inferable from the huge value loans and related frauds that have become known as of late which pose a noteworthy challenge to all partners in the banking system. Hence, Forensic accounting must be encouraged in India in order to avoid fraudulent transactions and dubious activities. Similarly, requisite amendments in the law must be made in order to understand the significant of forensic accountants in particular and forensic accounting in general.

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Relationship Marketing and its Role in Customer Satisfaction and Loyalty in Jordanian Pharmacies

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ABSTRACT

The purpose of this paper is to explore the effect of relationship marketing dimensions (trust, communication, conflict handling, empathy and perceived service quality) on customer satisfaction and loyalty in Jordanian pharmaceutical companies (Jordanian pharmacies). The study also tested the impact of customer satisfaction on their loyalty in these companies. The findings of the study showed there is a significant effect of relationship marketing dimensions (trust, communication, conflict handling, empathy and perceived service quality) on customer satisfaction in. There is also a significant effect of three dimensions (communication, conflict handling, empathy on customer loyalty, but two dimensions of relationship marketing (trust and Perceived service quality) have no significant effect on customer loyalty. Finally, the result of the study confirmed that customer satisfaction positively affects customer loyalty in pharmaceutical companies.

Key terms: relationship marketing, trust, communication, conflict handling, empathy, perceived service quality, customer satisfaction, customer loyalty.

1. INTRODUCTION

Our long marketing experience refers to four pillars of marketing. Those are: choosing target markets, creating value to customers, distinguishing stakeholders by providing them with the appropriate benefits, and relationship marketing (Kotler and Keller, 2012; Williams and Tony, 2006). In the same context, marketing management is about managing profitable customer relationships physically and digitally, locally and globally, in products, services, experiences, information, people and so on (Kotler et al., 2017; Romano, Jr and Fjermestad, 2006).

Marketing is the main organization function to develop a satisfied product and service, create corporate image and brand, establish and sustain profitable customer relationships by providing higher value to the customer. Marketing is meeting human and social needs profitably, managing profitable customer relationships (Kotler and Keller, 2012; Williams and Tony, 2006). In the same context, marketing

management is about managing profitable customer relationships physically and digitally, locally and globally (Kotler et al., 2017; Romano, Jr and Fjermestad, 2006). In the business environment, the evolution towards the knowledge and networking economy is associated to the shift of marketing focus from product to service, experience and then relationships. This transition can be created in various sectors of economy including the pharmaceutical industry. The pharmaceutical sector is considered as one of the most fundamental participant and influencer in the health care system all around the world (Narayana et al. 2012; Taher et al., 2012).

Pharmaceutical industry has matured rapidly around the world (Taher et al., 2012; Athavale et al., 2015). On this point it is important to indicate that the Jordanian pharmaceutical industry also has grown rapidly since 1960's. Pharmaceutical industry in Jordan is one of the most innovative and profitable industries. The total number of pharmacies in Jordan reached around 2800 pharmacies, with a percentage of one pharmacy for every 2000 citizens (<http://www.menbarnaqabi.net/?p=12735>). Pharmacies in Jordan have benefited from e-services in order to establish strong relationships with many of their customers, especially patients with chronic diseases who receive their medicines through health insurance services. Therefore, many of these pharmacies have been able to build strong relationships facilitated by their use to develop marketing relationships to achieve their goals.

2. RELATIONSHIP MARKETING

Relationship marketing activities and events are implanted by the companies to attract, interact, build long-term relationship with their clients and keep the most profitable clients (Ndubisi and Wah, 2005; Leverin and Liljander, 2006; Yoganathan et al., 2015). It seeks the attraction of new customers, in addition to retain and service current customers. However, the importance of marketing relationships is based on the fact that bringing in new customers is five to six times more expensive than keeping and servicing existing customers (Ndubisi, 2006; Ndubisi, 2007; Sharifi and Esfidani, 2014). For this reason during the last few decades, business vision has changed from traditional marketing and one transaction approach to relationship marketing (long-term relationship approach) in service as well as industrial companies. Therefore, the marketing of relations is being thought of as the appropriate strategy to meet the increasing competition between companies (Saxe and Weitz, 1982; Webster, 1992; Ndubisi and Wah, 2005; Yoganathan et al., 2015).

Relationship marketing is an approach consisting of a number of goals such as selling incentives, increasing profit, lowering costs of transactions, winning customer loyalty, because long-term relationships lead to the understanding of the most appropriate way to deal with all stakeholders especially with customers (Leverin and Liljander, 2006; Ndubisi, 2006; Kaur et al., 2012; Sharifi and

Esfidani, 2014). Whereas the relationship marketing is the marketing which seeks to build strong and satisfying long-term relationships with customers, increasing customer loyalty and lowering customer turnover (Ndubisi, 2006; Ndubisi, 2007; Kaur et al., 2012). Previous studies showed the existence of significant influence of relationship marketing on customers' relationship satisfaction on the performance of companies including market share, sales growth, profits return on investment, and customer retention (Leverin and Liljander, 2006; Nguyen and Ngo, 2012; Sharifi and Esfidani, 2014).

Understanding relationship marketing by companies benefits them to operate their relationships with customers and this causes a reduction in the level of customer dissatisfaction after purchase (Sharifi and Esfidani, 2014). Certain studies have shown that relationship marketing changed negatively the performance of a company in certain circumstances (Sharifi and Esfidani, 2014). This study develops an illustration of relationship marketing and its dimensions (trust, communication, conflict handling, empathy, and perceived service quality). The five dimensions that are established based on various studies as following: trust (Ndubisi and Wah, 2005; Ndubisi, 2006; Ndubisi, 2007; Nguyen and Ngo, 2012; Kaur et al., 2012; Firdaus and Kanyan, 2014; Sharifi and Esfidani, 2014; Yoganathan at all, 2015), communication (Ndubisi and Wah, 2005; Ndubisi, 2006; Ndubisi, 2007; Nguyen and Ngo, 2012; Firdaus and Kanyan, 2014; Sharifi and Esfidani, 2014; Yoganathan at all, 2015), conflict handling (Ndubisi and Wah, 2005 ; Ndubisi, 2006; Ndubisi, 2007), perceived service quality (Kaur at all, 2012 ; Yoganathan at all, 2015), and empathy (Nguyen and Ngo, 2012; Firdaus and Kanyan, 2014; Yoganathan at all, 2015). Table 1 shows that there are many dimensions to the marketing of relationships, but these five dimensions are confirmed by studies with more agreement than other dimensions (see table 1).

Table 1: Dimensions of relationship marketing

Author	Variables										
	Trust	Commitment	Communication	Competence	Cognitive dissonance	Conflict Handling	Perceived service quality	Empathy	Bonding	Shared value	Reciprocity
Ndubisi, 2007	√	√			√						
Kaur et al., 2012	√					√					
Firdaus and Kanyan, 2014	√	√					√				
Ndubisi and Wah, 2005	√	√	√		√						
Sharifi and Esfidani, 2014	√	√		√							
Ndubisi, 2006	√	√			√						
Nguyen and Ngo, 2012	√	√					√	√	√	√	
Yoganathan et al., 2015	√	√				√	√	√	√	√	

3. FIVE DIMENSIONS

Based on the table 1, this study identified five dimensions for marketing relationships as follows:

Trust: Trust is one of the most important components of every relationship, especially the relationship that is characterized by a particular risk. In the relationship between the company and the customer, the company establishes trust through integrity, honesty, and care which makes the customers give their trust and deal with it rather than the competitors. Therefore, trust can be considered as the mechanism for the minimization of social complexity and a mark of customer satisfaction. Trust is the state of the individual who is deliberately accepted to deal with the individual or the company, followed by positive expectations and behaviors in balanced long term relationships (Vlaar, 2008). The elements of trust are: choice, positive attitude, reliability, predictability of behavior, and reducing the risk and the possibility of betrayal in any relationship (Ward and Smith, 2003, p8). In general, trust is simultaneous with complacency and loyalty, while distrust may end up into disappointments (Jalava, 2006). Trust can mean an individual's feeling towards the other in the meaning of reliability, targets competence, kind motivation, and honesty (Han, 2010). Trust is the expression of one person to another that acts in a specific way. It depends on partners and grants them confidence, and the capacity to meet its obligations (Ndubisi and Wah, 2005; Kundu and Datta, 2015). Trust is a vital factor in all sectors of economy alike. It is a key factor in determining the strong, effective and long-term relationship between partners (Morgan

and Hunt, 1994; Ndubisi, 2007; Jambulingam et al., 2009; Han, 2010; Kaur et al., 2012; Firdaus and Kanyan, 2014; Kundu and Datta, 2015). There is a clear association between trusted clients and their satisfaction and loyalty (repurchase intentions) (Jambulingam et al., 2009; Nguyen and Ngo, 2012; Kaur et al., 2012; Sharifi and Esfidani, 2014; Firdaus and Kanyan 2014; Kundu and Datta, 2015).

Communication: The conventional concept of communication is the capacity to provide reliable, trustworthy, intense and meaningful information at the appropriate time and place on service and service changes to customer, and which in turn improves both parties' perceptions (Ndubisi, 2007; Firdaus and Kanyan, 2014; Yoganathan et al., 2015). Communication is a human action that is needed and necessary in various forms of organizations (Budd and Velasquez, 2014). The general concept of communication is to establish a continuous interactive dialogue between a company and customers that aids in discovering new opportunities for value creation. This dialogue combines all consumption and purchase stages (pre-purchase, purchase and postpurchase stages) (Anderson and Narus, 1990; Ndubisi, 2007; Firdaus and Kanyan, 2014; Huang, 2015). Communication is a major component in building trust and cooperation, and forms an important role in raising the level of trust among partners (Firdaus and Kanyan, 2014). More communication with customers after the purchase process tends to lower their cognitive dissonance as well as minimize uncertainties (Parker, 2017), and positively influence customer satisfaction and loyalty (Ndubisi, 2007; Chattananon and Trimetsoontorn, 2009; Nguyen and Ngo, 2012; Firdaus and Kanyan, 2014).

Conflict Handling: Conflict arises between partners, companies and customers as a consequence of tension, differences of expectations, opinions, interests, needs, values, desires, workplace practices and personalities (Bhanger et al., 2015; Messarra et al., 2016). Conflict handling is recognized as a company's ability to avert any probable conflict, its ability to resolve current conflicts before they turn into big problems by the understanding of the conflict and its solution (Ndubisi, 2007; Bhanger et al., 2015; Chen et al., 2016). Understanding conflicts and appropriately dealing with them lower future conflicts and promote long-term relationships (Messarra et al., 2016). In a proactive perspective, a better response to customer needs and effective communication can reduce the conflict between the company and its customers, yet conflicts can result for many reasons. So the company has to deal with these conflicts adequately. There are many ways to deal with conflicts such as: compromise, domination, avoidance, integration and obliging. The company can also deal with conflicts through specific actions such as: forcing, smoothing, withdrawing, compromising and problem-solving (Shih and Susanto, 2010; Chen et al., 2016). Choosing the right style to resolve current conflicts depends on several factors, including personality, prevailing circumstances, and emotional involvement. One of the most essential ways in conflict management is that the company understands conflicts and how to deal effectively with

them to achieve customer satisfaction and therefore boosts the performance of the company (Chen et al., 2016).

Empathy: The basic factors that form empathy are coping with the complex life and time spent by the individual to learn and understand others, Sympathy also means feeling the pain and happiness of others (Bakker and Demerouti, 2009; Akg et al., 2015; Lockwood, 2016). Empathy can be defined as the feeling of people's states, emotions and desires. It means appreciating how others feel in various occasions and placing the individual himself in the place of others in order to have a better understanding of their feelings (Kemp et al., 2017). Empathy is also defined as the spontaneous behavior that people make with other people, an individual's reaction to other people feelings. It can also mean that people tend to share other people their own feelings like being compassionate, show concern for people as well as feelings of warmth (Bakker and Demerouti, 2009; Powell and Roberts, 2017). Interacting with others and showing empathy interactively are important marks of empathy (Alic et al., 2015). Finally, Empathy plays an important role in raising the level of socialization, communication skills, social reconciliation, emotional inclination and high-level consciousness, satisfaction, as it also results in lowering egoism (Akg et al., 2015; Kemp et al., 2017).

Perceived Service Quality: Perceived quality is the process of assessing a particular service by the customer by comparing the expectations of the service provided and its perceptions, as the clients can assess the service in regards of service structure, process and outcome (Kondasani and Panda, 2015; Mohamed and Azizan, 2015). Perceived service quality is the void that happens between the expectations of customers and the actual service that was introduced by the company (Jahanzeb et al., 2013). A company should evaluate the quality of service provided to their customers, because customers tend to give comprehensive information of the quality of service they received whether it was positive or negative. Thus, perceived quality can be give an important sign of customer satisfaction.

CUSTOMER SATISFACTION AND LOYALTY

Relationship marketing aims to establish long-term relationships with customers, and these relationships benefits companies to obtain customer satisfaction and loyalty. An explanation of these concepts is demonstrated in the following paragraph.

Satisfaction: Satisfaction is related to the customer's positive assessment of the service provided by the company (Chuah et al., 2017). Satisfaction is defined as the point where a company meets a customer's expectations (Chodzaza and Gombachika, 2013; Yuen and Thai, 2015). Customer satisfaction process is an approach to obtain a competitive advantage in markets and the ability of companies to maintain their

clients and shape stronger relationships with them in the fierce competition of the market (Hussain, 2016). Customer satisfaction is made up of two compartments: pre-purchase expectations and post-purchase performance (Kundu and Datta, 2015). Customer satisfaction emerges through its self-perceptions of the company's postpurchase performance in comparison to their previous expectations of purchasing. Satisfaction can rise in cases where the company is able to meet clients expectations or even beat their expectations (Kundu and Datta, 2015; Chuah et al., 2017). From a marketing perspective, satisfaction can be considered as a sign of client's desire to re-purchase in the future (O'Sullivan and McCallig, 2012; Calvo-Porrall and Lévy-Mangin, 2015; Chuah et al., 2017). Researchers consider customer satisfaction as an essential element of customer loyalty and a factor that encourages the repurchase behavior (Kandampully and Suhartanto, 2000; Leverin and Liljander, 2006; Chuah et al., 2017). Customer satisfaction in a relationship with the company can be considered as a critical sign of customer loyalty (Leverin and Liljander, 2006). There is also a noticeable influence of customer satisfaction on customer's behavioral intentions (Qin and Prybutok, 2009; Yuen and Thai, 2015).

Customer Loyalty: Customer loyalty is the primary attitude toward something that leads to a long relationship with the company (Uncles et al., 2003). It is the customer's desire to purchase a specific service/product (McMullan and Gilmore, 2008). One of the important and essential goals of any company is to achieve the satisfaction and loyalty of customers (Audrain-Pontevia and Vanhuele, 2016). Factors that can result in an increase in customer loyalty are, trust as it the essential corner stone, customer-perceived value, switching costs, and relationship quality feature/determinant (El-Manstrly, 2016). Loyalty programs are one of the fundamental strategies that aid companies in raising customer satisfaction and loyalty (Audrain-Pontevia and Vanhuele, 2016). One of the essential goals of loyalty programs is maintaining and increasing sale revenues, building strong bonds between companies and their current clients, creating databases, furthering cross selling, aiding trade relation and establishing alliances (Uncles et al., 2003; Izogo, 2017). There are some advantages to the loyalty programs such as a decrease in price sensitivity, customer retention, attracting large number of customer, increased brand loyalty, positive word of mouth, increased market share and increased number of products sold (Uncles et al., 2003; McMullan and Gilmore, 2008; Fraering and Minor, 2013).

1. METHOD

Variables of the study: According to the extensive review of literature, independent variables (predictors) were identified in five dimensions to market relationships: trust, communication, conflict, empathy and perceived service quality. While, the dependent variables (predicted) have been identified in the customer satisfaction.

Participant: The study used the questionnaire on the Internet. The study sample consisted of usual customers who communicate with pharmacies through e-mails and WhatsApp. The questionnaire was sent to 500 respondents with 4 or 5 questionnaires distributed to customers in 112 pharmacies in Amman (Jordan's capital). The number of questionnaires retrieved and valid for the statistical analysis was only 450 questionnaires.

Questionnaire: Questionnaire was divided into three section: first section covered the demographic characteristics, second contained the statements that represented the relationship marketing dimensions: trust was covered by seven items, communication (6 items), conflict handling (3 items), empathy (7 items), service quality (6 items). Third section covered the customer satisfaction (3 items) and loyalty (3 items).

5.1 SAMPLE CHARACTERISTICS

Table 2 shows the distribution of respondents by sex, age, social status and educational level.

Table 2: Sample characteristics

Characteristics	Data	Freq.	%	Characteristics	Data	Freq.	%
Gender	Male	195	43.3	Marital status	Single	240	53.3
	Female	255	56.7		Married	210	46.7
Total		450	100	Total		450	100
Age	< 30	262	58.2	Education	Sec.	56	12.5
	30-39	114	25.3		Dip.	33	7.3
	40-49	46	10.2		Bach.	284	63.1
	50-59	24	5.3		Postgraduate	77	17.1
	> 59	4	0.09				
Total		450	100	Total		450	100

HYPOTHESES

In this study, there are three hypotheses as follow:

H₁: The dimensions of marketing relationships (trust, communication, conflict handling, empathy and service quality) positively affect customer satisfaction in pharmaceutical companies.

H₂: The dimensions of marketing relationships positively effect customer loyalty.

H₃: Customer satisfaction positively effects customer loyalty.

Before testing the hypotheses, important tests were performed to ensure that the questionnaire and collected data were valid for statistical analysis. To achieve face validity, the initial questionnaire was developed depending on the intensive literature review. It was then distributed to the group of experts (eight faculty members from two Jordanian universities) in order to develop the final questionnaire as a tool for collecting data from the study sample. Structure Validity for questionnaire items was tested using factor analysis loadings. The results indicated that factor loadings all items are larger than 0.30 (see table 3). The reliability test indicates the internal consistency of questionnaires items of each dimension of relationship marketing. To carried out this test Cronbach's Alpha was calculated was calculated for the five dimensions of marketing relationships and for the satisfaction and loyalty. The results showed that the values of Cronbach's Alpha ranged from the highest value (.886) and the lowest one (.780).

Table 3: Factor analysis loadings and KMO

Items	Factor	KMO
I. Trust		
Customers are treated with respect	.739	.911
Pharmacy employees provide specific information to customers	.801	
Pharmacy employees answer customer's questions efficiently	.800	
Pharmacy employees always provide excellent services	.788	
Pharmacy employees keep their word	.689	
Pharmacy employees deserve customers trust	.782	
Pharmacy employees treat people with honesty	.799	
II. Communication		
Pharmacy employees try different ways and methods to provide customers with information.	.724	.820
Pharmacy employees reply efficiently to customer's enquiries.	.714	
Pharmacy employees behave professionally with the customers.	.591	
Pharmacy employees take customers suggestions seriously.	.725	
Pharmacy employees communicate clearly with the customers.	.673	
Pharmacy employees accept customers criticism and complaints.	.722	
III. Conflict handling		
Pharmacy employees avoid disagreements with the customers.	.829	.703
Pharmacy employees are very cooperative in handling disagreements with the customers.	.892	
Pharmacy employees try to satisfy customers when disagreements happen.	.858	
IV. Empathy		
Pharmacy employees are good at understanding customers' needs.	.698	-838
Pharmacy employees are always available to take care of customers.	.750	
Pharmacy employees have strong will to help the customers.	.817	
Pharmacy employees are cooperative with the customers.	.799	
Pharmacy employees treat customers with kindness.	.718	
Pharmacy employees show personal care to every customer.	.638	
Pharmacy employees look at the situation from the customer's point of view.	.311	

V. Perceived service quality		
The pharmacy provides medications on a regular base to cover customers need.	.737	.770
The pharmacy provides all the medications that customers need in their area.	.820	
The pharmacy provides its services on time.	.748	
The pharmacy is located in an obvious and easy to get to location.	.656	
The pharmacy provides services that meet customer's expectation.	.689	
The pharmacy handles customer's complaints rapidly and efficiently.	.580	
1. Customer satisfaction		
- I am satisfied with the pharmacy's services.	.828	.696
-The pharmacy has highly satisfied customers due to its excellent services.	.893	
-The pharmacy has improved its employees skillsto increase customers satisfaction.	.848	
2. Customer loyalty		
- Pharmacy relationships with the customers are improved in order to make customers deal with the same pharmacy.	.871	.683
-The pharmacy has long term relationships with its customers.	.945	
- The pharmacy has regular customers and treats them as loyal customers.	.888	

Correlation matrix is an important tool to confirm that there are correlations between independent and dependent variables. The data is appropriate in case all or most of the correlations are above (30%), and then the study's variables are appropriate for analysis. As shown in the table 4 the results of correlations between independent variables and all inter item correlation are larger than 0.30.

Table 4: Relationship between Independent Variables

Variables	Trust	Communication	Conflict handling	Empathy	Preserved service quality
Trust	1				
Communication	0.754	1			
Conflict handling	0.523	0.554	1		
Empathy	0.68	0.710	0.566	1	
Preserved service quality	0.554	0.566	0.543	0.723	1

5.2. HYPOTHESES TEST

To test hypotheses, determination coefficient (R^2) was used to identify strength of relationship between variables of the study, and regression analysis to determine the effect of independent variable (relationship marketing dimensions) on dependent variables (customer satisfaction and loyalty). Table 5 shows that the appropriate statistical methods were used to test hypotheses.

Table 5: Hypotheses of the study: measures and decision rule

No. of Hyp	Hypotheses	Rela. ^a	Effects ^b	Decision rule	
				T-test ^c	Sig
H ₁	Dimensions of marketing relationships effect customer satisfaction.	R ₂	B	Cal-t	P-value
H ₂	Dimensions of marketing relationships effect customer loyalty.	R ₂	B	Cal-t	P-value
H ₃	Effect of customer satisfaction on customer loyalty.	R ₂	B	Cal-t	P-value

a. Rela: Relationship between variables. R₂:Determination coefficient identifies strength of relationship between variables and indicates the significance level of model.
b. B: unstandardized regression coefficient (slope parameter in analysis) identifies the effect of independent variables on dependent variables.
c. Calculated-t compares with tabulated-t, tabulated-t (at n = 450 and sig. level = .05) equals 1.65.

H₁: The dimensions of marketing relationships positively affect customer satisfaction in pharmaceutical companies.

Table 6 shows that determination coefficient was (0.643) indicating a strong positive relationship between relationship marketing dimensions and customer satisfaction. In order to determine the effect of relationship marketing dimensions (trust, communication, conflict handling, empathy and perceived service quality) on customer satisfaction, The regression analysis and beta or slope parameter were used. The results of regression analysis confirm that there is a positive effect of all these five dimensions on customer satisfaction. Beta vales were ranged from ,13 for empathy and conflict handling to .32 for perceived service quality, and all calculated-t values (t-statistical) were larger than tabulated-t value (critical value at n=450 and (p-value <.05 is 1.96). The results indicated accepting the alternative hypothesis and rejecting the null hypothesis.

Table 6: The effect of five dimensions on customer satisfaction

Independent Variables (five dimensions)	Dependent variables	R ₂	B	Cal-t	Sig
Trust	Customer satisfaction	0.643	0.236	5.158	0.000
Communication			0.157	3.270	0.001
Conflict handling			0.130	3.558	0.000
Empathy			0.126	2.528	0.012
Perceived service quality			0.310	7.327	0.000

H₂: The dimensions of marketing relationships positively effect customer loyalty.

The results as shown in table 7 indicated that there is a positive effect of relationship marketing dimensions (trust, communication, conflict handling, empathy and perceived service quality) on customer loyalty. These results confirmed that beta values of the five dimensions ranges from .01 for trust and .32 for conflict handling. The results were also shown in three dimensions (communication, conflict handling, and empathy), calculated-t values don't exceed tabulated-t value at significant level (p-value <.05). For these three dimensions, alternative sub hypotheses are accepted. Otherwise, the other two dimensions (trust and perceived service quality), the effect of them was not at the level of significance less than .05.

Table 7: The effect of five dimensions on customer loyalty

Independent Variables (five dimensions)	Dependent variable	R	R ₂	B	T	Sig
Trust	customer loyalty	0.643	0.413	0.006	0.101	0.919
Communication				0.178	2.884	0.004
Conflict handling				0.318	6.759	0.000
Empathy				0.169	2.637	0.009
Perceived service quality				0.092	1.694	0.091

H₃: Customer satisfaction positively effects customer loyalty.

Table 8 showed that there is a strong relationship between the customer satisfaction and customer loyalty where R square was .61. The result of regression analysis indicated that customer satisfaction contributes to increased customer loyalty. The beta value was .64 at the level of significance less than .05, indicating that customer satisfaction plays an important role in increasing their loyalty in marketing relationships

Table 8: The effect of customer satisfaction on customer loyalty

Variable	R	R ₂	B	T	sig
Satisfaction	0.610	0.372	0.635	16.286	0.000

6. DISCUSSION

Relationship marketing is a comprehensive and long term approach to care and service a customers. This approach is the opposite of deal approach (one transaction with each customer is sufficient), and then it does not matter what happens to the customer in relationship with the company. Relationship marketing is associated with loyal customers, customer dentation, learning from the customer and customer lifetime value. While the transaction sale is associated with compliant customer, customer with big mouth against company. In general, marketing relationships represents a new approach for Jordanian companies, so the dimensions of this approach may not have the same effect on customer satisfaction

and loyalty. This explains the results which confirmed that some dimensions of marketing relationships such as trust and perceived service quality did not have a positive effect on customer loyalty. The relationship marketing is not limited to customers, but also includes employees, marketing partners (distributors, channels, agencies, suppliers, dealers), and members of the financial community (investors, shareholders, analysts) (Groenroos, 1994; Ndubisi and Wah, 2005). These relationships with all these important partners of the company must be periodically evaluated in order to develop these relationships in the long term. The results of this study have confirmed the importance of marketing services in all its dimensions (trust, communication, conflict, empathy and perceived service quality).

According to first hypothesis, five dimensions of relationship marketing positively effect customer satisfaction. This result means that an increase in trust will have a direct positive effect on customer satisfaction. This result was consistent with Nguyen and Ngo's study (2012). Communication also has a positive role to customer satisfaction in line with the findings of the other studies (Sharifi and Esfidani, 2014; Chattananon and Trimetsoontorn, 2009). Other three dimensions of relationship marketing (conflict handling, empathy, and perceived service quality) which have a positive effect on customer satisfaction, were consistent with Ndubisi and Wah's study (2006) in relation to conflict handling, with Nguyen and Ngo's (2012) with regard to empathy, and with findings of the many studies (Ennew and Binks, 1999; Leverin and Liljander, 2006) in relation to perceived service quality.

Results of the second main hypothesis confirmed that three dimensions of relationship marketing (communication, conflict handling, empathy, and perceived service quality) have a positive effect on loyalty. These findings were agreed with the results of several studies (Ndubisi, 2006; Ndubisi, 2007; Huang, 2015). However, trust and Perceived service quality two dimensions of relationship marketing, have no significant effect on customer loyalty: $\beta=.006$, $p>.05$, and $\beta=.091$, $p>.05$ respectively. These results confirm that the relationship marketing programs are not fully integrated in all their dimensions, which mean that pharmacies may focus on some aspects, but not all dimensions in their relations. Result of the third hypothesis indicated customer loyalty is the function of customer satisfaction. This finding shows that customer satisfaction can be reflected later in the re-purchase for many times in the future from the same pharmacy. Finally, the main conclusion of this study is that the relationship marketing has a positive effect on the satisfaction and loyalty of customers in the work of Jordanian pharmacies.

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Socio-Economic Significance of Commercial Banks in India: with Special Emphasis on Public Sector Banks

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ABSTRACT

The study brings forward the significance of Public Sector Banks (PSBs) in developing economy of India, amidst the present liberal and dynamic financial and banking environment. The study begins with a general review of Indian Banking background. Further, the research is segregated into three parts: First part deals with the study of growth trends in various commercial banking related variables. Part two studies the impact of aggregate deposits, demand deposits and time deposits triggered by commercial banks on socio economic variables through regression analysis. Finally, importance of Public Sector Banks is analyzed on the basis of associated facts and figures.

Findings— Compounded growth rate of deposits and investments in government securities are noteworthy for socio economic development. The PSBs have a major role to play in improving the socio-economic performance of a developing economy.

Keywords: *Commercial banks, public sector banks, trend analysis, compounded annual growth rate, Welch and Brown-Forsythe statistics, log linear regression analysis.*

I. BACKGROUND: BANKING IN INDIA

Banks are the lifeline of an economy. The economic progress of an economy can be interpreted from the reforms in its banking activities. India has made significant leaps and strides in banking sector. We have witnessed all types of exchanges in our country: barter, indirect exchange through shells, hides etc and finally through money: coins and notes. The goldsmiths took over the work of mediators and later on a more systematic arrangement came into vogue. This was the beginning of banking sector, which introduced organized lending and borrowing operations. Later on, new techniques have been introduced and today banking in India is considered the most technically modernized sector.

Banks in India:

Banks have led a long journey full of twists and turns and in this journey they have proved their worthiness for the Indians. India adopted many foreign practices in banking sector, many experiments

were conducted and Indian banking system had to pass several litmus tests. Following is a step by step development of banking sector in India. The banks have been divided in two groups before nationalization of RBI (pre 1949) and after nationalization of RBI (post 1949)

Banks in India have been classified as:

Pre 1955:

1. Presidency Banks

- a. Bank of Bengal
- b. Bank of Bombay
- c. Bank of Madras

2. European Exchange banks: which had Head Office outside India

- a. Which conduct a larger proportion of their business in India
- b. Banks that are only agencies of large banking corporations

3. India Joint Stock Banks: registered under the Indian Companies Act. Which have head offices located in India

4. Private and unincorporated bankers or money lenders(systematic data not available)

In 1913, following was the position of capital reserve, deposits and cash balances of above three categories of banks.

Table 1 depicts that amongst the three categories of banks the deposits and cash balances were huge with Presidency banks, however the exchange banks had high corpus of capital and reserves.

Table 1	Total amount of Capital, Reserve, Deposits and Cash Balance of different classes of Banks Dec, 1913.								
	capital and reserve			Deposits			cash balances		
Type of Banks	1914 (Rs. Lakhs)	1913 (Rs. Lakhs)	Increase (%)	1914 (Rs. Lakhs)	1913 (Rs. Lakhs)	Increase (%)	1914 (Rs. Lakhs)	1913 (Rs. Lakhs)	Increase (%)
presidency banks	610	748	22.6	2515	4237	68.5	1022	1538	50.5
exchange banks	3204	5674	77.1	1632	3103	90.1	494	588	19
Indian joint stocks banks above Rs. 5 lakhs	145	364	151	1151	2259	96.3	144	400	177.8
Total	3959	6786	71.4	5298	9599	81.2	1660	2526	52.2

Source: Statistical tables relating to Banks in India, 2008-09, Introductory Memorandum: Glimpses into the history pp 7.

The growth rate of joint stock banks in terms of all three variables was the highest and it was in this period these banks increased enormously.

Bank Failures: This period saw the highest number of bank failures. Only in 1913 (7 banks failures) and 1914 (8 bank failures) 15 banks failures were reported. 57 banks having authorized capital of Rs. 99200000 failed to perform their functions judiciously.

Repercussions: The Presidency and the public was losing confidence in the banking system, the grim situation was calling for a change. A statutory body which could bind the banks and guide them towards common functions was required. The Reserve Bank of India is the central bank of the country. The Reserve Bank of India was set up on the basis of the recommendations of the Hilton Young Commission. The Reserve Bank of India Act, 1934 (II of 1934) provides the statutory basis of the functioning of the Bank, which commenced operations on April 1, 1935.

Post 1955:

1. **Nationalization of Public Sector Banks:** In 1955 Imperial bank of India was nationalized and formed as State Bank of India and was bestowed with the responsibility of agricultural, industrial and social and rural development through its banking efforts.
2. **In 1969:** Despite passing of RBI Act, 1949 which instilled control and authority with RBI, many banks were still being owned and controlled by private persons. This changed with nationalization of 14 banks in 1969 and another 6 in 1980. Nationalization gave GOI control over 91% of banking in India, especially on the credit delivery which was highly advocated for economic and social development of the nation.
3. **Indian Banking sector was opened for Private Sector banks in 1991:** This move ushered in efficiency in the whole banking system of India. It boosted competitiveness and harnessed the energy of employees and capital both, by introducing far reaching changes in the traditional system of banking in India. IndusInd Bank was the first private bank to come up in 1945-95.
4. **Foreign Sector Banks:** In 2003, foreign banks were allowed to increase their stake from 49% to 74% in Indian Banks, thus foreign banks were allowed to set up their subsidiaries and not just branches.

The present banking structure of India is a mixture of Public, Private and Foreign Sector Banks. Thus the importance of all the categories persists, however as India is still a developing economy with high unemployment rate and high proportion of population still living below poverty line and high percentage of population residing in rural areas where any profit seeking bank would not be interested in entering it is the Public Sector banks which become important here.

II. REVIEW OF LITERATURE

Many studies have been conducted to test if the growth of macro socio-economic variables depends on monetary or banking data in an economy. Ramachandran (2004) studied the relationship between money, output and prices and found evidence that growth in money is an indicator of future movement in prices and output. He further concludes that an economy like India must have moderate monetary policy rather than aggressive one as it may amplify price fluctuations in the long run.

Commercial Banking Report (2008), states that India's high savings rate and RBI's regulatory norms have brought stability in banking system however it also mentions that politics has complicated policy making and that about half of government's revenues are spent on interest, salaries and pension of public sector employees. Burgess, Pande and Wong (2005), stating importance of public sector banks mention that expansion of nationalized banks into rural unbanked areas have lead to reduction in poverty by increasing lending amongst low caste and tribal groups. Acharya et al. (2009) investigated the relationship between financial development: credit growth and economic growth: per capita income growth in 14 Indian states, using panel cointegration and modified ordinary regression analysis. The panel co integration results confirmed existence of relationship between the two variables under study. An article in Emerging Markets Monitor (2010), reveals the fact that commercial credit growth will increase with increase in growth in infrastructure, capital expenditure loans and consumer lending. It goes on to say that job security offered by urban regions and enhanced rural purchasing power will also contribute in this growth. However, it cites the risk in terms increasing non- performing assets is a cause of concern.

Issues related to banking development in India have been discussed thoroughly in Indian defence (Economist, 2005). The article discusses the viewpoints of RBI for keeping away competition from private and foreign sector banks and slowly opening the banking sector. It mentions that 20 public sector banks control three quarters of banking assets and have more than 51% government ownership, thus these banks can be forced to offer credit at subvention rates: a cause for poor society like India. However, the banking sector was opened in 1991 for private banks which have proved their mettle yet the social cause still rests with the public sector banks. The entry of foreign sector banks have induced competition in the Indian banking sector and has made its mark in technology up gradation and swiftness of transactions, thus bridging gap between the credit seeker and credit giver. However, the significance of public sector banks still cannot be refuted by any factor. The article clearly mentions "For a country as big as India, and as much in need of basic development finance, financial-sector liberalization presents a dilemma." Since the 26% poor, more than 70% of country living in villages needs to be cared and supported: a venture which rational business men may not find worthy and safe.

Saez, Lawrence (2001), analyzed the process of financial reforms in India and China and concluded that new banks entry (followed in China) into banking system rather than the rehabilitation approach (followed in India) was more efficient in reducing the NPAs. However they explain the approach of both the countries in following their paths to reduce NPAs.

Berger et al. (2008) have conducted research on role of bank ownership type in banking relationship with the customer. They have concluded that the companies which have targets to diversify and have multiple banking relationships tend to become foreign banking customers and customers of state owned banks are usually unlikely to diversify and have multiple banking relationships. Regarding entry of foreign banks in India Alvares, Clifford (2009), states that many European and U.S. banks have made India their beehive and are spreading their retail operations in the country.

Indian Banking sector was opened for Private Sector banks in 1991 and for Foreign Sector Banks in feb 2003. Foreign banks were allowed to increase their stake from 49% to 74% in Indian Banks, thus foreign banks were allowed to set up their subsidiaries and not just branches. The article outlines the following shares of different types of banks in Indian market:

State of the market Share of Indian banks' total assets March 31st 2002, %

State banks 75.3

Foreign banks 7.2

Indian private banks 17.5

A study performed by Business Today and KPMG (2008), on Banks in India outlined that the PSU banks have performed and managed to be competitive in terms of information, technology, customer service and adding new customers to their kitty after opening up of the banking sector.

The news of takeover of private banks by foreign banks issued through circular of RBI drew up the private and public sector banks portfolios in terms of value gain. However, the gains were more for private banks rather than PSB and the relation between potential of takeover by foreign sector bank and value gains have been found to be positive. Sensarma, Rudra (2008) found that the efficiency of banks had declined after deregulation of the sector. The findings are contrary to the views held by many economists that efficiency and productivity had actually improved following deregulation: Mahesh, H. P and Rajeev, Meenakshi (2007)¹. The conference proceedings on the theme 'Challenges and opportunities

¹ Mahesh, H., & Rajeev, M. (2007). Productivity of Indian Commercial Banks in the Pre- and Post- Liberalization Periods. ICFAI Journal of Bank Management, 6(4), 17-30.

faced by the Indian banking sector in the liberalized environment', published in Vikalpa, outlined that the banking sector has undergone changes due to many reasons especially technology and customer behavior and the experts unanimously agreed that competitive advantage can be reaped by harnessing hidden potential in employees.

However, the GOI had clipped the wings of foreign sector banks after allowing them to fly in 2003, by asking them to take over only the weak banks identified by it and not any bank they were interested in. This move alienated the FSB to some extent. However the government has its own reasons of preferring public sector banks over private and foreign sector banks. Table 1 proves this point amidst the prevalent situation in Indian Economy Out of the total deposits made in India rural population has a share of 9% each in 2008 and 2009, however their share in credit off take has subsided from 8% to 7%. Error! Not a valid link.

Table 2				
POPULATION GROUP-WISE DISTRIBUTION OF DEPOSITS AND CREDIT OF SCHEDULED COMMERCIAL BANKS - 2008 TO 2009				
			(Amount in Rs.Crs.)	
Population Group	Mar-08		Mar-09	
	Deposits	Credit	Deposits	Credit
	(7)	(8)	(9)	(10)
Rural	303025	183097	365491	208694
	(9)	(8)	(9)	(7)
Semi-Urban	429377	230629	531944	266736
	(13)	(10)	(14)	(9)
Urban	657624	383576	824463	461870
	(20)	(16)	(21)	(16)
Metropolitan	1838792	1597263	2215437	1920225
	(57)	(67)	(56)	(67)
All India	3228818	2394565	3937335	2857525
	(100)	(100)	(100)	(100)
Note : Figures in bracket indicate percent share in All-India total.				
Source : Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, March 2008 & 2009, RBI.				

This reveals the importance of PSBs, which have been bestowed the responsibility to make available the credit to rural and priority sector. The other banks take this task as waste of resources and time as it is not profit bearing, however the PSBs have to fulfill their social and economic responsibility of bringing equilibrium across the unequal regional sects mentioned above. However, the importance of private and foreign sector banks cannot be denied.

III. RESEARCH METHODOLOGY

A study of banking sector, its' impact on the Indian economy and the way the banking sector reforms have taken place in India will enrich the knowledge about banking sector in systematic manner.

This paper is divided into three parts:

1. Study of growth trends in: deposits, borrowings, other demand and time liabilities, investment in government securities, investments in other approved securities.
 - This will include study of respective rate of growth of every variable
 - Test for equality of growth
2. Study of impact of aggregate deposits, demand deposits and time deposits triggered by banks in Indian Economy on investments (capital formation), food credit, and non food credit in India.
3. Importance of Public Sector Banks (SBI and Associates+ Nationalized Banks) in India: Analysis of importance of presence and strong hold of public sector banks in India.

Part I

Study of growth trends in: deposits, borrowings, other demand and time liabilities, investment in government securities, investments in other approved securities.

This will include study of respective rate of growth of every variable using semi log model in econometrics. The data has been taken from RBI website for the period of 1971-2009. This study is based on secondary data.

And finally an in-depth analysis of the same will be conducted.

The growth rates of these variables are calculated using semi log model in econometrics. Log- Lin Model: a form of semi log model to calculate growth rate is used.

$$\text{Ln}Y_t = \beta_1 + \beta_2 t + u_1 \quad \dots (1)$$

Where, $\text{Ln}Y_t$ is Log of a single variable, β_1 is intercept, β_2 is slope coefficient, t is time and u_1 depicts disturbance error.

The slope coefficient measures the constant relative change in Y for a given change in the value of regressor (time variable here) denoted by β_2 in the model.

$$\beta = \frac{\text{Relative change in regressand}}{\text{Absolute change in regressor}} \dots(2)$$

The instantaneous growth rate can be derived by multiplying the relative change (β_2) by 100, however it only denotes rate of growth at a point of time. To calculate compounded rate of growth we take antilog of β_2 after subtracting 1 from it and multiplying the difference with 100 thus,

$$\text{Compounded annual growth rate} = (\text{Antilog } \beta_2 - 1) \times 100$$

Table 2

Taxes	Instantaneous Growth	Compounded Growth	Growth Rate
Demand Deposits	0.14	0.15	15%
Time Deposits	0.176	0.192	19.20%
Total Deposits	0.167	0.181	18.10%
Demand and Time liabilities	0.194	0.214	21.40%
Investment in government securities	0.18	0.197	19.70%
Investments in other approved securities	0.098	0.103	10.30%

Test of Welch and Brown-Forsythe statistics was conducted, to test the hypothesis if the rate of growth of the above figures is same: it was rejected at .05 level of significance. Significance level of this test reveals the significance level of F test. As the significance level is .00 we conclude that the growth rates of the above figures are different.

Part II

Study of impact of aggregate deposits, demand deposits and time deposits on investments (capital formation), food credit, non food credit in India.

To conduct this analysis following hypothesis need to be tested using regression analysis:

Hypothesis 1

H_i = Investments in India are not dependent on demand deposits and time deposits (or β_2 and $\beta_3 < 0$)

H_o = Investments in India are dependent on demand deposits and time deposits. (or β_2 and $\beta_3 > 0$)

Hypothesis 2

H_i = Investments in India are not dependent on total deposits (or $\beta_2 < 0$)

H_o = Investments in India are dependent on total deposits (or $\beta_2 > 0$)

Hypothesis 3

Hi= Food Credit in India is not dependent on demand deposits and time deposits (or β_2 and $\beta_3 < 0$)

Ho= Food Credit in India is dependent on demand deposits and time deposits (or β_2 and $\beta_3 < 0$)

Hypothesis 4

Hi = Food Credit in India is not dependent on total deposits (or $\beta_2 < 0$)

Ho= Food Credit in India is dependent on total deposits (or $\beta_2 < 0$)

Hypothesis 5

Hi= Non food credit in India is not dependent on demand deposits and time deposits (or β_2 and $\beta_3 < 0$)

Ho= Non food credit in India is dependent on demand deposits and time deposits.(or β_2 and $\beta_3 > 0$)

Hypothesis 6

Hi = Non Food Credit in India is not dependent on total deposits (or $\beta_2 < 0$)

Ho= Non Food Credit in India is dependent on total deposits (or $\beta_2 < 0$)

This analysis has been done using log linear regression analysis. For this analysis we make 2 models each for investments, food credit and non food credit.

Models:

1. $\text{Ln Investments} = \beta_1 + \beta_2 \text{LnDD} + \beta_3 \text{LnTD} + u_1$
2. $\text{Ln Investments} = \beta_1 + \beta_2 \text{LnAD} + u_1$
3. $\text{Ln Food Credit} = \beta_1 + \beta_2 \text{LnDD} + \beta_3 \text{LnTD} + u_1$
4. $\text{Ln Food Credit} = \beta_1 + \beta_2 \text{LnTD} + u_1$
5. $\text{Ln Non Food Credit} = \beta_1 + \beta_2 \text{LnDD} + \beta_3 \text{LnTD} + u_1$
6. $\text{LnGTR} = \beta_1 + \beta_2 \text{LnTD} + u_1$

Data Analysis:

Using SPSS 13, following results have been drawn on the basis of data analysis of past 39 years. All 6 hypothesis have been rejected at 5% level of significance and the models have been found to be significant. The explanation of each model is as follows.

$$1. \text{Ln Investments} = \beta_1 + \beta_2 \text{LnDD} + \beta_3 \text{LnTD} + u_1$$

The model explains 99.8% variation in investments (as R-square = .998) and the results are as follows.

$$\text{LnI} = -.509 + .139 + .855$$

$$\text{S.E.} = .109 \quad .055 \quad .044$$

$$\text{Sig.} \quad .00 \quad .017 \quad .00$$

The model represents that the intercept is negative and both growth in DD and TD contribute to the growth in Investments. For 1% growth in DD, Investments grows by .139% and for 1% growth in TD the growth of investments is .855%. Thus, it can be seen that TD have higher contribution rather than DD.

$$2. \text{Ln Investments} = \beta_1 + \beta_2 \text{LnAD} + u_1$$

The variation in aggregate deposits explain 99.7% of variation in investments (R square= .997).

$$\text{LnI} = -1.284 + 1.022$$

S.E. .102 .008

Sig .00 .00

The model represents that the intercept is negative and Aggregate Deposits contribute to the growth in Investments. For 1% growth in AD, Investments grows by 1.022%. Thus, it can be seen that rate of AD have higher contribution in rate of growth of Investments.

$$3. \text{Ln Food Credit} = \beta_1 + \beta_2 \text{LnDD} + \beta_3 \text{LnTD} + u_1$$

The independent variables: rate of growth in demand deposits and time deposits explain 88.6% of variation in dependent variable i.e. growth in food credit. Following is the model.

$$\text{Ln Food Credit} = -1.83 + .025\text{DD} + .726\text{TD}$$

SE .661 .336 .268

Sig .783 .941 .010

The model explains significantly that for 1 % change in TD growth in Food Credit changes by .76% in the same direction. However, the result of intercept and change in Food Credit with reference to DD is not significant thus cannot be stated with confidence.

$$4. \text{Ln Food Credit} = \beta_1 + \beta_2 \text{LnAD} + u_1$$

The variation in independent variable i.e. Log Aggregate deposits explain 88.5% of variation in Log Food Credit significantly. Following is the model:

$$\text{Ln Food Credit} = -.871 + .790\text{AD}$$

SE .568 .047

Sig. .134 .000

We can interpret the for a unit change in AD there is .790 times that unit change in Food Credit, thus the AD have significant and positive impact of change in Food credit.

$$5. \text{Ln Non Food Credit} = \beta_1 + \beta_2 \text{LnDD} + \beta_3 \text{LnTD} + u_1$$

The variation in DD and TD explain 99.7% variation in Non Food Credit significantly according to R square and ANOVA analysis. The model is as follows:

$$\text{Ln Non Food Credit} = .097 + .499 \text{LnDD} + .527 \text{LnTD}$$

SE .128 .065 .052

Sig. .456 .000 .000

It can be stated with 95% confidence limit that a % change in DD leads to .499% change in Non food credit in the same direction and 1% change in Time deposits lead to .527% change in non food credit in India.

$$6. \text{LnNFC} = \beta_1 + \beta_2 \text{LnAD} + u_1$$

The model is a good fit. 99.6% variation in dependent variable: Non Food Credit is explained by independent variable Aggregate Deposits. ANOVA reveals that independent variable explains the dependent variable as per the model. The model is as follows:

$$\text{LnNFC} = -.234 + .976 \text{LnAD} + u_1$$

SE .121 .010

Sig. .061 .000

The results show that a percent change in AD lead to .976% change in the same direction in the Non Food Credit market.

The above data states the importance of Demand Deposits, Time Deposits and Aggregate Deposits as a whole by explaining their impact on Investments, Food Credit and Non Food Credit market of India.

Part III

Importance of Public Sector Banks:

There are more than a 100 scheduled commercial banks in India, however the importance of PSBs cannot be denied. They work for social, economic and at times political cause also. They are bestowed with the burden of controlling and guiding the economy at the most critical times of inflation and deflation and cannot shy away from their duties which private and foreign sector banks may deem to be unprofitable.

Following are the reasons why PSBs are more important and their efficiency needs to be analyzed elaborately.

Table 4 (annexure) reveals the importance of PSBs in comparison to other commercial banks and foreign sector banks operating in India. The PSBs have the capacity to take high level of liability from banking system and other parties. The reason is the confidence that comes from GOI being the largest shareholder in such banks and the assurance to get back the money at the time of criticality. The table also reveals that the assets with the PSBs are less than FSBs however they are more than other scheduled commercial banks in India. This reveals the fact that despite having fewer assets the PSBs are able to maintain number one position in cash in hand, investments in India and Bank credit provided to needy.

2. Following is comparison of PSBs with Foreign Sector and other scheduled commercial banks: including Private sector and regional rural banks, in terms of 20 ratios. This gives a snapshot of how are they working and what are the priorities of PSBs.

Table 5 depicts that PSBs are more inclined towards priority sector lending, investment in safe havens, more inclined to pay better to employees: some people argue that the salaries are less in PSBs but the argument here is that the total wage bill that is total of number of employees and their salaries is far greater than other types of banks which employ less people and get more work done.

Table 5

BANK GROUP-WISE RATIOS OF SCHEDULED COMMERCIAL BANKS : 2008 AND 2009			
Ratios	Performance of Public Sector Banks in terms of ranking		positive/average/negative performance of PSBs vis-a-vis others
	2008	2009	
Ratio of priority sector advances to total advances	1	2	positive performance
Ratio of term loan to total advances	2	2	average performance
Ratio of secured advances to total advances	2	1	positive performance
Ratio of investments in non-approved securities to total investments	2	3	positive performance
Ratio of interest income to total assets	2	2	average performance
Ratio of wage bills to intermediation cost	1	1	negative performance
Ratio of wage bills to total expense	2	2	average performance
Ratio of wage bills to total income	1	1	negative performance
Ratio of burden to total assets	1	1	negative performance
Ratio of burden to interest income	1	1	negative performance
Ratio of operating profits to total assets	3	3	negative performance
Return on assets	3	3	negative performance
Return on equity	1	1	positive performance
Cost of deposits	2	2	average performance
Cost of borrowings	1	1	negative performance
Cost of funds	2	2	average performance
Return on advances	3	3	negative performance
Return on investments	2	2	negative performance
Return on advances adjusted to cost of funds	3	3	negative performance
Return on investments adjusted to cost of funds	3	3	negative performance
3 types of banks include: Public Sector Banks, Foreign sector banks and Other scheduled commercial banks			
Source : Annual accounts of banks of respective years			

Thus the PSBs also take care of their employees better than other categories of banks. They have given the best returns to shareholders: though the biggest shareholder in PSBs happens to be GOI itself. In terms of returns the performance of PSBs is not satisfactory one of the reasons is that they have to invest in safe investments thus due to taking less risk they fetch less returns.

3. Table 6 shows that PSBs have highest share in disbursing agricultural, industrial, trade and finance credit. These are highly risky assets for a bank however they are responsible for generation of employment and infrastructure.

These facts reveal the importance of PSBs in Indian Economy.

Table 6

BANK GROUP-WISE DISTRIBUTION OF OUTSTANDING CREDIT OF SCHEDULED COMMERCIAL BANKS ACCORDING TO OCCUPATION:2008 (in Rs. Crores)										
		All Scheduled Commercial Banks			PSBs:State Bank of India & its Associates + Nationalised Banks			Contribution of PSBs in Percent		
	Occupation	No. of	Credit	Amount	No. of	Credit	Amount	No. of	Credit	Amount
		Accounts	Limit	Outstanding	Accounts	Limit	Outstanding	Accounts	Limit	Outstanding
I.	Agriculture	38205178	321418	274141	26314376	238071	205412	69	74	75
II.	Industry	4065753	1308392	928536	2213077	1001656	734544	54	77	79
III.	Transport Operators	734179	57078	44696	288614	30187	23552	39	53	53
IV.	Professional And Other Services	5764136	249071	187268	1363351	146569	114010	24	59	61
V.	Personal Loans	44024161	687741	485416	16654015	329380	267573	38	48	55
VI.	Trade	6455472	285896	212556	4357495	215927	161992	68	76	76
VII.	Finance	197730	228486	170554	98049	165370	142727	50	72	84
VIII.	All Others	7543571	146009	113840	3901448	90052	72258	52	62	63
Total		106990180	3284091	2417007	55190425	2217212	1722068	52	68	71
Note : Data reported here cover Bank's branches in India and include bills rediscounted under the New Bill Market scheme as also dues from banks.										
Source : Basic Statistical Returns of Scheduled Commercial Banks in India, Volume 37, March 2008.										

5. The share of PSBs in number of accounts, credit limit and amount outstanding is more than 50% across the following ranges except Rs 25000-Rs 2 lakhs (49%) as revealed by Table 7.

Table 7

The share of PSBs in total number of accounts, credit limit and amount outstanding: 2008 (in %)			
Credit limit range	No. of Accounts	Credit Limit	Amount Outstanding
Rs. 25000 and less	52	52	59
Above Rs. 25000 and upto Rs.2 lakh	49	53	65
Above Rs. 2 lakh and upto Rs.5 lakh	62	63	67
Above Rs. 5 lakh and upto Rs.10 lakh	57	57	61
Above Rs. 10 lakh and upto Rs.25 lakh	52	53	53
Above Rs. 25 lakh and upto Rs.50 lakh	55	56	56
Above Rs. 50 lakh and upto Rs.1 crore	62	63	62
Above Rs. 1 crore and upto Rs.4 crore	67	68	66
Above Rs. 4 crore and upto Rs.6 crore	69	69	68
Above Rs. 6 crore and upto Rs.10 crore	71	70	71
Above Rs. 10 crore and upto Rs.25 crore	69	68	69
Above Rs. 25 crore	73	78	84
Total	52	68	71

Source : Basic Statistical Returns of Scheduled Commercial Banks in India, Volume 37, March 2008. RBI

However, it has been noticed that when it comes to loans of more than 50 lakhs PSBs have shown their mettle and have come forward to assist the development efforts in the Indian economy.

5. It is witnessed from the data in Table 8 that the PSBs have accumulated huge NPAs over past years.

Table 8

Gross NPAs				
year	Public Sector Banks	Indian Private Banks	Foreign Banks	All Scheduled Commercial Banks
2004	7.8	5.8	4.8	7.2
2005	5.4	3.9	3	4.9
2006	3.9	2.6	2.1	3.5
2007	2.8	2.4	1.9	2.7
2008	2.3	2.7	1.9	2.4
2009	2.1	3.2	4.3	2.4

Source : Off-site returns (domestic & provisional) of banks, Department of Banking Supervision, RBI.

From 2004 to 2007 the Gross NPAs of PSBs have been more than the average NPAs of all scheduled commercial banks, however in 2008 and 2009 they have shown significant decline. It is expected that the PSBs need to cut their NPAs if they have to progress in the new competitive era of open market banking.

6. Table 9 shows that SBI and its associate banks have maintained the lowest lending rate (lower than average of all banks). The nationalized banks are also the low interest chargers (after SBI).

Table 9										
BANK GROUP-WISE AND OCCUPATION-WISE WEIGHTED AVERAGE LENDING RATE AND DEPOSIT RATE: 2007 and 2008 (in per cent)										
Occupation	State Bank		Nationalise		Foreign		Other		All	
	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
Weighted Average Lending Rate										
I. Agriculture	11.5	11.4	11.6	11.6	13.5	12.7	12.01	12.45	11.7	11.8
II. Industry	12.1	12.1	12.4	12.6	12.8	12.3	12.37	12.71	12.4	12.4
III. Transport Operators	12.2	12.7	12.8	12.7	13.3	13.1	12.18	11.78	12.5	12.3
IV. Professional and Other Services	11.8	12	12.2	12.6	12.8	12.9	12.51	12.85	12.3	12.6
V. Personal Loans	10.5	11	10.4	11.1	13.5	14.2	11.05	12.75	10.9	12
VI. Trade	10.8	12	11.3	12.4	13.1	13.7	12.18	12.82	11.5	12.5
VII. Finance	13	12.3	12.3	12.8	13.2	13	12.92	12.78	12.6	12.7
VIII. All Others	11.7	12.1	11.7	12.5	13.8	13.4	12.03	12.66	11.9	12.6
Total Bank Credit	11.6	11.8	11.9	12.3	13	13.1	11.91	12.68	11.9	12.3
Weighted Average Deposit Rate of Term Deposits	7.74	8.49	8.02	8.56	9.03	8.03	8.98	9.31	8.22	8.71
Notes : 1. The data given here are based on the accounts with credit limit of over 2 lakhs. 2. The data are exclusive of Inland & Foreign Bills purchased and discounted. 3. Amount outstanding figures are used as weights for calculating average lending rates. 4. The deposit data corresponds to only term deposits. 5. The data for 2008 on average deposit rate are based on 65027 reporting branches out of 70207 total branches having term deposits. 6. Mid-points of the interest rate range were taken as values and total deposit amount in the range as weights. Source : Basic Statistical Returns I & II, Department of Statistics and Information Management, RBI.										

However, as the PSBs are charging low rate of interest and are also responsible to provide loans to various lenders under social schemes, they are not in a position to pay high interest, in addition to this as the PSBs provide more security of deposits than private or foreign sector banks they pay lesser rate of interest.

7. The importance of PSBs can be analyzed from the spread of their branches across the country in various areas (Table 10).

7. The importance of PSBs can be analyzed from the spread of their branches across the country in various areas (Table 10).

S .no	Category of Branch	SBI and Its Associates	Nationalized Banks	Public Sector banks	Foreign Banks	Other Scheduled Commercial Banks
1	Rural	5549	13376	18925	4	1110
2	Semi-Urban	4828	8662	13490	4	2625
3	Urban	3037	8949	11986	52	2715
4	Metropolitan	2623	8370	10993	233	2405
	Total Branches	16037	39357	55394	293	8855

Notes :

1. Population group classification is based on 2001 census.
2. No. of offices includes administrative offices.
3. Data for 2008 have been revised since last publication.
4. Data for 2009 are provisional.

Source : Master Office File (latest updated version) on commercial banks, Department of Statistics and Information Management, RBI.

They have highest number of branches in rural areas, then semi urban, then urban and lowest number of branches in metropolitan areas. Thus, keeping up with need based approach as the foreign and private sector banks are more attracted towards metropolitan and urban areas and have low interest in rural or semi urban areas. This data reveals the importance of PSBs for the whole country, especially the backward areas

8. The PSBs dominate in all the areas (Table 11), however they have comparatively more share in Northern, North Eastern, Eastern and central regions.

year	2008		2009	
	Deposits	Credit	Deposits	Credit
Northern Region	72	76	75	77
North Eastern Region	86	85	86	84
Eastern Region	81	82	82	83
Central Region	85	85	85	85
Western Region	61	63	67	68
Southern Region	70	71	71	73
All India	71	71	74	74

Note : Figures in bracket indicate per cent share in all India total.

Source : Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, March 2008 & 2009, RBI.

One of the reasons is that the private and public sector banks have been more interested in western and southern areas deemed to be economically better off than the others. Except in NER the banks have more share in credit than deposits, thus signifying the social cause again.

IV. CONCLUSION AND FURTHER SCOPE OF RESEARCH:

From the above facts and figures it is concluded that the PSBs have an important role in our economy in terms of their presence, reach, number of accounts, credit disbursement, competitive lending rates and priority sector assistance. The opening of banking sector have made them more competitive and prepared to accept new technologies. However, there is ample place for betterment and scope for efficiency.

As PSBs are the most important categories amongst all types of banks further research can be conducted on study of their efficiency for past 15 years, since the opening of banking sector.

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Economic Analysis of Rural Development Through Micro-Credit System in India

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ABSTRACT

Financial exclusion is broadly defined as the lack of access by certain segments of the society to suitable, low-cost, fair and safe financial products and services from mainstream providers. Thus the essence of financial inclusion is to ensure that a range of appropriate financial services is available to every individual and enable them to understand and access the services. Hence, here paper is based on secondary sources and an objective is to examine the financial inclusion and rural development in India.

Keywords: *Financial Inclusion, Selfhelp Groups, Micro-credit*

1. INTRODUCTION

Financial exclusion is broadly defined as the lack of access by certain segments of the society to suitable, low-cost, fair and safe financial products and services from mainstream providers. Thus the essence of financial inclusion is to ensure that a range of appropriate financial services is available to every individual and enable them to understand and access those services. Apart from the regular form of financial intermediation, it may include a basic no frills banking account for making and receiving payments, a savings product suited to the pattern of cash flows of a poor household, money transfer facilities, small loans and overdrafts for productive, personal and other purposes, insurance (life and non-life), etc. In fact, the main reasons for financial exclusion, from the demand side are lack of awareness, low income, poverty and illiteracy; and from the supply side is distance from branch, branch timings, cumbersome documentation and procedures, unsuitable products, language, staff attitudes, etc. Due to all these procedural hassles people feel it easier to take money from informal credit sources, but it results in compromised standard of living, higher costs, and increased exposure to unethical and unregulated providers and vulnerability to uninsured risks. Thus financial inclusion does not mean merely opening of saving bank account but signifies creation of awareness about the financial products, education and advice on money management, offering debt counseling, etc. by banks. Every society should ensure easy access to public goods. Therefore, banking service being a public good should also be aimed at providing service to the entire population (Sadhan Kumar Chattopadhyay: 2011).

Table 1: Indicators of banking sector outreach

INDICATOR	MEASUREMENT
(i) Bank accounts per adult	Number of bank accounts per adult
(ii) Geographic branch penetration	Number of branches per 1000 km ²
(iii) Demographic branch penetration	Number of branches per 1,00,000 people
(iv) Geographic ATM penetration	Number of bank ATMs per 1000 km ²
(v) Demographic ATM penetration	Number of bank ATMs per 1,00,000 people
(vi) Demographic Loan penetration	Number of loans per 1,00,000 people
(vii) Loan-income ratio	Average size of loan to GDP per capita
(viii) Demographic deposit penetration	Number of deposits per 1,00,000 people
(ix) Deposit-income ratio (or deposit-GDP Ratio)	Average size of Deposits to GDP per capita (or total bank deposits to GDP)
(x) Cash-Deposit Ratio	Cash in circulation to total bank deposits

The necessity of Rural Development arises due to the gap between urban and rural areas in terms of infrastructural facility, standard of living and their income. Rural Development is the proper utilization, protection and intensifying the natural, physical and human resources requires making long term improvement in rural life. Rural development which much more implies on small farmers agricultural progress, encompasses efforts to raise both farm and non-farm rural real incomes through job creation, rural industrialization, and the increased provision of education, health and nutrition, social and welfare services. Rural Development is defined as balancing the rural and urban areas with the healthy competition among those which are results in nation's development. In the country's revenue larger share is contributed by rural sector, which provides food to whole population and raw material to agro-based industries. For this reason, rural finance plays vital role in the developments of rural sector.

It started with lending money from informal sector through money lenders, landlords, relatives, traders and institutional credit facilities, then through the agencies like Co- operatives, commercial banks, land development banks and government. In the developing countries like India with 'regional imbalance's existing. So 'Micro-credit' assumes a great significance in this context. A micro-Credit programme expands small loans to poor people for the provision of self employment that generate income allowing them to care of themselves and their family members. The microcredit programme showed remarkable successfulness since 1992 passing through stages of pilot during 1992-95, mainstreaming during 1995-98 and expansion phase (1998) and onwards. Recently microcredit emerged as the world's biggest microfinance programme in terms of outreach, covering 1.6 million groups as on March 2005. As per NABARD data, the number of bank-linked SHGs stood at around 68 lakh during 2009-11.5 If one assumes the average membership of about 12 households per SHG, this works out to be about eight crore households. The average outstanding bank loans for the three-year period amounted to Rs 27,300 crore.

The commercial banks form the major financing partner in the programme. They accounted for the bulk of the loans outstanding – 68% – followed by regional rural banks (RRBs)(22%) and cooperative banks (6%).

MICRO CREDIT IN INDIA

“Indian public policy for rural finance from 1950s to till date mirrors the patterns observed worldwide. Increasing access to credit for the poor has always remained at the core of Indian planning in fight against poverty. The assumption behind expanding outreach of financial services, mainly credit was that the welfare costs of exclusion from the banking sector, especially for rural poor are very high, starting from late 1960s, India was home to one of largest state intervention in rural credit market and has been euphemistically referred to as “Social banking phase” (Alok Mishra,2006).

The credit requirements of Indian farmers are met by the moneylenders, traders, commission agents, landlords, relatives and the organized institutional agencies like Co- operatives, Commercial Banks, Land Development Banks and Government. Co-operatives have been a major source of rural Credit since a very long time. The All India Credit Survey Committee in 1951-52 observed that it felt short of the right quality was not of the right people. After nationalisation of 14 Major commercial Banks, In 1969 Commercial Banks have also entered into the field and a part of rural credit is met by the different Commercial Banks. The Integrated Rural Development Programme (IRDP) was launched in the year 1978 as an anti-poverty programme. The main purpose of this programme was alleviation of poverty. But Unfortunately IRDP programme failed to reach whole poor rural.

The share of “exploitive” sources (professional moneylenders and agriculturist moneylenders) in rural credit fell from an average of over 75per cent in 1951-1961 to 25 percent in 1991. The share of formal sector lending more than doubled between 1971 and 1991. At this stage rural credit marked in India need for financial innovation.

Basically, the main objective of microfinance is to uplift the poor through providing credit facilities at easy accessible way. As per the NABARD and the RBI definitions, microfinance means “provision of thrift, credit and other financial services and products of very Small amounts to the poor enabling them to raise their income levels and improve living Standards” (NABARD 2000; RBI 1999).

“The remarkable success of the Grameen Bank in Bangladesh is a good example that visionary micro credit movement, led by Muhammad Yunus, has consistently aimed at removing the disadvantage from which women suffer, because of discriminatory treatment in the rural credit market, by making a special effort to provide credit to women borrowers. The result has been a very high proportion of women

among the customers of the Grameen Bank. The remarkable record of that bank in having a very high rate of repayment (reported to be close to 98 percent) is not unrelated to the way women have responded to the opportunities offered to them and to the prospects of ensuring the continuation of such arrangements. Also in Bangladesh, similar emphasis has been placed on women's participation by BRAC, led by another visionary leader, Fazle Hasan Abed” (Amarthya Sen, 2006).

Conceptually the, microfinance methodologies could be classified into five groups as follows viz; Grameen solidarity model, the group approach , individual Credit, Community Banking, Credit banking and, credit unions and cooperatives.

The Formal sector of rural is the sector in which loan transactions are regulated by legislation and other public policy requirements. The institutions in this sector include commercial Banks, cooperatives banks and credit societies and other registered financial institutions. The informal sector of credit is not regulated by public authorities and the terms and conditions attached to each loan are personalized, and therefore vary according to the bargaining power of borrowers and leaders in each case.

As rightly observed by Alok Mishra, “Microcredit emergence in India has to be seen in this backdrop for a better appreciation of current paradigm, successful, intervention interventions across the world especially in Asia and in parts of India by NGOs provided further impetus. In this backdrop NABARD's search for alternative models of reaching the rural poor brought the existence of informal groups of poor to the fore”.

MICRO CREDIT INSTITUTION: SHG- BANK LINKAGE PROGRAMME

In developing countries 'Micro credit' has been coined as banking for poor people. In rural areas revolutionary step taken place by the government through introducing the micro credit facility in two ways those are 'Self Help Groups-bank linkage' and 'Microfinance institutions'. That has proved that a small thing makes a lot of difference. It has become in India too. SHG-Bank Linkage Programme, since its project in 1992, has emerged as the leading micro-finance programme in the country. It is recognized as an effective tool for extending access to formal financial services to the unbanked rural poor. Encouraged by the success, the programme has been adopted by state government as a major poverty alleviation strategy. It has also led to the emergence of Micro Finance Institutions(MFIs) as a bridge between the banking sector and the rural poor(NABARD:2008-2009). Microfinance is emerging as a powerful instrument for poverty alleviation in the new economy. In India, Microfinance scene is dominated by Self Help Group (SHGs)-Bank Linkage Programme as a cost effective mechanism for providing financial services to the “Unreached Poor” which has been successful not only in meeting financial needs of the rural poor women but also strengthen collective self help capacities of the poor,

leading to their empowerment. Rapid progress in SHG formation has now turned into an empowerment movement among women across the country. The SHG – Bank Linkage Programme started as an Action Research Project in 1989. In 1992, the findings led to the setting up of a Pilot Project.

The pilot project was designed as a partnership model between three agencies, viz., the SHGs, Banks and Non Governmental Organisations (NGOs). The SHG Bank linkage Programme which started in 1992 has grown exponentially over two decades and around 74.62 lakh SHGs are linked to different Banks up to 2011. Of these nearly 65 per cent have direct credit link with bank. Out of these 74.62 lakh SHGs 60.98 lakh are women SHGs. The overall progress under microfinance from the period 2006-07 to 2010-11 is shown in table- 2, it is represent that, though savings of number of SHGs with the bank is increasing over the years the growth rate of SHGs in percentage terms is declining from 22.21 in 2009 to 7.3 in 2011. Regarding the amount of savings it has a significant growth during 2008 to 2009 (46.5 per cent) but after that it declines. Regarding bank loan disbursement to SHGs it shows a declining trend and in terms of number of SHGs became negative in 2011.

Table No 2: SHG- Bank Linkage Programme

S. No.	Particulars	2007-08		2008-09		2009-10		2010-11	
		No. of SHGs (in Lakh)	Amount (Cr.)	No. of SHGs (in Lakh)	Amount (Cr.)	No. of SHGs (in Lakh)	Amount (Cr.)	No. of SHGs (in Lakh)	Amount (Cr.)
1	Savings of SHGs with Bank	50.09	3785.4	61.21	5545.62	69.53	6198.71	74.62	7016.3
				(22.21)	(46.5)	(13.6)	(11.8)	(7.3)	(13.2)
2	Bank Loans disbursed to SHGs	12.28	8849.3	16.09	12253.5	15.86	14453.3	11.96	14547.7
				(31.1)	(38.5)	(-1.4)	(17.9)	(-24.6)	(0.01)
3	Bank Loans Outstanding with SHGs	36.25	16999.9	42.24	22679.8	48.51	28038.3	47.87	31221.17
				(16.5)	(33.4)	(14.8)	(23.6)	(-1.3)	(11.4)

The pattern of funds flow during 2006-10 to self-help groups and microfinance institutions – the two competing institutional arrangements of micro finance delivery in India – reveals that the commercial banking system had steadily shifted its patronage to large MFIs from the mid-2000s. Increased access to equity capital helped these MFIs improve their capital adequacy, which, in turn, helped them leverage the domestic debt market. They also resorted to newer ways of raising capital through product structuring and introduction of innovative debt instruments. MFIs thus played a significant role in linking the processes of neo-liberal restructuring and financialisation with the daily lives of local communities (T.S. Nair, EPW:2012).

CONCLUSION

In developing countries 'Micro credit' has been coined as banking for poor people. In rural areas revolutionary step has taken place by the government through introducing the micro credit facilities in

two ways, those are; 'Self Help Groups-bank linkage' and 'Microfinance institutions. Earlier to 1980's micro credit was provided by the informal agencies like Landlords, Money lenders, Merchants and Relatives etc.

But the credit provided by them was very costly; i.e., borrowers had to pay high interest on credit and common man, farmers were sufferers. Later on from 1986-87 the NABARD has taken initiation to give shape to informal agencies. After nationalization, banks, provided loans to farmers but it did not become effective. But after the liberalization i.e. in 1990's, financial sector needed innovation, then it's resulted in using term called "micro credit". Rural development requires this provision of this type of rural credit. That is formation of Self help groups, which is usually consisting of minimum 15 members and 90 per cent of women members. In the rural areas it has created tremendous change. In the recent phase of globalization, self help groups have given answer to the poverty. This has created self-reliance, self-respect, entrepreneurship among poor rural people, not only in India but also in all developing countries like India.

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E-Commerce Infrastructure for the Development of Technology and Communication

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ABSTRACT

Intend of this study is to recognize the desirable infrastructure for e-commerce and trade with technology and communication infrastructure mainly. Also we are going to cram whether technology and communication foundation is one of emotional obstacles in creation and development of e-commerce, among other communications of e-commerce. Information systems rely on infrastructure in sharing data and information. Here we focus on IT infrastructure and discuss what skills and knowledge is needed in development of e-commerce infrastructure for the company.

The paper aims at to presenting the infrastructure for e-commerce and its impact on the current trends of economy.

Keywords: *Research Model, E-Commerce*

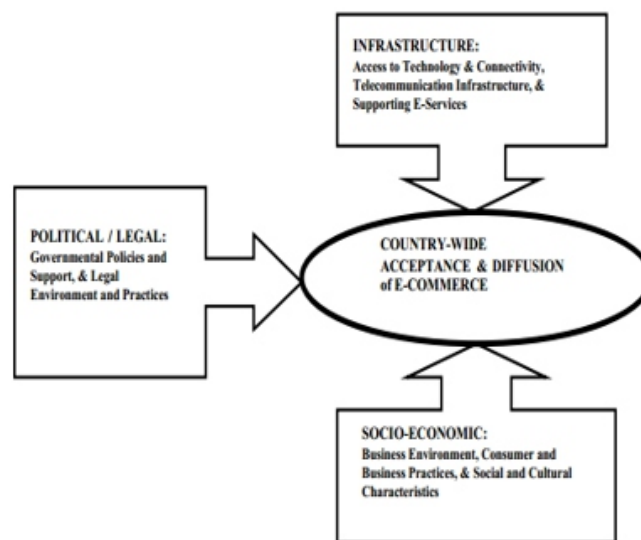
1. INTRODUCTION

During the humane past some innovations have occurred that have caused great changes and have had wide cost. Innovations such as combustion discovery, language creation, and money creation have twisted surprising effects in human life. In the new two centuries, the creation of steam engine resulted in industrial revolt era and this new discovery augmented human welfare. Also in the 20th century plenty of innovations happened. One these vital innovations was utilizing computer networks and lastly internet in business and trade affaires. This change and growth in information technology and communications caused the appearance of information era in which information about computer to use computer networks seems necessary and vital. E-commerce also is the consequence of information technology development which is keenly welcomed in today's business world. Although e-commerce was shaped in the developed countries, it is accepted as a medium of exchange in rising countries, too. But as there are customary infrastructure and business tools in these countries, they are not ready to carry out the novel economics (digital economics). Thus, companies are forced to recognize and supply the needed infrastructure in order to use e-commerce [1].

1.1. Objectives

Our objective was to explore e-commerce connected concepts, infrastructure and socio- economic, as they relate to China as a mounting country with a government that has taken a individual interest in technical capabilities of its population. We knew from direct experience that, in malice of lately increased governmental efforts and investments ,the telecommunication and e-commerce infrastructure was not as developed in China as they were in U.S., Europe, or as would be in any developing country, and we predictable to find technical and infrastructural limitations to be important obstruction. Therefore, we focused on the societal issues and particularly wanted to recognize and explore the influence of culture on receipt and use e-commerce in this developing country.

Influences on Diffusion of E-Commerce



II. LITERATURE REVIEW

Billy and Lowrence [2] originate out in their studies that innovations and inventions in the pasture of information technology has cause an increase in the difficulty for technologies useful in the industry and has shaped competitions in service industries especially in a worldwide measure. Thus, countries seek those new technologies in order to advance their optimization level which is directly related to the increases in reasonable growth [3]. Pohjola and Javala (2007) found out that the reason for the development in economic status in America in 1990s which was about 2.3 percent was owing to work force optimization because of utilizing information technology and communications. Also they complete new confirmation to estimate the amount of utilize and creation of information technology and communications in contrast to economic growth in Finland. This research showed that the share of information technology and communications compared with production in Finnish markets, has amplified from 0.3 percent in the early 1990s to 0.7 percent in late 1990s [4]. Zaree (2004) deliberate this issue in his paper entitled: "Studying the obstacle of developed use of e-commerce in Iran, with a special look at the big import companies of the country". He used random example technique and his sample

consisted 68 companies. The results of the investigate showed that increasing knowledge about the capabilities of e-commerce can augment the amount of e-commerce. Also knowledge of computer use and internet will have the most impact on the amount of e-commerce [5]. Torabi & et al. (2008) deliberate the significance and effects of globalization and the effects of novel economics highlight on the role of e-commerce on economic growth of the developing countries. The results of this research demonstrate that in developing countries with an takings level higher than the average, the variable coefficient of e-commerce is positive and meaningful, but the globalization variable coefficient is meaningless statistically. And in countries with an income level lower than the average, both e-commerce and globalization criterion variables have a positive relationship with economic growth [6].

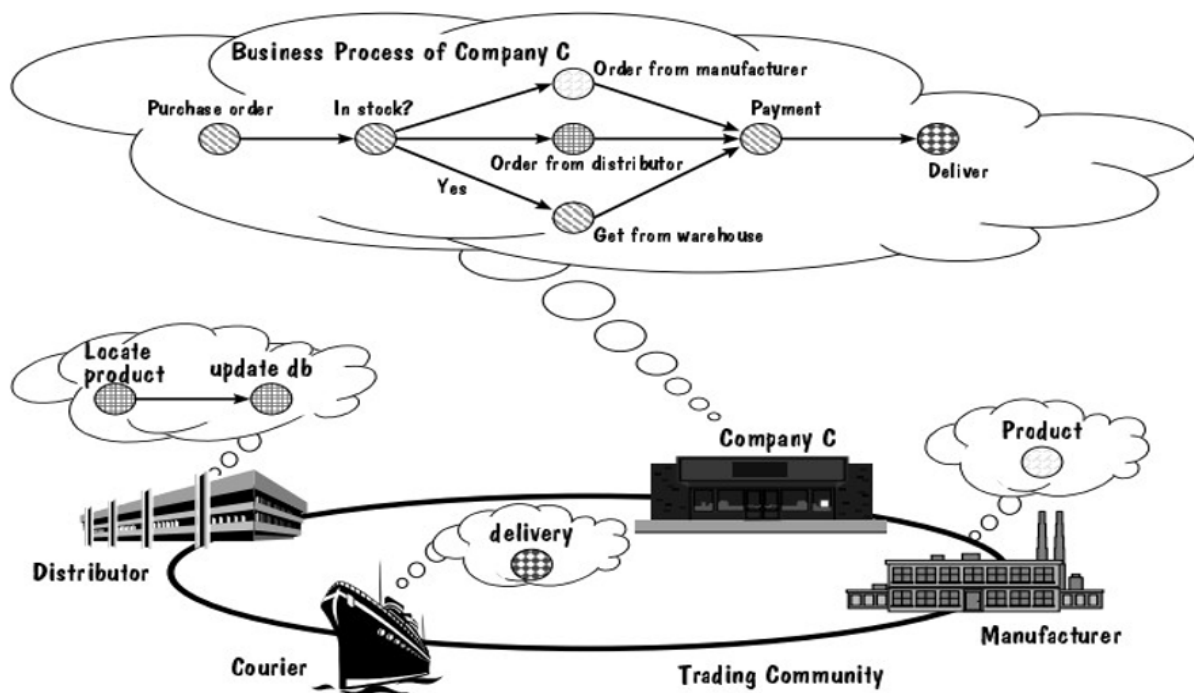


Figure 1: A company incorporating a virtual process as part of its own business processes.

2.1. E-Commerce in increasing Countries:

E-commerce is an objective effect of ICT enjoying such advantages as globalization of commerce, removal of time and space limits, increase in purchase rate, easy access to information, significant decrease of transaction costs and reduction of duration of transaction. Electronic commerce presents developing countries an opportunity that can potentially enhance economic growth and development [7]. The acceptance of e-commerce in rising countries differs greatly from developed countries. Developing countries often lack the necessary financial, legal, and physical infrastructures for the development of e-commerce. In calculation, developing countries often have different cultures and business philosophies, which limit the applicability and transferability of the e-commerce models calculated by Western countries. However, some developing countries have begun strategies to achieve an appropriate level of e-commerce development [8].

2.2. E-Commerce in Iran & UAE

According to Internet World Stats, there was a sharp growth of Internet users 13180% in Iran. This is from 250,000 users in 2000 to about 33 million users in June 30, 2010; this shows the main amount of Internet users (52.5 percent) in the Middle-East. No misgivings to the United Arab Emirates and Dubai in particular, enjoy much compensation for Internet and e-commerce growth and development. Some of these advantages were throughout the opening of the Internet city. Dubai Internet City is predictable to attract \$400 millions in investment. With the cost of two and half billion dollars (\$2.5 billion), Dubai Technology and Ideas Oasis is under the procedure to be the largest enterprise for investors and dedicated people in the electronic industry [8]. More than two third of the citizens of the United Arab Emirates or 75.9% use the Internet regularly, according to Internet World Stats (2011). The top five countries of the list of nations of the Middle East in Internet penetration are as follows. First, Bahrain with 88%. UAE is the second, where 75.9% of residents use the Internet. Rank third is Qatar with 51.8%. Then Iran with the penetration of 43.2% connects to the World Wide Web.

2.3. RESEARCH MODEL AND THEORY

2.3.1. Explore Model

This paper examines the relationship among nation and attitudes towards e-commerce. The autonomous variables were the nations involved, national cultures, gender and previous Web purchase experience, while the needy variables were the approach about e-commerce. Public Policy is a major aspect of e-commerce identified by Turban (2010). According to Turban, Public Policy includes taxation, legal and privacy issues, regulations and technical standards [9].

2.3.2 Control and Privacy

Privacy has been defined in three main ways. First, privacy is a "claim, entitlement or right" of a person to determine what personal information may be converse to others. Secondly, solitude is defined in relation to the "control" of access to personal information. Lastly, privacy is often unwritten with an individual's "rightful sphere of autonomy", the intimacies of life and one's thoughts or body. [10]

2.3.4. Isolation Cost:

Nations enact laws to protect from the loss of privacy, and that the Internet has sensitive the consciousness of the potential privacy loss due to technology. Privacy can be secluded by information control, property control and the use of secrecy of addresses in Internet communications. [10]

2.3.5. Assets Rights and Infrastructure:

Academic property IPR legislation applies to e-commerce comprises the international Trade- Related feature of Intellectual Property (TRIPS) agreement. TRIPS provide international IP standards, and purposely provide copyright protection for computer programs as intellectual creations.

2.3.6. Access Rights:

The World Wide Web Consortium (W3C) defines the Web as the "universe of network- accessible information". One of the W3C's primary goals is to make these benefits, including universal access, available to all people, whatever their hardware, software, network infrastructure, native language, culture, geography, location, or physical or mental ability" (www.w3.org/Consortium/Points).

2.3.7. Consumer partiality

Consumer partiality was defined in this paper as the tendency to prefer the store as the purchase position instead of the Internet. Consumers in nations where face-to-face concord are considered important, such as the Middle East, may cause consumers to prefer stores over the Internet. These consumers may use the Web to obtain information, and conduct their transactions in the store.

III. RESEARCH THEORY:

Nation Culture

The users in various nations have conflicting approach about aspects and issues related to information technology and electronic commerce, expressed in the hypothesis as:

H1: Cultural groups will differ in attitude about e-commerce. Attitudes may be statistically different yet essentially appear to relate the same opinion in differing degrees.

3.1. Gender

Genders might also differ in e-commerce approach. H2: Gender influences attitude about e-commerce. Harris and Davison (2009) study computer anxiety and involvement with personal computers in six Pacific Rim nations, and note that gender may have an influence on technology attitudes and use. They report that males have a more positive attitude towards technology. [11]

3.2. Infrastructure and e-support impediments to e-commerce:

Our reading contributor recognized exact infrastructure related obstruction that will contain and be obstacle to full development of e-commerce in China in the near future. amid the most repeatedly state

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Our reading contributor recognized exact infrastructure related obstruction that will contain and be obstacle to full development of e-commerce in China in the near future. amid the most repeatedly state issues were lack of credit cards (wide availability of them for the general public in China) and convenient payment means, poor distribution logistics, lack of specialized, trust-worthy online merchants of sensible size (too many small players facing many bottlenecks and without needed resources to set up e-commerce systems), imperfect legal system, and lack of large scale telecommunication transmission capability (broadband). As users of e-commerce, the primary obstruction for our study group, in the order of importance, were “Internet security”, “lack of feel-and-touch associated with online purchases”, “problems in returning products”, and “selection” (product availability and breadth).

3.3. Expansion of the E-Commerce Infrastructure:

In universal, information system development is defined as mounting a system that convene needs or civilizing the existing system [21]. The expansion process occupy organization of the process, mapping of the organization, mapping of the present state of information dispensation and the actual design process , [12]. Here we apply these stages into development of e-commerce infrastructure.

Once the need of or moving towards e-commerce is recognized the development process must be organized and a development group must be formed. Members of the group are often selected based on the skills, role and interest that they have towards the e-commerce platform. Here business knowledge and interactive skills are at stake. A typical development group could include IT people, business managers and other key people, users and outside consultants. The important issue is that the development group has enough expertise in order to evaluate different alternatives and make design choices. Also business understanding is vital as noted by interviewed business managers.

In development work can outside sources of information be valuable. This may include advice from consultants, a academic people or experts. Also conferences, professional journals and other e-commerce sites can give ideas. The second stage in the development work is mapping the organization. This refers to developing a mutual understanding of the key sectors of operations, how the information flows from one department and person to others etc. It is vital to have business understanding because e-commerce should be integrated to business processes.

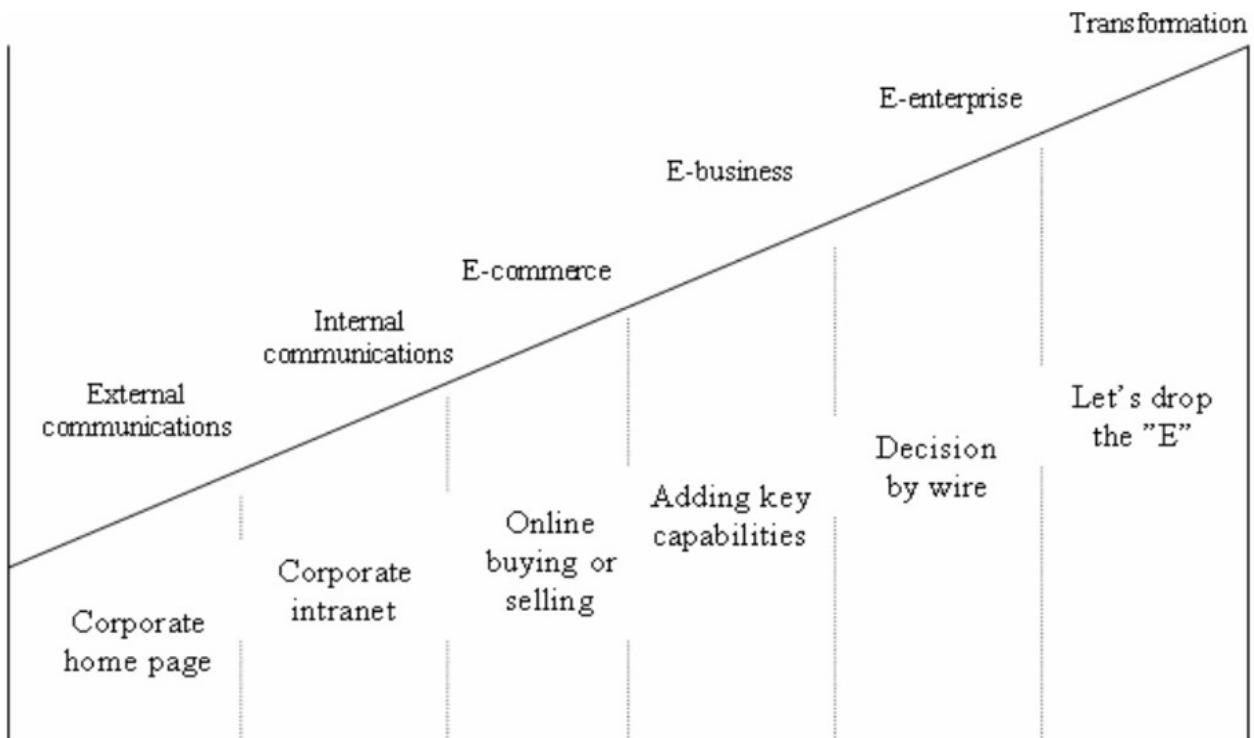


Fig2. Evolving the E-Enterprise

Mapping the present state of information systems refers to existing information system: the development group needs to understand what the underlying infrastructure is. For example, e-commerce applications are often linked to existing databases and financial systems. This is why new technology should fit into the existing IT infrastructure [13], [10]. Building a robust and reliable system that integrates existing systems with new technologies is a challenge for the development group. Therefore the actual design process calls for technical expertise. The development of an e-commerce infrastructure takes a long time. It involves also other than technical issues, for example identifying potential products and customers for e-commerce. Typically, the development of e-commerce is an evolutionary process of moving traditional business into e-business [14]. The other alternative is that company builds operations to Internet alone. In both cases there are several stages involved in the process (Figure 2). As Earl [15] notes “lessons learned in each stage and where each stage leaves behind critical imperatives for the next “one” .In first two stages the main emphasis is often on external or internal communication. Possible applications range from company's home pages to extranets that connect business partners to company's information systems. In these stages learning how IT can be applied has an important role. It involves skills and knowledge in technology (web-technology, security etc.), business understanding (importance of up-to-date content on the home page etc.) and interactive skills (organizing the development work, involving technical experts, business people and outside service providers etc.). The next two stages are about selling or buying online. The key challenges here

are connected to promoting e-commerce, selecting and pricing products for e-commerce and managing brand. On deeper level e-commerce and e-business involves positioning e-activities with traditional business and redesigning business processes [16]. These challenges require mostly business expertise and understanding of what are the strategic goals of e-commerce related activities in the company. E-commerce makes it possible to collect and use data of all online transactions. It allows decision-making that is based on real-time information. Therefore, management processes should be redesigned so up-to-date information can be used in company management. This can introduce new ideas of management control, thus being the basis for ins situation ailing the online business model [14]. Another interesting framework of e-commerce positioning and development is a awareness/positioning framework (or commitment -implementation matrix) proposed by Stroud [17+]. It is based on two questions: firstly, what is the managements' vision of the relative importance of technology. Secondly, how can Internet be integrated into existing organizational structures? Based on these questions company's level of commitment ranges from wait and see –approach to bus lines innovation where processes are redesigned so that the potential of Internet can be used maximally. Similarly, the mode of development varies from building separate applications to business centric development where the potential of Internet is understood [17].

The interplay of technical and business understanding is a key issue in this framework. If company lacks technical expertise, opportunities may be lost as technology is not utilized. It is also possible that the importance of technology is diminished, left to technical people alone and not considered worthy of management's time and effort [17]. The solution to these problems is in interaction between technical people and less-technically oriented business people. In general, interaction is recognized as one of the primary requirements for successful information systems development and implementation [18]. Open discussion and changing opinions are critical for the development work. However, there are also other factors such as personal characteristics of the group members and rewarding methods that affect the interaction and performance of the development group. Consequently, enhancing group interaction and discussion are important, but may not automatically ensure better results.

IV. CONCLUSION:

Expansion of e-commerce infrastructure and information technology development in general is more than production right scientific choices. Administration the expansion process is a challenge, it requires business Understanding in how technology can be utilized in the best possible way. In this extended abstract, we have presented a basic infrastructure for business to business electronic commerce.

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