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TRAINING EFFECTIVENESS EVALUATION AMONG TWO DRDO CADRES IN PROOF & EXPERIMENTAL ESTABLISHMENT

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ABSTRACT

Two Management Training on "Team Building & Interpersonal Relationship Development" were conducted, one for Technical Officers of Defence Research Technical Cadre (DRTC) and the other one for Admin Assistants and Admin Officers of Administrative cadres of PXE by same PXE Trainers at the same venue inside island environment. Evaluation of training effectiveness for two Defence Research & Development Organization (DRDO) cadres was carried out in three levels following Kirkpatrick's evaluation model i.e. in 'Reaction level' (Level 1), the 'learning level' (Level 2) and also in 'Behaviour level' (Level 3). It was found that the course was highly satisfactory to all participants of both cadres while the learning percentage was recorded 44 to 70 % for DRTC participants but 16 to 49 % for participants of Administrative cadres. Even superiors commented after six months considering behaviour levels of participants about the trainings as very effective. Performance of Trainers as evaluated by participants was also found above four in five point scale in case of all faculties. Trainees from DRTC cadre harvested higher benefit from this training course than the trainees of Admin cadre due to their Engineering and scientific educational background, younger age and better open mindedness. This well designed and well conducted training motivated the trainees to improve their knowledge. Measurement of net gain by the organization from training courses is, however, a difficult task in R&D organization.

KEYWORDS

DRDO cadre, Human capital, Training effectiveness, Training evaluation.

INTRODUCTION

Every individual enters into service with a prescribed educational qualification. During work Human Resource Development Cell finds out the gap between the existing knowledge & skill and required knowledge & skill for smooth progress of work in case of all employees, thus training needs are identified and proper trainings are arranged accordingly for each employee with a purpose to improve their human assets, the differentiator between a good institute and a great institute. Training is also important at all employees' levels since skills erode, become obsolete over a period of time and need to be replenished (Langer and Mehra, 2010). In the era of competition, training to employees in the organization is, therefore, always considered as critical for developing their skills, upgrading their knowledge and for bringing desired changes in their abilities, attitudes and behaviours. According to Lowry et al (2002), training is a factor that enhances employees' commitment and maximizes employees' potential. It is expected that a well designed and well conducted training program will lead to positive reactions from trainees, learning of the important material, behaviour change on the job, and performance improvements (Ostroff, 1991). Training is a costly affair since all government, public, private and corporate sectors including Defence Research & Development Organization (DRDO) spend a considerable amount of time and money on training for facilitating employee's learning of job related competencies. In fact, training is an investment in the human resources of an establishment, with both immediate and long range return. However, HRD cell needs to manage training programs more effectively so that it can get the highest returns from its investment. It is, therefore, utmost important to provide evidence that training efforts are being fully realized. Different researchers (Hinrichs, 1976; Kirkpatrick, 1978; Ostroff, 1991; etc.) described the evaluation of the effectiveness of training programs as very critical since training results might not be immediately reflected in trainee's performances and contributions but without documentation of the effectiveness of training, organizations have no good way to know whether training dollars are being spent wisely (Grove and Ostroff, 1991). Leach and Liu (2003) mentioned that organization would be interested to know the reactions of trainees, knowledge acquisition by trainees and behaviour change impact outcomes for critical evaluation of training investments. Hence it is very vital to measure training effectiveness for taking further decisions on continuation of training, improvements in training and allocation of training funds. In fact, nothing will improve until it is measured, the training programs have to be assessed in terms of the program itself, of the behaviour outside the training environment and whether it has desired effect or not. Evaluation determines the effect of training at individual, departmental and organizational levels. According to Pidd (2004), effective training can be gauged by the capacity of trainees to apply knowledge, skills and abilities gained in training to their work environment (i.e. transfer of learning) and maintain them over time in their job context. Huque and Vyas (2008) also suggested for assessing training effectiveness by considering the performance of the trainees and their ability to transfer training information to their jobs. Evaluation can also help to improve the quality of training activities as well as Trainer's ability.

In Defence Research & Development Organization (DRDO) employees of three different cadres are recruited having four different qualification levels. Defence Research & Development Service (DRDS) cadre officers are recruited by Recruitment & Assessment Centre (RAC), Delhi as Scientists having Bachelor of Technology (B. Tech.), Master of Technology (M. Tech.), Master of Science (M. Sc.) or Doctorate of Philosophy (Ph. D) degree. Defence Research Technical Cadre (DRTC) staff are recruited by CEPTAM, Delhi both as Senior Technical Assistants with Graduation in Science or Engineering Diploma qualifications and as Technicians having pass certificate on various trades from Industrial Training Institute (ITI). Administrative & Allied cadre employees are also recruited by CEPTAM as Admin or Store Assistants, vehicle operator, Fire men, Fire Engine Drivers and Attendant Multi Skill Workers having ten and twelve standard Board examinations pass certificate. In DRTC cadre Senior Technical Assistants become Technical Officers after getting promotion while Technicians are promoted to Technical Assistants and then Technical officers with time and acquiring experiences through Promotional Assessment. Schmidt (2009) showed that different demographic dimensions like age, gender, educational background, job status, job tenure, income, marital status, work experiences, etc played important role on training satisfaction / effectiveness. Keeping all these in view two personality development training were organized, one each for DRTC and Admin Cadre at an unique isolated island environment during 2013 with a primary objective to develop soft skill among trainees for creating efficient teams in the establishment and their training effectiveness were evaluated using Kirkpatrick's 4 level of Training Evaluation model. The 4 levels are : Reaction of Trainees (Level 1), Learning of Trainees (Level 2), Changes in Behaviour of Trainees (Level 3) and Results / impact to Institutes (Level 4).

EVALUATION PROCEDURE FOLLOWED

The Personality Development training on 'Team Building and Interpersonal Relationship Development' was organized for Admin & Allied cadre during 14 – 16 June 2013 and for DRTC cadre on 26 – 28 December 2013 at the same venue by the same Faculty members. Thirteen Admin Assistants, 3 Admin Officers, 1 Accounts Officer and 1 Store Officers dealing mainly with government administrative rules and procedures participated in first training while 14 Technical Officers-A having technical background participated in second training. However, 13 participants of each batch took part in training evaluation process. Important topics like 'Attitude Matter', 'Team Building Concepts', 'Interpersonal communication', 'Fundamental Interpersonal Relations Orientation – Behaviour (FIRO-B)', 'Motivation', 'Seven habits of highly effective people', etc were discussed in both training. In addition 'conflict management' was covered in first training while 'Return on training investment (ROTI)' was discussed in second training. Since the Trainer performance has a great impact not only in attracting trainees towards goals of program, but also to the entire effectiveness of training (Rama Devi and Shaik, 2012), efforts were made to keep the same trainers in

both training. However three trainers dealt different topics in first training while two trainers took classes in second training. After each class, participants gave feedback on overall effectiveness of the topics on 5 point scale (1= very poor, 2= poor, 3= Average, 4=Good and 5= Excellent) in both training. In second training, trainees gave feedback on Topic Content, Presenting style of the faculty and Interaction with participant in addition to overall effectiveness from which satisfying percentage were calculated by taking average. The Reaction (Level-1) of participants were recorded by taking feedback from each participants immediately after completion of training on the arrangement of facilities (i.e. logistic supports, course kits, etc) for trainees, management of classroom facilities (i.e. computer, multimedia projector, white board with coloured pens, collar microphone system, laser pointer, etc.), relevance of topics in training course, capability of trainers, etc. for judging the satisfaction level of trainees as well as quality of training (Level 1). Learning of trainees were evaluated by giving a set of questions to answer before starting of training and another similar set of questions after completion of training to each participant. Pre-test and post test score was calculated by marking answers of each Answer script. The difference of value for each trainee is called as learning gain or improvement in knowledge (Level 2) due to training. To estimate the change in behaviour (Level 3) for each trainee, feedbacks were taken after six month from their immediate superiors / Bosses who have noticed the change, if any, during working together.

FINDINGS AND DISCUSSION

DEMOGRAPHIC CHARACTERISTICS OF TRAINEES

Three days training course on 'Team Building & Interpersonal Relationship' was conducted for two different cadres having two different distinct educational backgrounds and working patterns. Employees of Admin cadre work in office and deal files for taking decisions in relation to various administrative and financial matters on the basis of Government rules and regulations. Employees of DRTC cadre are, on the other hand, busy in field for test and evaluation of various guns, tanks, rockets, mortars and their ammunitions for providing safe and secured armaments to Indian defence users on the basis of various observations and data collected using various instruments. Table 1 presents the demographic profile of these trainees. In first training, out of 18 Admin cadre employees 13 participated in training evaluation, in which 4 were officers and 9 were Senior Admin Assistants. Similarly in second training 14 Technical officer 'A' took training and 13 officers participated in Training evaluation. Age wise 8 employees of Admin cadre were more than 45 years old, majorities were of 50 years or above and only 5 employees were below 45 years. In case of DRTC cadre 100 % officers were below 45 years, majorities in between 33 to 38 years. In respect of Educational qualification 8 Admin cadre employees were arts or commerce graduates while 5 passed High school certificates (HSC) Examination. But among DRTC cadre trainees 10 employees were having Engineering diploma and 3 Graduation in Science. According to working experience or service length only 6 trainees in Admin cadre had less than 20 years experience while rest have 26 to 29 years of experience but in DRTC cadre except one trainee others had less than 20 years of experience, precisely 7 to 13 years of experience. The data in Table 1, therefore, reveals that DRTC trainees were younger in age as well as service with better IQ in comparison to the Admin cadre trainees.

REACTIONS OF TRAINEES (KIRKPATRICK'S LEVEL 1)

Immediately after completion of training, feedback was collected from each participants on i) relevance of course in broad area of trainee's work, ii) level of technical content, iii) enhancement of knowledge, iv) covering of course contents as per expectation, iv) Training duration, v) arrangement of logistic support like accommodation, class room and other facilities, etc. Since the course was planned for developing soft skill among trainees by increasing awareness on positive attitude, team building concepts and advantages of team work, interpersonal relationship and communication, seven habits of effective people, etc. trainees were highly satisfied. According to them, course was helpful not only in personal life but also in official activities. As the course was conducted as 'Off the Job' training at an isolated unique eco-friendly island environment having beautiful guest house and conference room facility, trainees were motivated to participate in both theoretical classes and practical demonstrations starting from morning to evening without feeling any short of boringness. As expressed by trainees of both training courses, this environment had energized their belongingness with course and also increased their interest for learning.

TABLE 1: DEMOGRAPHIC PROFILE OF TRAINEES

Cadre	Demographic Attribute		Frequency	Percentage (%)
Admin cadre	Rank	Officer	4	31
		Staff	9	69
	Age group	< 45 years	5	38
		> 45 years	8	62
	Qualifications	Graduate and above	8	62
		Secondary / HSC	5	38
	Service length	< 20 years	6	46
		> 20 years	7	54
DRTC	Rank	Officer	13	100
		➢ Staff	Nil	0
	Age group	< 45 years	13	100
		➢ > 45 years	Nil	0
	Qualifications	Diploma / Graduate	13	100
		Secondary/ HSC	Nil	0
	Service length	< 20 years	12	92
		> 20 years	1	8

LEARNING OF TRAINEES (KIRKPATRICK'S LEVEL 2)

The course contents dealt in both training courses were not taught earlier to all trainees participated in these courses. In first training a questionnaire having objective type questions of total marks 31 from the topics to be covered for Admin cadre was given to all trainees of this cadre for answering immediately just to test the knowledge level on those topics before starting the course. Similar type of questionnaire of 31 marks was again given to answer after the training for judging the learning level due to training. The learning gain was estimated from post test and pre test results. Similar attempt was made for second batch i.e. trainees of DRTC cadre also. Both pre-test and post test score along with learning gain percentage data of each trainee participated in feedback are presented in Table 2.

TABLE 2: LEARNING GAIN (%) OF TRAINEES

Admin cadre (14-16 June, 2013)				DRTC (26-28 December, 2013)			
Trainees	Score (%)		Learning Gain (%)	Trainees	Score (%)		Learning Gain (%)
	Pre-test	Post- test			Pre- test	Post- test	
A1	16	35	19	T1	12	66	54
A2	35	52	17	T2	06	61	55
A3	42	71	29	T3	24	80	56
A4	16	51	35	T4	10	80	70
A5	35	65	30	T5	26	86	60
A6	16	45	29	T6	09	68	59
A7	10	55	45	T7	22	75	53
A8	26	49	23	T8	14	68	54
A9	16	65	49	T9	17	86	69
A10	45	61	16	T10	29	73	44
A11	16	48	32	T11	16	66	50
A12	39	68	29	T12	10	54	44
A13	10	35	25	T13	03	50	47
Avg.	24.76	53.84	29.08	Avg.	15.23	70.23	55.0

The pre-test score of Admin cadre trainees varied from 10 to 45 % with an average score 24.76 % while that of DRTC trainees varied from 03 to 29 % with an average 15.23 % indicating better initial knowledge of Admin cadre trainees than younger DRTC trainees which was obvious as with experience and age Admin cadre trainees learnt the soft skill to manage many problems in life. But opposite results has been recorded in post-test scores which ranged from 35 to 71 % (Average 53.84 %) in case of Admin cadre trainees and 50 to 86 % (Average 70.23 %) in case of DRTC trainees, indicating better improvement in learning gained through training by later trainees. The range of learning gain was, however, found much better for DRTC trainees ranging from 44 to 70 % with an average 55 % in comparison to Admin cadre trainees (Range 16 to 49 % and average 29.08 %). Few low pre-test score trainees got high post-test score which might be due to their more concentration on class activities and learning, the motivating factor might be their awareness about less knowledge on the subject. More knowledgeable trainee sometimes becomes little lethargic to attend the class more attentively. The findings in Table 2 showed that all trainees irrespective of their cadre have achieved a positive knowledge gain from this personality development training. The positive knowledge gain by trainees was also earlier reported by Alvarez et al (2004), Sitzmann et al (2008), Giangreco et al (2009) and Giangreco et al (2010).

The learning gain data was analyzed further to determine the causal factors for getting variation in learning among two DRDO cadres and presented in Table 3, 4 and 5. The data in table 3 reveals that age has some impact in learning since both concentration on class and memory keeping power reduce with older age. The finding of table 4 clearly shows that educational qualification plays an important role in grasping the knowledge / information. Less education level showed less learning gain. Employees with Engineering and Science background harvested the better benefits from this training course even though it is soft skill development or personality development training. There was not much impact noticed in case of service length or experience as they were basically not from management background and not dealt the management responsibility during service. The findings on learning gain, therefore, indicate that the better learning by DRTC trainees was due to important demographic factors like their Educational qualification and younger age with energetic approach. This is in line with the findings of Schmidt (2009) in relation to role of various demographic factors on training effectiveness. In fact, the administrative people gradually lose their open mindedness and flexibility during working with rigid rules and regulation. This might be also an inherent factor for restricting Admin cadre trainees to learn more on the topics which they might not be used in their day to day office works. Fischer (2011) also stated that open-mindedness is also a significant moderator of training effectiveness.

TABLE 3: IMPACT OF AGE FACTOR IN LEARNING GAIN (%)

Cadre	Age group	Trainee numbers	Learning gain (%)	
			Range	Average
Admin	Below 45 years	5	16 - 49	30.20
	Above 45 years	8	17 - 45	28.37
DRTC	Below 45 years	13	44 - 70	55.0

TABLE 4: IMPACT OF EDUCATIONAL QUALIFICATION IN LEARNING GAIN (%)

Cadre	Qualification	Trainee numbers	Learning gain (%)	
			Range	Average
Admin	Graduate and above	8	17 - 49	33.25
	Secondary / HSC	5	16 - 29	22.4
DRTC	Diploma / Graduate	13	44 - 70	55.0

TABLE 5: IMPACT OF SERVICE LENGTH ON LEARNING GAIN (%)

Cadre	Service length	Trainee numbers	Learning gain (%)	
			Range	Average
Admin	Below 20 years	6	16 - 49	29.00
	Above 20 years	7	17 - 45	29.14
DRTC	Below 20 years	12	44 - 70	55.08
	Above 20 years	1	54	54.00

CHANGES IN BEHAVIOUR OF TRAINEES (KIRKPATRICK'S LEVEL 3)

Personality or soft skill development training gradually helps the trainees to change his / her behaviour with more open mindedness, positive and cooperative attitude, building up trust and confidence on their colleague which ultimately expressed as good team members. This is always noticeable to his team leader or boss. The feedback taken from the superiors of all those trainees after six months of the training proved that the training was very effective as there was a remarkable change in their behaviour during dealing with colleagues, files or handling instruments. They are now more proactive and cooperative in action being responsible team members.

TABLE 6: EVALUATION OF TRAINERS PERFORMANCE (5 POINT SCALE)

Trainers	Topics	Admin Cadre	DRTC cadre			
		Overall effectiveness	Overall effectiveness	Topic content	Delivery style	Liveliness / Interaction
A	Attitude Matter	4.17	4.53	4.54	4.62	4.46
	Team Building	4.78	4.31	4.08	4.31	4.46
	Interpersonal communication	4.72	4.69	4.31	4.62	4.62
	Motivation		4.38	4.25	4.50	4.13
Average		**4.56**	**4.48**	**4.30**	**4.51**	**4.42**
B	FIRO-B	4.72	4.69	4.38	4.85	4.62
	Seven Habits	4.50	4.85	4.62	4.85	4.85
	ROTI		4.00	4.08	4.46	4.54
Average		**4.61**	**4.51**	**4.36**	**4.72**	**4.67**
C	Motivation	4.17	-	-	-	-
	Conflict Management	4.33	-	-	-	-
Average		**4.25**	**-**	**-**	**-**	**-**

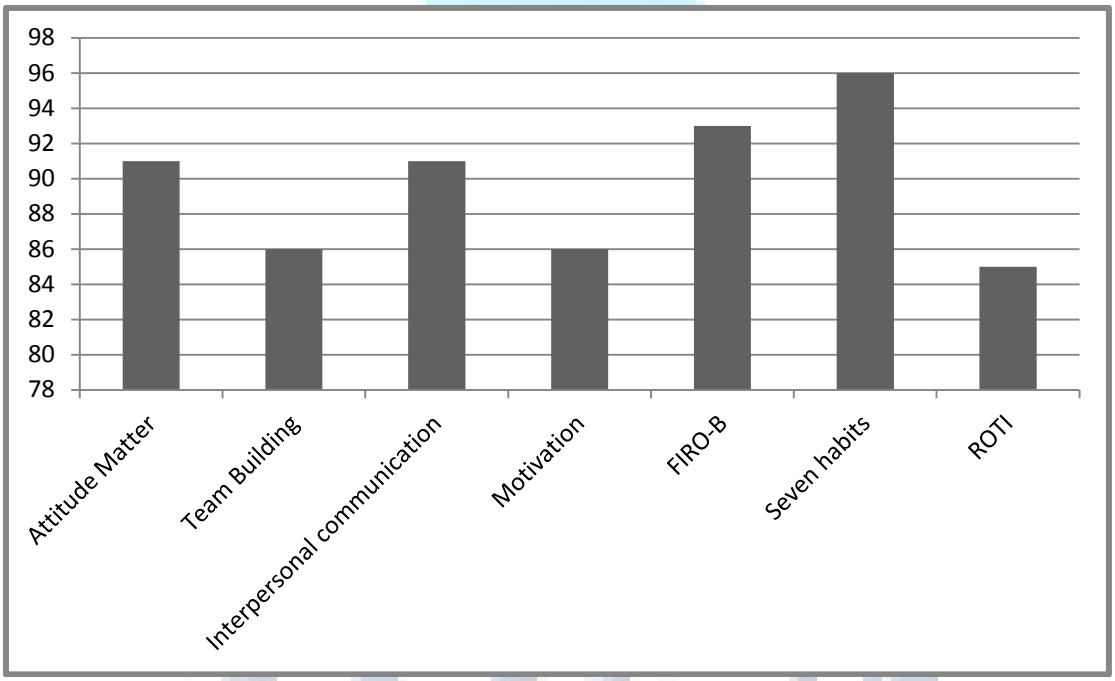
EVALUATION OF TRAINERS BY TRAINEES

As shown in Table 6 the three internal expert faculties took classes in first training course for Admin cadre while in second training course for DRTC trainees only two internal experts took classes. The grading of more than 4 given by trainees in 5 point scale for overall effectiveness indicates that trainees of both cadres were highly satisfied with the trainers' performance in dealing with different topics. Admin cadre trainees were comparatively more satisfied than DRTC cadre. Performance of all the three speakers was almost at par. The high rate grading (above 4 in 5 point scale) in topic content, delivery style and interaction for both trainers by the trainees also suggest that trainees were highly satisfied and enjoyed the training. This confirmed the earlier findings of Ostroff (1991).

SATISFACTION LEVEL OF TRAINEES ON TOPICS

The average grading data of 4 observations e.g. topic contents, Delivery style, Interaction and overall effectiveness was converted to percentage value and presented graphically in Figure 1 as satisfaction level of trainees on topics. The high values (above 85 %) of the chart indicate that DRTC trainees were highly satisfied with the design and delivery of all topics discussed during training.

FIGURE 1: SATISFACTION PERCENTAGE BY THE DRTC TRAINEES ON THE TOPICS OF THE TRAINING



LIMITATION

Proof & Experimental establishment is a service oriented establishment where dynamic test and evaluation of various weapons and ammunitions are carried out daily at its sea-coast test range during last 120 years. In this situation evaluation of training impact on each trainee with respect to results / profits (Kirkpatrick's Level 4) was very difficult and not carried out. Since the work pattern of both DRDO cadre are quite different, it was also not possible to quantitatively assess the transfer of soft skill learning to workplace. More psychological study is required to gauge the real achievement from the behavioural changes of trainees.

CONCLUSION

The approach to take the trainees to an isolated but undisturbed unique eco-friendly environment away from office taken by the author as Course Director was found highly fruitful to create better motivation, more attention and high satisfaction among trainees as well as trainers. The finding of this study showed that all trainees were happy with the content of the course, the speakers' style of facilitating, the overall effectiveness and the learning gained. The well planed training schedule, the tension free logistic support and class room facilities arranged by the Course Director motivated the trainees for improving their knowledge on personality development which has lifelong impact towards achieving success.

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INDIA-SINGAPORE TRADE RELATIONS: MULTIPLE AGREEMENTS & TRADERS' DILEMMA

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ABSTRACT

International trade and Commerce plays a vital role in growth and development of an economy India-Singapore trade relations were developed since the announcement of "Look East policy". During the early 1990s, South-East Asian states were experiencing rapid and sustained economic growth and India too was entering into Economic reforms. Being geographically closer and reaping benefits of economic and political ties, India-Singapore signed a 'Comprehensive Economic Cooperation Agreement' (CECA) in the year 2003. Further, the relation has taken another form of 'ASEAN-India Free Trade Agreement' (AIFTA) in 2009, which got implemented in 2011. The paper analyse, the dilemma for traders to follow which agreement especially when negotiating trade with Singapore. The impact of CECA and AIFTA on traders provides different framework in terms of tariff savings and relevant rules of origin. Every trader is concerned with tariffs and relevant rules of origin in respective commodities. Therefore, the paper is an attempt to study the selective commodities (goods) in which India-Singapore largely trade and calculate the cost in terms of Tariff savings. Also, it aims at highlighting complicacies that arose in the minds of Indian traders while trading with Singapore, the costs involved in administration and hence effective tariff and non-tariff relaxations. The study gives suggestions to the policy makers to make it convenient and practical for the traders.

KEYWORDS
Indian trade, multiple agreements, Singapore, tariffs, traders.

1. INTRODUCTION

International trade and Commerce plays a vital role in growth and development of an economy. Since the latter half of 1980s, trade has assumed its importance, specifically in developing countries like India. The new era took its ultimate shape in our country with implementation of New Economic Policy (NEP' 1991) comprising of three major elements viz. Liberalization, Privatization and Globalization. Trade relations between countries reflect the purpose of raising standards of living, ensuring full employment, large and steadily growing volume of real income and effective demand and expanding the production of and trade in goods, services and investment.

India-Singapore trade relations were developed since the announcement of "Look East policy". During the early 1990s, South-East Asian states were experiencing rapid and sustained economic growth and India too was entering into Economic reforms. Being geographically closer and reaping benefits of economic and political ties, India-Singapore signed a 'Comprehensive Economic Cooperation Agreement' (CECA) in the year 2003. Further, the relation has taken another form of 'ASEAN-India Free Trade Agreement' (AIFTA) in 2009, which got implemented in 2011.

The paper analyse, the dilemma for traders to follow which agreement especially when negotiating trade with Singapore. The impact of CECA and AIFTA on traders provides different framework in terms of tariff savings and relevant rules of origin. Every trader is concerned with tariffs and relevant rules of origin in respective commodities. Therefore, the paper is an attempt to study the selective commodities (goods) in which India-Singapore largely trade and calculate the cost in terms of Tariff savings. Also, it aims at highlighting complicacies that arose in the minds of Indian traders while trading with Singapore, the costs involved in administration and hence effective tariff and non-tariff relaxations. The study gives suggestions to the policy makers to make it convenient and practical for the traders.

2. LITERATURE REVIEW

2.1 FACTORS INFLUENCING TRADE

As per the report of World Trade Organization (2013) states very clearly the factors influencing trade between two countries are demography, investment, technology, energy and other natural resources, transportation costs and institutional framework. An empirical study done by Baldwin and Lopez-Gonzalez (2012), Kimura (2012) indicates a minimum level of investment on infrastructure plays an important role in reducing trade costs at regional level. Grossman and Helpman (2005) study production networks, low costs and secure transmission of information like high quality of telecommunication system is essential to build trade on infrastructure. Nordas and Piermartini (2004) estimated that doubling the kilometres of paved roads per 100 square kilometres of territory of a country boosts trade by 14%. Helpman (1984) viewed strong relationship between foreign direct investment (FDI) and trade. Further various studies developed on horizontal and vertical FDI and its relation with trade promotion.

Technology also plays a vital role in determining trade. Krugman (1991, 1998), Head and Mayer (2010), WTO study (2013) etc have given additional insights into the way technology diffusion has an impact on production and trade patterns. Sadorsky (2012) studied changes in the cost of energy can alter the commodity composition of a country's export and import depending on their energy intensity.

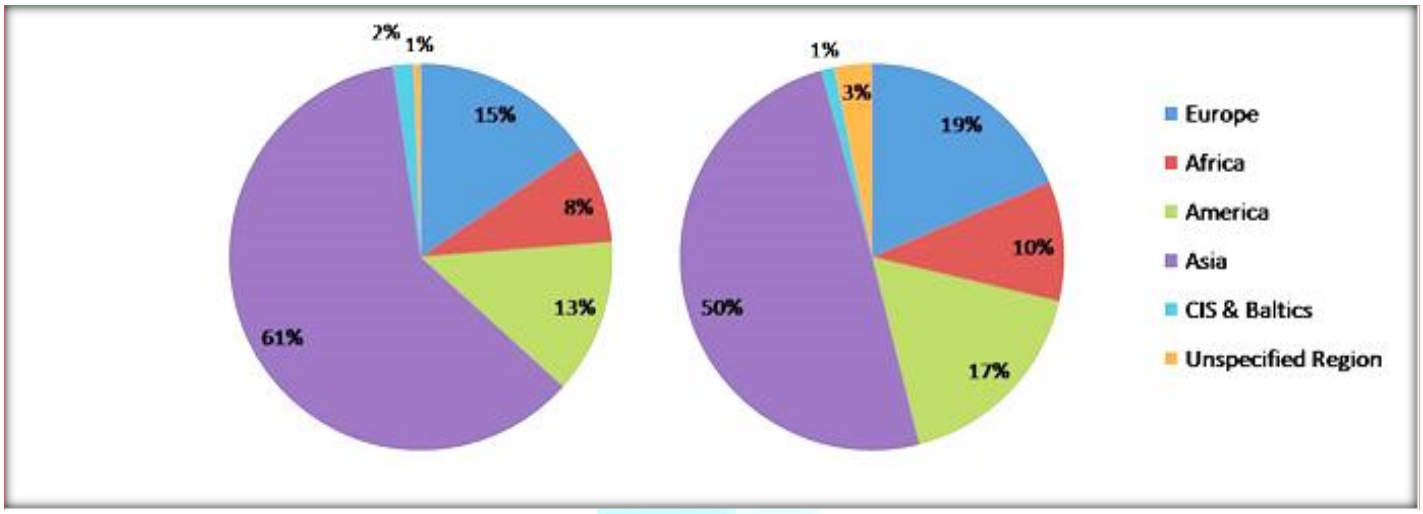
Anderson and van Wincoop (2004) had done a comprehensive survey of trade costs in which the importance of transportation costs is similar to protectionist policy measures. The tariff barriers are studied by McGowan and Milner (2011) The study by Paul Krugman on gravity model also mentions the importance of distance in trade.

But there are a few studies discussing how multiple agreements affect actual traders and this dilemma needs to be considered. This paper tries to focus on it.

2.2 BACKGROUND: INDIA-SINGAPORE TRADE RELATIONS

This paper considers India-Singapore trade relations specifically to understand that which country from ASEAN have higher level of trade with India. As per Department of Commerce statistics of 2014, India total exports in share percentage to ASEAN is 9.94, out of that India exports to Singapore is 3.17%. On the other hand, India imports from ASEAN 9.17 % out of which 1.51% comes from Singapore. The figure 1 below shows that the large portion of Indian trade is with the Asian countries. The left panel shows 61 percent of Indian imports are coming from Asia and right panel shows 50 percent of Indian exports are going to Asian countries.

FIGURE 1: REGION WISE SHARE OF INDIA'S IMPORTS AND EXPORTS (2013-14)



Note: Left panel data shows India's imports and right panel shows India's exports

Source: Compiled from Export-Import data bank (Ministry of Commerce and Industry, India)

2.2.1 COMPREHENSIVE ECONOMIC COOPERATION AGREEMENT (CECA)

India- Singapore CECA launched in 27th May 2003. The trade encompasses trade in goods, trade in services, investment protections and other features. This landmark agreement is India's first ever CECA and is also the first comprehensive economic pact between Singapore and a South Asian country. This agreement is a strategic compact between the two countries that will further enhance bilateral ties by improving already growing flows of trade, investment, ideas and people. The Trade in goods provides tariff concessions that will make Singapore more competitive vis-à-vis other foreign imports into India.

TABLE 2: COMPREHENSIVE ECONOMIC COOPERATION AGREEMENT (CECA) AT GLANCE

Topics	Facts	Benefits to importers
Goods coverage	Tariff reduction/elimination for 82% of Singapore's exports	Tariff free or reduced tariff importing
Tariff elimination schedule	Import duty reduction/staged elimination from 1st August 2005 • Immediate tariff elimination for 506 goods under the Early harvest program (EHP) • Phased tariff elimination for more than 2600 tariff lines by 2015 • Phased tariff elimination for more than 2500 tariff lines from 2005 to 2015	Imports of products such as personal computers, cellular phones, and un-defused silicon wafers have been duty free since 1st August 2005 Imports of products such as car and motorcycle tyres, ships and live ornamental fish have been duty free since 1st April 2009
Rules of origin	40% local value-add based on FOB price and change in tariff heading Product specific rules may apply	Access to wide range of products eligible for preferential tariff treatment
Mutual recognition agreements	Concluded MRAs: Electrical and electronic equipment Telecommunications equipment	Avoids duplication of testing Reduces the cost to imports Cuts down the time to market
Customs procedures	Advance ruling on tariff concession eligibility available upon request	Provides advance confirmation of how imports will be treated by customs Allows importers to budget for import duties, if any

Source: www.iesingapore.com

2.2.2 ASEAN-INDIA FREE TRADE AGREEMENT (AIFTA)

On 13 August 2009, the Trade in Goods Agreement under the ASEAN-India Free Trade Area was signed, forming the first substantive pillar of the ASEAN-India Free Trade Area (AIFTA). The Trade in Goods Agreement came into force on 1 January 2010. As compared to CECA, the AIFTA offers more flexible rules of origin criteria and ASEAN accumulation provides manufacturers a larger sourcing base of ASEAN-originating raw materials.

TABLE 3: ASEAN-INDIA FREE TRADE AGREEMENT (AIFTA) AT GLANCE

Topics	Facts	Benefits to importers
Goods coverage	The AIFTA covers approximately 90% of the tariff lines traded between ASEAN and India	Tariff-free or reduced-tariff importing
Tariff elimination schedule	Approximately 90% of India's tariff lines fall under the normal and sensitive tracks	Tariff elimination for products under the normal track by 2016, and tariff reduction for products under the sensitive track to no more than 5%by 2016
Rule of origin	35% of regional value content based on FOB price and change in tariff subheading	Access to wide range of ASEAN- originating products eligible for preferential tariff treatment under the AIFTA
Customs procedures	Back to back certificate of origin Third party invoicing	Preferential tariffs for imports importing products of ASEAN origin Originating products still qualify for preferential treatment even if the invoices for these goods were issued in third countries.

Source: www.iesingapore.com

AIFTA has 4 tracks Normal track 1, Normal track 2, Sensitive track and special products which are reflected in Table 4. Approximately 90% of India's tariff lines falls under NT-1, NT-2 and sensitive track. NT-1 and NT- 2 cover 80% of tariff lines where tariffs are to be completely eliminated for goods. The sensitive track covers 10% of tariff lines and tariffs under this track are to be reduced to 5%. This means that tariff rates for these products will be no more than 5% by 2016. There is also provision in the TIG Agreement for a special track for tariff reduction for 5 products which are the key exports of some ASEAN members.

TABLE 4: UNDER THE AIFTA, TARIFF ELIMINATION AND REDUCTION HAS BEEN COMMITTED AS FOLLOWS

Category	India, Singapore, Brunei, Indonesia, Malaysia & Thailand	India & Philippines	India, Cambodia, Laos, Myanmar & Viet Nam
Normal Track 1	0% by 2013	0% by 2018	India: 0% by 2013 CLMV: 0% by 2018
Normal Track 2	0% by 2016	0% by 2019	India: 0% by 2016 CLMV: 0% by 2021
Sensitive Track	No more than 5% by 2016	No more than 5% by 2019	India: No more than 5% by 2016 CLMV: No more than 5% by 2021
Special Products	Reduced to 37.5% for crude palm oil, 50% for pepper & 45% for the rest by 31 Dec 2019	Reduced to 37.5% for crude palm oil, 50% for pepper & 45% for the rest by 31 Dec 2019	Reduced to 37.5% for crude palm oil, 50% for pepper & 45% for the rest by 31 Dec 2019
Exclusion List	Products will be subject to annual tariff review with a view to improving market access	Products will be subject to annual tariff review with a view to improving market access	Products will be subject to annual tariff review with a view to improving market access.

Source: Department of Commerce, India

2.4 ISSUES AND PROBLEMS: INDIA-SINGAPORE TRADE

The study finds a gap in which various agreements are being signed and committed. Various agreements have been signed with the objective of tariff reduction, trade facilitation, common external tariff, promotion of industrialization, tariff savings for traders and strategic alliances which force countries to join regional agreements. But a few study has been empirically prove that out of all agreements, which agreement has been followed for trade and how much tariff has been saved by the traders with same country. It puts a dilemma in the traders mind as to which agreement to be followed and how much tariffs will be reduced in future for them. As per the experts[1] opinions mostly trade happens without these agreements. As these agreements required more documents in terms of rules of origin, different tariff calculations as per agreements and complex customs procedures which undermine traders to go via preferential route. As per experts, 30% of total trade in India happens via rules of origin. Therefore this paper tries to fill a gap by providing some suggestions to policymakers and raise up these concerns for traders. Otherwise these agreements are only on the paper but not on the ground.

ILLUSTRATION

For this purpose, paper has considered India-Singapore trade in the years of 2012-13 and 2013-14. The data has been collected from department of Commerce, Export-Import data bank version 7.2. The data consists with Export-Import country-wise all commodities between India-Singapore. The data compiled and sorted as export and import. Further segregates into top traded exports from India to Singapore and imports from Singapore and then calculated tariff savings and relevant rules of origin.

The study has taken HS code at 4 and 8 digit levels to understand the pattern of trade between India-Singapore. To calculate the tariff savings 1000 units have been assumed to be given in the study for every commodity. Study has considered few commodities to understand the difference in different agreements in terms of calculating tariff savings and relevant rules of origin.

3. ANALYSIS

DATA INTERPRETATIONS

The table 5 below shows tariff savings under CECA and AIFTA and relevant rules of origin. The study indicates India-Singapore trade through these commodity descriptions and HS code at 4 and 8 digit levels. These commodities been chosen on the basis of their share in total trade between India-Singapore in the year of 2013-14.

TABLE 5: TARIFF SAVINGS UNDER CECA AND AIFTA AND RELEVANT RULES OF ORIGIN BETWEEN INDIA-SINGAPORE

HS CODE 4 DIGIT	COMMODITY DESCRIPTION	HS CODE 8 DIGIT	COMMODITY DESCRIPTION	Year	Total Value ($)	MFN Rate (%)	CECA Pref Rate (%)	AIFTA Pref Rate (%)	Potential Tariff Savings under CECA ($)	Potential Tariff Savings under AIFTA ($)
8905	LIGHT-VSSLS,FIRE-FLOATS,DREDGERS,FLOATING OTHR SMLR VSSLS WHRE NAVGABLTY IS SBSDRY TO THR MN FNCTN;FLTNG DOCKS;FLTNG PL	89059010	Floating docks	2011	1000	10	0	5	100	50
8901	CRUISE SHIPS, EXCURSION BOATS , FERRY-BOATS, CARGO SHIPS, BARGES AND SIMILAR VESSELS FOR THE TRANSPORT OF PERSONS	89011010	Ships	2011	1000	10	0	5	100	50
8906	OTHER VESSELS, INCLUDING WARSHIPS AND LIFEBOATS OTHER THAN ROWING BOATS	89061000	Warships	2011	1000	10	0	5	100	50
7113	ARTCLS OF JEWELLERY AND PRTS THEREOF; OF PRCS MTL/OF MTL CLD WTH PRECIOUS METAL	71131910	Of gold, unstudded	2011	1000	10	0	5	100	50
7502	UNWROUGHT NICKEL	75021000	Nickel, t alloyed	2011	1000	5	0	2	50	30
7102	DIAMONDS, WHETHER OR NOT WORKED, BUT NOT MOUNTED OR SET	71023910	Diamond, cut or otherwise worked but t mounted or set	2011	1000	10	0	5	100	50
8802	OTHER AIRCRAFT (FOR EXAMPLE, HELICOPTERS, AEROPLANES); SPACECRAFT (INCLUDING SATELLITES) AND SUBORBITAL AND SPACE	88022000	Of an unladen weight t exceeding 2000 kg	2011	1000	3	0	2	30	10
8904	TUGS AND PUSHER CRAFT	89040000	TUGS AND PUSHER CRAFT.	2011	1000	10	0	5	100	50
8803	PRTS OF GOODS OF HDG NO.8801 OR 8802	88033000	Other parts of Aeroplanes or Helicopters	2011	1000	3	0	2	30	10
8001	UNWROUGHT TIN	80011010	Block tin	2011	1000	5	0	2	50	30

Note: Relevant rules of origin:

[1] Experts from IIFT – Centre for WTO studies

CECA Rule of Origin: General rule of Change in HS classification on the 4-digit level and regional value-added content of no less than 40%
AIFTA Rule of Origin: General rule of a change in HS classification on the 6-digit level and regional value content of no less than 35%
Source: Computed by Author.

It is seen from the above Table that-

- Through these commodities, it reflects clearly that tariff savings is different in MFN route, CECA route and AIFTA route.
- A trader will benefit more, if CECA route has been adopted than AIFTA.
- Potential tariff savings are more in CECA than AIFTA in every given commodity.
- It puts dilemma in the minds of traders, if rules of origin are considered. In the case of CECA, change in HS classification on the 4-digit level and regional value-added content of no less than 40% and in AIFTA, change in HS classification on the 6-digit level and regional value content of no less than 35%.
- Therefore much trade between India-Singapore happens via MFN route than any other preferential route.

Every trader avoids using preferential route due to rules of origin and many customs procedure. No doubt, when countries seek "Trade Facilitation" as one of the solution to avoid such hassles and do trade through regionalism than multilateralism or any otherway.

4. CONCLUSION

Countries are signing these agreements to facilitate their traders by providing better opportunities and market access through these agreements. The Multiple agreements for the same trade area creates dilemma in the trade .This confusion in empirical sense needs to be mitigated. It is found that benefits of trade have reflected on the paper or agreement but not on the ground for traders. Tariff savings and easier procedures allow traders to do more trade with countries, otherwise it become barriers for trade.

5. SUGGESTIONS

The suggestion for the government and policy makers is to make customs procedure easier and provide guidelines to traders to follow the same rules under different agreements.

These agreements should motivate traders by conducting technical sessions for traders on agreements by the Ministry and discuss the benefits of these agreements under preferential route, so to increase overall trade under these agreements.

Policymakers should also provide data on preferential trade agreement. Whether, the trade happens via MFN route or preferential route. The data should provide on the basis of different trade routes, to understand the impact of these agreements for traders.

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COMPARATIVE STUDY ON NON PERFORMING ASSETS OF SELECTED BANKS: WITH SPECIAL REFERENCE OF ICICI BANK AND SBI BANK

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ABSTRACT

Non Performing Assets is the indicators of banking health in a country. A strong banking sector is important for a flourishing economy. NPA is an important tool to measure the financial performance of a bank. NPA involves the necessity of provisions, any increase in any provision decrease the overall profitability of banks. In this research paper, an attempt to evaluate the operational performance to NPA and Profit of the selected two different sector bank i.e., Sate Bank of India and ICICI Bank. We used secondary data. In the paper, it has been try to analyze how efficiency public sector and private banks have been managing NPA with various financial tools and techniques. The object of present study is to assess the non – performing assets of Sate Bank of India and ICICI Bank and its impact on profitability & to see the relation between total advances, Net Profits, GROSS & NET NPA. The study uses the annual reports of both Bank for the period of five years from 2008-09 to 2012-13. The data has been analyzed by using tables and coefficient of correlation. In analysis we find that here is strong positive correlation between profit and NPA in public sector banks and negative correlation in private banks. Private Banks npa's are controlled and highly manageable. When banks profit increase due to increases of Loan and Advances, other side NPA also increases. It means banks are facing problems of NPA management.

KEYWORDS
Gross Non Performing Assets, Net Profit, Net Non Performing Assets and Total Advances.

INTRODUCTION

A strong banking industry is important for developed economy. The banking industry has reformed after the first phase of economic liberalization in 1991 and with new credit management. While the primary function of banks is to lend funds as loans to various sectors such as agriculture, industry, personal loans, housing loans, education loan etc., but in recent times the banks have become very cautious to distribute the loans. The reason is the huge amounting of nonperforming assets (NPAs). Nowadays these are one of the major concerns for every banks of India. NPAs reflect the performance of banks. A high level of NPAs creates low profitability or a large number of credit defaults that affect the profitability and net-worth of banks. It also erodes the value of the asset. The NPA growth involves the necessity of provisions, which decrease the overall profits.

LITERATURE REVIEW

Emphasized on management of non-performing assets in the perspective of the public sector banks in India under strict asset classification norms, use of latest technological platform based on Core Banking Solution, recovery procedures and other bank specific indicators in the context of stringent regulatory framework of the RBI. Non-performing Asset is an important parameter in the analysis of financial performance of a bank as it results in decreasing margin and higher provisioning requirements for doubtful debts. The reduction of non-performing asset is necessary to improve profitability of banks. Stated by Debarsh and sukanya Goyal.

An article on NPA Management by B.M. Nandwana the deputy General Manager of Recovery department of Central Bank of India impact of NPA on Indian Banks. It gives the information regarding the norms of RBI and other code of conduct which bank have to follow to manage its NPA.

OBJECTIVES OF THE STUDY

1. To compare the Total Advances, Net Profit, Gross NPA & Net NPA of SBI And ICICI Bank
2. To study the impact of NPA on overall performance of selected banks.
3. To evaluate the efficiency in managing NPA between selected banks.
4. To study the relationship between Net profit and Net NPA of Banks.
5. To make suggestions for better NPA management in selected Banks.

SCOPE OF THE STUDY

The present study of Non-performing assets is confined and restricted to the boundary of commercial banks, especially in private and public sector bank. We have discussed here only single aspect that, how NPA effects on profitability of banks.

HYPOTHESES OF STUDY

According to above objectives, the researcher have been framed the following hypotheses.
H1 = NPA's affected banks profit.
H2 = Private banks npa management is strong as compare to public banks.

RESEARCH DESIGN

1. The Sample:-The matter of the study consist all the public sector and private banks. Here, researcher has been selected two different sector banks i.e., SBI and ICICI for this comparative study.
2. The data collection and period of the study:-The study has been carried out for a five year, i.e., during 2008 – 09 to 2012 – 13. The reason behind selecting this period was availability of data for both sample banks under study.The study is based on secondary data; the data has been collected from the published annual report of the sample banks.
3. Tools and techniques:- As per the nature of study tools and techniques adopted by researcher are average and Correlation, for testing the hypotheses.

MEANING OF NPA

Banks basic function is "Advances". When this loan and Advances not recover as form of principal and interest payments, then Banks usually classify as nonperforming assets. If any commercial loans which are not recovered till than 90 days overdue and any consumer loans which are not recovered more than 180 days overdue are called NPA. More generally, and is not producing income. In India, an asset is classified as a Non-Performing Asset (NPA) if interest or installments of principal due remain unpaid for more than 180 days. However, with effect from March 2004, default status would be given to a borrower if dues are not paid for 90 days. If any advance or credit facilities granted by a bank to a borrower become non-performing, then the bank will have to treat all the advances/credit facilities granted to that borrower as non-performing without having any regard to the fact that there may still exist certain advances/credit facilities having performing status.

DEFINITION OF NPA

A non-performing asset (NPA) was defined as a credit facility in respect of which theinterest and or installment of principle has remained past due for a specific period of time.An amount due under any credit facility is treated as past due, when it has not been paid within 30 days from the due date. Due to improvement in the payment and settlement systems, recovery climate, up gradation of technology in the banking system, etc. it was decided to dispense with past due concept, with effect from March 31, 2001.

Definition given by the Narasimham Committee 'The Committee has defined Non-performing assets as an advance where as on the date of Balance Sheet: 1. In respect of terms loans, interest remains past due for s period of more than 90 days. 2. Overdrafts and cash credits accounts remain out of order for more than 90 days. 3. Bills purchased and discounted remain over due and unpaid for period of more than 90Days.An amount is considered past due when it remains outstanding for 30 days and beyond the due date.'

The following are the RBI guidelines for NPA classification and provisioning:

STANDARD ASSETS

Standard assets, which are not NPAs, but involve business risks, require a minimum of 0.25% provision on global portfolio but not on domestic portfolio.

SUB – STANDARD ASSETS

These are those accounts which have been classified as NPAs for a period less than or equal to 18 months. The general provision of 10% of total outstanding principal plus entire outstanding interest should be made on sub - standard assets.

DOUBTFUL ASSETS

These are those accounts which have remained as NPAs for a period exceeding 18 months. On these assets the banks are required to provide 100% for the unsecured portion and additional provision of 20% to 50% advances, if doubtful for 3 and above 3 years.

LOSS ASSETS

Loss asset is a credit facility where the bank's internal or external auditors or the RBI inspectors have identified as loss but the amount hasn't been written off, wholly or partly. Provisions required are 100 percent of the outstanding balance of the loss assets. Standard assets are treated as performing assets and the remaining categories of assets such as sub standard, doubtful and loss assets are known as Non Performing Assets.

DATA ANALYSIS AND INTERPRETATION

Economy of any country based on banking sector and the base of banking sector is Advances and it recovery. For fulfillment of research following table reflected the data of SBI And ICICI bank. In banking when advances increasing, profit increases and gross and net npa also increases. if npa increases it decreased the profit of banking. if we add npa's in profit we find that profit highly increase.

TABLE 1: SBI BANK (Figures in crores)

Year	Total Advances	Net Profit	Gross NPA	Net NPA
2008-09	5,42,503.20	9,121.56	15,588.60	9,552.02
2009-10	6,31,914.15	9,166.39	19,534.89	10,870.17
2010-11	7,56,719.44	8,264.85	25,326.29	12,346.90
2011-12	8,67,579.00	15,343	39,676	51,189
2012-13	10,45,617.0	17916	15,819	21,956
Total	3844332.79	59,811.80	115,944.78	105,914.09
Average	768866.558	11962.36	23188.956	21182.818
ave.profit % on adv.	1.555843452			
Ave. npa's % on ave. profit			193.8493408	91.34873515

TABLE 2: ICICI BANK (Figures in crores)

Year	Total Advances	Net Profit	Gross NPA	Net NPA
2008-09	2,18,310.85	4,126 .63	9649.31	4553.94
2009-10	1,81,205.6	5,207 .47	9,480.65	3,841.11
2010-11	2,16,365.90	7,781 .91	10,034.26	2,407.36
2011-12	2,53,727.66	11,650 .69	9,475.33	1,860.84
2012-13	2,90,249.43	16,408 .48	9,607.75	2,230.56
total	1159859.44	45,175.06	48247.3	14893.81
ave.	231971.888	9035.0114	9649.46	2978.762
ave.profit % on adv.	3.894873417			
Ave. npa's % on ave. profit			106.8007507	30.86972743

INTERPRETATION OF RESULT

The table is comparing Total advances with NET Profit, Gross NPA & Net NPA. With the help of this table we can say about shaking performance of SBI and ICICI Bank. We can analysis that on one side total advances given by banks and Net Profits are increasing continuously since 2008-09. Averagely Sbi increases it Average profit on Advances is 1.55% but with this the gross and net npa increases on profit app.193% and 91 %.ICICI Bank also increases profit on advances is 3.8% but Gross npa and net npa on profit is app. 106% and 31%.Which shows that bank is performing very well. But Gross NPA & Net NPA is also increasing which shows performance is declining due to NPA mismanagement of banks.

IT EFFECTS ON

LIQUIDITY

Money is bloked so normal operations will be effected.

CREDIT LOSS

In case of bank is facing problem of NPA then it will be decreased the market value of the bank. Management should take proper and prompt decision on this matter. No doubt this NPA directly effect on the Return on investments of the banks.

CORRELATION OF NPA AND NET PROFIT

On the above table we calculate the correlation between net NPA and net profit.the analysis concluded that in SBI net profit and Net npa correlated with **.67** and same in the ICICI Bank it is **-.88 .**it shows in the SBI , simply means that as profits increase NPA also increase. It is because of the mismanagement on the side of bank. NPA is directly related to Total Advances given by bank and banks main source of income is interest earned by bank. On other side ICICI Bank shows negative relation, it means net profit increases, but NPA is not increases in same side.

Any bank should select the customers with very carefully, because the good customers can increase the Advancese and increase the Profit, due to lack NPA.

FINDING AND CONCLUSION

- Total advances given by ICICI and SBI Bank, and Net Profits are increasing continuously since 2009.
- Private Banks NPA Management is very strong.
- Nationalized bank need to create sound NPA policies.
- Positive correlation shows NPA's increments & profits declining are due to wrong choice of clients by Banks.
- Nationalized Bank is unable to give loans to the new customers due to lack of funds which arises due to NPA
- Indirectly this NPA creates adverse affect on Indian GDP.

SUGGESTIONS

- Customers financial evaluation should be more accurate.
- NPA management must be strong
- Varieties of Loan and advances must be in loan portfolio.

This research is based on secondary data .We just made the conclusion on the bases of analyzing the data collected through Annual reports of past 5 years.

SCOPE OF FURTHER STUDIES

Research paper gives opportunity to researcher to do research on Non performing assets's other aspects of banking sectors.

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POLICY DEVELOPMENT FOR NEPALESE FINANCIAL SYSTEM AND ITS CHALLENGES

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ABSTRACT

A sound, efficient and healthy financial system is the preconditions for achieving the faster economic growth. But this situation cannot be built without the presence of sound and healthy banks and financial institutions in the economy. Managing the financial system is, therefore, a subject of crucial importance. The increased number of bank and financial institutions has also resulted in an expansion of deposit collection and lending. This is helpful in promoting financial inclusiveness and deepening in the economy. So, well articulated policies should be in place for the proper management of the financial system. The entry points of Banks and financial institutions are managed and administered through the licensing policy and there should be adequacy of prudential rules, regulations and the supervision system, whereby the sustainability and soundness of the financial institution operation is assured all the time.

KEYWORDS

Nepalese financial system, economic growth.

BACKGROUND

The financial sector includes all the wholesale, retail, formal and informal institutions in an economy offering financial services to consumers, businesses and other financial institutions, every thing from banks, stock exchanges and insurers, to credit unions, microfinance institutions and money lenders. (DFID, 2004). In the theory of economic, it has a long tradition that financial and economic activities are deeply interrelated. The French economist Clement Juglar who was among the first find out the characteristic of business cycles said in 1860 that economic fluctuations begins in the credit system.

To pool and utilized financial resources, decrease costs and risk, expand and diversity opportunities increase the given efficiency of resources and encourage the productivity and help the economic grow a latest financial system is indispensable. On the one hand the development of financial sector on the other hand automatically enables persons, and institutions to channel savings to more productive enterprises offer plays a very significant role in GDP growth. On one hand a strong financial condition promotes and help in the growth of the real sector on a sustainable base on the other hand financial condition badly affect the objectives economic development. It also helps to minimise the poverty. The influence of these already witnessed by the experience of the financial crises of 1990s.

According to central banks, financial sector advancements are different from other services. Financial development affert the long term production and employment. They can affert tools for monitoring and modeling economy patterns. Banking sector changes can influence the mechanism of monetary transmission. Advancement in the financial system can improve transmission of the single monetary policy. An effective financial system can lead to better risk hedging and risk diversification that make economies less vulnerable to disturbances. Some financial development, however, increase speculative behavior, market volatility and deepen financial crises (Gonzalez-Poramo, 2008).

A number of factors are responsible for the efficiency of a financial system, such as level of integration, market competition, development level and capacity to invent. Observation shows that countries that provide more credit to the private sector have stronger economic growth.

A country can develop its financial system in several ways. One of them is to open up to foreign competitions and international capital flows. Many countries fear this approach because they expect foreign shocks. Moreover, many economists claim that the liberalizations cost can be extremely high. A poor financial system may invite bank runs and balance of payments crises irony capitalism and excessive risk-taking by banks. The high cost may overwhelm the benefits from higher growth. But evidence indicates that financial growth with effective regulations can channel savers resources to more productive firms, they results in sustainable long run growth.

It is possible to learn valuable lessons from financial sector policies in developed and emerging market (Beck, 2006). The government needs to play an active role for creating markets by ensuring competitive and contestable banking and capital markets and providing an incentive-compatible financial safety net. It is more important to define a proper role for government.

OBJECTIVES OF THE STUDY

i. To study development policies regarding Nepal's financial system and
ii. To list some challenges of the country's financials system

POLICY DEVELOPMENT AND FINANCIAL SYSTEM OF NEPAL

Because the financial system raises funds for productive investment, successful financial liberalization is an important part of national policy for economic growth. Financial liberalization has many objectives: improving deposit mobilization, enhancing the allocative efficiency of financial intermediation by ending the distortion generated by administrative control, motivating more competition in financial markets and improving monetary control.

In Nepal, financial openness was started in the mid 1980s when the government gave a green signal for the entry of commercial banks is joint venture with foreign banks. To modernize banking through the transfer of technology and managerial skills, Nabil Bank Ltd. was established in 1984 as the first joint-venture bank in Nepal, which was latter fallowed by Nepal Bank Ltd. and Standard Chartered Bank Ltd.

Financial liberalization made progress in 1987/88, when Nepal entered a three year structural Adjustment Programme (SAP) with the IMF. The general purpose of this step was to improve the role of market forces in the financial system. The NRB started regular auctions of treasury bill since 1988/89 in order to begin greater flexibility in the interest rate structure. It also improved its rediscounting rates with form of three windows: basic rate, selective rate, and tender of the last resort rate in 1989.

To reduce the dependence of commercial banks for short term borrowing, a call money market was established during 1988/89. At the same time a comprehensive study under the title of Commercial Bank Problem Analysis and Strategy Study (CBPASS) was carried out to improve the financial and organizational structure of the two state owned commercial banks [Nepal Bank Limited (NBL) and Rastriya Banijya Bank (RBB)]. A few of the recommendation included in the CBPASS were applied in 1990/91.

Due to positive result Nepal entered into another three-year Enhanced Structural Adjustment Facility (ESAF) with the IMF, in 1992/93. The main focus of financial liberalization was on (a) allowing market forces to play a more active role in the financial system, (b) toughening competition and improving efficiency (c) improving and increasing tools and (d) expanding the capital market.

With the aid of the World Bank and the Department for international Development of the United Kingdom, the Financial Sector Technical Assistance Project has been brought into operation since 1988. The essential elements of the Project are the re-engineering of the NRD, rebuilding of NBL, RBB and capacity improving in the financial sector. Under FSTA Project, the regulatory and supervisory capacities of the NRB have improved. A new licensing policy in 2002 (last revised in 2007) was framed for opening a new commercial bank or financial institution.

A number of reform steps regarding financial sector legislation have been taken, such as enactment of a new Nepal Rastra Bank Act 2002 and Debt Recovery Act 2002. With the enforcement of the Nepal Rastra Bank Act 2002, the central bank of the country has become independent. A Debt Recovery Tribunal (DRT) was established under the Debt Recovery Act 2002 in order to improve the legal and judicial processes of recovery problem loans of bank and financial institution.

The Secured Transaction Act and Insolvency Act were strengthened on Nov 16, 2006 and Nov 20, 2006 respectively to make the legal structure of banks and financial institutions better and more convenient.

For the development of the NRB, the second stage of reform has begun, whose objective is to update the information technology supervisory power and human resource management. In addition, the accounting system of the NRB is modernized to match the international and domestic accounting standards the year 2004 saw the enactment of the bank and Financial Institution ordinance. Besides, in the same year the new legal framework replaced various fragmented legal structure. In view of the promulgation of the Banks and Financial Institutions Act (BFIA), the current prudential rules and instructions, issued at different times, have been revised and incorporated into a unified system and enforced from July 16, 2005.

To lower the risk in the financial sector, a regulation has already been issued. For the supervision of the system, the policy of risk based guidance is being followed. The private sector is being motivated to setup a credit rating agency.

Regarding the construction of suitable base for the enforcement of BASEL ll Accord since 2007, necessary instructions, policies and provisions have been formulated. Moreover, according to BASEL ll Accord, the regulatory provision has been formed to abide by the Simplified Standardized Approach (SSA) for capital base and Basic Indicator Approach (BIA) for operational risk.

The huge quantity of Non-performing Assets (NPA) has posed a main problem for financial sector development and stability. To deal with this problem, the NRB is working with the government in improving the power of Debt Recovery Tribunal and setting up an Asset Management company (AMC).

To reduce the potential fraud and crimes, the Anti-Money Laundering Act 2008 and Banking Crime and Punishment Act 2008 have been implemented on Jan. 28, 2008 and Feb. 5, 2008 respectively. Moreover, the Financial Intelligence Unit has been set up in the NRB and necessary by laws and instructions are being made.

A comprehensive description of all banks and institutions has been posted on the web to offer necessary information to public.

The NRB has been trying to provide a well regulated financial sector. In this directions, the capital sufficiency, single borrower limit, loan loss provision, professionalism of the promoter, standardized capital base, complete deregulation of interest rate, open licensing policy, phasing out the discredit credit have been major improvements.

The NRB has offered sequential financial sector liberalization public financial services, deregulation of micro finance of activities and so on.

The government introduced the National Micro Finance Policy on May 4, 2008 with the objective of increasing the power of micro finance. According to this policy a separate agency would be set up to watch the microfinance. This policy will enhance access of microfinance to undeveloped and poor families. The future plan is to set up National Microfinance Development Fund to mobilize resource, locally as well as internationally.

The NRB has reworked on those requations that are not consistent with market-oriented policies. Interest rate spread has been eradicated and the rule to invest in priority sector has been wiped out. From 2007/08 onwards, priority sector lending will not be in use. In the procedure of the accession to the world Trade Organization (WTO) Nepal had made some allegiance in financial service under the General Agreement on Trade in services (GATS) and the Annex on Financial services. But all the allegiances were conditional upon entry requirement domestic laws, rules and regulation even the terms and conditions of the NRB and Insurance Board. In Nepal, through a domestically incorporated company, the financial services are carried out. For the wholesale banking, the foreign bank's breaches should be encouraged. However, the financial institutions that obtain a rating of at least 'B' from eminent global credit rating agencies will be permitted to do commercial business in the country. On the contrary to this perspective, the foreign banks banking transactions in Nepal and the opening of branches by the Nepalese banks abroad, there is newdraft prepared by the bank. The draft contains special and separate provision for the licensing and the operations of the branches of the foreign bank.

Owing to the various measures initiated by the NRB in the financial sector field of the country and they creating an amiable environment for the entry of new financial institutions where some many financial institutions have been established and competition has been boosted to some extent. As whole, as of mid-July 2013 there were 32 commercial bank ('A' class financial institutions), 89 development banks 'B' class financial institutions and so on licensed by the NRB to undertake certain financial transactions. In addition to these there are other various financial institutions consisting of Employees Provident Fund, Citizen Trust, Postel Saving Bank, Finance Companies and Co-operatives and NGOS licensed to undertake certain banking business full under supervisory jurisdiction of the NRB. Comparatively small and under developed economy base of the country, Nepal has a noticeably diversified financial sector as evidenced by the number and variety of institutions that play a active role in the sector.

TABLE 1: A GLANCE OF NEPAL'S FINANCIAL INSTITUTIONS

	2008	2009	2010	2011	2012	2013
Commercial Banks (A Class)	25	26	27	31	32	32
Development Banks (B class)	58	63	71	88	88	89
Financial companies (C class)	78	77	79	80	70	65
Micro Credit Financial Institutions (D class)	12	15	18	21	24	28
Credit Co-operatives	16	16	15	16	16	16
NRB incensed NGO&	46	45	45	38	36	33
Insurance companies	25	25	25	25	25	25
Employes Provident Fund	1	1	1	1	1	1
Citizens Investment Trust	1	1	1	1	1	1
Postal Savings Bank	117	117	117	117	117	117

Source: Economic survey, 2012/13, Ministry of Finance, Nepal.

After the Development Bank Act 1996 become effective, a number of development banks were established with the aim of helping agriculture industry and commerce through the provision of credit. Before this Act there were only two development banks viz. Agricultural Development Bank and Nepal Industrial Development Corporation, and both of them were under the ownership of the government. Currently a number of development banks are operating under Banks and Financial Institutions Act 2006 with status of 'B' Class.

After the amendment of the Finance companies Act 1992 in 1992, the finance companies were emerged rapidly. Now such companies are operated under Bank and Finance Institution act 2006 as 'C' grade financial institutions on the one hand and on the other co-operatives are operated under Co-operatives Act 1992. Besides, these there are also NRB licensed NGOs to undertake limited banking transactions in accordance with provision of the financial Intermediation Related Institution Act 1999.

The provident fund of army, police teachers, government institutions, and some other private companies is managed under the Employees Provident Fund Act 1962. On the other hand, the private and institutional savings, loans and advances are managed by CIT which is under the Ministry & Finance.

Different areas like capital market and insurance are included in the financial sector. In the capital market, the stock exchange, being the important player of the capital market has a prominent role in the Nepalese Financial Market. To reform capital markets Nepal government converted Securities Exchange Center into Nepal Stock Exchange Limited (NEPSE) in 1993. The NEPSE introduced fully automated screen based trading since August 24, 2007, replacing the preserve system.

When the securities Act 2007 come into effect from Jan. 14, 2007 it has further extended the mandate of the securities Board of Nepal (SEBON) as the operater the securities market. Securities market operation Regulation 2007, Securities Dealers Regulation 2007; Security Board Regulation 2007 etc were introduced by SEBON.

In 1990 the insurance sector was opened to the private sector. Under the insurance Act 1992, there are altogether 25 Insurance companies 17 of these are non life insurance,, seven life insurance and one is both life and non-life insurance. From the vantage point of the ownership, 18 are owned by the private sector three are foreign joint venture, three are foreign branches and one is government owned. The insurance Board operates the insurance sectors.

CHALLENGES

- The financial sector is still docile and there is little approach to financial services for the small business and low income households despite the help of NRB.
- It is more intricate and challenging for the banks and financial institutions to bring changes and reforms after becoming the member of the world trade organization. Nepal's membership to this universal organization represents both opportunities and risks in the process of maintaining overall financial stability so as to speed up the economic growth.
- The new market participants and the emergence of new products has viewed many changes in the past fostered. Moreover, because of the rapid increase in the number of banking and non banking financial institutions with different modes of operations the task of ensuring sufficient monitoring and control by the NRB has been made move challenging.
- As the NEPSE is being run under the government ownership and management, it would be difficult for an autonomous regulatory institution to regulate and observe it. Hence it is needed to review the management and the ownership and enhance it as a modern institution operating as per the international practice.
- To mobilize deposits and allocate credit through informal and community, based banks and microfinance areas where the reach of formal banks is limited close connection between informal and formal financial markets should be developed by inspiring formal financial institutions. To encourage these developments, fiscal policies, regulatory and supervisory structures should be designed.

CONCLUSION

The backbone of an economy is built in many ways by the financial markets. A well operated financial sector takes an efficient transformation of saving and investment, guarneting the resources are well used where they earn the highest return. The major pre-requisites for the financial stability and economic progress are a strong and resilient financial system and the orderly evolution of financial markets.

It is very important to know that success of any financial system, in its resources mobilization and allocation function, depends on its ability to offer the public variety of assets. It is also very much important to formulate appropriate policies to enable financial system.

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THE INVESTIGATION OF TOTAL QUALITY MANAGEMENT PRACTICES WITH SPECIAL REFERENCE TO SD PHARMACY

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ABSTRACT

In today's rivalry packed industrial atmosphere, the growth of any business organization would entirely depend upon customer appreciation and loyalty it can command. These can be ensured only by offering products and services of high quality on a durable basis. Therefore, continuous enhancement of quality on a sustaining basis has become essential for the prosperity of any business organization at present and in the future as well. In the early 1950's, quality management practices developed rapidly in Japanese plants, and become a major theme in Japanese management philosophy, such that, by 1960, quality control and management had become a national preoccupation. Total Quality Management (TQM) is now part of a much wider concept that addresses overall organizational performance and recognizes the importance of processes. As we move into the 21st century, it has developed in many countries into holistic frameworks, aimed at helping organizations achieve excellent performance, particularly in customer and business results. TQM has gained importance not only for manufacturing and service organizations but also for pharmaceutical companies. Ayurveda is an ancient Indian Medical Science, the origin of which can be traced back to more than 5000 years. World Health Organization (WHO) has recognized 'Ayurveda' as an alternative system of medicine. Ayurveda is a science dealing not only with the treatment of some diseases but also helps to lead a healthy way of life. This system of medicine follows a holistic approach which includes the whole body constitution of the patient. Today, ayurveda is gaining global popularity. The World Health Organization recognizes ayurveda as an alternative system of medicine. The 100% natural, after effect free and eco-friendly medicines used in Ayurveda makes it one of the world's safest systems of medicine. SD Pharmacy is one among the popular ayurvedic companies in India which was established in the year 1939, by a leading practitioner of Ayurveda, Shri.P.S.Kesavan Vaidyan to aid his practice. As was the custom of those days, leading Ayurvedic physicians used to manufacture medicine for use in their clinical practice in the same premises under their vigilant eye. But the growing demand for his medicines made Shri.P.S.Kesavan Vaidyan; think in terms of a large scale-manufacturing unit. This was the beginning of the SD Pharmacy group, today a highly diversified group of companies which manufactures ayurvedic medicines, herbal cosmetics and massage equipments. This study mainly deals with the investigation of the total quality management practices adopted by SD Pharmacy, Alleppey and the study is confined to ayurvedic medicines only. The last few weeks helped me to gain knowledge about their different types of ayurvedic medicines and its indication. SD Pharmacy has a very long product line up of over 350 products. Liquids, pastes, powders and pills constitute traditional preparations. Oriental Medicine Private Limited, its sister concern produces modern tablets which share shelf space along with the traditional pills. The various quality control measures taken by the company has also viewed along with this. Still SD Pharmacy considers its traditions sacred. In spite of the advent of most modern quality control methods and materials, they still believe in the traditional sensory Quality Control. They employ sense of smell, taste and naked eye examination of consistency in addition to modern scientific lab QC methods. SD Pharmacy's processing facility is with staff having rich experience, some of them with 20/30 years in the same facility.

KEYWORDS
TQM, S D Pharmacy's.

INTRODUCTION

All the customers who consume the product or service ensure quality. The term quality means 'fitness for purpose'. Total Quality is a description of the culture, attitude and organization of a company that strives to provide customers with products and services that satisfy their needs. The culture requires quality in all aspects of the company's operations, with processes being done right the first time and defects and waste eradicated from operations.

Total Quality Management is a philosophy that seeks to bring about organization-wide quality improvement by involving every individual in the organization. The conventional approach confined quality to the quality personnel and manufacturing departments. Quality was also limited to certain parameters of product specifications which enabled any quality related problem to be attributed to the manufacturing department.

Total Quality Management seeks to eliminate the inconsistencies by making quality control the responsibility of each and every person in the organization. The whole organization is guided towards serving the customers more effectively. Total Quality Management is a management approach that originated in the 1950's and has steadily become more popular since the early 1980's.It is a management philosophy that seeks to integrate all organizational functions (marketing, finance, design, engineering, and production, customer service, etc.) to focus on meeting customer needs and organizational objectives.

IMPORTANCE OF THE STUDY

TQM views an organization as a collection of processes. It maintains that organizations must strive to continuously improve these processes by incorporating the knowledge and experiences of workers. The simple objective of TQM is "Do the right things, right the first time, every time". TQM is infinitely variable and adaptable. Although originally applied to manufacturing operations, and for a number of years only used in that area.

TQM is now becoming recognized as a generic management tool, just as applicable in service and public sector organizations. As we move into the 21st century, TQM has developed in many countries into holistic frameworks, aimed at helping organizations achieve excellent performance, particularly in customer and business results. In Europe, a widely adopted framework is the so-called "Business Excellence" or "Excellence" Model, promoted by the European Foundation for Quality Management (EFQM), and in the UK by the British Quality Foundation (BQF)."

Quality control has become a major criterion for ayurvedic medicines as well.Ayurveda is the 5000 years old Indian system of medicine. The term evolved from two words 'Ayur' meaning life and 'Veda' meaning science. This system of medicine follows a holistic approach, diagnosing not just the disease but the whole body constitution of the patient. Today ayurveda is gaining global popularity. The World Health Organization recognizes ayurveda as an alternative system of medicine. The 100% natural, after effect free and eco-friendly medicines used in Ayurveda makes it one of the world's safest systems of medicine. It also has a wide range of medicines compared to modern medicine.

Rejuvenation and therapeutic procedures are unique to Ayurveda. This comprehensive, multi disciplinary system of medicine offers specialties like pediatrics, genetics, gynecology, physiotherapy and rejuvenation. Ayurvedic therapy being natural and practically after effect free, will replace chemical drugs more and more in coming years. This will create a dramatic growth in popularity of Ayurveda in the coming 10 - 15 years.

The growing demand for ayurvedic medicines was the focal point for the SD Pharmacy to set up in terms of large scale manufacturing unit.Today,it is a highly diversified group of companies which has an international fame for its ayurvedic resort'Keraleeyam' within very short span of 5 years.

REVIEW OF LITERATURE

QUALITY

Quality of a product or services is its ability to satisfy the needs and expectations of the customer. According to *Joseph Juran,* quality is "fitness for use". *Philip B. Crosby defines* quality as "conformance to requirements". Every customer looks for a product is its quality. Therefore, all the organization should continuously improve the quality of the products and services.

TOTAL QUALITY

Total Quality is a description of the culture, attitude and organization of a company that strives to provide customers with products and services that satisfy their needs. The culture requires quality in all aspects of the company's operations, with processes being done right the first time and defects and waste eradicated from operations.

TOTAL QUALITY MANAGEMENT

The expression of Total Quality Management started to appear in the 1950s and has steadily become more popular since the early 1980's. Total Quality Management (TQM) is a method by which management and employees can become involved in the continuous improvement of the production of goods and services. It is a combination of quality and management tools aimed at increasing business and reducing losses due to wasteful practices. According to *Ross*,TQM is "the integration of all the functions and processes within an organization in order to achieve continuous improvement of the quality of goods and sevices.The goal is customer satisfaction".

The key principles of TQM are as follows:

- Management Commitment
  a) Plan (drive, direct)
  b) Do (deploy, support, participate)
  c) Check (review)
  d) Act (recognize, communicate, revise)
- Employee Empowerment
  a) Training
  b) Suggestion scheme
  c) Measurement and recognition
  d) Excellence teams
- Fact Based Decision Making
  a) SPC (statistical process control)
  b) TOPS (Team Oriented Problem Solving)
- Continuous Improvement
  a) Systematic management
  b) Excellence teams
  c) Cross functional process management
  d) Attain, maintain, improve standards
- Customer Focus
  a) Supplier partnership
  b) Service relationship with internal customers
  c) Never compromise quality
  d) Customer driven standards

OBJECTIVES

1. To find out the total quality management practices adopted by S.D Pharmacy.
2. To evaluate whether the TQM practices adopted by S.DPharmacy ensures competitive edge in the market to attract the prospective customers.

METHODOLOGY

POPULATION

The entire aggregation of items from which samples can be drawn is known as a population. For the study, dealers and the employees pertaining to Alleppey district constitute the population.

SAMPLE UNIT

A sample unit can be an individual element or a group of elements selected from the population. Those dealers and the employees who are close with the product constitute the sample unit.

SAMPLE SIZE

The sample size is 55 which is to be collected from both the dealers as well as employees.

DATA COLLECTION

For the study, both primary data and secondary data are to be collected. Primary data are those data which are collected afresh and for the first time whereas, secondary data is the data that already exists which has been collected by some other person or organization for their use and is generally made available to other researchers free or at a concessional rate. Primary data is collected using direct interview with Mr.K.Ramesh, Managing Director of SD Pharmacy; Alleppey and using questionnaire whereas, secondary data are collected using brochures, internet and other published resources.

SAMPLING METHOD

Sampling is the act, process or technique of selecting a representative part of a population for the purpose of determining the characteristics of the whole population. Sampling can be probability sampling and non-probability sampling. A sampling in which every member of the population has a calculable and non-zero probability of being included in the sample is known as probability sampling whereas, non-probability sampling involves the selection of units based on factors other than random chance. In this study, convenience sampling, a non-probability sampling method has been adopted.

DATA ANALYSIS AND INTERPRETATIONS

TOTAL QUALITY MANAGEMENT PRACTICES ADOPTED BY S.D PHARMACY

Total Quality Management (TQM) is a method by which management and employees can become involved in the continuous improvement of the production of goods and services. Some of the total quality management practices used by the company is as follows:

a. The raw materials are washed, cleaned and dried as soon as it is delivered. It is then checked for parasites, fungus, foreign bodies, adulteration and moisture.
b. There is separate area for storing of herbs, minerals, animal origin, volatile oils and perfumes and these are stored in proper containers.
c. Segregation of different raw materials is done by the procurement and storage department.
d. Raw materials are then labeled with the supplier name, quantity and date of receipt.
e. The company ensures personal hygiene, proper waste management and sanitation system.

f. As soon as the top management instructs, the goods are dispatched from the procurement and storage department. Then there is a random sampling of raw materials by the quality control and assurance department .After their checking and approval, the production begins.
g. There is quality checking at each and every stage during the production.
h. Finished goods are then packed and labeled using shrink wrapper, aluminium foil and preservatives to protect from damages.
i. These finished goods are stored in bottles which are sterilized and boiled.
j. In case of the defects in the finished goods, both the production department as well as quality control and assurance department is responsible.
k. Finally it is checked for packing material, labeling and finished goods and the goods are stored in the dispatch department and as per the requirements, and the goods are supplied to the outlets.

As a part of the study, data are collected from both the dealers as well as the employees of the company. This is to know the extent to which the total quality management techniques are followed by them.

DATA ANALYSIS OF EMPLOYEES

VARIOUS WAYS FOR STORING THE RAW MATERIALS

The table shows the different ways for storing the raw materials.

TABLE NO. 1

Ways	Respondents	Percentage
Containers	25	50
Sacks	9	18
Jars	6	12
All the above	10	20
Total	50	100

Source: Survey Data

Interpretation

The above figure shows that 50% of the employees said that the raw materials are stored in containers, 18% said in sacks,12% in jars and 20%said all the above.

MINIMUM SHELF PERIOD OF RAW MATERIALS

The table shows the minimum shelf period of raw materials.

TABLE NO. 2

Shelf Period	Respondents	Percentage
Below 1 week	12	24
1-2 weeks	28	56
2weeks-1month	7	14
1month-3months	3	6
Total	50	100

Source: Survey Data

Interpretation

From the above figure, it is clear that the minimum shelf period of raw materials is 1-2 weeks.

FREQUENCY OF QUALITY CHECKING OF RAW MATERIALS

The table shows the frequency of quality checking of raw materials.

TABLE NO. 3

Frequency	Respondents	Percentage
Daily	17	34
Weekly	3	6
Monthly	5	10
Random Sampling	25	50
Total	50	100

Source: Survey Data

Interpretation

From the above figure ,it is clear that 50% of the respondents said that there is random sampling of raw materials,34% said that quality of raw materials are checked daily,10%said monthly and 6% said weekly.

ENSURING THE QUALITY OF PRODUCTS

The table shows the ways of ensuring the quality of the products.

TABLE NO. 4

Ways	Respondents	Percentage
Quality control lab	26	52
Research and analysis wing	0	0
Periodic sample checking	14	28
All the above	10	20
Total	50	100

Source: Survey Data

Interpretation

52% of the respondents said that the quality of the products is ensured by the quality control lab, 28%said by periodic sample checking.

REMEDIAL MEASURES INCASE OF SHORTAGE OF RAW MATERIALS

The table shows the remedial measures in case of shortage of raw materials.

TABLE NO. 5

Measures	Respondents	Percentage
Stocking in excess	31	62
Outside purchasing	3	6
Inoperative	3	6
All the above	13	26
Total	50	100

Source: Survey Data

Interpretation

From the above figure, it is clear that stocking in excess is the remedial measure taken in case of shortage of raw materials.

MEASURES ADOPTED IN EMERGENCY BREAKDOWNS

The table shows the measures adopted in emergency breakdowns.

TABLE NO. 6

Measures	Respondents	Percentage
Power supply standby	8	16
Emergency rescue	2	4
Production standby	38	76
All the above	2	4
Total	50	100

Source: Survey Data

Interpretation

76% of the employees said that the production process is controlled in case of emergency breakdowns

ADEQUACY OF STORAGE FACILITY FOR SMOOTH PRODUCTION

The table shows the adequacy of storage facility for smooth production.

TABLE NO. 7

Particulars	Respondents	Percentage
Adequate	20	40
Inadequate	4	8
Needs improvement	18	36
More than required	8	16
Total	50	100

Source: Survey Data

Interpretation

The above table depicts that 40%of the employees said that the storage facility is adequate, 36% said it needs improvement,16% said it is more than required and 8% said it is inadequate for smooth production.

MEASURES FOR WASTE DISPOSAL IN THE COMPANY

The table shows the measures for waste disposal in the company.

TABLE NO. 8

Measures	Respondents	Percentage
Recycling	12	24
Reusable products	0	0
Reutilizing method	38	76
All the above	0	0
Total	50	100

Source: Survey Data

Interpretation

From the above figure, it is clear that 76% of the employees said that wastes are reutilized, 24%said it is recycled.

PROGRAMMES FOR THE SKILL DEVELOPMENT OF EMPLOYEES

The table shows the programmes adopted for the skill development of employees.

TABLE NO. 9

Programmes	Respondents	Percentage
In house training	33	66
Training by experts	7	14
Field/factory visit	4	8
None of the above	6	12
Total	50	100

Source: Survey Data

Interpretation

The above table depicts that 66% of the respondents said that in house training is provided for the skill development of employees,14% said there is training by experts and 8% said field or factory visit.

RATING ABOUT PERKS AND EMOLUMENTS OF EMPLOYEES

The table shows the rating about perks and emoluments of employees.

TABLE NO. 10

Rating	Respondents	Percentage
Satisfactory	23	46
Unsatisfactory	10	20
Competitive	10	20
Needs improvement	7	14
Total	50	100

Source: Survey Data

Interpretation

46% of the employees are satisfied with the perks and the emoluments,20% are unsatisfactory as well as said competitive and 14% said it needs improvement.

SHELF PERIOD OF FINISHED GOODS

The table shows the shelf period of finished goods.

TABLE NO. 11

Shelf Period	Respondents	Percentage
1 year	9	18
2 years	17	34
3 years	20	40
4 years	4	8
Total	50	100

Source: Survey Data

Interpretation

From the above table, it is clear that the shelf period for finished goods is 3 years.

WAYS OF PROTECTING THE FINISHED GOODS

The table shows the ways of protecting the finished goods.

TABLE NO. 12

Ways	Respondents	Percentage
Aluminium foil	3	6
Shrink wrapper	6	12
Preservatives	4	8
All the above	37	74
Total	50	100

Source: Survey Data

Interpretation

74% of the employees said that the finished goods are protected using aluminium foil, shrink wrapper and preservatives.

RESPONSIBILITY OF THE DEFECTS

The table shows the person responsible for the defects.

TABLE NO. 13

Responsibility	Respondents	Percentage
Production Department	8	16
Quality Control Department	15	30
Packing and labeling Department	11	22
Both QC and production Department	16	32
Total	50	100

Source: Survey Data

Interpretation

The above table shows that 32% of the employees said that both the quality control and production department is responsible for the defects.

ESSENTIAL AREA FOR IMPROVEMENT

The table shows the essential areas for improvement.

TABLE NO. 14

Areas	Respondents	Percentage
Production	4	8
Quality Control	5	10
Distribution and Marketing	34	68
All the above	7	14
Total	50	100

Source: Survey Data

Interpretation

68% of the respondents said that there should be improvement in the area of marketing and distribution.

WAYS TO IMPROVE THE QUALITY

The table shows the ways to improve the quality.

TABLE NO. 15

Ways	Respondents	Percentage
Encourage Communication	10	20
Quality Circles	18	36
Motivation	12	24
Fringe benefits	10	20
Total	50	100

Source: Survey Data

Interpretation

36% of the employees said that there should be quality circles to improve the quality,24%said that motivation is essential and 20% said both communication and fringe benefits.

DATA ANALYSIS OF DEALERS

FEATURES OF THE PRODUCT AND THE PRODUCER

The table shows the features of the product and the producer.

TABLE NO. 16

Features	Respondents	Percentage
Quality Products	3	60
Efficient Delivery Channel	0	0
Commission	1	20
All the above	1	20
Total	5	100

Source: Survey Data

Interpretation

The above table shows that quality is the main feature which the dealer looks in to.

THE BRAND IMAGE OF THE COMPANY

The table shows the brand image of the company.

TABLE NO. 17

Brand Image	Respondents	Percentage
Excellent	2	40
Good	3	60
Average	0	0
Poor	0	0
Total	5	100

Source: Survey Data

Interpretation

60% of the dealers said that the brand image of the company is good and 40% said excellent.

PRESENT SET UP REGARDING INCENTIVES FOR THE DEALERS

The table shows the present set up regarding incentives for the dealers.

TABLE NO. 18

Particulars	Respondents	Percentage
Attractive	1	20
Adequate	2	40
Moderate	1	20
Poor	1	20
Total	5	100

Source: Survey Data

Interpretation

40% of the dealers said that the incentives are adequate and 20% said attractive, moderate and poor respectively.

FREQUENCY OF THE INCENTIVES

The table shows the frequency of the incentives for the dealers.

TABLE NO. 19

Frequency	Respondents	Percentage
Daily	0	0
Weekly	1	20
Monthly	3	60
Yearly	1	20
Total	5	100

Source: Survey Data

Interpretation

The above table shows that 60%of the dealers said that they receive the incentive on monthly basis and 20% said that they receive weekly and on a yearly basis respectively.

MEASURES ADOPTED IN THE CASE OF DAMAGED GOODS

The table shows the measures adopted in the case of damaged goods.

TABLE NO. 20

Measures	Respondents	Percentage
Buy back	3	60
Dispose	1	20
Discounts	1	20
Offers	0	0
Total	5	100

Source: Survey Data

Interpretation

The above table depicts that the company will buy back the goods in case of damage.

FINDINGS

From the study, the following findings were arrived. All the findings are given in a nut shell, based on the questionnaire and their detailed version is given in the data analysis part along with the graph. Among the respondents, 50% of the employees said that the raw materials are usually stored in containers. 56% of the employees said that the raw materials have a minimum shelf period of 1-2 weeks 24% of the respondents said below 1 week.50% of the respondents said that random sampling is done to check the quality of raw materials. From the 52% respondents,52%said that the quality of the product is ensured through the quality control lab,28% responded through periodic sample checking and the rest said both the quality control lab and periodic sample checking is done to ensure the quality of products. 62% of the employees said that raw material are stocked in excess incase of shortage. 76% responded that the production is controlled in the case of emergency break downs. 40% of the respondents said that the storage facility is adequate for the smooth production and 36% responded that it needs improvement. Reutilizing method is mainly adopted for the waste disposal in the company said 76% of the employees. 66% of the respondents said that in house training is provided for the skill development of the employees. Among the employees, 46% are satisfied with the perks and emoluments. 40% of the respondents said that the finished products have a shelf period of 3 years. 74% of the employees said that the finished goods are protected by aluminium foil, shrink wrapper and preservatives. 32% of the respondents said that both the production as well as the quality control department is responsible for the defects. 68% of the respondents said that distribution and marketing is the essential area for improvement. 36% said that quality circles should be encouraged in order to improve the quality. Among the dealers, 60% said that quality is the main feature of the product and the producer. 60% said that the brand image of the company is good and 40% said it is excellent. 40% of the dealers said that the incentives are adequate. 60% said that incentives are received on monthly basis and 20%said weekly and yearly.In the case of damaged goods, 60% of the dealers said that the company will buy back the goods.

SUGGESTIONS

The methodology should change when there is a problem in the working condition. Problem solving allows workers to learn the process and how to use the tools effectively which in turn will improve the quality of the organization as a whole. Implement the PDCA (Plan Do Check Act) Cycle which promotes continuous improvement. Encourage communication among the employees and motivate them to improve the quality. Control charts can be used so that the products which are not within the set limits can be rejected. Modern techniques and production processes should be adopted for manufacturing of highest quality goods. Encourage field visit or factory visit among the employees which will help them to learn new things. Formation of quality circles within the organization.

CONCLUSION

The employee and dealer survey indicated that the key concern for the company is to encourage communication and motivation to improve the quality of employees in the organization. They should also improve their marketing and distribution channel in order to boost the customers to have a better brand image and formation of quality circles is also essential. The company has a competitive edge in the market to attract the customers being a company hailed for ayurvedic medicines.

In order to capture the market successfully, the company should also have a look on the competitors services and offer the best which is attractive than them, so that the customers will communicate to their friends and relatives about the company's products and its services, a best method called mouth- to-mouth marketing which creates publicity. The company should also provide some attractive incentives for the dealers and at the same time they should also focus on the employees' .The Company should always ensure that they offer the best quality products to their customers and this study enables the customer to know about the various quality measures taken by the company.

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A BRIEF OVERVIEW OF PHARMACEUTICAL MARKETING IN INDIA

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ABSTRACT

Economy of any country, whether developed or developing, comprises of contribution from various sectors such as agriculture, engineering, service sectors, telecommunication, entertainment and pharmaceutical sector as well. Indian economy is no exception, & it has an enormous contribution from all these sectors and pharmaceutical industry contributes to it to a larger extent. This paper tries to throw light on evolution of pharma industry in India and its pre and post dependence scenario. Paper also mentions about the important growth drivers of the pharmaceutical industry & contribution of national and multinational companies in the Indian pharmaceutical market. Though the subject is quiet vast, sincere efforts are made to understand the pharmaceutical marketing in India. As pharmaceutical marketing is directly related to the health of the people of the nation, to understand pharmaceutical marketing becomes more important. Personal selling is a major component of pharma selling. Hence, role of pharma sales representatives is of utmost importance in pharmaceutical marketing in India. Advancement in science and technology has brought rapid changes in the methodology of treatment of patients and moreover latest pharmaceutical formulations are introduced in the market day in and day out ,as a result of which latest pharmaceutical products are available to the physicians as an option for treatment of patients. This paper tries to brief about the latest position of pharmaceutical marketing in India.

KEYWORDS

Drug, Medicine, allopathic, antibiotic, prescription.

INTRODUCTION: THE BEGINNING OF PHARMA MARKETING IN INDIA

In the year 2000 B.C. a famous Indian scripture was written in Sanskrit, named 'Rig-Veda'. 'Rig Veda' is supposed to be the combination of knowledge of art of living &knowledge of science of life. Three important 'doshas' of Ayurveda i.e. vata, pitta, &kapha (wind, bile & phlegm) are mentioned in 'Rig Veda' which are mainly responsible for causing various health problems to human beings.& here one can find the traces of Indian Medical System.

PRE INDEPENDENCE SCENARIO

There is no concrete information about entry of allopathic medicines in India but some of the researchers of this subject are of the opinion that it could be in the beginning of 19th century. When Britishers ruled our country, during those days they use to import medicines for their personal use. This is supposed to be the main reason of entry of pharmaceutical preparations in India. The products which were imported by the Britishers slowly became popular among the urban population of India. Britishers use to import these drugs during those days mainly from UK & Germany & these two countries has remained the major source of medicines for Britishers for years together. According to Drug & Cosmetic Act definition "Allopathic drug includes all the substances excluding food which affect the structure or any function of the human body (including contraceptives) & all substances ,employed for destruction of insects & notified on this behalf by Central Government which cause disease in human beings or animals are also deemed to be allopathic drugs in this act". (Dr. Kumar Datta Ganjre, 2011).

It took long time for an Indians to establish a pharma company of Indian origin. Prof.P.C.Ray was a reputed industrialist who was founder of 'Bengal Chemicals & Pharmaceuticals '. He established this company in Kolkata in 1901. In the same era some other pharmaceutical research institutes were also established. Central Research Institute was established at Kasuali in 1905 & in 1907, Pasteur Institute was established in Connaore. Halftkin Institute & king Institute was also established in this period.

POST –INDEPENDENCE SCENARIO

Indian pharmaceutical industry captured the momentum of growth precisely after independence. In 1954, Government of India took initiative and started first public sector pharma company 'Hindustan Antibiotics Ltd.' It mainly produced antibiotics**. "**Antibiotics are the drugs which prevent the growth of bacteria or kills them.' This company used the raw material of Indian origin for producing antibiotic formulations. After the success of Hidustan Antibiotic Ltd', the then Govt. of India, in 1961, founded one more public limited called 'Indian Drugs & Pharmaceuticals Ltd'. After the establishment of these two companies, Government of India, on priority basis decided to concentrate on gaining speedy economic progress by focusing especially on rapid industrialization & in last four decades the nation has observed significant growth in Indian Pharmaceutical Industry. Today pharmaceutical industry of India comprises of pharma companies which are private limited, public limited and multinational firms. The business of pharma companies is stupendous in India as the population of India has crossed 120 crores & it is still growing by leaps & bounds. Subsequently, the health related problems are also on the rise. Moreover, the globalization and liberalization has intensified the competition in every sector and hence one has to strive hard to sustain in such cut throat competition. This struggle for survival has given birth to many health related problems such as blood pressure, diabetes, cardiac problems, back pain & many more. Apart from this, majority of the people of Indian population are still living in such slums where extremely poor sanitary conditions prevail. Poor sanitation & unhygienic conditions are responsible for diseases such as malaria, typhoid, tuberculosis, chicken guinea, swine flu and many such epidemic diseases. Hence, India is one of the major market of pharmaceutical preparations. The Indian pharmaceutical industry is a highly knowledge based industry which is growing steadily and plays a major role in the Indian economy. As a highly organized sector, the numbers of pharmaceutical companies are increasing their operations in India. In 1947, the pharma industry was just 10 Cr, and now the industry is expected to touch US$ 35.9 billion by 2016. In order to grab the maximum share of this market, the pharmaceutical companies are competing extensively amongst themselves. The Indian pharmaceutical market (IPM) is currently valued at Rs 72,069 Crores as against Rs 65,654 Crores in 2012. Looking at the size and scope of the market, it is but obvious for any growing pharma company to focus on such potential market. It is well known fact that the pharma business is mainly dependent on the pharma sales representatives. More than the strategies, its practical implementation in the field depends mainly on the pharma sales representatives who are actually working on the soil under the sun. They are supposed to be the back bone of the Indian pharma industry.

OBJECTIVES OF THE PAPER

Indian pharma marketing has a voluminous share in the economy of India and hence concentrating on this aspect; following main objectives are considered at the time of preparation of this paper.

1. To understand the beginning of pharma marketing in India & its pre & post independence scenario.
2. To understand the process of evolution of pharma marketing in India

3. To throw light on major growth drivers of pharma marketing in India
4. To find out the contribution of national and multinational pharma companies in Indian pharma market.
5. To understand the role of pharma sales representatives in pharma marketing.

RESEARCH METHODOLOGY

This is a descriptive type of research paper and hence primarily required different type of data regarding pharmaceutical marketing in India. Data for this paper is collected from various books and websites & research work related to the subject of paper. References from books related to marketing of pharmaceuticals in India are utilized for the purpose of preparation of this paper.

MEANING AND DEFINITION OF PHARMACEUTICAL MARKETING

Pharmaceutical Marketing in India is growing rapidly. "Pharmaceutical marketing is marketing of pharmaceutical formulations or fine chemicals into market'' (k. Ganjre- 2011). Pharma marketing is indirect marketing because pharma sales representatives are approaching to the doctors who prescribe the medicines for their patients and hence doctors are the decision makers and patients are the buyers. Medicines are the preparations which contain one or more active ingredients having medicinal action along with non active ingredients which are required to be used while preparing the pharmaceutical formulations.

However when a customers who buys the pharmaceutical preparations which are sold on the counter without prescription of doctor such as anti-cold preparations then it comes under direct marketing. Mainly in pharmaceutical marketing, doctors or physicians are the intermediate customers & they may be general practitioners or may belong to any specialty. Depending upon the problem of the patient doctors take decision which medicine should be prescribed and patient who is the ultimate buyer of the medicine takes only those medicines which are prescribed to him.

STAGES OF EVOLUTION OF PHARMACEUTICAL MARKET IN INDIA

After independence, pharma industry was one of the major industrial sectors which progressed with considerable pace. Pharmaceutical industry since its beginning is composed of local, national & multinational pharma companies as well as some state and central government owned public enterprises.

FIG. 1: STAGES OF EVOLUTION OF INDIAN PHARMA MARKET

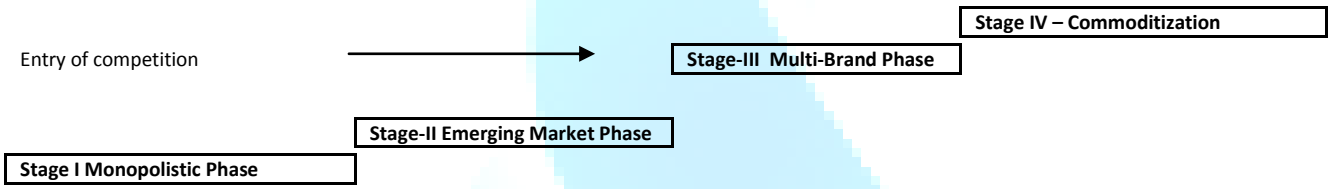


Figure 1 shows the four different stages of Indian pharmaceutical market. First stage in the process of evolution is the ***monopolistic*** phase which prevailed in the early years of 1970's. That was the era when companies enjoyed the monopoly in their respective segments. Later on in late 1970s Indian pharma market experienced the emerging market phase where companies realized the emergence of newer markets for their operations.

Stage III was Multi Brand phase where pharmaceutical companies has concentrated on introducing newer brands and focused on marketing of multiple brands. Fourth stage in the evolution of pharma market is commoditization i. e. majority of the companies have marketed almost similar type of products having very marginal difference and were differentiated on the basis of prices and not on the basis of brands.

MAJOR GROWTH DRIVERS OF INDIAN PHARMA MARKET

Following are the major growth drivers for the Indian pharma market which can lead to substantial growth of Indian pharma market.

1. **Substantial Population Growth**- With the growth rate of 1.5% every year the population of India shall reach to more than 140 crore and hence there is lot of scope for pharma companies.

2. **Spending capability of people**- Avaragely GDP (Gross Domestic Product) growth is 8% and hence economist predict that such type of growth rate can move approximately 75 million people to upper income group and such people can certainly afford medicines whenever needed . This factor can also certainly be an important growth driver for Indian pharma market. Approximately 650 million people will have insurance coverage by the year 2020 & private insurance will increase by 50%. Apart from this it is speculated that under different government public health schemes almost 380 million people shall be benefited and this will certainly add to growth of Indian pharma industry.

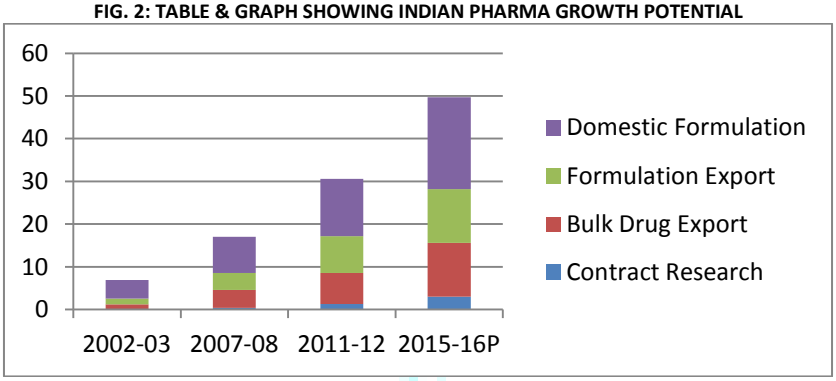
3. **Availability of Drugs-** It is estimated that more than 200 Billion dolllars shall be poured in developing medical infrastructure & thus 160,000 beds shall be added to different departments of hospital. Rise in availability of medical facility consumption of medicines shall be certainly on the higher side. Medicines shall be easily available to the needy patients.

4. **Preference to the newer or modern medicines**- Aggrasive marketing of the medicines by the leading national and pharma companies shall lead to the better acceptance of the modeern or new medicines by the medical practitioners. Vaccines can grow at the rate of 20% in the coming decade. Biologics will grow by 3 Billion USD. The chances of incresing propensity of customers towards OTC (Over the tabele &counter products which do not need prescription of physician.) is quiet high which can boost up sales of OTC products by 14% and thus this can add to the projected future growth of the pharma market.

CURRENT STATUS OF INDIAN PHARMACEUTICAL MARKET

Indian pharmaceutical market is governed by approximately more than 4 lakh doctors working in 15 lakh hospitals and almost 3.5 lakh chemists. Local, National, Multinational put together, more than 9000 thousand pharma companies are operating in Indian market through more than 1 lakh pharma sales representatives. The report of the year 2009 of OPPI (Organization of Pharmaceutical Producers in India) clearly mentions that that there are 2.9 lakh employees are working in ***organized*** sector and 1.7 lakh people are working in small scale unit. The report also states that number of indirect employees working in distribution and trade of pharmaceutical market is 16.5 lakhs. 7.5 lakh people are working in ancillary industries. Thus all put together approximately 28.6 lakh people are working in pharmaceutical industry.(***Ref- Ganjre 2011).***

FIG. 2: TABLE & GRAPH SHOWING INDIAN PHARMA GROWTH POTENTIAL



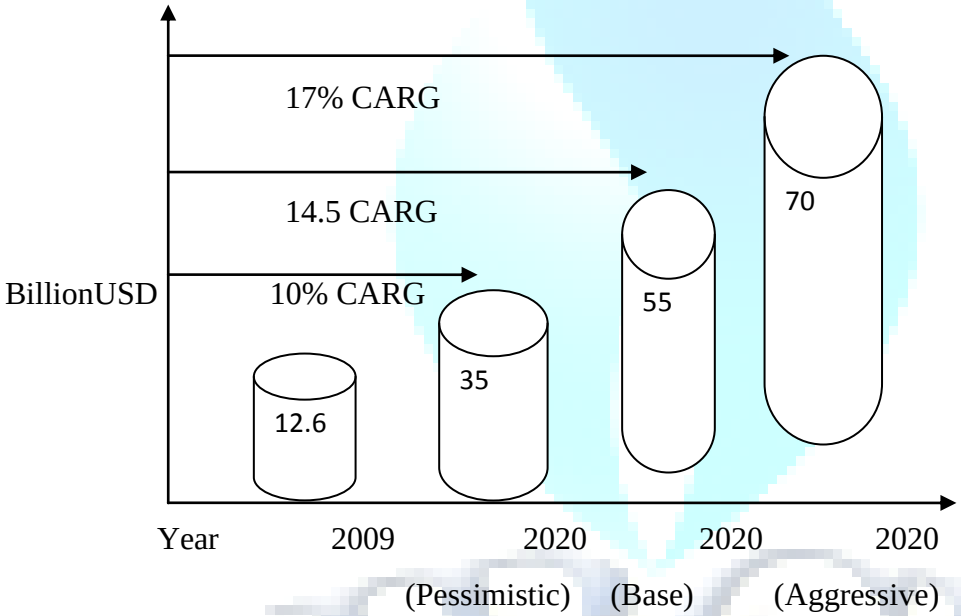
Source-Dr.KumarDatta Ganjre, 2011, YES Bank

Figures on x-axis are in US Billion dollars. Its quiet evident that the Indian pharmaceutical industry is growing at very high pace and the trend of positive growth is constantly observed since the era of post-independence. Hence, pharma industry has been given priority by the Indian government and permitted foreign investment in it. Government is quiet liberal about foreign investment in pharma companies and hence permits foreign equity up to 51%. Therefore, it is observed that companies are having nearly 40% foreign equity. In days to come, its quiet possible that approval to the high tech machinery agreements for drugs &pharmaceuticals can be automatically provided to boost and promote use of more advanced and latest technologies. "Drug is a chemical substance having capacity to alter function of cell, tissue, organ, system or human body" ***(Dr. Kumardatta Ganjre 2011)***

The table and graph shown in fig 3, clearly shows that there is consistent growth in bulk drug export, formulation export and domestic formulations as well. Even, trend of contract research is also increasing.

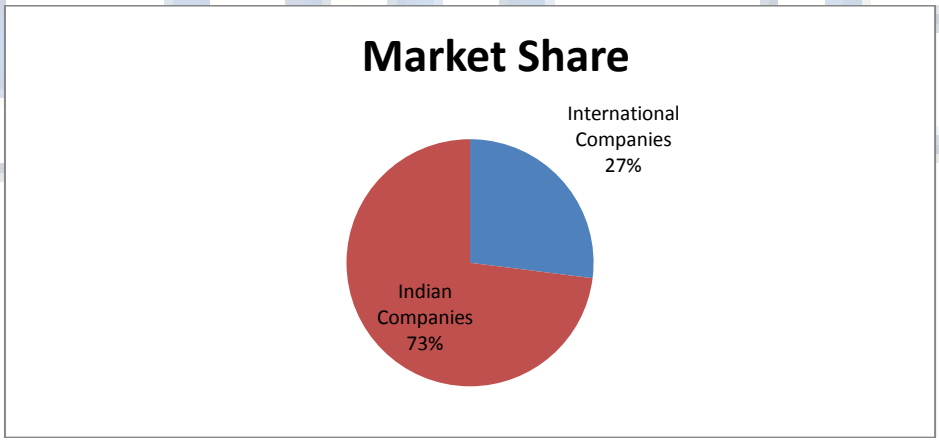
According to one report, ' Indian Pharma 2015, 'Unlocking the potential of Indian Pharma Market' it can be stated that in coming years , the Indian pharma Market would be in the range of 20 Billion USD – 24 Billion USD & the speed of growth would be 12-14%. by the end of year 2015. It is also expected that by the year 2020, Indian pharma market will reach 60 to 70 Billion USD.

FIG. 3: GRAPH SHOWING PROBABLE GROWTH OF INDIAN PHARMA MARKET IN PESSIMISTIC, BASE I. E NORMAL AND AGGRESSIVE CONDITION COMPOSITION OF INDIAN PHARMA MARKET



COMPOSITION OF INDIAN PHARMA MARKET

Indian pharma market is dominated by Indian pharma companies which constitutes 73% market share where as International companies contributes 27%.



MAJOR PLAYERS IN INDIAN PHARMA MARKET

Amongst the international companies, Abbot Laborateries has got 6.5% market share which is the leading one and Smeeth kline Beecham aquires 2nd place with 4.8% market share.

TABLE 1: TABLE SHOWING MAJOR INDIAN PHARMA COMPANIES OF INDIAN PHARMA MARKET

Key Domestic Players	Revenue INR million
Sun Pharma	116,880 (2013)
Lupin Laboratories	96,691 (2013)
Cipla Ltd	85,240 (2013)
Ranbaxy Laboratories	65,607 (2013)
Glenmark Pharmaceuticals	50,188 (2013)
Zydus Cadila	37,286 (2013)

ROLE OF PHARMA SALES REPRESENTATIVES IN PHARMACEUTICAL MARKETING

More than one lakh pharma sales representatives are working today in Indian pharma market for regional, national and multinational pharmaceutical companies. As personal selling is the only effective & time tested method adopted for selling pharma products, the role of pharma sales representative becomes most important in marketing of pharma products. He is an important communication link between company and doctors and wholesalers and retailers. Precisely a pharma sales representative has to perform his role in following manner and his main role is to generate prescription for his company's product. Prescription is defined as,'' an order written by a physician, dentist, veterinarian, or any other licensed practitioner directing the pharmacist to compound and dispense medication for the patient & usually accompanied by direction for administration or use." (Ch. S.V.R Subba Rao 1990)

a) **Detailing**- Detailing is the first and foremost important task that a pharma sales representative has to perform. It means giving complete & concrete information about the formulations of the company in effective way so that physician can recommend the company's products to his patients. This is called as generation of prescription.

b) **Sampling the products**- Pharma sales representative samples the products of his company to the doctors according to his profile and prescribing habits. Doctor uses these samples for treating the patients and thus pharma sales representatives gain faith of the doctors for his products so that doctor recommends his products for his patients.

c) **Monitoring**- Monitoring the prescriptions of doctors of own company's products as well as monitoring prescriptions of competitors brands is an important task of a pharma sales representative. This helps him to tackle the competition in the market as well as to retain and increase the prescription share of the company's products in the market.

d) **Retailing**- To visit the retailers i.e. .chemists' shops and to provide them information about the company's products that are promoted to the doctors is one of the important activity that a pharma sales representative has to perform. He also informs the retailers about the various promotional offers that are given by the company from time to time. To make the company's brands available at the retail counter is the important responsibility that a pharma sales representative has to fulfill. He acts as an important mediator between company, wholesaler, retailer and doctors.

Major responsibility of a pharma sales representative is to complete the product wise and rupee wise sales target allotted to him from time to time. Apart from this, he has to provide the party wise stock and sales statements and updated product wise doctors' list to the company and feedback of the doctors and retailers about the company's products.

CONCLUSION

Genesis of the Indian pharma company lies in the ancient literature such as Rig-Veda and people during those days people vested mainly on medicines of herbal origin and allopathic medicine made its entry when Britishers came to rule India. Indian pharma industry slowly surged ahead after independence and latter on then flourished with remarkable momentum. Advancement in technology and the growing market conditions has reinforced the growth of Indian pharma market. Pharma sales representatives are the major pillars of this market and success of any pharma company depends on intensive leg work and strategy implementation in toto by the pharma sales representative of that company. They are the main communicator and the important link between company, doctors, pharma retailers and wholesalers. Indian pharma market is mainly dominated by Indian pharma companies and they have share of 77% and multinational companies are having 23% market share. It's important to note that Indian pharma market is constantly surging ahead and plays prominent role in economical growth of India.

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THE EFFECT OF CUSTOMER SERVICE RECOVERY STRATEGIES ON CUSTOMER SATISFACTION AND LOYALTY IN ETHIOPIAN INSURANCE CORPORATION (EICO)

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ABSTRACT

The major objective of this study is to investigate the effect of customer service recovery strategy on customer satisfaction and loyalty in the case of Ethiopian Insurance Corporation. The questionnaire was distributed to 350 customers at different branches of EIC operating in Addis Ababa 230 (65.7%) questionnaires were collected. However, only 210 (60%) questionnaires were usable. The interactional justice service recovery strategy contributed to the level of satisfaction while Procedural justice was the least contributor of customer satisfaction. In this study, samples were taken from Addis Ababa area and excluded the EICO branch offices in different regions due to time and other resource constraint. The study Provides an insight on the effect of service recovery practices of EIC's and also assist the management of the corporation to revisit the service recovery strategy as well as critically evaluate implementation problems to minimize disappointments of customers and in order to convert them to be life time loyal to the EICO. The study identified a number of industry specific service recovery items that need to be given undivided attention by the EICO to maximize its service recovery capability.

KEYWORDS
insurance sector, Distributive Justice, Interactional Justice, Procedural Justice, service recovery strategy, customer satisfaction, loyalty.

INTRODUCTION

The trend in the international economy is highly variable and continuously becoming sophisticated. The order of the day in the economy is tilting towards the service sector time after time. The 2011 world development indicators show that the service sector account for almost 71 % of global GDP in 2010 and is expanding at quicker rate than the agriculture and manufacturing sector. Moreover, trade in service is growing at apace faster than trade in goods since 1980's. Its increasing Vitality is becoming visible even for developing countries. For instance it was in the end of 2009 that for the first time service sector took the leading position from agriculture in the overall GDP contribution to the Ethiopian economy.

The Ethiopian insurance corporation was established by proclamation NO 26/1975 which brought all 13 private insurance companies in the country under the ownership and control of the Derg Government.

The Ethiopian insurance corporation served solely the Ethiopian economy for nearly two decades up until the new economic orientation of the transitional government opened up new vistas as giving the chance to the formation of the present 17 private insurance companies. The Ethiopian insurance industry has experienced many ups and downs through a bit over century old history of public service for public good.

The chance for the industry to exhibit an immense growth is to make a periodic survey as to how its service recovery strategy is being exercised as compared with other rival companies operating in the insurance industry. The company should *say good-bye to the stereotyped* models of thinking and work hard and should be customer-focused.

There is widespread customer dissatisfaction in the insurance industry, stemming from insurers' failure to recover service failures. Therefore, further research to improve the industry's understanding of service recovery strategy is required.

SERVICE FAILURE

Related literature has contributed numerous definitions and has scrutinized the dimensions of a service failure. Tax et al. (1998) stated that a service failure occurs when the service delivery falls short of the customers' expectations; which in turn, necessitates the service provider's response with recovery efforts. Smith et al. (1999) recognized that in the service industry, especially the banking industry, there is a high degree of human contact; thus, service failures are an inevitable element to service. Although service failures are viewed as a defect or problem area within the organization, Tax et al. (1998) believed that the true test of an organization's commitment to service quality is the way the organization responds to the service failure. To enhance that concept, Smith et al. (1999) revealed that negative performances have greater influence on satisfaction and purchase intentions compared to positive performances. When a service organization experiences a service failure, the organization is faced with a unique window of opportunity to rebuild trust and commitment and satisfy the customer. Not surprisingly, many companies consider the development of a complaint management system to be a vital component of their continuous quality improvement efforts (Johnston, 1994). Put simply, service organizations realize that an effective system is a vital means to increasing customer satisfaction and establishing a long term relationship that leads to customer loyalty and positive behavioral intentions (Tax et al., 1998). Lovelock et al., (2001) added to the above when they suggested that customer satisfaction evaluations are linked not only to fault-free service, but also to what transpires when something does go wrong. Dissatisfactory experiences have been labeled as negative incidents (Duffy et al., 2006) or unsuccessful processes that trigger failed encounters (Smith et al., 1999); which in turn, cause the customer to realize that the service has not met their expectations (Zeithamal and Bitner, 2003; Tax & Brown, 1998).

This emerging ideal is a significant advancement from the more traditional approach to handling a service failure. At one time, a service failure was more of an embarrassment to a service organization opposed to an opportunity. Prior to this paradigm, shift a service failure was something that a service organization would quickly brush under the carpet; never to be discussed. However today, service failures are regularly viewed as learning opportunities for service organizations; creating opportunities for service organizations to achieve the competitive edge and understand how to better satisfy the customer (Zeithamal and Bitner, 2003).

SERVICE RECOVERY DEFINED

In 2000, Gronroos suggested that a service recovery was an organization's response to poor quality service. Lovelock (2001) enhanced that definition by stating that a service organization must take some form of action and the action must be effectively carried out to reduce the damage in the relationship and to transfer the customer from dissatisfied to a satisfied state. In 2000, Gronroos recognized that a successful recovery was an action that returned a customer to a satisfied state with the service provider and the quality of the action could either destroy or enhance the customer's loyalty and future behavioral intention

JUSTICE THEORIES IN SERVICE RECOVERY

Procedural Justice focuses on the "perceived fairness of the policies, procedures, and criteria used by decision makers in arriving at the outcome of a dispute or negotiation" (Blodgett et al., 1997, p. 189). Tax et al. (1998) described five elements of procedural justice including process control, decision control, accessibility, timing/speed, and flexibility. Yunus (2009) concluded that procedures must be consistent, unbiased and impartial, representative of all parties concerned and based on correct information and ethical standard to be judged fair. It has also been found that procedural justice is important in service recovery as consumers who might be satisfied with the type of recovery strategy offered but still could be unhappy if the process endured to seek redress were

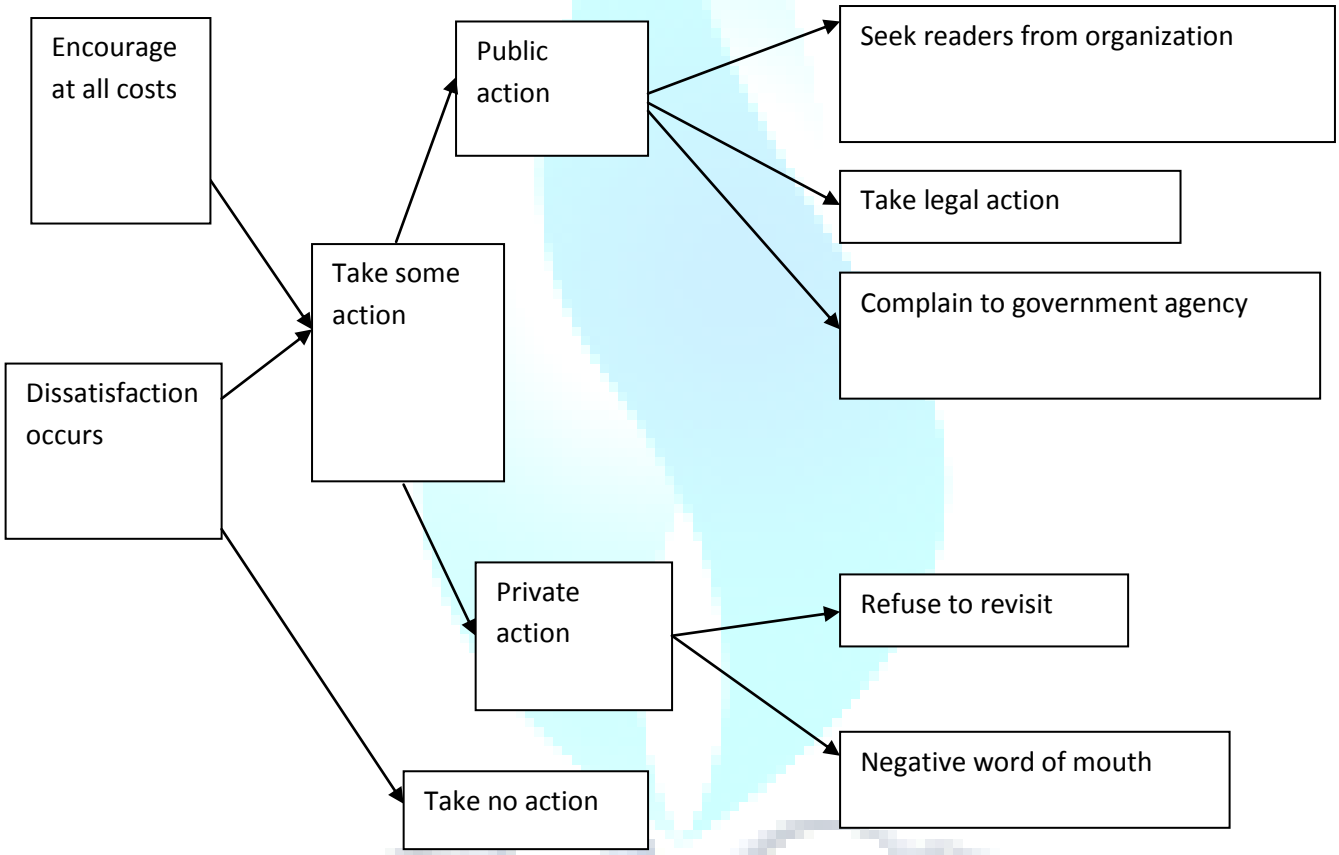
unsatisfactory (Tax et al., 1998). However, Blodgett et al., (1997) found that in a retailing setting, procedural justice (timeliness) did not have a significant effect on customers' repatronage intentions nor their negative word-of-mouth intentions.

Interactional Justice Focuses on the "fairness of the interpersonal treatment people receive during the enactment of procedures" (Tax et al., 1998, p. 62). They further identified five elements of interactional justice: explanation/ causal account, honesty, politeness, effort and empathy. In a service recovery situation, interactional justice would refer to the manner in which the recovery process is operationalized and recovery outcomes presented. This distinction is important as Blodgett et al., (1997) found that people might view the procedure and outcome to be fair and yet felt being unfairly treated as a result of interactional factors. Other research has shown that the manners in which managers and employees communicate with customers (Goodwin and Ross, 1992) and efforts taken to resolve conflicts (Mohr and Bitner, 1995) affected customer satisfaction. For instance, when employees apologized for their mistakes, customers often ended up feeling more satisfied. Heskett et al. (1997) also confirmed that display of empathy, being polite and willingness to listen to customers were critical elements in service encounters. Blodgett et al. (1997) also discovered that interactional justice had the strongest effect on subjects' repatronage and negative word of- mouth intentions in their experimental study.

Distributive Justice is concerned primarily with the specific outcome of the recovery effort, i.e. what did the service provider do to pacify the offended customer and whether the consequent outcomes more than offset the costs incurred by the customer (Heskett et al. 1997). Some often-quoted distributive outcomes include compensation in the form of discounts, coupons, refund, free- gift, replacement, apologies and so on (Blodgett et al., 1997; Hoffman et al., 2000; Tax et al., 1998). The assessment of whether the compensation is fair may be also affected by the customer's prior experience with the firm, knowledge about how other customers were treated in similar situations and perception of the magnitude of his or her own loss (Tax et al., 1998). Blodgett et al. (1997) found that in a retail setting, distributive justice had a significant effect on customers' repatronage and negative word-of-mouth intentions.

SERVICE FAILURE RESPONSE CHOICES

FIG. 1



Source: (Lovelock, 2001)

Although many definitions have been recognized in related literature, one of the most widely accepted definitions of service recovery is by Casado et al., (2010) when they defined service recovery as: *"a thought-out process for returning aggravated customers to a state of satisfaction with the firm after a service or product has failed to live up to the customer's expectations" (p. 39).* When customers encounter a service failure they may, for example, switch to another supplier, complain to the relevant provider or spread negative word-of mouth to other consumers. However, such future intentions may be eliminated or, perhaps more realistically, minimized if the firm develops and implements an appropriate recovery strategy (Johnston, 1994). Service recovery strategies are actions taken by service providers as a direct response to defects, inconsistencies or failures in the service production. Such strategies generally consist of three distinct functions, i.e. apologies, assistance and compensation. These actions can either be practiced separately or in combination with each other depending on the failure at hand and particular nature of the service being provided (Lovelock, 2001).

SERVICE RECOVERY AND SATISFACTION

Service failure is unavoidable due to human, non-human errors (Loh and Kau, 2006), and its unique characteristics (Zeithamal and Bitner, 2003; Yunus, 2009). Customers' complaint records show that service failure is frequently encountered in Commercial Bank of Ethiopia (CBE) and the bank is not being able to provide error-free service. Consequently, these failures lead the insurance's customers to dissatisfaction and switch their patronage to competitors (Source: Customers' Compliant Records, 2003).

While several theories exist regarding the formation of satisfaction perceptions, the equity theory perspective seems particularly relevant in a service recovery context; given that Maxham (1999), 11–24 consumers generally perceive some degree of inequity in response to a service failure. Consistent with the equity theory perspective, several researchers have reported a positive relationship between fairness and satisfaction (Smith et al., 1998). That is, consumer perceptions of satisfaction will increase as firms recover from their failure in a fair manner. As such, consumer perceptions of satisfaction following a service failure may be somewhat shaped by their perceptions of fairness during the recovery process. Researchers have also linked service recovery to consumer satisfaction (Goodwin and Ross, 1992; Smith et al., 1998; Tax et al., 1998).

CUSTOMER LOYALTY

Customer loyalty underlies a commitment to a particular vendor and is often reflected as the continued patronage of the same provider. Customer loyalty is important as the long-term survival of the firm lies in its ability to retain and attract profitable customers. Loyal customers generally possess lower marketing requirements and are deemed to be more profitable than new customers (Kau and Loh, 2006). Smith et al., (1998) also reported that a service company could boost profits by 100 percent just by increasing customer retention rate by 5 percent. Retention is believed to be a function of existing customers' level of satisfaction. Other studies have also shown that an important variable that contributes to customer and employee commitment is satisfaction (Kelley and Davis, 1994; Kelley et al., 1993). When a firm develops a good system of resolving customer complaints, it leads to greater customer loyalty (Tax and Brown, 2000). On the other hand, Tax et al. (1998) discovered that as dissatisfaction with complaint handling increases, commitment would decrease. Similarly, Cronin and Taylor (1994) also affirmed that satisfaction with service recovery had a strong impact on customer loyalty.

STATEMENT OF THE PROBLEM

Customer satisfaction is crucial to the survival of any business organization. Commercial Bank of Ethiopia is striving for delivering high quality service aiming for customer satisfaction that leads to customer loyalty (Annual Report: 2009/2010). However, service failure is unavoidable due to human, non-human errors (Loh and Kau, 2006), and its unique characteristics (Zeithamal and Bitner, 2003; Yunus, 2009). Customers' complaint records show that service failure is frequently encountered in Ethiopian Insurance Corporation (EIC) and the insurance company is not being able to provide error-free service. Consequently, these failures lead the corporation's customers to dissatisfaction and switch their patronage to competitors (Source: Customers' Compliant Records, 2003).

Due to the difficulty to avoid service failures, effective service recovery strategies are vital for the corporation. Effective service recovery has a positive impact on customer satisfaction and it can turn dissatisfaction to satisfaction (Yunus, 2009; Potuluri and Mangnale, 2011). However, developing successful service recovery is not an easy task especially in the insurance industry (Potuluri and Mangnale, 2011). Most EIC customers who complained were not pleased (dissatisfied) by the corporation's recovery efforts, because they were not treated fairly, and the service recovery efforts were far away from adequate justice (Source: Customers' Compliant Records, 2003). This shows that developing effective service recovery strategy is the major problem of EICO. Consequently, failed service recovery following initial service failure (i.e. customers doubly faced a service failure) produce a "double deviation". These scenarios lead the Corporation's customers to follow the most harmful response to the EIC (Hart et al., 1990).Thus it is vital to make a rigorous analysis to examine to what extent service recovery strategy is affection the level of customer satisfaction.

OBJECTIVE OF THE STUDY

The general objective of the study is to investigate the effects of service recovery on customer satisfaction and loyalty in Ethiopian Insurance Corporation Company in Ethiopia. The specific objectives of the study include the following:

- To identify the various types of service failures encountered in Ethiopian Insurance corporation
- To identify what types of service recoveries are customers getting in response to service failures
- To identify to whom dissatisfied customers complain
- To examine how justice oriented recoveries affect customer satisfaction
- To evaluate how recovery satisfaction affects customer loyalty

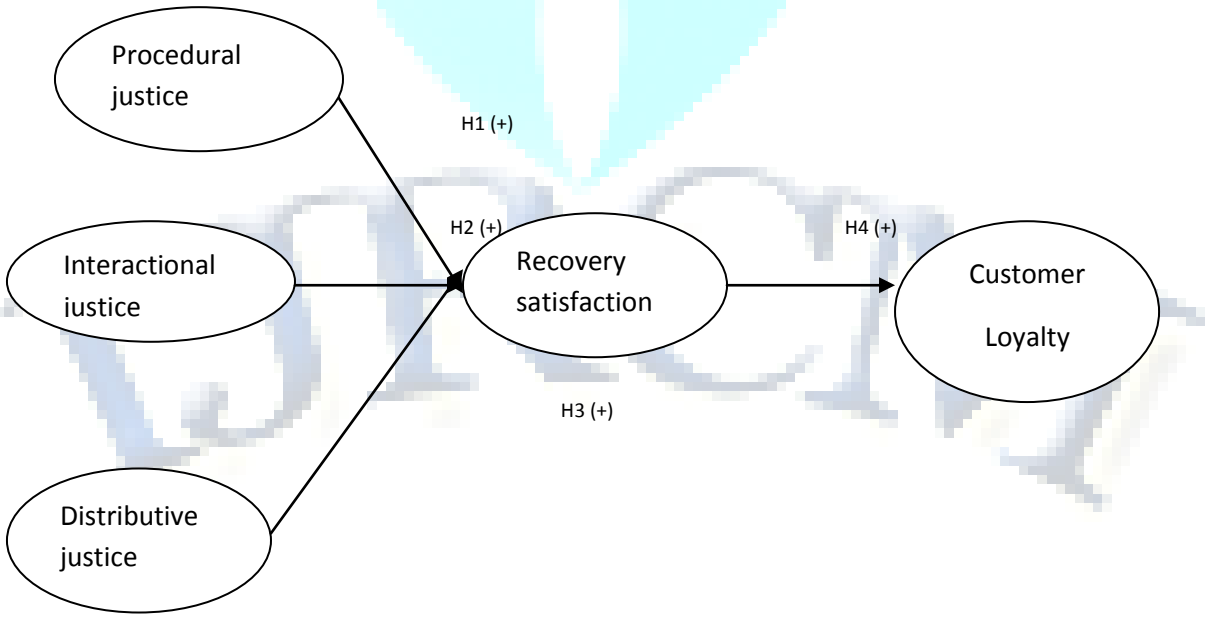
BASIC RESEARCH QUESTIONS

This study was conducted to answer the following five questions:-

- What are the various types of service failures encountered in Ethiopian Insurance Corporation company
- What types of service recoveries are customers getting in response to service failures?
- To whom dissatisfied customers complain?
- Do justice oriented recoveries have an effect on customer satisfaction?
- Does recovery satisfaction have an effect on customer loyalty?

CONCEPTUAL MODEL AND HYPOTHESIS OF THE STUDY

FIG. 2



HYPOTHESIS OF THE STUDY

H1: Procedural justice has positive and significant relationship with customers' recovery satisfaction
H2: Interactional justice has positive & significant relationship with customers' recovery satisfaction
H3: Distributive justice has positive& significant relationship with customers' recovery satisfaction
H4: Recovery satisfaction has positive & significant relationship with customer loyalty

SIGNIFICANCE OF THE STUDY

The significance of the study includes the following:

- It enables the EICO to know how its recovery efforts affect customer satisfaction and loyalty.
- It can be used as a springboard for researchers who are intended to undertake a research in the area.
- The findings add knowledge on the existing literatures.

RESEARCH METHODOLOGY

The units of analysis for this study were those customers who have experienced errors, mistakes or problems with the initial service and recovered by the bank.

SAMPLING TECHNIQUES

The total Population of the study includes all customers of Ethiopian Insurance Corporation. The study is undertaken on selected branches of the corporation in Addis Ababa. The sampling technique in selecting the branches offices was purposive or judgmental sampling. It was based on expert advice that these branches were selected. They are assumed to be highly profitable with a large customer base as compared to other branches operating in Addis Ababa. Though they are assumed to have large number customers both individual and corporate, it was difficult to obtain the exact number of customers served by those branches.

Roscoe (1975) proposes the following rules of thumb for determining sample size.

- Sample sizes larger than 30 and less than 500 are appropriate for most research
- Where samples are not to be broken into subsamples, (male /Female, juniors/seniors, etc), a minimum sample size of 30 for each category is necessary.
- In multivariate research (including multiple regression analysis), the sample size should be several times (preferably 10 times or more as large as the number of variables in the study.
- For simple experimental research with tight experimental controls (matched pairs, etc ;), successful research is possible with samples as small as 10 to 20 in size.

The sample size for this study was 350 which is between 30 and 500 (*Roscoe (1975)). 350* questionnaires were distributed to customers of EICO and only 230 were collected. This shows the nominal response rate to be 65.7 % (230/350).However, during the questionnaire checking time the number of correctly filled up questionnaires turned out to be 210 (60%) real response rate.

DATA COLLECTION PROCEDURES

The number rof questionnaires to be distributed were equally divided among selected branches in Addis Ababa based on expert advice in the insurance business. 50 questionnaires to each of seven branches operating in Addis Ababa. Data has been collected from each branch from customers to be served based on their willingness to fill the questionnaires. The data has been collected from December 01 to December 30 2013.

RESEARCH INSTRUMENTS

Survey questionnaires were used to collect quantitative data from customers. Survey questionnaires were chosen due to their cost-effectiveness and because they offer respondents greater anonymity, thereby encouraging the respondent to disclose feelings and attitudes more readily. The instruments used in this study adopted from Tax et al. (1998). The instruments were tested by Loh and Kau (2006) using Cronbach's alpha and the coefficient values which was at 0.785, 0.723, 0.699 and 0.760 for procedural justice, interactional justice and distributive justice and overall reliability respectively. They considered as very reliable and acceptable as the values are greater than 0.7 (Chang and Chang, 2010).

The instrument has seven parts. The initial part of the instrument requested respondents to provide their background information. The second part was intended to obtain information regarding customers' experience of service failure and recovery. Then, from part three to part five, the four dimensions of perceived justice were measured using a seven point Likert scale starting from 1 = strongly disagree to 7 = strongly agree. In the sixth part, customers' satisfaction with the company's recovery effort was examined. Finally, in the seventh part, customers' decision whether to stay with the company or to switch to competitors was evaluated. Customers rated their satisfaction with the company's recovery effort, from 1 = very dissatisfied to 7 = very satisfied. This was followed by a serious of questions which measured their decisions whether to stay with the company or to switch to competitors, on a seven point Likert scale, from 1 = strongly disagree to 7 = strongly agree.

According to Rubin, et al (1994), negative worded items should be recoded. Hence, while entering the data in to SPSS, all negative worded items were reverse coded. The instruments are translated in to a local language – Amharic. To make sure, whether the translation is reliable or not back translation (translation - re - translation) is conducted and the same meaning is obtained.

DATA ANALYSIS

Collected data were analyzed using Statistical Package for Social Science (SPSS) version 20.0. Multiple regression and correlation analysis were carried out to examine how perceived justice affects customer satisfaction with the insurance company's recovery effort. This was followed by an examination of how satisfaction in turn affects customer loyalty. Specifically, all the different aspects of perceived justice (procedural, interactional and distributive) were regressed and correlated to customer satisfaction with recovery. Subsequently, the effect of satisfaction on customer loyalty was evaluated.

LIMITATION OF THE STUDY

Although every attempt was made to eliminate possible limitations, this study does have several limitations. The study was conducted based on the data obtained from a single source (i.e. customers). However, it would have been better if multiple sources (i.e. both customers and managers) were used. The samples were taken from Customers of EICO in Addis Ababa and do not include customers outside Addis Ababa. The conclusion was made based on the findings obtained from the data gathered within one month's time. If longitudinal studies were conducted many types of failures and recovery strategies would have been identified.

RESULTS AND DISCUSSION

This section presents the results of the research in to two sections. Section one provides the summary of detailed breakdown of the sample demographic characteristics, different types of service failures encountered in insurance company customers' complaining behavior, recovery strategies given by the company in response to service failure, the four dimensions of perceived justice, customers' level of satisfaction with the company recovery effort and their intention whether to remain with the bank or defect to competitors by descriptive statistics (i.e. frequency, percentage, mean and standard deviation). The summary of statistical analysis and hypothesis testing (i.e. the relationships between the four dimensions of perceived justice - Procedural justice, Explanation and effort, empathy and politeness, and Distributive justice with recover satisfaction) and then the relationship between recovery satisfactions with loyalty are presented in the second section.

TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Demographic Variable	Measurements	
	Frequency	Percentage
Gender		
Male	113	53.8
Female	97	46.2
Age		
18-30	103	49.0
31-40	50	23.8
41-50	39	18.6
50+	18	8.6
Monthly Income		
1001-3000	97	46.2
3001-5000	43	20.5
5001-6000	11	5.2
6001-8000	29	13.8
More than 8000	30	14.3
Educational Level		
Preparatory school	28	13.3
Diploma	75	35.7
Degree and above	107	51.0
Occupation		
Driver	9	4.3
Merchant	31	14.8
Civil servant	37	17.6
Private employee	106	50.5
Farmer	27	12.9

Source: Own Questionnaire/ 2013

The total population was composed of 53.8% males and 46.2% females. The age of the majority group represented was 18-30 (49%). The second largest group was 31-40 (23.8%). Th third respondent groups were in the age group of 41-50 (18.6%) and the least respondent group was 50+ (8.6%). The highest frequency monthly income was 1001-3000 (46.2%) followed by 3001-5000 (20.5%). The lowest frequency of monthly income was 5001-6000 (5.2 %). For educational level, the highest number of respondents had obtained university degrees and above (51.0%), where as only 35.7% of respondents had a diploma while 13.3% had completed high school. This implied all are educated enough to understand the questionnaire. Lastly, the largest occupational groups were private employees (50.5%) followed by civil servants (17. %) while 14.3% of theme were merchants.

TABLE 2: UNDERLYING FAILURE THAT CAUSED YOU DISSATISFIED

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Wrong registration	3	1.4	1.4	1.4
	Long queue	28	13.3	13.3	14.8
	Unwilling employees	18	8.6	8.6	23.3
	No sufficient parking space	125	59.5	59.5	82.9
	Few branch offices	7	3.3	3.3	86.2
	Unjustifiable high rate	29	13.8	13.8	100.0
	Total	210	100.0	100.0	

TABLE 3: THE PERSON TO WHOM TO COMPLAIN

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manager	8	3.8	3.8	3.8
	Underwriter	50	23.8	23.8	27.6
	Customer relationship officer	95	45.2	45.2	72.9
	None	57	27.1	27.1	100.0
	Total	210	100.0	100.0	

45.2% of the respondents who had a problem with the company complained to Customer relationship officer followed by 27 reported to none. This indicates that dissatisfied customers would rather opt not register their complaint. A few customers lodge their complaints managers (3.8). Hence, customer officers are expected to handle customers' complaints tactfully because they have been preferred by the customers. Underwriters need to pay attention to customer's complaints too.

TABLE 4: TYPES OF MEASURES TAKEN TO REDRESS THE FAILURE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Correction	20	9.4	9.5	9.5
	Apologies	44	20.7	21.0	30.5
	Compensation	20	9.4	9.5	40.0
	Exceptional treatment	48	22.5	22.9	62.9
	Explanation	13	6.1	6.2	69.0
	Nothing	65	30.5	31.0	100.0
	Total	210	98.6	100.0	
Missing	System	3	1.4		
Total		213	100.0		

Different insurance recovery strategies are more effective for various types of service failures. Ethiopian Insurance Corporation company had given four types of recovery strategies in response to the three types of service failures. The highest frequency of service recovery strategy was nothing 65 (30%). This implies that the insurance marketers or managers ignored and did not take any action when service irregularity happened. The lowest frequency of recovery strategy was explanation 13 (6.1%) followed by the next lower frequency compensation20 (9.4%). Exceptional treatment was the second highest response 48 (22.5 %) which is quite encouraging.

TABLE 5: PROCEDURAL JUSTICE

	N	Mean	Std. Deviation
I was not given an opportunity to tell my side of the storey	210	3.6905	1.46225
It was difficult to determine where to lodge my complaint	210	3.2762	1.64561
They were slow in responding to my complaint	**210**	**3.1857**	**1.34085**
It was hard for me to figure out to whom I should complain in the company	210	3.2810	1.70900
I got a chance to tell them my problem	**210**	**3.0476**	**1.27456**
The complaint procedure was easy to access	210	3.9905	1.81959
They listened to my entire complaint	210	4.6524	1.10593
The time taken to resolve the problem was longer than necessary under the conditions	210	3.8667	2.01699
The arrangement for handling customers who are waiting to be served worked poorly	210	3.8381	1.66083
They told me why the service had failed in the first place	210	4.5619	1.68826
Valid N (listwise)	210		

When customers complain they expect fairness in terms of policies, rules and timelines of compliant process, and they want things handled quickly, preferably by the first person they contact. The mean score ranges between 3.0476 and 4.6524. For example Ethiopian Insurance Corporation customers were not given the chance to tell their stories (mean = 3.0476). They also faced with difficulties to know where to voice their complaint (mean = 3.2762) .The time taken to resolve the problem was longer than necessary under the conditions with a mean score of 3.8667needs special attention to by insurance marketers. The results indicated that Ethiopian Insurance Corporation is expected to perform better with regard to procedural fairness in treating its customers on many fronts.

TABLE 6: INTERACTIONAL JUSTICE

	N	Mean	Std. Deviation
They told me why the service had failed in the first place	210	4.5619	1.68826
The employees seemed very interested in helping me	210	3.8619	1.71260
I was given a reasonable explanation as to why the original problem occurred	210	3.9286	1.59234
The employees did not tell me the causes of service failure	210	4.6190	1.43023
They tried hard to resolve the problem	210	4.2143	1.41988
No reason was given for the poor service that i had received	**210**	**4.6000**	**1.78832**
The employees were attentive in providing good service	210	3.9571	1.47809
The employees were courteous to me	210	3.7238	1.80640
I felt that i was treated rudely	210	4.095	1.9344
The employees were not polite to me	210	3.5762	1.64168
The employees showed little kindness or understanding	210	3.9762	1.56652
The employees listened politely to what i had to say	**210**	**3.3619**	**2.00775**
They seemed to be very concerned about my problem	210	3.4905	1.92501
The employees seemed very understanding about the problem i had experienced	210	4.0762	1.70950
Valid N (listwise)	210		

Most employees of EIC are not trained. Thus, they faced difficulties to handle customers' complaints effectively. In addition to that, they lack the authority to resolve customers' problem on spot. **Moreover,** customers need want to be told why the service had failed. They also want to see employees' hard effort to resolve their problems. The mean values for the items of interactional justice vary between **3.3619 -4.6000.** These confirmed that customers were not told the reasons for service failures and employees were less interested in helping the customer. They also did not try to resolve customer's problems and they were not willing to help customers.

Interactional justice can dominate the others if the customers feel the company and its employees have uncaring attitude and have done little to try to resolve the problem. Hence, CBE should give due emphasis to this dimension of the perceived justice.

TABLE 7: DISTRIBUTIVE JUSTICE

	N	Mean	Std. Deviation
In resolving the complaint ,they gave me what i need	210	3.8143	1.78478
I did not received what i required	210	4.8952	1.27863
The result of the complaint was not up to expectation	210	4.2810	1.29486
Taking everything into consideration ,the result were quite fair	210	3.8333	1.40941
Valid N (listwise)	210		

Customers expect outcomes or compensation that matches the level of their dissatisfaction. The mean score varies between 3.8143 and 4.8952. Customers want to feel that the company had paid for its mistakes in a manner at least equal to what the customer has suffered. The result implied that the outcome of the service recovery process were less than to offset the cost incurred by customers.

TABLE 8: RECOVERY SATISFACTION

Descriptive Statistics			
	N	Mean	Std. Deviation
I am satisfied with the company 's service	210	3.3000	1.47077
In my opinion the bank provides a satisfactory banking service	210	3.6810	1.72738
How satisfied are you with quality of the bank service	210	4.6714	1.63445
Valid N (listwise)	210		

Recovery satisfaction affected by the three dimensions of perceived justice. Customers evaluate the service recovery effort on the basis of these dimensions. The average response for the items under satisfaction ranges from 3.3000 to 4.6714. These mean score showed that, developing effective service recovery strategy is not a simple task and Ethiopian Insurance Corporation need to work hard to recover service failure effectively.

TABLE 9: CUSTOMER LOYALTY

Descriptive Statistics			
	N	Mean	Std. Deviation
I will continue to stay with the company	210	4.6429	1.48068
In the near future I intended to use none of the services provided by the company	210	5.1190	1.25661
I considered myself to be loyal customer of the insurance company	210	4.4476	1.53106
Valid N (listwise)	210		

Satisfied customers are more likely to remain loyal with the insurance company. This is to mean that recovery satisfaction affects whether customers would continue their patronage or defect to competitions. However, it does not necessarily mean that all dissatisfied customers will switch to competitors. The average response for the items under loyalty was "moderately disagree", the mean values ranges from 4.4476 to 5.1190. These confirmed though customers were not satisfied, they are less likely to switch their patronage to competitors.

TABLE 10: RELIABILITY ANALYSIS

Reliability Statistics		
	Cronbach's Alpha	No of Items
Procedural Justice	.785	10
International Justice	.723	23
Distributive justice	.692	4
Overall reliability	.760	37

MULTIPLE REGRESSION ANALYSIS

Multiple regression analysis was used to establish the relationship between the four dimensions of perceived justice (i.e. Procedural justice, Explanation and effort, empathy and politeness, and Distributive justice) and recovery satisfaction. The coefficient of determination (R^2) [was] 0.801 suggesting very good fit of the model. This confirmed that, recovery satisfaction was significantly affected by the three dimensions of perceived justice (i.e. procedural justice, Interactional Justice and Distributive justice). In other words, 80.10% of the variation on recovery satisfaction explained by the perceived justice. The remaining 19.9 % of the variance on recovery satisfaction was due to unidentified and controllable factors.

The t – values were respectively, 19.50, 20.123, 16.345. These suggested each dimension of the perceived justice independently affect recovery satisfaction (t >2) (Chang and Chang, 2010). The value of VIF (Variance Inflated Factors) for all dimensions was 1.000, implied the non-existence of co-linearity. The standard beta coefficients were respectively, 0.825, 0.879, 0.856, and 0.844. These confirmed that explanation and effort makes the strongest contribution while distributive justice contributes less.

TABLE 11: REGRESSION ANALYSIS BETWEEN PERCEIVED JUSTICE AND RECOVERY SATISFACTION (n=210)

Dependent variable	Independent variables	Beta	t	VIF	R	R 2	Sig.
Recovery satisfaction	Procedural justice	.825	19.50	1.000	.903[a]	.801	.000
	Interactional Justice	.879	20.123	1.000			
				1.000			
	Distributive justice	.844	16.345	1.000			

Source: summary o multiple regression analysis

Hypothesis 1: predicted procedural justice has positive and significant relationship with recovery satisfaction. Hence, H1 is supported. The findings was consistent with prior results, for instance Kuenzel and Katsaris (2009) found that hotel guests who perceived the hotel's recovery procedures to be fair were more likely to be satisfied with the outcomes of the recovery.

Hypothesis 2: The data analysis presented on table 11 showed that interactional justice has a positive and significant relationship with recovery satisfaction. Hence, H2 is supported. This is consistent with past research suggesting that recovery satisfaction increase when higher level of interactional justice is experienced. For example, Alexander (2002) reported that customers were more satisfied when service providers were friendly and polite.

Hypothesis 3: The data analysis indicated on table11 predicted that distributive justice has a positive and significant effect on recovery satisfaction. All items incorporated under distributive justice were also found to have significant and positive relationship with recovery satisfaction. Hence, H3 is supported.. The finding was consistent with prior studies where distributive justice was found to be positively related to satisfaction. For example, Loh and Kau (2006) found distributive justice is significantly and positively related to satisfaction with service recovery and customers view fairness of outcome in the provision of mobile phone service to be the most important component. Similarly, Yunus (2009) and Kuenzel and Katsaris (2009) had come up with similar findings.

TABLE 12: REGRESSION ANALYSIS BETWEEN RECOVERY SATISFACTION AND LOYALTY (n=210)

Dependent variable	Independent variables	Beta	t	Sig.	R	R 2	VIF
Customer loyalty	Recovery satisfaction	.476	5.686	.000	.482[a]	.240	1.000

Source: summary of multiple regression analysis

Hypothesis 4: Analysis of the data indicated on table 12 predicted that recovery satisfaction is positively correlated with customer loyalty. Hence, H4 is supported.

Consequently, how recovery satisfaction could have affected customer loyalty was examined. The regression analyses result indicated that recovery satisfaction affects customer loyalty. The R^2 value was 0.240 indicating recovery satisfactions was able to explain 24. % of the variance. This confirmed, its effect is not strong

because 76% of the variation on loyalty explained by other factors (see table 11). The t - value was 5.686. This indicated that customer satisfaction independently affects customer loyalty (t >2) (Chang and Chang, 2010). The value of VIF is 1.000, implied the non-existence of co-linearity.

CORRELATION ANALYSIS

According to Rubin et al., (1994) Pearson correlation coefficients between shows:

- 0.19- slight or negligible correlation
- 0.20 – 0.39, quite small
- 0.40 – 0.69-Moderate correlation
- 0.70 – 0.89 - high correlation and
- 0.90 – 1.00, very high correlation respectively.

Results of correlation between service recovery strategies and recovery satisfaction, procedural justice and service recovery satisfaction, interactional justice and service recovery satisfaction, distributive justice and service recovery satisfaction and service recovery satisfaction and customer loyalty are analyzed using Pearson correlation analysis.

Summary of the Results of correlation analysis suggested that recovery satisfaction was positively correlated with the three dimensions of perceived justice namely, procedural justice (r = 0.846), interactive justice (r=.899) and distributive justice (r = 0.855). Similarly, recovery satisfaction measures are positively correlated with customer loyalty (r = 0.500).

CONCLUSION

All the three dimensions of the perceived justice (i.e. Procedural justice, interactional Justice, Distributive justice) were found to be significantly and positively related to recovery satisfaction. Interactional justice made the highest contribution while procedural justice made the least contribution to recovery satisfaction. Recovery satisfaction has positive relationship with loyalty. However, the correlation (relationship) was not significant meant though customers were not satisfied with the banks service and recovery strategies they are less likely to switch to competitors.

RECOMMENDATION

In a service industry, employees are part of the service. Every action of employees, behavior, even their facial expressions play a prominent role in customers' evaluation of the service experience (Zeithamal and Bitner, 2003). In addition, employees should always be attentive to help customers. The corporation is advised to hire competent, talented, employees and individuals who have interest in the job. Those unwilling employees should be identified and trained as to how to deal with different employees problems. EIC should understand the importance of recovery. It should not let customers to go back with their disappointment grief. Nowadays there is stiff competition in the insurance industry and customers do have alternatives. In addition, customer retention costs five times less than customer attraction/acquisition. Hence, the corporation should work hard on customer retention by developing effective service recovery strategies or properly implementing whatever service recovery strategies it had.

FURTHER AREA OF INVESTIGATION

Other interested researchers can make a critical evaluation of the service recovery strategy document of the corporation as well as other company's both domestic as well as overseas service recovery strategies. Moreover, they can organize a Focus Group Discussion with the corporation's top management to make sure that the working strategy is up to international standard.

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AN ANALYSIS OF CONSUMER BUYING BEHAVIOR: A CASE STUDY OF REAL ESTATE

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ABSTRACT

Consumer behavior is the process by which individuals explore,select, purchase, use and dispose of goods and services for the satisfaction of their needs and wants. The real estate sector has been undergoing corporatization and professionalization and recognized as a key sector contributing to the economic development. According to the Global economic scenario there is a slowdown in the domestic economic conditions. In this research paper, we had tried to find out the consumer buying behavior in real estate sector In this study 50 respondents were there who are resident of the flat and has the practical knowledge about the place. This study was conducted in the north west area of india to figure out the main points that the buyers consider while buying flats and also to find out the main information about old customers like their age group, class of living and their preferences. This study will help the organizations in selecting their 'Main customer's age group, class, age, etc. Further they can set their goals or facilitate their customers according to their customer's main demands or expectations.

KEYWORDS

Consumer behavior, real estate sector, economic development, corporatization.

INTRODUCTION

The study of consumer behavior is concerned with the study of individuals, groups, or organizations and the processes they use to select, secure, and dispose of products, services, experiences, or ideas to satisfy the needs and the impacts that these processes have on the consumer and society. It is a blend of elements from psychology, sociology, marketing and economics. It attempts to understand the decision-making processes of buyers or purchasers, both individually and in groups. It studies characteristics of individual consumers such as demographics and behavioral variables in an attempt to understand people's wants. It also tries to assess influences on the consumer from groups such as family, friends, reference groups, and society in general.

Consumer Buying Behavior refers to the buying behavior of the ultimate consumer. A firm needs to ascertain the consumer buying or purchasing behavior for a plethora of reasons, but the main reasons are:

- The firm's success depends upon the reaction of the customer to its marketing strategies.
- The marketing concept stresses on the notion of providing optimal customer wanting, therefore it is essential to analyze the voice of the customer.
- For the better prediction of consumer responses to the marketing strategies.

When the customer purchase or like to purchase a flat, he or she often passes through some stages step wise.

1. Recognition of the problem. (Why there is a need to purchase a flat)
2. Browse through information regarding companies.
   - Internal search, own memory.
   - External search if you need more information. Friends, colleagues and relatives (word of mouth).
   - Sources dominated by marketers; comparison shopping; public sources et cetera.

A successful information search leaves a buyer with a possible set of alternatives

1. Evaluation of Alternatives needs to establish criteria for evaluation, features the buyer wants or does not want. Rank/weight alternatives or resume search.
2. Purchase decision: Choose market alternative, includes product, package, store, method of purchase etc.
3. Purchase: May differ from the decision, Availability of flat.
4. After-Purchase Evaluation: Outcome, Satisfaction or Dissatisfaction. Cognitive Dissonance, have you made the right decision. This can enhanced by providing best after sale services.

REVIEW OF LITERATURE

As this topic relates to the field studies, so the previous research in the respective field was studied. According to (Seth and Parvatiyar, 2005) it is essential to understand what attracts customers the most in order to reduce the market choices. In addition to this they also concluded that, the willingness and ability of consumers and marketers in a relation leads to a greater marketing productivity. (Mudambi, 2002) Branding in consumer markets increases the company's financial performance and its survival in a competitive market.

Karen M. Gibler and Susan L. Nelson (1998), in their Research study "CONSUMER BEHAVIOR APPLICATIONS TO REAL ESTATE" make emphasis on that Most real estate study are based on neoclassical economics. Consumers are expected to make real estate decisions that maximize their utility and wealth given price and income constraints. Tastes and preferences are taken as given. The outcomes of consumer actions are used to infer these preferences. The study of real estate would benefit from an expansion to include consumer behavior concepts from sociology and psychology as synthesized through marketing. Inclusion of these concepts in real estate education will help real estate analysts better explain and predict the behavior of decision-makers in real estate markets. This paper presents a review of the consumer behavior literature relevant to real estate and suggests how these concepts could expand real estate study.

Brandstetter, M. C. G. de O. (2011) in his study Consumer Behavior Analysis of Real Estate Market with emphasis in Residential Mobility, Choice and Satisfaction – Brazilian Cases discussed that This research work addresses determinants of housing consumer behavior. This Brazilian work presents the development of a methodology which combines the examination of housing attributes and behavioral attitudes about residential mobility, choice and satisfaction. A theoretical revision is made initially considering these three processes of architecture and socio-demographic literature. The research method is the multiple case studies. The data had been collected since 2004. About 80 studies had been carried. A general vision of the study is presented, with description of the sources of the data. Presenting one of the cases, the work shows how the progression of households through the stock is influenced by the circumstances that prompt moves, economic resources and family life cycle stage. For analysis of this concept, a representative project was developed, considering the notion of parallelism between professional and housing careers, life cycle events and family financial aspects.

Dr. T. Kotty Reddy (2013) in his research title "Progress of Real Estate Sector in India" focused on the real estate sector has been undergoing corporatization and professionalization and recognized as a key sector contributing to the economic development of the country. Global economic scenario, a slowdown in the domestic economic conditions, escalation in input costs and controversies over land acquisition are the factors responsible for slow growth in this industry in the year 2011.The author opines that a relaxation in external commercial borrowing norms, new manufacturing and telecom policies would revive global investor confidence. The study concludes that Government of India's recent decision to allow 51 per cent FDI in multi-brand retail is also expected to benefit the real estate business in the country in terms of boosting development of new shopping malls.

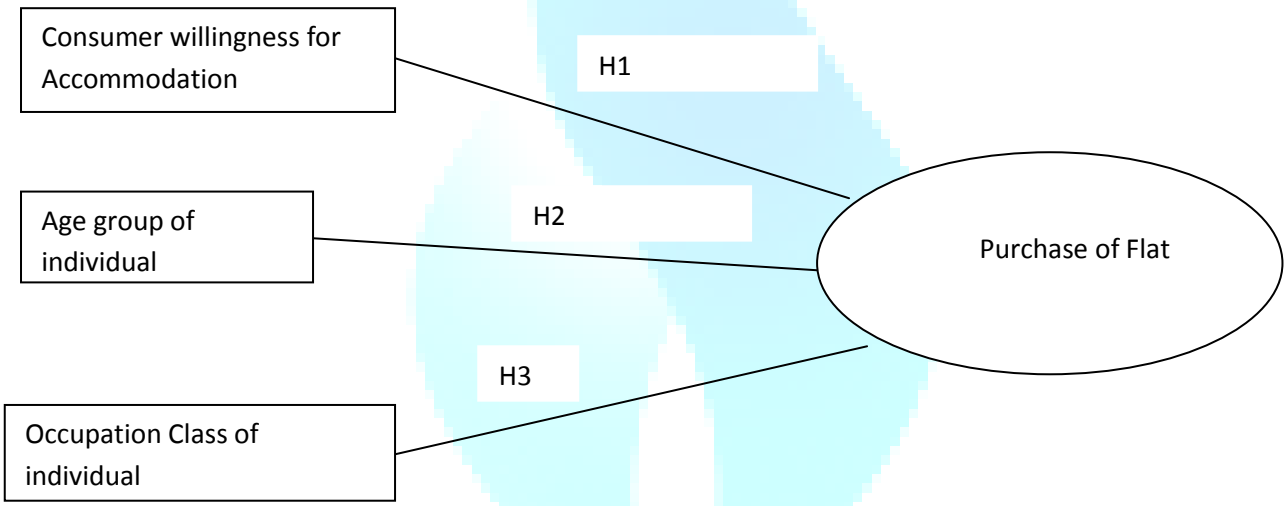
RESEARCH METHODOLOGY

This study was conducted in an area in Northern west region of India to figure out the main points that the buyers consider while buying flats and also to find out the main information about old customers for example age group, class of living their preferences. This study will help the organizations in selecting their 'Main customer's age group, class, age, etc.' The Chronbach's alpha value was checked for the 20 trail based responses which was 0.86, minor changes were made on the demand of building agencies and then the questionnaire was filled by the 50 customers and the alpha value was again re-calculated. This time the alpha value was 0.908.

Sample size=50

The test has been conducted by taking data from the all 50 respondents.

CONCEPTUAL RESEARCH MODEL



HYPOTHESIS

H1:- Consumer's Willingness to buy a flat for accommodation is positively related with the purchase of flat.
H2:- The age group of consumer's positively contributes in purchasing of flats.
H3:-The occupation class of the individuals positively relates with purchase of flats.

ANALYSIS OF DATA

TABLE 1

Dependent Variable		R	R Square	Adjusted R Square	F	Sig.
payment		.920	.847	.837	84.723	0.000
Sr. No	Independent Variable(s) (Lack in)	Unstandardized Coefficients		Beta	t	Sig.
		B	Std. Error			
1	Accommodation	.604	.038	.918	15.780	0.000
2	Age group	-.053	.033	-.093	-1.581	.121
3	Occupation class	.188	.061	.181	3.068	.004

CONCLUSION

After studying the statistical figures. It is apparent that consumer's willingness to buy a flat for accommodation significantly influences the dependent variable purchase of flat. In addition to this age group of individual does not play an important role in purchase of flat. Apart from this occupation class has very little effect on purchasing of flat. On the basis of regression analysis the hypothesis h1 and h3 is accepted and hypothesis h2 is rejected. In other words, it can be said that Consumer willingness is very important, while deciding to purchase a flat. Age group does not play a vital role in purchase of flat as study discloses, it further discloses that Occupation class also not plays so much important role in the purchase of flat.

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THE HARYANA STATE CO-OPERATIVE APEX BANK (HARCO BANK): PERFORMANCE AND ACHIEVEMENTS

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LOHAR MAJRA

ABSTRACT

A large proportion of the population in India is rural based and depends on agriculture for a living. Enhanced and stable growth of the agriculture sector is important as it plays a vital role not only in generating purchasing power among the rural population by creating on-farm and off-farm employment opportunities but also through its contribution to price stability. The main factor that contribute to agriculture growth is that the credit. Credit is not only obtained by the small and marginal for survival but also by the large farmers for enhancing their income. Hence, since independence, credit has been occupying an important place in the strategy for development of agriculture. Co-operative banks play an important role for providing the agriculture credit. In Haryana, there are three tier systems of co-operative credit institutions. The Haryana state co-operative Apex bank Ltd. is the apex co-operative bank which is also known as HARCO bank plays an important role in credit. This is an attempt to highlight the financial position, performance and some other achievements of the bank.

KEYWORDS
HARCO bank, co-operative banks.

INTRODUCTION

The Co-operative Movement was introduced into India by the Government. It is the only method by which the farmers could overcome their burden of debt and keep them away from the clutches of the money-lenders. The Co-operative Credit Societies Act, 1904 was passed by the Government of India and rural credit societies were formed. Through the appointment of registrars and through vigorous propaganda, the Government attempted to popularize the Movement in the rural areas. Within a short period, the Government realized that there are some shortcomings of the 1904 Act and, therefore, passed a more comprehensive Act, known as the Co-operative Societies Act of 1912. This Act recognized non-credit societies also. But the rural credit societies have continued to be predominant till now.

Cooperative banks play imperative role in Indian financial system as cooperation has been inherent in Indian cultural ethos to work as a socio-economic organization for the well-being of the people. The principles and practices of cooperative system have been guiding the people for community based management of means of production and economic resources. The expectations from cooperatives have been to facilitate self-sufficiency in food grain production, creation of better employment opportunities for rural people, workers and artisans and to provide organizational strength to the persons of the limited means for their sustenance.

In India, there are two structures of co-operative credit institutions in rural areas viz. short-term and long term structure. But, the short term co-operative credit structure plays more significant role for achieving the desired targets. Under this structure, at apex level or state level, State Co-operative Banks (SCBs) work and District Central Co-operative Banks (DCCBs) are meant for middle or district level and ultimately, Primary Agricultural Credit Societies (PACSs) have been serving rural strata of the society. In Haryana, there are three tier systems of co-operative credit institutions. The Haryana State Co-operative Apex Bank Ltd. is the apex co-operative bank which is also known as HARCO Bank works at state level , there are nineteen (DCCBs) working across the state with 594 branches and 656 PACS working across the state.

OBJECTIVES OF THE STUDY

1. To study the structure of HARCO bank in Haryana.
2. To study the financial position of HARCO bank.
3. To study the performance and achievements of HARCO bank in Haryana.

RESEARCH METHODOLOGY

The present study is based on secondary data. The study period is 2002-03 to 2013-14.The required data is obtained from the annual reports and other financial statement of HARCO bank, journals and different internet sites. Different charts and table are used to show the financial position of HARCO bank.

HARCO BANK

The Reserve Bank of India Act 1949 required that there should be a strong Apex Bank if co-operative movement was to utilize the benefit of finance granted by the RBI. Therefore each state has one such bank. Likewise on 1st Nov. 1966 the Haryana State Co-operative bank was established in the State of Haryana as an Apex Institution for short term and medium term co-operative credit. The jurisdiction of the bank extends over the entire state of Haryana. HARCO bank at state level having 13 branches and two extension counters at Chandigarh and Panchkula, 19 central co-operative banks at district headquarters with their 595 branches and 656 PACS working across the state is catering the needs of 30.47 lacs members who are residing mostly in rural Ares of Haryana. It works as controller of the State Co-operative credit movement and as a balancing center of Central financing agencies in the state. It is as pivot of the economic development through co-operative approach in the state. This bank acts as a clearing house for capital for pooling the resources and canalizing surplus of one locality to meet the deficiency of another to the advantage of the state as a whole.

HARCO Bank has been finance to farmers, rural artisans, agricultural laborers, entrepreneurs etc. In the state and serving its depositor for the last 47 years. The Bank provide agriculture credit, non-agriculture credit and nonfarm finance under which it provides crop loan, credit card, cash credits against hypothecation of stocks, interim finance by way of cash credit, various loan schemes etc. The process of computerization of its head office operations was started in 1990.

VARIOUS BRANCHES OF HARCO BANK

HARCO Bank has 13 branches, 2 extension counters and Staff Training College (STC) at Panchkula. Following are the branches of HARCO Bank.

TABLE 1: BRANCHES OF HARCO BANK AS ON 31ST MARCH, 2014

At Chandigargh	At Panchkula
Sector 17	sector 9
sector 15	sector 4
sector 19	sector 11
sector 20	sector 15
sector 34	Extension counter at Haryana state agricultural marketing board (HSAMB) Complex
sector 44	Staff training college sector 5 Panchkula
sector 28	
Manimajra	
Haryana civil secretariat	
Extension counter new secretariat	

Source: Reports of HARCO Bank

It can be observed from above table that majority of the branches of HARCO Bank are operating in Chandigarh. Bank has two extension counters and one Staff Training College which impart training to the employees of cooperative banks in Haryana.

FINANCIAL POSITION OF HARCO BANK

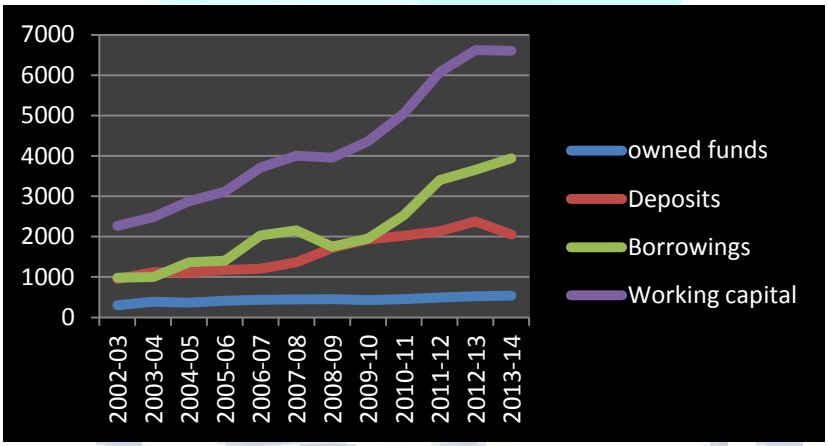
From a humble beginning in November 1966, the bank has grown into a sound financing institution of outstanding credit worthiness. HARCO bank was adjudged the best State Cooperative Bank in the country on the basis of its performance during the study period. The data provided in Table highlights the financial performance of the bank during the period2002-03 to 2013-14

TABLE 1: OWNED FUNDS, DEPOSITS, BORROWINGS AND WORKING CAPITAL OF HARCO BANK (Rs. In Crores)

Year	owned funds	Deposits	Borrowings	Working capital
2002-03	304.51	949.75	982.98	2266.32
2003-04	386.41	1117.69	1002.31	2484.52
2004-05	367.1	1108.31	1367.87	2876.22
2005-06	409.6	1172.7	1400	3115
2006-07	434.4	1206.52	2029.37	3709.7
2007-08	447.47	1362.58	2156.61	4005.67
2008-09	449	1723.72	1751.74	3952.79
2009-10	426.03	1935.17	1951.23	4360
2010-11	456.28	2025.21	2528.91	5051.04
2011-12	494.64	2130.9	3404.41	6070.63
2012-13	524.29	2375.82	3655.23	6620.74
2013-14	538.12	2057.34	3941.97	6604.68

Source: Annual reports of HARCO Bank

GRAPH 1: OWNED FUNDS, DEPOSITS, BORROWINGS AND WORKING CAPITAL OF HARCO BANK



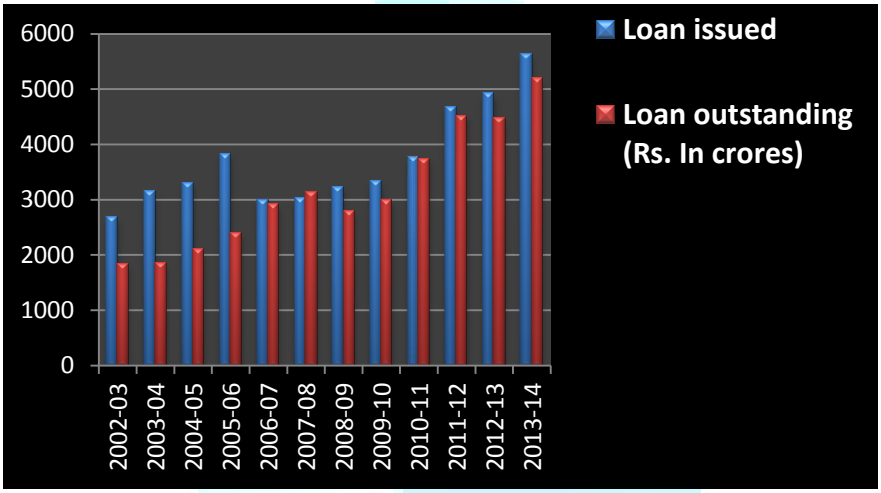
The table 1 and graph 1depicts the owned funds, deposits, borrowings and working capital of HARCO bank. Owned funds include share capital and reserve funds. The owned funds of the HARCO bank was Rs.304.51 crore in 2002-03 which increased to Rs. 538.12 crore in 2013-14.The owned funds of the bank has shown increasing trend during the study period. The deposit of the bank was Rs.949.75 crore in 2002-03 which increased to 2057.34 crore in 2013-14. The deposits also shown increasing trend during the study period. Borrowings are the other major source of funds of the bank for advancing credit. The total borrowings of HARCO bank was Rs.982.98 crore in 2002-03 which increased to 3941.97 crore in 2013-14. Borrowings have shown fluctuations it was lowest in the year 2008-09. Working capital means funds of the bank and it can be considered as total assets. The total working capital was Rs. 2266.32 crore in 2002-03 which increased to Rs.6604.68 crore in 2013-14. The working capital has also shown increasing trends during this period. Thus it may be concluded that all the variables has shown increasing trend during the study period.

TABLE 2 - LOAN ISSUED, LOAN OUTSTANDING, RECOVERY POSITION AND PROFITS OF HARCO BANK (Rs. In Crores)

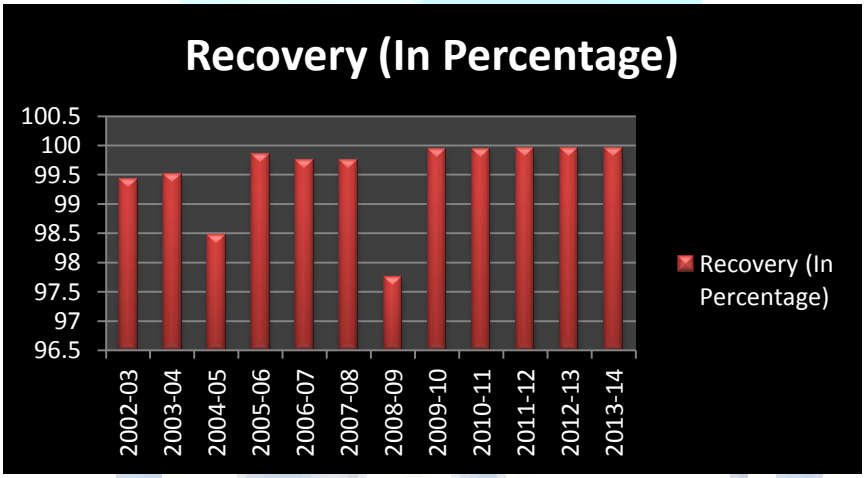
Year	Loan issued	Loan outstanding	Recovery %	Profits
2002-03	2671.82	1828.37	99.43	39.02
2003-04	3141.05	1840.28	99.51	29.29
2004-05	3300.89	2094.23	98.46	35.01
2005-06	3823.25	2393.2	99.85	37
2006-07	2987.14	2910.96	99.76	25.63
2007-08	3026.54	3124.16	99.76	4.91
2008-09	3227.4	2800	97.75	10.61
2009-10	3332.86	2988.77	99.93	-17.94
2010-11	3764.48	3738.89	99.94	5.01
2011-12	4676.64	4515.33	99.95	18.69
2012-13	4909.01	4462.42	99.95	30.29
2013-14	5627.14	5184.58	99.95	21.98

Source: Annual reports of HARCO BanK

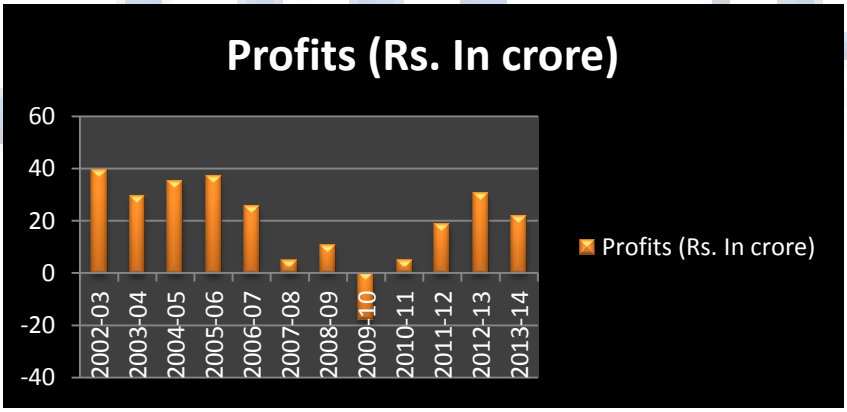
GRAPH 2: LOAN ISSUED AND LOAN OUTSTANDING OF HARCO BANK



GRAPH 3: RECOVERY OF HARCO BANK



GRAPH 4: PROFITS OF HARCO BANK



The table 2 and the above graphs depict the loan issued, loan outstanding, recovery and profits of the HARCO bank. HARCO bank provides loan to their customers in diversified manner. The total loan issued by HARCO bank was Rs. 2671.82 crore in 2002-03 which increased to Rs. 5627.14 crore in 2013-14. Loan

issued by HARCO bank has shown an increasing tendency. These loans play an important role in agriculture sector for the growth of rural Ares. The loan outstanding was Rs. 1828.37 crore in 2002-03 which increased to Rs.5184.58 core in 2013-14. The recovery performance of HARCO bank is appreciable. Recovery percentage is near almost hundred percent during this period. In 2002-03 recovery percentage was 99.43% which increased to 99.95% in 2013-14. The profits of HARCO bank have shown fluctuations during the study period. In all the year bank showed positive profits (except 2009-10). The total profits was Rs.39.02 crore in 2002-03 which increased to Rs.21.98 crore in 2013-14. The lowest profits was in 2007-08(Rs.4.91 crore).In this way, on the basis of loan issued, loan outstanding , recovery and profits, it may be concluded that HARCO bank is on the study path of growth and development. The credit policies and recovery mechanism of HARCO Bank have been to be found very workable during the reference period of time.

AWARD AND PRIZES WON BY THE BANK DURING THE DECADE

Keeping in view the financial position of the bank and overall performance at the National level amongst the State co-op. banks, the bank was awarded by National Federation of State Coop. Banks (NAFSCOB) Number and National bank for Agriculture and Rural Development (NABARD) as under:

AWARD BY NABARD

Year	Position
1996-97	Second
1998-99	First
1999-2000	First
2000-01	Second

AWARDED BY NAFSCOB

Year	Position	Year	Position
1987-88	First	1992-93	First
1988-89	First	1993-94	First
1989-90	First	1994-95	First
1990-91	First	1995-96	Third
1991-92	Second	1996-97	Third
1998-99	Special award in recovery and profitability		
1999-2000	Special award in Profitability		
2000-01	Special award in outreach, Recovery performance and profitability		
2001-02	Special award in performance		
2002-03	Second prize in overall performance		
2005-06	Special award in Recovery performance.		

Source: Annual reports of HARCO Bank

In India, NABARD and NAFSCOB give awards to state co-operative Banks for their performance under different categories. The achievements of HACRO Bank in this regard have always been appreciable for other banks. If we see the award given by NABARD to HARCO Bank, we find that this bank got first position for two consecutive years viz. 1998- 1999 and in the years 1999- 2000. Additionally, from NAFSCOB, it had received first prize for six consecutive years (except 1992-second position) - 1988, 1989, 1990, 1991, 1993, 1994 & 1995. It shows that both the financial and non-financial performance of HARCO Bank had been good during 1980s & 1990s. Besides these, it has received many special awards under different categories of performance for many years. Special awards were mainly given for better profitability and recovery performance. To receive award for good recovery and profitability is an excellent achievement of this bank. HARCO Bank has been playing significant role in implementing Revival Scheme in the state. State Government is showing great faith on HARCO Bank in this regard. Further, with the help of this bank, Government has introduced various schemes viz. Recovery Linked Incentive Scheme -2007, Timely Payment Incentive Scheme -2008 and State Interest Subvention Scheme. These entire schemes are being implemented across the state. The role of HARCO Bank for the development of co-operative movement and in spreading banking services in every corner of Haryana has been great.

CONCLUSION

Co-operative banks play imperative role in Indian financial system as cooperation has been inherent in Indian cultural ethos to work as a socio economic organization for the well-being of the people. It promotes economic activity and provides banking facilities and services to the rural people. The significant role of the co-operative bank in the agriculture economy. The co-operative bank teach the agriculturist to borrow at the right time and in right amounts and for right purpose and to repay on the right dates, and they alone can teach him to save so that he may not have to borrow at all. The co-operative banks are for the agriculturist, a friend, a philosopher, and a guide. Co-operation in Haryana at the time of its coming into being as a separate state. With the passage of time, co-operative banks has started surrounding automatically and grown into a full tree. It has spread its brands for and wide. It is, in fact, giving shelter to thousands of people in villages as well as cities credit co-operatives in Haryana have much contribution to its economic development continuously its help to make a steady progress since the formation of the state. A Haryana state co-operative bank (HARCO bank) is the federation of central co-operative banks in a state. It is the pivot around which all economic activities of the co-operative movement rotate for the provision of short term and medium term credit to agriculturist on co-operative basis. It is the "keystone of the co-operative movement in the state." HARCO bank is known as the Apex bank. It plays an important role in rural and urban areas. On the basis of study period, it can be said that HARCO bank has increased its worth with a good pace. Amount of deposits, borrowings and working capital has been increased during this period. It advanced good amount as loans to its customers and also earned reasonable profits during the period. More appreciable indicator for the progress of bank is recovery position. The recovery position of the bank that has been almost hundred percent. HARCO bank is on the study path of growth and development. HARCO bank won many awards and prizes by NABARD and NAFSCOB. There are many loans and advances schemes of HARCO bank like kisan credit card schemes, consumption loans, loans for ancillary activities etc. Which are very helpful for the people. Other development activities included human resources management, sankat Haran bima yojana, NAIS etc. are very important introduced by HARCO bank. In this way, HARCO bank is the “key stone of the co-operative movement in the state”.

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ROLE OF NUCLEAR ENERGY IN INDIAN ECONOMY

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ABSTRACT

India has had a long commitment to nuclear energy since the establishment of the Atomic Energy Commission in 1948 and the Department of Atomic Energy in 1954. India was one of the few countries to achieve the complete fuel cycle – from uranium exploration, mining, fuel fabrication and electricity generation, to reprocessing and waste management – by the 1970s. (Sethna, 1979). The country's nuclear industry is viewed with strong pride and considered an instrument to achieve "energy independence," "fossil fuel frees future" or "self-sufficiency" (Kalam, 2011; Sethna, 1979). However, India's nuclear power capacity remains small despite continuous commitment and advances in indigenous technology. India's current nuclear generation capacity is 4.8 GW and ranks 13th in the world, which account for only 1.2% of global nuclear capacity (WNA, 2012). The share of nuclear was 1% in India's total energy mix in 2009 and 2% in electricity generation capacity in 2012 (Figure 31). This is the result of India's long isolation from the global nuclear energy regime and its emphasis on a thorium-based nuclear development programmer. Nuclear energy could play a critical role in addressing India's energy challenges, meeting massive energy demand potentials, mitigating carbon emissions and enhancing energy security through the reduction of dependence on foreign energy sources. This is why India remains devoted to nuclear power even after the Fukushima-Daiichi accident in 2011 (PMO, 2012). This chapter discusses India's policy framework for the nuclear sector, provides an overview of nuclear capacity and prospects and key issues.

KEYWORDS
Indian economy, nuclear energy.

INTRODUCTION

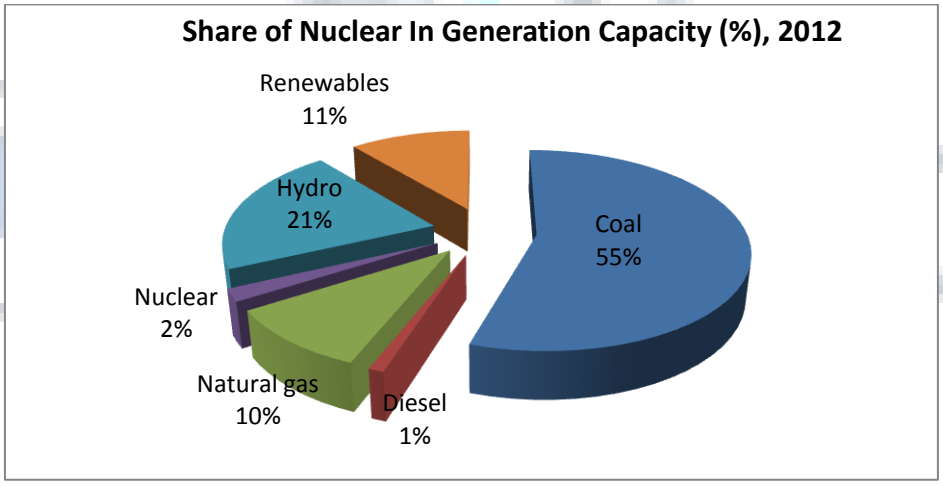
Nuclear power is the fourth-largest source of electricity in India after thermal, hydroelectric, and renewable sources of electricity. As of 2013, India has 21 nuclear reactors in operation in 7 nuclear power plants, having an installed capacity of 5780 MW and producing a total of 30,292.91 GWH of electricity while seven other reactors are under construction and are expected to generate an additional 6,100 MW.

In October 2010, India drew up "an ambitious plan to reach a nuclear power capacity of 63,000 MW in 2032",but, after the 2011 Fukushima nuclear disaster in Japan, "populations around proposed Indian NPP sites have launched protests, raising questions about atomic energy as a clean and safe alternative to fossil fuels".There have been mass protests against the French-backed 9900 MW Jaitapur nuclear power project in Maharashtra and the Russian-backed 2000 MW kudankulam nuclear power plant in Tamil Nadu. The state government of West Bengal state has also refused permission to a proposed 6000 MW facility near the town of Haripur that intended to host six Russian reactors. A Public Interest Litigation (PIL) has also been filed against the government's civil nuclear program me at the Supreme Court. Despite this opposition, the capacity factor of Indian reactors was at 79% in the year 2011-12 compared to 71% in 2010-11. Nine out of twenty Indian reactors recorded an unprecedented 97% capacity factor during 2011-12. With the imported uranium from France, the 220 MW Kakrapar 2 PHWR reactors recorded 99% capacity factor during 2011-12. The Availability factor for the year 2011-12 was at 89%.

India has been making advances in the field of thorium -based fuels, working to design and develop a prototype for an atomic reactor using thorium and low-enriched uranium, a key part of India's three stage nuclear power program me. The country has also recently re-initiated its involvement in the LENR research activities, in addition to supporting work done in the fusion power area through the ITER initiative.

India's and Asia's first nuclear reactor was the Apsara research reactor. Designed and built in India, with assistance and fuel from the United Kingdom, Apsara reached criticality on August 4, 1956 and was inaugurated on January 20, 1957. A further research nuclear reactor and its first nuclear power plant were built with assistance from Canada. The 40 MW research reactor agreements were signed in 1956, and achieved first criticality in 1960. This reactor was supplied to India on the assurance that it would not be used for military purposes, but without effective safeguards against such use. The agreement for India's first nuclear power plant at Rajasthan, RAPP-1, was signed in 1963, followed by RAPP-2 in 1966. These reactors contained rigid safeguards to ensure they would not be used for a military programmer. The 200 MWe RAPP-1 reactors were based on the reactor at Douglas point and began operation in 1972. Due to technical problems the reactor had to be downrated from 200 MW to 100 MW.[1] The technical and design information were given free of charge by to India. The United States and Canada terminated their assistance after the detonation of India's first nuclear explosion in 1974.

DIAGRAM NO. 1



THREE-STAGE NUCLEAR POWER PROGRAMMED

India's three-stage nuclear programmer was approved by parliament in 1958 and developed by Dr. Homi Bhabha, the first Chairman of the Atomic Energy Commission, who is widely known as the father of India's nuclear programmer (Suryanarayan, 2010). The three-stage strategy aimed to utilize India's vast thorium reserves, an approach that is still valid today (NPCIL, 2008):

First stage: Pressurized Heavy Water Reactors (PHWRs), fuelled by natural uranium.
Second stage: Fast Breeder Reactors (FBRs) backed by reprocessing plants and plutonium based fuel fabrication plants, fuelled by mixed oxide of Uranium-238 and Plutonium-239. With sufficient inventory of plutonium, thorium can be converted to fissile isotope U-233.
Third stage: Thorium generated U-233 cycle using Advanced Heavy Water Reactor (AHWR), which generates a large amount of energy.
India has so far reached the commercial maturity of the first stage and is moving into the second stage (NPCIL, 2008). The country's first-of-its-kind 500 MWe prototype Fast Breeder Reactor (PFBR), which was scheduled for completion in 2011, is under construction at Kalpakkam, Tamil Nadu and expected to start operation by early 2013 (Raj, 2009; DAE, 2012a; ET, 2012c). Nuclear capacity is envisioned to reach 20 GW by 2020. India also aims to develop a thorium-based demonstration plant and a full prototype before 2050.

INDIA'S ENERGY DEMAND OUTLOOK

The demand for energy increases with increase in population base, and change in livelihood and lifestyle needs. In India, the energy demand has increased over six fold over the last five 4 decades, whereas the population has increased by 2.7 times. Table 1 provides the energy demand met by different energy sources (Planning Commission, 2012). While total energydemand registered an average annual growth rate of 3.67% between 1990–91 and 2011–12, the commercial energy demand grew at the rate of 4.93% indicating of a declining growth rate for noncommercial energy sources. The share of oil has remained around one-third of the commercial fuel since 1970. The share of natural gas has increased from 1% in 1970–1 to 8.8% in 2011–12 while that of other renewable sources like solar, wind, small hydro, hydrogen, geothermal forms is below 1% of the total primary energy demand.

TABLE 1: PRIMARY ENERGY DEMAND IN INDIA (MTOE)

Type of carriers	1960-61	1970-71	1980-81	1990-91	2000-01	2006-07	2011-12
Coala	35.7 (79.9)	37.3 (62.3)	58.2 (60.2)	97.7 (55.9)	138.0 (49.1)	208.7 (53.3)	283 (51.8)
Oila	8.3 (18.6)	19.1 (32.0)	32.3 (33.4)	57.8 (33.1)	107.0 (38.1)	132.8 (33.9)	186 (34.1)
Natural gasa	0.0 (0.0)	0.6 (1.0)	1.41 (1.5)	11.5 (6.6)	25.1 (8.9)	34.6 (8.8)	48 (8.8)
Hydroa	0.7 (1.5)	2.2 (3.6)	4.0 (4.1)	6.2 (3.6)	6.4 (2.3)	9.8 (2.5)	12 (2.2)
Nucleara	0.0 (0.0)	0.6 (1.1)	0.8 (0.8)	1.6 (0.9)	4.41 (1.6)	4.86 (1.2)	17 (3.1)
Total Commercialb	42.8 (36.5)	60.3 (41.0)	99.8 (47.9)	181.1 (59.7)	296.1 (68.4)	391.5 (72.6)	546 (76.4)
Non-Commercialb	74.4 (63.5)	86.7 (59.0)	108.5 (52.1)	122.1 (40.3)	136.7 (31.6)	147.6 (27.4)	169 (23.6)
Total	117.2	147.1	208.3	303.2	432.8	539.1	715

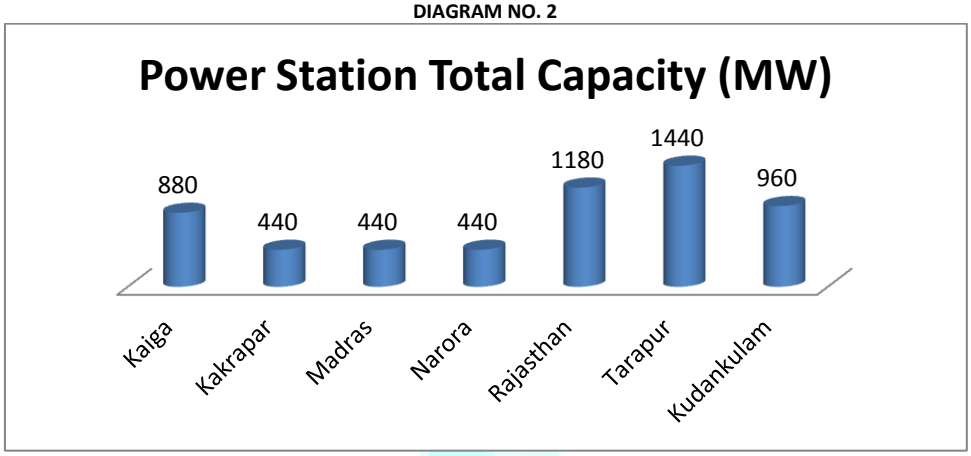
Source: Planning Commission (2012)

Notes: a The number in the bracket shows the percentage with respect to total commercial fuels
b The number in the bracket shows the percentage with respect to total fuels

NUCLEAR POWER GROWTH IN INDIA

India now envisages increasing the contribution of nuclear power to overall electricity generation capacity from 2.8% to 9% within 25 years. By 2020, India's installed nuclear power generation capacity will increase to 20,000 MW (2.0×1010 Watts, which is 20 GW). As of 2009, India stands 9th in the world in terms of number of operational nuclear power reactors. Indigenous atomic reactors include TAPS-3, and -4, both of which are 540 MW reactors. India's US$717 million fast breeder reactor project is expected to be operational by 2012–13.
The Indian nuclear power industry is expected to undergo a significant expansion in the coming years, in part due to the passing of the U.S. India Civil Nuclear Agreement is agreement will allow India to carry out trade of nuclear fuel and technologies with other countries and significantly enhance its power generation capacity. When the agreement goes through, India is expected to generate an additional 25,000 MW of nuclear power by 2020, bringing total estimated nuclear power generation to 45,000 MW.
Risks related to nuclear power generation and prompted Indian legislators to enact the 2010Nuclear Liability Act which stipulates that nuclear suppliers, contractors and operators must bear financial responsibility in case of an accident. The legislation addresses key issues such as nuclear radiation and safety regulations, operational control and maintenance management of nuclear power plants, compensation in the event of a radiation-leak accident, disaster clean-up costs, operator responsibility and supplier liability. A nuclear accident like the 2011 Fukushima Daiichi nuclear disaster would have dire economic consequences in heavily populated India as did the 1984 Union Carbide Bhopal disaster, the world's worst industrial disaster, covered extensively in Dominique Lapierre's 2009 prize winning book *Five Past Midnight in Bhopal*.
India has already been using imported enriched uranium for light-water reactors that are currently under IAEA safeguards, but it has developed other aspects of the nuclear fuel cycle to support its reactors. Development of select technologies has been strongly affected by limited imports. Use of heavy water reactors has been particularly attractive for the nation because it allows Uranium to be burnt with little to no enrichment capabilities. India has also done a great amount of work in the development of a thorium centered fuel cycle. While uranium deposits in the nation are limited there are much greater reserves of thorium and it could provide hundreds of times the energy with the same mass of fuel. The fact that thorium can theoretically be utilised in heavy water reactors has tied the development of the two. A prototype reactor that would burn Uranium-Plutonium fuel while irradiating a thorium blanket is under construction at Kalpakkam by BHAVINI - another public sector enterprise like NPCIL
Uranium used for the weapons programmer has been separated from the power programmer, using uranium from indigenous reserves. This domestic reserve of 80,000 to 112,000 tons of uranium (approx 1% of global uranium reserves) is large enough to supply all of India's commercial and military reactors as well as supply all the needs of India's nuclear weapons arsenal. Currently, India's nuclear power reactors consume, at most, 478 tones of uranium per year. Even if India were quadruple its nuclear power output (and reactor base) to 20 GW by 2020, nuclear power generation would only consume 2000 tones of uranium per annum. Based on India's known commercially viable reserves of 80,000 to 112,000 tons of uranium, this represents a 40–50 years uranium supply for India's nuclear power reactors (note with reprocessing and breeder reactor technology, this supply could be stretched out many times over). Furthermore, the uranium requirements of India's Nuclear Arsenal are only a fifteenth (1/15) of that required for power generation (approx. 32 tonnes), meaning that India's domestic fissile material supply is more than enough to meet all needs for it strategic nuclear arsenal. Therefore, India has sufficient uranium resources to meet its strategic and power requirements for the foreseeable future.
Former Indian President A.P.J.Abdul Kalam, stated while he was in office, that "energy independence is India's first and highest priority. India has to go for nuclear power generation in a big way using thorium based reactors. Thorium, a non fissile material is available in abundance in our country." India has vast thorium reserves and quite limited uranium reserves.
The long-term goal of India's nuclear program has been to develop an advanced heavy water thorium cycle. The first stage of this employs the pressurized heavy water reactors (PHWR) fueled by natural uranium and light water reactors, which produce plutonium incidentally to their prime purpose of electricity generation. The second stage uses fast neutron reactors burning the plutonium with the blanket around the core having uranium as well as thorium, so that further plutonium (ideally high-fissile Pu) is produced as well as U-233. The Atomic and Molecular Data Unit (AMD) has identified almost 12 million tonnes of monazite resources (typically with 6-7% thorium). In stage 3, Advanced Heavy Water Reactors (AHWR) would burn thorium-plutonium fuels in such a manner that breeds U-233 which can eventually be used as a self-sustaining fissile driver for a fleet of breeding AHWRs. An alternative stage 3 is molten salt breeder reactors (MSBR), which are believed to be another possible option for eventual large-scale deployment. On 7 June 2014, Kudankulam-1 became the single largest power generating unit in India (1000 MWe). Currently, twenty-one nuclear power reactors have a total install capacity of 5,780.00 MW (3.5% of total installed base).

DIAGRAM NO. 2

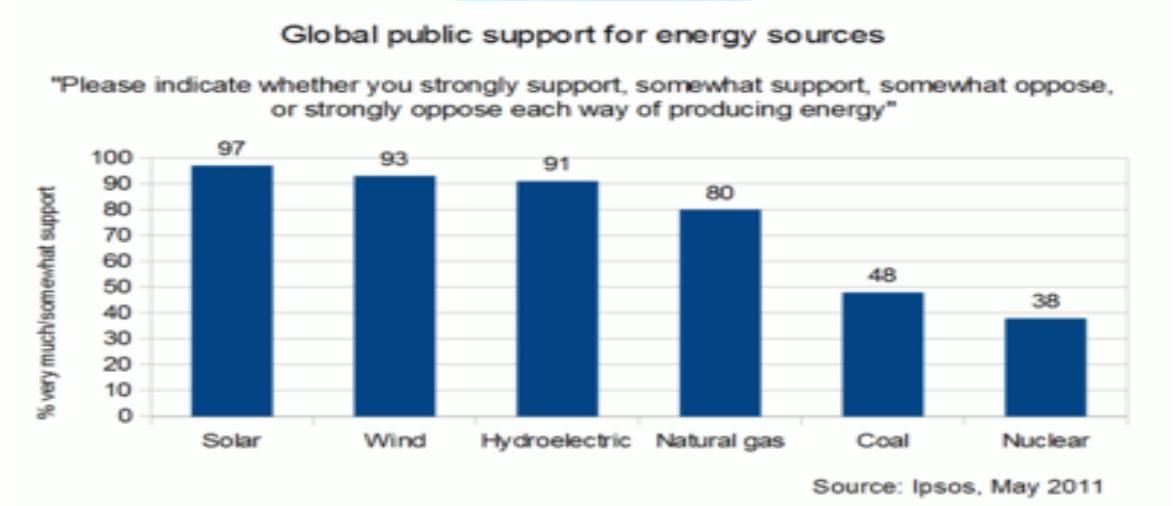


The details of the nuclear power generation capacity in the country are given below

TABLE NO. 1

Year	Total nuclear electricity generation	Capacity factor
2008–09	14,921GW.h	50%
2009–10	18,798GW·h	61%
2010–11	26,472GW·h	71%
2011–12	32,455GW·h	79%
2012–13	32,863GW·h	80%
2013-14	35333 GW-h	83%

DIAGRAM NO. 3



Following the March 2011 Fukushima nuclear disaster in Japan, populations around proposed Indian NPP sites have launched protests that had found resonance around the country. There have been mass protests against the French-backed 9900 MW Jaitapur Nuclear Power Project in Maharashtra and the Russian-backed 2000 MW Koodankulam Nuclear Power Plant in Tamil Nadu. The Government of West Bengal refused permission to a proposed 6000 MW facility near the town of Haripur that intended to host 6 Russian reactors. But that now is disputed: it's possible for Bengal to have its first nuclear power plant at Haripur despite resistance. A Public Interest litigation (PIL) has also been filed against the government's civil nuclear programme at theSupreme Court. The PIL specifically asks for the "staying of all proposed nuclear power plants till satisfactory safety measures and cost-benefit analyses are completed by independent agencies". But the Supreme Court said it was not an expert in the nuclear field to issue a direction to the government on the nuclear liability issue.

Nuclear power is already economically competitive with coal-thermal away from coal pitheads. But with increase in unit-capacity size, reduction in project gestation periods and safe and higher operation levels, it is our end eavour to make it competitive with coal-thermal even at coal pithead. This will open new business avenues at new locations for NPCIL. It also implies that nuclear power will emerge as one of the cheapest sources of electricity in the regions, which are away from coal-belts. The uniqueness of this programme is derived from the concept of the 3-stage nuclear power programme propounded by Dr. Bhabha..... Utilisation of abundant thorium resources in combination with moderate uranium resources through a 3-stage nuclear power programme for India was also outlined. The 3-stage nuclear power programme essentially links the fuel cycles of each stage in a manner that multiplies the potential of nuclear fuel several-hundred folds. A major challenge before the nuclear establishment in India in the early days was to develop an indigenous industry capable of meeting the requirements of the nuclear power industry.

CONCLUSIONS

Nuclear power is already economically competitive with coal-thermal away from coal pitheads. But with increase in unit-capacity size, reduction in project gestation periods and safe and higher operation levels, it is our Endeavour to make it competitive with coal-thermal even at coal pithead. This will open new business avenues at new locations for NPCIL. It also implies that nuclear power will emerge as one of the cheapest sources of electricity in the regions, which are away from coal-belts. The uniqueness of this programmer is derived from the concept of the 3-stage nuclear power programmer propounded by Dr. Bhabha..... Utilization of abundant thorium resources in combination with moderate uranium resources through a 3-stage nuclear power programmer for India was also outlined. The 3-stage nuclear power programmer essentially links the fuel cycles of each stage in a manner that multiplies the potential of nuclear fuel several-hundred folds. A major challenge before the nuclear establishment in India in the early days was to develop an indigenous industry capable of meeting the requirements of the nuclear power industry. Under the climate regime India's energy sector faces a difficult challenge. On one hand, the country needs to expand its energy base to sustain growth, make energy reach the deprived, while, on the other hand, energy course needs to follow an efficient and low-carbon

path. In this paper, we tried to map these twin objectives through a sustainable development strategy. We have forecast future demand for different energy carriers under two scenarios: baseline and low carbon future (LC). The important factors influencing energy demand are GDP, population, urbanization, resource availability, and diversification of energy supply, efficiencies in generation, transmission and utilization, growth of vehicles and appliances, and modal shift in transportation. Through a mathematical model, the growth rates for different energy carriers are estimated and the demand projections are made. The diversification of India's current energy mix, which is dominated by coal, is necessary if India is to increase its economic growth rate and at the same time constructively contribute towards reducing climate change. Therefore, it becomes necessary for India to reduce its coal and other fossil fuel consumption and consider other alternatives that do not emit as much greenhouse gases as do fossil fuels. At the same time, India needs to make sure that it employs sustainable energy sources which do not jeopardise its energy supply and therefore its economic growth. The country finds itself in a position where it has to constantly negotiate between sustained economic growth and reducing its carbon emission. Therefore, nuclear energy proves to be a viable option as it is a tried and tested technology and India has developed nuclear technology over the years and has a matured nuclear industry. Nuclear energy is therefore a sustainable source of energy and would significantly reduce total carbon emissions from India. Another reason why nuclear energy proves to be a viable option for India is because India will continue to develop its civilian nuclear industry with indigenous efforts and from foreign investments made possible by the Indo–U.S. Civilian Nuclear Agreement. While significant contribution from nuclear energy towards the total energy needs of India in the short term (within the next decade) is suspect, it holds good promise in the long run, once the construction of the reactors is complete and they become operational. In sum, prospects of nuclear energy in India are bright, but that is in the long run. The benefits of the nuclear deal coupled with a mature and well established nuclear sector in India suggests that nuclear energy has the potential to be a major source of electricity in future. India must continue to develop its fast breeder reactors regardless of the US nuclear deal to be at the forefront of technology development and to safeguard the country's strategic interests. Fast breeder reactors have the capability to produce more fuel by reprocessing spent fuel. This provides a multiplier effect which increases the amount of fuel available, and hence provides more fuel for the same amount of money spent. The fuel increases by a certain breeding rate each year. As per the DAE, the breeding rate is 8.1 per cent a year. Research and Development (R&D) activities in the area of thorium-uranium-233 cycle must be pursued as not only is thorium a clean source of energy, but it is also found in abundance in India, which would make India resource independent. Nuclear energy can be used to run water desalination plants which can convert sea water into potable drinking water. This would help in increasing the supply of drinking water. Desalination plants can be used to pump in fresh water to replenish the ground water table which can have healthy ecological implications. In the long term, India will benefit by employing nuclear energy as a source of electricity generation. Increasing environmental pressures will make it difficult for India to continue with the use of fossil fuels at existing levels in the future. While domestic nuclear ore is of low grade, and hence expensive to utilise, the Indo–U.S. Civilian Nuclear Agreement helps India to import nuclear fuel which would reduce fuel costs and hence the cost of nuclear power generation. The three-stage nuclear programme was set up which ultimately aims at developing technology which will enable India to utilise its thorium resources to generate energy. Thorium has the prospects of being a significant source of energy in the long term (perhaps 2050 and beyond).

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JOB SATISFACTION IN BANKING SECTOR: A STUDY OF PUBLIC AND PRIVATE SECTOR BANKS OF UTTARAKHAND

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ABSTRACT

An organization's strength is determined by the quality of its human resources which play a pivotal role in the utilization of the other resources. Since organizations are managed and staffed by people, the challenges and the opportunities of creating and managing them frequently emerge from the people themselves. It is the responsibility of those who are managing the capital, the material and other information assets, to add value to the organization, also by managing their human resources, the human capital effectively. Banking industry is growing ever since its inception but after liberalization it has gained wider scope. The study focuses on the job satisfaction of employees in banking sector. It aims to gain an insight into current working life policies and practices, as well as other issues of employees. Several notable factors that influence Job Satisfaction considered for the study were pay, promotion, supervision, benefits, contingent rewards, operating procedures, co-workers, nature of work, and communication. A sample of 600 respondents were taken for the analysis and it was revealed that the employees of the private sector were high on most of the dimensions as compared to public sector as mean score of private sector is higher than that of public sector employees.

KEYWORDS
Job Satisfaction, Public Sector banks, Private Sector Banks.

INTRODUCTION

An organization's strength is determined by the quality of its human resources which play a pivotal role in the utilization of the other resources. Since organizations are managed and staffed by people, the challenges and the opportunities of creating and managing them frequently emerge from the people themselves. It is the responsibility of those who are managing the capital, the material and other information assets, to add value to the organization, also by managing their human resources, the human capital effectively.

Human beings do work generally to pass time, earn living, discharge family and social duties, actualize talents and capabilities, prevent boredom and in some case to earn a reputation and win recognition.

Job satisfaction can be defined as an individual's response to the job or assignment, which denotes the extent of positive and happy feelings that he or she derives from doing the job. It represents a person's evaluation of his job and work context. It is an appraisal of the perceived Job characteristics, work environment and emotional experiences at work. Satisfied employees have a favourable evaluation of their job, based on their observations and emotional experiences. Job satisfaction consists of a collection of attitudes about specific facets of the job. Employees can be satisfied with some elements of the job, while being simultaneously dissatisfied with others.

It is an established fact that job –satisfaction usually leads to qualitative and quantitative improvement in performance. Satisfaction in the job induced motivation and interest in work. It represents a person's evaluation of his job and work context. Job satisfaction consists of a collection of attitudes about specific facets of the job. Employees can be satisfied with some elements of the job, while being simultaneously dissatisfied with others.

Although in India, high rate of unemployment makes any work attractive, however, employers need to recognize the economic, social and self-actualization needs of employees so that they can develop their potential qualities and experience to have a better Job Satisfaction.

The current economic situation provides a lot of opportunities as well as challenges to the existing banks. It is up to the banks to leverage the opportunities to meet the challenges to the best of their abilities. Developing countries like India, still has a huge number of people who do not have access to banking services due to catered and fragmented locations. But if we talk about those people who are availing banking services, their expectations are raising as the level of services are increasing due to the emergence of Information Technology and competition.

Banking sector is emerging and growing at a rapid pace. With the development and advancement of technology, globalization and influence of money in the lives of the people, total scenario of banking industry has changed.

REVIEW OF LITERATURE

Johansen (1975) was of the view that workers often value factors such as job interest, and good working conditions above pay. He concludes that pay becomes the most important factor in job satisfaction only when it is seen as a compensation for a dissatisfying and alienating job situation.

In a study under Indian conditions, Bharadwaj, (1983) found that overall QWL is related to job satisfaction, humanizing work or Individualizing the organization, and organizational development prgogrammes. It involves both personal (subjective) and external (objective) aspects of work related rewards, work experience and work environment.

Rice et al. (1985) emphasize the relationship between work satisfaction and quality of people's lives. They contend that work experiences and outcomes can affect person's general quality of life, both directly and indirectly through their effects on family interactions, leisure activities and levels of health and energy.

Efraty, Sirgy and Claiborne (1991) conducted a study on 219 service deliverers to the elderly persons and found that personal alienation increased need deprivation, which in turn decreased job satisfaction which in turn decreased job involvement, which ultimately decreased organizational identification.

Chandawarkar (1998) studied the three crucial determinants of effective human resource development, viz., communication satisfaction, job satisfaction and organizational commitment. It was found that a positive communication environment is an essential ingredient of organizational effectiveness. Job satisfaction is broadly related to a number of communication satisfaction determinants, most importantly communication climate, personal feedback and interdepartmental communication.

Nayak (1999) used a structured questionnaire to study the relationship between leadership and Job satisfaction among randomly selected 80 supervisors at a Steel Plant. It was found that job satisfaction of the workers is higher under relationship-oriented supervisors than task-oriented supervises and further the employees in highly favourable situations are most satisfied while those in highly unfavourable situation are least satisfied.

The study on job satisfaction by Hossain (2000) was designed with a view to investigating the satisfaction of commercial bank employees and its consequences on related issues of 440 commercial bank employees in Bangladesh from both the private and the public sectors were randomly selected as sample for the study. The results revealed that the public sector bank employees were in a better position in terms of their job satisfaction than the private sector bank employees and the executives were more satisfied than the non-executives.

Yousef (2000) investigated the role of various dimensions of organizational commitment and job satisfaction in predicting various attitudes towards organizational change. The analysis revealed attitudes that employees' attitudes towards organizational change increase with the increase in affective commitment, and that low perceived alternatives directly and negatively influence attitudes towards change.

Jegadeesan (2007) discussed factors affecting job satisfaction and its influence employee's good feeling or ill feeling. The most important among them are working conditions, wage structure, work group, nature of work and quality of supervision.

Kamal and Sengupta (2008-09), in their study ascertained the degree of overall job satisfaction prevailing among the bank officers, elicited officer's views on the different factors of job satisfaction being identified as motivation/hygiene factors and studied the impact of different variables such as the occupational level (clerks, cashiers or officers), age, education, organizational climate, economic background and gender, on the various factors affecting the overall job satisfaction.

Shrivastava and Purang (2009) examined the job satisfaction level of 340 bank employees of a public sector and private sector bank in India. Job Diagnostic Survey by Hackman and Oldham (1975) was used to ascertain the level of job satisfaction. Results indicated that the means of the public and private banks were significantly different from each other. It was found that private sector bank employees perceive greater satisfaction with pay, social, and growth aspects of job as compared to public sector bank employees.

Khalid and Irshad (2010) aimed at examining job satisfaction level of bank employees in Punjab Province. A structured questionnaire survey conducted. The result of study reveals that employees of private banks were more satisfied with pay, recognition, and working hours as compared to public sector bank employees.

Kumar (2012) studied the job stress of employees of nationalized and non- nationalized banks of Kottayam and Ernakulam district of Kerala. He found that stress is higher among non-nationalized bank employees compared to nationalized bank employees.

SIGNIFICANCE OF THE STUDY

Banking industry is growing ever since its inception but after liberalization it has gained wider scope. The study will quantify the effects of job satisfaction on employees in banking sector. The study will help the policy makers and the management to frame policies and take steps so that higher job satisfaction can be achieved in banking sector.

OBJECTIVES OF THE STUDY

The main objectives of the study are as follows:

1. To study the Job Satisfaction of employees in Public and Private Sector Banks.
2. To study the differences between the Dimensions of Job Satisfaction of Public and Private Sector Banks.

HYPOTHESES OF THE STUDY

H_1: There is a significant difference in Job Satisfaction of employees of Public and Private Sector.

H2: There is a significant difference in the dimensions of Job satisfaction of employees of Public and Private Sector.

SCOPE OF THE STUDY

The study will cover all major banks of Uttarakhand region namely, Punjab National Bank (P.N.B.), State Bank of India (S.B.I.) and Central Bank of India from Public Sector and Housing Development Financial Corporation (H.D.F.C.) Bank, Industrial Credit and Investment Corporation of India (I.C.I.C.I.) Bank and Axis Bank from Private Sector.

LIMITATIONS OF THE STUDY

There was non-cooperation and resistance of the employees to evaluate their quality of work life may be because of their hectic routine work. Also, there was shortage of time.

RESEARCH METHODOLOGY

A sample of 100 employees taken from each bank's main branches and a total of 600 respondents were selected by using simple random sampling method. The study is based on primary as well as secondary data .For the purpose of measuring Job Satisfaction, a scale developed by Spector (1985) was used. It was designed to assess employee attitudes about the job and aspects of the job. It consists of 36 items which describe nine job facets (four items per facet). The job facets include pay, promotion, supervision, benefits, contingent rewards, operating procedures, co-workers, nature of work, and communication.

ANALYSIS AND INTERPRETATION

To examine whether the Job Satisfaction vary among employees of Private and Public Sector Banks. T-test has been used to analyze the quality of work life of the employees under study and also to test the hypotheses.

H1: There is a significant difference in the overall Job Satisfaction of employees of Public and Private Sector.

H_2: There is a significant difference in the dimensions of Job Satisfaction of employees of Public and Private Sector.

Mean, Standard deviation and T-test for Dimensions of Job Satisfaction of the Employees of Public and Private Sector banks

TABLE 1

Dimensions of Job Satisfaction	Public Sector Banks		Private Sector Banks		T-test	
	Mean	Standard deviation	Mean	Standard deviation	T	p-value
Pay Satisfaction (PS)	13.28	1.635	13.45	1.548	-1.308	.191
Promotion Satisfaction (PRS)	13.35	1.537	13.57	1.451	-1.803	.072
Supervision Satisfa ction (SS)	13.19	1.685	13.67	1.458	-3.731	<.001**
Benefit Satisfaction (BS)	13.30	1.575	13.59	1.504	-2.307	.021*
Reward Satisfaction (RS)	12.97	1.604	13.34	1.525	-2.921	.004**
Operating procedure Satisfaction (OPS)	12.30	3.314	12.01	2.879	1.118	.264
Co-worker Satisfaction (CWS)	14.35	2.959	15.03	3.171	-2.689	.007**
Work itself Satisfaction (WS)	12.23	3.278	12.11	2.778	.457	.648
Communication Satisfaction (CS)	13.24	1.619	13.38	1.471	-1.135	.257
Total	**118.21**	**7.561**	**120.16**	**3.815**	**-3.995**	**.001****

Source: field study

** significant at p < 0.05*

*** significant at p < 0.01*

The data reveals that the employees of private sector were high on all these dimensions as compared with public sector employees. Hence, Hypothesis is accepted as most of the dimensions show significant differences between public and private sectors. There were insignificant differences in the dimensions viz, Pay Satisfaction (PS, p=.191), Promotion Satisfaction (PRS, p=.72), Operating Satisfaction (OPS, p=.264), Work itself Satisfaction (WS, p=.648), Communication Satisfaction (CS, p=.257) in public and private sectors.

Hence, Hypothesis H_1 and H2 are accepted.

CONCLUSION

The differences across public and private sector was identified in the dimensions of Job Satisfaction viz Supervision Satisfaction, Benefit Satisfaction, Reward Satisfaction, Co-worker Satisfaction. The employees of private sector are more satisfied with the supervision and supervisor's role in the organisation and better benefits derived on account of Benefit Satisfaction which includes perks, growth opportunities, fringe benefits, etc. The employees of Private Sector are satisfied with the rewards received by them for work done. The results indicate that the employees of private sector are better off than employees of public sector as regards co-worker satisfaction which concludes that employees in private sector work as a team. The employees of private sector are better off than public sector in terms of overall Job satisfaction.

RECOMMENDATIONS

1. A supportive climate and culture should be encouraged by providing opportunities to individuals to make meaningful contribution, involving employees in teamwork planning and administration, career guidance and various other growth opportunities.
2. There should be Employee Feedback Surveys in banks after regular intervals so that information from employees on areas like personal health and wellness, workplace relationships and measures of a healthy workplace can be collected.
3. Banks should encourage participative management and good communication within the organization. It will help employees express their views on various issues and official problems.

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IMPACT OF TOTAL ASSETS AND NET INCOME ON RETURN ON EQUITY OF SMALL MEDIUM ENTERPRISES OF PAKISTAN

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ABSTRACT

An attempt was done in order to reveal the bounding of snap shot and financial period of a firm with gaining value from the stock market. A study was conducted in the Pakistan context where rate of economy is at developing phase. It was assumed that the change in return of equity is a cause of Net income and entire assets of a firm. 11 years of data was taken from 50 small medium enterprises that was the reason of gathering 550 observations as a sample size and were put into analysis purpose to justify the hypotheses. Regression was put as a statistical tool with analysis of variance in order to test the research model that was a reason to confirm the impact of total assets and net income on return on equity. It was recommended to augment the size of sample for strong building the relationship among variables. A suggestions were not only restricted at number of observations but further study can be extended to find out the relationship and association with other factor by using same methodology in different context.

KEYWORDS
Total Assets, Net Income, ROE, SMEs, Regression, Anova.

1. INTRODUCTION

In European Union and international organizations small and medium enterprises are the corporations with wide margins and employ many people, these corporation are also known as innovative and competitive in many economic sectors. Assets are known to be economic resource in financial accounting. Any tangible or intangible has an economic value and owned by any organization or any individual person is known to be an asset. Total Assets consist of all non-current assets which are bought for long term use and current assets which can be easily converted into cash. Net income or total income are obtained after deducting all the cost incurred during the business which includes amortization, depreciation, salaries, wages, rents, taxes, interests and other expenses. Further net income is used to measure the earning per share of the company with the help of the number of the shares issues by the company. Return of equity measure's the profitability of a company with respect to the amount or number of shares invested in a company by shareholder. It can be used by the investors internally to evaluate the performance of the management or to investigate the return on shareholders' investment. It doesn't only measure the profitability on one share but it also measures the efficiency and effectiveness of the management. ROE is calculated by dividing Net Income by Shareholders Equity (Total Assets less Total Liabilities); it can also be calculated by Multiple Net profit margin by asset turnover by equity multiplier. Increasing ROE is a positive indicator where as decreasing ROE usually creates problem. In a study conducted earlier it was quoted that 15% of the ROE is a benchmark for the investors. If ROE is increasing due to fall in shareholders' equity which shows company is moving more towards debt financing which can create more problems and can lead an organization towards liquidity. If ROE is increasing due to increase in Net Income this indicates a positive growth in ROE or return on profitability per share.

Cassar and Holmes (2003) worked on the study with variables capital structure, financing and small-medium enterprises. The study focused on the importance of the capital structure and the determinants were asset structure, profitability, risk and growth. Hypothesis examined the static trade-off and pecking order of various characteristics like asset structure, growth, size, profitability and risk. Sample was gathered from Australian small medium enterprises with a panel survey and econometrical technique used was regression analysis. The end result concluded that asset, profitability and growth were the most important factors for financing and capital structure in small medium enterprises.

Abor (2007) worked on the variables capital structure (debt policy), financial performance and small medium enterprises. In this study impact of debt policy on financial performance of the Ghana and South African small medium was examined. A number of small medium enterprises of Ghana and South Africa were taken as sample and to investigate the relation among the capital structure and financial performance panel data analysis was used. The result indicated that capital structure especially debt ratios influences the financial performance of the companies, the affect showed the negative impact on the small medium enterprises due to high gearing ratio and found that companies got liquidate faster than large companies.

Mira (2002) worked on the financing theories and capital structure of small medium companies in Spain, the variables worked on were fiscal, trade off and pecking theories. In this study the main focus was on financing theories but hierarchy and some other covenants were also considered. Panel data of 3962 non financial small medium Spanish companies were taken as data. To verify the variables individually heterogeneity, correlation and regression analysis were used as econometric methodology. The end results showed a negative impact of fiscal theory with leverage ratios of companies especially with taxes and depreciations and it was also found that taxes had a negative impact on debts, whereas trade off theory found to have a positive correlation with the debt policies of companies. In the end it was found that long term debts effects positively and short term debts showed a negative relation.

Tran and Neelakantan (2006) worked on the determinants which influenced capital structure of small medium enterprises of Vietnam. The variables worked on were business risk, profitability, growth; net working, size of the firms and tangibility these companies. Small medium enterprises of Vietnam were taken as sample and it was gathered in a panel form, regression analysis and correlation were used as econometrical tool. In the result it was found that SME mostly used short term debt for financing the operations. A positive relation was found among the between capital structure and business risk, growth, size, relation with banks and networking where as a negative relation was found tangibility.

Francisco (2005) worked on the study which included the uniqueness impacts of capital structure on small medium enterprises specifically from the year 1994 to 1998. A total of 6482 non-financial small medium emprises of Spain were taken as sample as panel data. Correlation and regression analysis were used to conclude and interpret the gathered data. The results generated were on the basis of hypothesis and found that negative impact of profitability and taxation shield had been found with debt financing and related to leverage ratio where as positive relation was found in growth, asset structure and size with respect to debt financing in small medium enterprises. Furthermore a confirmation of maturity matching behavior of capital structure in small medium enterprises has been found.

Frank (1997) worked on the variables discounted dividend growth model with the impact of inflation and return on equity. In this study the critical factor was the hedging the inflation into the growth model to evaluate the common stock price. The data was gathered from the 40 years from 1956 to 1995 components were of return on equity. The results showed that in 1960's there was a fall in profit margins and total assets and a minor increase in financial leverage was notified whereas other components were almost constant. During the study it was also notified that due to the fluctuation in inflation negative impact was notified in growth components and common stocks are found to have poor relation with hedging.

It was ***hypothesized*** that:

H1: There is significant impact of total asset on ROE in SME.

H2: There is significant impact of net income on ROE in SME.

2. METHODOLOGY

A longitudinal designed study examined the impact of total assets and net income on return on equity of small medium enterprises and secondary data was used in order to justify the relationship. In the study, three variables have been taken into account total asset, return on equity and net income. Net income could be measured by different ways but for this study net income has been referred as income after tax and total assets showed all the assets given on the annual reports of the companies considered for this research. Return on equity measured, profit earned by shareholders. This research has been conducted within the context of Pakistan with sample size of 550 observations; collected, organized and put into analysis purpose. The data has been collected from various financial statements in annual reports of small medium enterprises in Pakistan. Data for return on equity, total assets and net income have been taken from the annual reports of 50 companies in the form of time series for the period of 11 years, from 2000 to 2011. Regression analysis test has been used as a statistical tool in order to evaluate the impact of total assets and net income on return on equity. On the basis of analyzing the statistical interpretation, the OLS model has been deployed for supporting regression test.

Return on Equity = $\alpha 1 + \beta 1$ (Net Income) + $\beta 2$ (Total Assets) + ET

Here,

α is constant and intercept.

β is slope.

ET is error term.

3. RESULTS AND DISCUSSIONS

For the data analysis statistical tests has been applied which was regression analysis, which showed the following models and findings. The nature of the data has been found in numeric form.

TABLE 3.1: *MODEL SUMMARY*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	1.000[a]	1.000	1.000	938.304	.619

a. Predictors: (Constant), Net Income, Total Assets

b. Dependent Variable: ROE

The above table showed summary of the model obtained from the test of analysis of variance (ANOVA). A model was fully explained by independent variables (net income and total assets) by the value of adjusted R square which was (1.000). This model also revealed, positive autocorrelation in model by the value of Durbin- Watson which was (0.619). It has been observed from the result that there was huge standard error in model. This showed presence of space for error correction model.

TABLE 3.2: *REGRESSION ESTIMATES*

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	199.003	41.803		4.761	.000		
	Total Assets	.000	.000	1.000	34934.229	.000	.943	1.060
	Net Income	3.99E-6	.000	.000	10.657	.000	.943	1.060
a. Dependent Variable: ROE								

The above result revealed an alpha with the magnitude of (199.003). In other words, this magnitude also explained the predicted value of leverage when all other variables were 0 whereas, predictors showed significant values with the probability of 0.000. The result also suggested that there was significant positive relation between total assets and leverage with negligible magnitude. Net income also showed positive relation with ROE with the positive magnitude of $4x10^{-6}$.This result also explained that error could be ignored among variables because of having no standard error which was (0.000).

T-values also confirmed the impact of dependent variable (ROE) and exogenous variables (total assets and net income) that was also the reason for accepting the hypothesis which was significant impact of total assets and net income on return on equity of small medium enterprises in Pakistan. This result also obtained that there was no collinearity in variables which was determined by the values of tolerance and VIF. From the result it has been concluded that if total assets increased than the return on equity also increased similarly, return on equity also affected if there was a change in net income. Previously numerous studies were conducted to find out the relationship between these variables. Umar, Tanveer, Aslam, and Sajid (2012) discussed various variables such as return on equity, return on total assets, earnings before interest and tax, earning ratio and net profit margin. Result of this study suggested that ROE of a firm positively affected on the performance of a firm, also showed the positive impact of total assets on earnings before interest and tax. This study also revealed, insignificant impact of return on equity on current assets to total assets. But this research discussed about the impact of total assets and net income after tax on return on equity and showed contradictory result as compared with the previous research. The result for both independent variables can be further explained as, there was positive relationship between the total assets and leverage, net income also showed same result as for the total asset. Return on equity can be improved if there was a positive change in total assets and net income. On the basis of obtained results, the following chart showed the synthesis of all observations and conclusions of assumptions.

TABLE: 3.3 *TESTING OF HYPOTHESES*

Hypotheses	Empirical Conclusion
There is significant impact of total asset on ROE in SME.	Accepted
There is significant impact of net income on ROE in SME.	Accepted

A chart of summary for assessed hypotheses has been deployed above in order to provide a snap shot of all findings. Although a similar statistical technique has been found useful in order to assess the Chinese currency regime after de-trending of non-stationary data (alvi and kamal, 2015). Future research is possible of the same methodological model with some other variables in other context of the world.

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IMPORTANCE OF FIVE YEAR PLANS & INDUSTRIAL POLICIES FOR THE DEVELOPMENT OF SMALL SCALE INDUSTRIES

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ABSTRACT

Industrial development becomes incomplete without the roll-out of Small Scale Industries, since this sector provides opportunity to create the abundant manpower and unexploited resources. Value of the progression of small-scale sector significantly increased. To add mass to any action, independent of the the way to obtain credit, it is always make the feasibility of government policies for initiation of the latest industries and with supporting the sick industries to accomplishing the duty of healthy small-scale industries. Government industrial policies and five year plans therefore plays a crucial role in small sectors industries ready for its economical growth and increase in such industries which have been for that welfare belonging to the mankind by giving necessary support in a variety of tasks in small scale industries. On this present paper we discussed about Five-Year plans and various industrial policies towards the introduction of small , medium scale industries sector and proposed some tips for better performance of such small , medium enterprises by explaining the current situation of SSI sector and the position of Sick units and just how they financed by way of the commercial banks.

KEYWORDS
Small Scale Industries, Five year plans, industrial policies, Nationalized Banks.

1. INTRODUCTION

The prominence for small scale sector emanates from two basic premises of economic development policies being the balanced development and sustainable growth of the economy which will involve certain minimum amount of diversification within the economy. Small,and medium enterprise units being labour intensive have favourable capital-output ratio. Small enterprises have flexibility to help with making quick adjustment to changing economic and trading scenario.

Small and Medium Enterprises (SMEs) can easily absorb new technology, new design, new processes together with the like. If large scale industries dominate, many small scale enterprises retain a competitive advantage by serving dispersed local markets, providing differentiated products with low-scale economies. Small scale industries have an overabundance flexible production schedules, and might operate closer to rural homes compared to a larger units and thus be a major entrepreneurial source among women in developing countries. Industrial development becomes incomplete without the roll-out of Small Scale Industries, since this sector provides opportunity to use the aboundant manpower and unexploited resources.

The increased exposure of the progression of small scale sector significantly increased in the establishment of the look commission which initiated the formulation of some Five Year Plans and industrial polices. These Indian Five Year Plans and industrial policies have given a particular area to the small scale industrial sector, due to creation of broad based employment opportunities and wide dispersal of industrial production.

2. FIVE YEAR PLANS FOR SSI DEVELOPMENT

The key provisions for the development are determined in different forms not only reserved for the priority sectors plus towards the economical continuing development of all weaker sections in particular Small Scale Sector.

2.1. **FIRST FIVE YEAR PLAN:** In this plan directions made towards reservation of sectors of productions and prevention of capacity expansion by large scale units and reservations for small scale industries development. The development of small scale industrial sector received a new thrust after the adoption of the Ford Foundation's perspective plan in 1953-54 which earmarks the areas of functional and operational weaknesses in this sector, the major ones being; market research, design, raw material availability, research and technical assistance, distribution and promotion, and finance and professional management.

2.2. **SECOND FIVE YEAR PLAN** (1956-61): Mahalanobis Model is the base for it. This Mahalanobis strategy of development accorded the highest priority to heavy industries and implementation of this policy involved rapid development of the public sector which promotes separate component of planning to promote modern small scale industries within the overall gamut of rural, village and small industries.

2.3. **THIRD FIVE YEAR PLAN** (1961-66): A reference may be made to the proposed establishment of deposits for stocking raw materials in short supplies which are to be made available to small units with a view to assisting in fuller utilisation of the existing capacity. In order to foster the growth of small scale industries, the policy of product reservation was initiated in 1967 to make products of small scale sector competitive with those of the large scale sector by offsetting the disadvantage of mass scale production, economies of scale, wider marketing network, better credit availability and publicity through mass media and advertisements.

2.4. **FOURTH FIVE YEAR PLAN** (1969-74): Rural industrialisation was accepted as an effective instrument for the promotion of decentralization, development of agro-industries and dispersal of industries in backward areas for reducing regional disparities in income and employment opportunities in the country.

2.5. **FIFTH FIVE YEAR PLAN** (1974-79): This plan emphasized that the rural industrialisation had an important role to play in the removal of poverty, disparities in income and regional imbalances.

2.6. **SIXTH FIVE YEAR PLAN** (1980-85): It aimed at a strategy based on industry cum development approach leading to vertical and horizontal integration of the programmes. Its major objectives being: (i) to generate opportunities for further and full time employments; (ii) revitalising and developing the existing traditional and other small-scale industries; (iii) promoting intensive development of new viable industries; (iv) to raise the level of earnings of rural artisans, handlooms, weavers, craftsman and other employed in the industries; (v) to promote the growth of these industries in rural areas; and (vi) to reduce progressively the role of subsidies by providing selective credit, development of skills, design and marketing.

2.7. **SEVENTH FIVE YEAR PLAN** (1985-90): During this plan Nayak committee and single window scheme has been established for the development of SSI sector.

2.8. **EIGHT FIVE YEAR PLAN** (1992-97): The eighth plan allocated a sum of Rs.6334 Crore for the development of small scale industries. Production of small-scale industries reached a peak of Rs.4112636 Crore, employment Rs. 160 Lakh and export Rs.39248 Crore in 1996-97.

2.9. **NINTH FIVE YEAR PLAN** (1997-2002): This plan laid down the strategy for the development of small scale sector. The Plan proposed: (i) review of list of reserved items; (ii) inducement to financial institutions to offer factoring services to small enterprises; (iii) extending the coverage of Prime Minister Rozgar Yojana in order to create new self employment opportunities. Moreover, under the scheme of Integrated Infrastructure Development Centres (IIDC), infrastructure facilities are being developed in backward rural areas.

In the year 1999, the Planning Commission constituted a Study Group on Development of Small Enterprises under the chairmanship of Dr S.P. Gupta. The committee recommended three tier definitions for: (i) tiny sector with an investment in plant and machinery up to Rs.10 Lakh; (ii) small scale unit with an investment in plant and machinery above Rs.10 Lakh to Rs.1 Crore; and (iii) medium scale unit with an investment in plant and machinery above Rs.1 Crore to Rs.10 Crores. The Study Group also recommended the enactment of a separate Small Enterprises Development Act for governing the promotion and development of small enterprises. Hence, with effect from October 2, 2006, a comprehensive act called Micro, Small and Medium Enterprises Development Act, 2006 came into force which aimed at facilitating the growth of small enterprises so that they could graduate to medium enterprises, thus improving their competitive strength.

2.10. **TENTH FIVE YEAR PLAN** (2002-07): This plan proposed to: (i) Adopt a promotional approach to the small scale industrial sector as there is a growing realisation that the policy of reserving the manufacture of certain items exclusively for small-scale units is unsustainable and prevents them from attaining economies of scale and dealing with competition; (ii) raise the ceiling on investment in plant and machinery to Rs.5 Crore for SSIs to enable the small-scale industry to graduate smoothly into medium enterprises; (iii) expedite the recommendations of the Committee established for addressing the problem of multiple inspection and consequent harassment of small scale units; and (iv) provide the Small and Medium Enterprises (SME) sector with adequate term and working capital loans. The other areas which merit consideration are credit rating, capacity building in project appraisal and compliance with RBI instructions on collateral free loans.

2.11. **ELEVENTH FIVE YEAR PLAN** (2007-12): To achieve the targeted growth in medium and small enterprises at the rate of 12 percent as they are instruments of inclusive growth which touch upon the lives of the most vulnerable, the most marginalized- women, Muslims, SCs and STs – and the most skilled. The Eleventh Plan approach to the Medium and Small Enterprises sector marks a shift from the welfare approach to that of empowerment.

In this Plan, the Ministry of Micro Small and Medium Enterprises (MSME) would establish a Technology Mission to promote new and emerging technologies, assess present levels of technology and their up-gradation, setup technology information centers / data banks and an IT portal for information dissemination to carry out detailed technology audits. In 2006, the government launched the National Manufacturing Competitiveness Programme (NMCP). The NMCP and the Ministry of Micro, Small and Medium Enterprises chalked out a five-year programme which includes setting up of design clinics, application of lean manufacturing technologies for increasing competitiveness of firms by systematically identifying and eliminating waste throughout the business cycle. It has been observed that Labour Laws and Factory Laws generally create problems for Micro and Small Enterprises (MSE) units in terms of number of inspections. To address this issue, the committee setup under Planning Commission recommended a system of third-party inspection to give enterprises an option to get their regulatory compliance certified by accredited agencies. Once such certification has been obtained, the unit would be exempted from routine inspection.

2.12. **TWELFTH FIVE YEAR PLAN** (2012-2017): It is planned for the development of small scale industries in all possible routes from the inception of a small enterprise by improving the availability of finance by way of facilitating access to bank credit, opening alternate routes for equity funding through angel funding, venture capital, private equity etc. as well as facilitating entry to capital markets through IPOs and specialized exchanges for SMEs; Improving marketing and procurement facilities through preferential treatment for MSEs in public procurement, development of B2B portals and establishing cluster based marketing networks; Improving the skill level of work force through harmonization of training programmes under the Ministry with the mission of the Prime Minister's National Council for Skill Development; Improving infrastructure for the MSME sector by ensuring availability of work places, common facility centers and specialized growth centers for startups; Improving technology and innovation through continuation of National Manufacturing Competitiveness Programme (NMCP), facilitating technology transfer and creation of intellectual properties and wide spreading adoption of information and communication technologies; Facilitating entry of young/first generation entrepreneurs through entrepreneurial support, access to venture/equity funding, ensuring collateral free credit, providing ready-to-move workplaces, enabling entrepreneur friendly policy environment and finally ensuring access to market; Developing an institutional framework for handholding of the Micro & Small entrepreneurs to move up the value chain and facilitating global competitiveness of the small & medium enterprises; Projecting Khadi as eco-friendly and heritage product and leveraging KVI sector to achieve 11% growth in Khadi, 13.7% growth in Village Industries (VIs) production and 12% growth in the flagship scheme PMEGP and Acquiring new dimensions for Coir Sector through diversification of products and market as also technological interventions to enhance quality and competitiveness so as to double the exports from present level of Rs.800 Crore within 5-years.

Accordingly in the process of reshaping and developing the Indian economy under the aegis of Five Year Plans, SSI sector is rapidly coming into prominence.

3. INDUSTRIAL POLICY RESOLUTIONS FOR SSIs:

The Government's attitude and intention towards industrial development after independence is very particular because besides agricultural the only possible division is the industries. By giving financial support and allowing private funds in to this sector for infrastructure development, subsidies to the established industries are the major factors for promoting this sector to achieve the growth in industries and growth in employment. Production of employment is also a major problem in developing countries like India is also an important task for economic growth. SSIs are the best remedy for producing high employment at low investments and high number of products in all areas depending on natural resources.

In order to achieve targeted development and to cater the needs of industries in general and SSIs in particular, Industrial policy Resolutions had been made by the Government of India.

3.1 **INDUSTRIAL POLICY RESOLUTION 1948:** It was stated that SSIs are particularly suited for the utilization of local resources and creation of employment opportunities. The primary responsibility for developing small industries by creating infrastructure has been provided to state governments. Central government frames the broad policies and coordinates the efforts of State Governments for the development of SSIs.

3.2 **INDUSTRIAL POLICY RESOLUTION 1956:** It stated that besides continuing the policy support to cottage, village and small industries by differential taxation or direct-subsidies, the aim of state policy would be that the development of this sector is integrated with that of large scale industry.

3.3 **INDUSTRIAL POLICY RESOLUTION 1977:** The main thrust of policy was effective promotion of cottage, village and small industries widely dispersed in rural areas and small towns.

3.4 **INDUSTRIAL POLICY RESOLUTION 1980:** The policy focused on the need of promoting SSIs through integrated industrial development between large and small sectors. Industrially backward districts were identified for faster growth of existing network of SSIs.

3.5 **INDUSTRIAL POLICY RESOLUTION 1990:** It raised the investment ceiling in plant and machinery for SSIs. It created central investment subsidy for this sector in rural and backward areas. Also, assistance was granted to women entrepreneurs for widening the entrepreneurial base. Reservation of items to be produced by SSIs was increased to 836. Small Industries Development Bank of India (SIDBI) was established to ensure adequate flow of credit to SSIs. Stress was reiterated to upgrade technology to improve competitiveness. Special emphasis was laid on training of women and youth under Entrepreneurial Development Programme. Activities of Kadhi and Village Industries Commission and Khadi and Village Industries Board were to expand.

3.6 **INDUSTRIAL POLICY RESOLUTION 1991:** The basic thrust of this resolution was to simplify regulations and procedures by de-licensing, deregulating, and decontrolling. SSIs were exempted from licensing for all articles of manufacture. The investment limit for tiny enterprises was raised to Rs. 5 Lakhs, irrespective of location. Equity participation by other industrial undertakings was permitted up to a limit of 24 percent of shareholding in SSIs. Factoring services were to launch to solve the problem of delayed payments to SSIs. Priority was accorded to small and tiny units in allocation of indigenous and raw materials. Market promotion of products was emphasized through co-operatives, public institutions and other marketing agencies and corporations.

During the recession period in the recent past Indian economy escaped only because of SSIs. That is why, the government emphasizes on the growth and development of small scale sector by directing planning commission which initiated the formulation of a series of Five Year Plans. And at the same time government initiated with the Industrial Policy Resolutions in different Five Year Plans made recognized growth in SSIs sector

The Industrial Policy approach turned full circle with the advent of the Narsimha Rao government in 1991 in the form of New Industrial Policy of 1991. The country decided to follow the lines of capitalism. The watchword for the New Industrial Policy thus became liberalization, globalization and privatization. The Government introduced three sets of reforms:- first, deregulation, delicencing, decontrol and de-bureaucratization of industrial licensing system; two, liberalization of foreign trade and currency transactions and third, institute several measures to facilitate foreign direct investment inflows. All these measures were launched in the year 1991 and since then, further liberalizations have been introduced every year with each new budget.

4. PERFORMANCE OF SSI SECTOR IN INDIA

As discussed above, These Indian Five Year Plans have given a special place to the small scale industrial sector, due to creation of broad based employment opportunities and wide dispersal of industrial production. Year wise growth rate of employment in Small Scale sector is shown in Table 1. However, sick units position is bit disappointing, the aid from the commercial banks to sick SSIs facilitates to boost its performance to stand back. The position of sick units in India from the year 2001 to 2014 is shown in Table 2.

TABLE 1: YEAR WISE GROWTH RATE OF EMPLOYMENT IN SSI SECTOR

Sl.No.	**Year**	**Employment** (in Lakh)	**Growth Rate** (%)
I	II	III	IV
1	2001-02	249.33	-
2	2002-03	260.21	4.36
3	2003-04	271.42	4.31
4	2004-05	282.57	4.11
5	2005-06	294.91	4.37
6	2006-07	805.23	173.04
7	2007-08	842	4.57
8	2008-09	880.84	4.61
9	2009-10	921.79	4.65
10	2010-11	965.15	4.70
11	2011-12	1,011.80	4.83
12	2012-13	1,061.52	4.91

Source: MSME Annual Report 2013-14

The data shown in the above table represents the employment and its growth rate in SSI sector from the year 2001-02 to 2012-13. The Government of India generating and implementing various schemes and policies for the development of SSIs. The main motto behind this is, to eradicate unemployment and growth in per capita income through SSIs. As per the annual report of MSME, the employment generated through SSIs till 2012-13 is 1061.52 Lakhs. From 2001-02 to 2005-06, an average growth rate is 4.29 percent. However, in the year 2006-07 the growth rate of employment is 173.04, why because, the MSME Act, 2006 has come into force. With the support of this Act, it is notified that 238.34 Lakh enterprises are in working status additionally in the year 2006-07 when compared to the year 2005-06. It means, 510.29 Lakh people are additionally benefited by way of employment in the year 2006-07. Later on, even though the number is in increasing manner but the rate of growth is very slow. In the year 2007-08, only 36.57 Lakh people are employed which is 4.57 percent of growth when compared to the previous year. Even though the facilities of term loans and working capital loans, RBI instructions on collateral free loans and enactment of National Manufacturing Competitiveness Programme (NMCP) are available there is no such rapid growth in working enterprises. The above chart is indicating the year wise proportions of number of employment. The chart is showing 79 percent of overall growth rate is happened only in the year 2006-07. In the remaining all years the growth is of 2 percent except 3 percent in the year 2012-13 which means 4.91 percent of growth which is equivalent to 49.72 Lakh in number when compared to previous year 2011-12.

4.1 SICK UNITS IN INDIA

TABLE 2: POSITION OF SICK SSI UNITS

Year (end-March)	Sick SSI/MSE units
2001	249630
2002	177336
2003	167980
2004	138811
2005	138041
2006	126824
2007	114132
2008	85187
2009	103996
2010	77723
2011	90141
2012	85591
2013	220492*
2014	456771

Source: MSME Annual Report 2013-14

4.2 CAUSES FOR SICKNESS

Pertaining to the factors, this sickness arises due to internal disorder in the areas justified as following:

a) Lack of Finance: This including weak equity base, poor utilization of assets, inefficient working capital management, absence of costing & pricing, absence of planning and budgeting and inappropriate utilization or diversion of funds.

b) Bad Production Policies : The another very important reason for sickness is wrong selection of site which is related to production, inappropriate plant & machinery, bad maintenance of Plant & Machinery, lack of quality control, lack of standard research & development and so on.

c) Marketing and Sickness: This is another part which always affects the health of any sector as well as SSI. This including wrong demand forecasting, selection of inappropriate product mix, absence of product planning, wrong market research methods, and bad sales promotions.

d) Inappropriate Personnel Management: The another internal reason for the sickness of SSIs is inappropriate personnel management policies which includes bad wages and salary administration, bad labour relations, lack of behavioral approach causes dissatisfaction among the employees and workers.

e) Ineffective Corporate Management: Another reason for the sickness of SSIs is ineffective or bad corporate management which includes improper corporate planning, lack of integrity in top management, lack of coordination and control etc.

TABLE 3: YEAR WISE SICK SSI UNITS FINANCED BY SCHEDULED COMMERCIAL BANKS

Year	No. of Sick SSI units	Amount Outstanding (Rupees in Billion)
2001	2,49,630	45.06
2002	1,77,336	48.19
2003	1,67,980	57.06
2004	1,38,811	52.85
2005	1,38,041	53.8
2006	1,26,824	49.81
2007	1,26,824	49.81
2008	85,187	30.82
2009	1,03,996	36.19
2010	77,723	52.33
2011	90,141	52.11
2012	85,591	67.9
2013	2,20,492	124.42
2014*	4,56,771	276.22

Source: MSME Annual Report 2013-14 - * Data for 2014 are Provisional.

From the above table 3, it is shown that in India, there are so many industries are going to be sick by the above reasons and the financial institutions are supporting to those sick industries towards running and development. In such financial institutions commercial banks are very close to the industries which will help such industries at earliest. This table gives the details of the identified sick units and the finance given to those sick industries by the commercial banks.

Due to the five year plans and industrial policies, so many industries are initiated in different plan periods. By introducing the MSME act 2006, so many small scale industries are streamlined from sickness due to the liberalization of rules after that it is clear that there are no such huge number of sick units are identified upto 2012. In 2013 and in 2014 the intensity is more and the support to those industries is also huge.

5. CONCLUSIONS

From the above discussion, it can be concluded that the five year plans have given a special place to the small scale industrial sector, due to creation of broad based employment opportunities and wide dispersal of industrial production. By the industrial policies, the small scale scale sector had a new dimension of liberalization, globalization and privatization.

However, sick units position is bit disappointing, the aid from the commercial banks to sick SSIs facilitates to boost its performance to stand back and it is compulsory to Small Scale Units to acquire knowledge about the taxation and regulatory measures by way of training and should use budgetary control for financial planning to overcome the sickness.

Small Scale Units should collect information about the Govt. assistance and utilize it effectively in getting the assistance is also an important task to get liberate from the industrial sickness majorly.

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EMPLOYEE PERCEPTION OF TRAINING & DEVELOPMENT PROGRAMS: A COMPARATIVE STUDY OF HDFC, ICICI & AXIS BANK

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ABSTRACT

In today's rapidly changing business environment, the efficiency of any organization depends directly on the capability, motivation & talent of its employees. Capability of an employee depends on his working ability & the type of training received. Training & Development activities have utmost importance because it leads to achievement of organizational objectives. The study involves a survey conducted in major private sector banks in Punjab i.e. ICICI Bank, HDFC Bank, Axis Bank. The respondents are Lower Level Management employees. The study is made by taking into consideration the training programs attended by the employees till date & their attitude & expectations for the upcoming training programs. The study aims at measuring the effectiveness of Training programs of banks by focusing on Training Need Analysis, Training Program designs & Training Delivery techniques. The data is collected from a structured questionnaire & was analyzed using SPSS 17.

KEYWORDS
Effectiveness, Need Analysis, Training.

JEL CODE
M53 Training.

1.0 INTRODUCTION

Employee Training is becoming a necessity to every organization now-a days. Employees are delegated with different role & responsibilities & training helps them to accomplish these roles & responsibilities & prepare them for the future responsibilities as well.

The Indian government & the local industry are continuously increasing their investments in training to upgrade the skills of employees. The IT industry is the largest user of training & spends about 3 % to 5 % of their revenues on training as compared to 0.5% to 2% done by Non IT Companies. Training & Development has become a major part of employee retention & service enhancement programs. Besides the IT Sector, multinational companies, banks & large Indian organizations also utilise the benefits of training services.

The Present day Economy is very much dependent upon the various functions of banking Practices, it's unlikely for the country's economy to grow & develop without the role of banks. The role of Banks is carried out by its employees, so it's necessary to have a well trained & motivated staff to manage the bank operations.[1] In the rapidly changing world of private banking, knowledge, performance and service must be pooled with understanding of customer needs in order to have a competitive edge. In particular, private bankers must ensure that employees-customer contact remain current in their understanding not only of financial services but also of the legal, regulatory and tax changes impacting their clients. To meet these rising demands on knowledge and skills, banks often rely on training.

BANKING INDUSTRY

Banking has come up with one of the most challenging sectors in the country. The banking system is the most dominant section of the financial sector. Indian banks are continually building their strengths and have become stronger than ever before. According to the study, Indian banks contributed 1.7 per cent to the total global brand value at US$ 14,741 million and grew by 19 per cent in 2011[2].

The Public Sector Banks (PSBs) are the base of the Banking sector in India which contributes for more than 78 per cent of the total banking industry assets, but they are weighed down by many Non Performing assets (NPAs), huge manpower and lack of modern technology. On the other hand the Private Sector Banks are progressing a lot. They are leaders in e banking, tele- banking, ATMs.[3]

The rapid growth of the banking industry in India has increased the need of trained human resources in banks of the country. The shortage of trained professionals has become so acute that banks are taking initiatives to train the human capital themselves only.[4] e.g. TimesPro with partnership with HDFC bank co-developed the content of a training course for graduates which aimed at bridging the skills-gap in the banking industry and transforming candidates into job-ready professionals. The course was titled as 'The Modern Banker' programme.[5]

2.0 LITERATURE REVIEW

Bassi, Cheney and Van Buren (1997) studied the training trends with changing times. They compared the current year and the next three years' trends based on the challenges & opportunities faced by professionals specializing in workplace learning & performance due to the technological innovation in the transfer of skills & knowledge Skill requirement. They analysed that the major trends that were followed in training were computer skill training, teamwork training, shift from training to performance, decision making & problem solving training. In the next three years trends were shifted from training to performance & performance to learning. The shift of training to performance & learning is observed today also.[6]

Matthews (1999) in his research developed a model of workplace learning that shows eight mindsets that are important to learners and the organization in perceiving work place learning as positive, so that growth & development take place. The mindsets were:

- Workplace learning must be greater than the change.
- Workplace learning must be systematic & interactive.
- Workplace learning must be geared to business outcomes.
- Workplace learning must provide meaning, self worth & sustaining for all employees.
- Workplace learning must be timely.
- Workplace learning must be worker driven.
- Workplace learning must expand the frontiers of knowledge.
- Workplace learning must be competency based.[7]

Aniruddha Bannerje (2004) in his research; Employee Training: Strategic approach to better ROI, stated that the employee training comes out to be very expensive for most organizations & for majority, it is unable to achieve the best possible results because it is taken tactically rather than strategically. According to the research a Good training is based on:

a) Identifying the training needs,
b) Training a critical mass of employees,
c) Determining the forms of the training,
d) Transferring the training to the job and
e) Evaluating training.

He concluded that the key to get the best returns on investment from training is to view it strategically rather than tactically.[8]

Liz Massey (2009) in his research work focused on training employees for task fluency & reaping the benefits. He stressed on setting up a learning environment & developing a program that stress on fluent employee performance. According to him the basic keys of setting a workplace learning program that focus on fluent performance are focus on fundamentals, Adding & continuing in time Practices as soon as possible in training, shifting the Training Mix to a high proportion of active hands-on practice exercises & Promoting a culture of fluency.[9]

Amalia Santos & **Mark Stuart (2003)** conducted a study on employee perceptions and their influence on training effectiveness. The study investigates evaluation strategies designed to extract greater training effectiveness, and explores the influence of trainees' perceptions and work environment factors on this. They concluded that training will be more effective if attention is given to ensure that the work climate and management practices encourage personal development, since behavioural change after training seems more likely to occur where management encourage and reward trainees for using new skills. The analysis suggests that any evaluation of training effectiveness must take into account both pre and post training activities.[10]

3.0 IMPORTANCE OF STUDY

The study will help in comparing the Training Programs of three banks in terms of Training Need Analysis, Training Program Design & Delivery. Through this research improvements can be suggested to banks depending on the present scenario so that the future performance can be enhanced accordingly.

4.0 STATEMENT OF PROBLEM

There is growing need to measure the effectiveness of training & development programs because the banks are investing a large sum of money in it. There is a vast scope for the study in India because this area is been overlooked due to lack of interest by the employees & management but with rapidly changing environment one needs to study the attitude of employees towards the training programs in order to make them more effective.

5.0 OBJECTIVES OF THE STUDY

1. To analyse the employee perception regarding training need identification, training program design and delivery of training and development (T&D) programmes used by the banks.
2. To compare the banks in terms of Training need identification, training programs design & delivery.
3. To suggest improvements in training programs for enhancing employee performance relevant to the banks under study.

6.0 HYPOTHESIS

H_0 = There is no significant difference in Training need identification, Delivery of training programs & design of training programs amongst the three chosen banks HDFC, ICICI & Axis Bank.

H_A= There is a significant difference in Training need identification, Delivery of training programs & design of training programs amongst the three chosen banks HDFC,ICICI & Axis Bank.

7.0 RESEARCH METHODOLOGY

Data Collection: Data has been collected by both primary & secondary sources. Primary data is collected through structured questionnaire & personal interviews from the randomly selected employees working at the Lower Level Management of private banks in major cities of Punjab. Questionnaire for the workers based on literature and consultations with academicians and experts in training have been designed.

Secondary data needed for the study has been collected from related books, publications on training evaluation & effectiveness, websites, Policy guidelines, internal records & publications of the bank.

The study was undertaken by selecting about **40** branches from Punjab & Chandigarh by following stratified random sampling in proportion to their distribution. A total of **283 employees** (approximately 7% of total population), were randomly selected.

Research Design: The study conducted followed descriptive design.

The study is confined to major cities of Punjab mainly Patiala, Ludhiana, Jalandhur, Mohali & Chandigarh.

8.0 ANALYSIS & DISCUSSIONS

NEED, DESIGN & DELIVERY OF TRAINING & DEVELOPMENT PROGRAMS

For analysing the training need identification of the employees, Training program design & delivery of the three banks we applied factor analysis & first looked out for the appropriateness of factor analysis & identified the variables supporting these three parameters & calculated their factor loadings. We tested the goodness of fit model & then the three banks were compared on the above mentioned three variables.

As it has been determined that factor analysis is suitable for analysing the data. Therefore for the appropriateness of Factor analysis we first applied KMO & Bartlett's test of sphericity which is a test used to examine the hypothesis that the variables are uncorrelated in the population i.e. one variable correlate perfectly with itself but has no correlation with other variables.

To test the overall significance of the correlation matrix we used Bartlett's test, the research data is significant at 0.001 level according to the below mentioned table which is 973.724. The other test is the measure of sampling adequacy which fortunately falls in the acceptable range with a value of 0.793. Therefore the 10 considered variables are statistically significant & collectively meet the fundamental requirement of factor analysis.

All the measures tested above indicate that the set of variables is appropriate for factor analysis.

TABLE 8.1: KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.793
Bartlett's Test of Sphericity	Approx. Chi-Square	973.724
	Df	45
	Sig.	.000

TOTAL VARIANCE EXPLAINED

This correlation matrix is then transformed through estimation of a factor model to obtain factor matrix. The loading of each variable on the factors are then interpreted to identify the underlying structure of the variables (Hair et al, 1998). Here the training need identification, training design & delivery related factors are taken into consideration & steps of factor analysis are examined. In the previous stage we found out that the component factor analysis is appropriate.

Following table contains the no of information regarding the 10 possible factors & their relative explanatory power as expressed by their Eigen values.

TABLE 8.2: FACTOR ANALYSIS APPLIED TO IDENTIFY TRAINING NEED, DELIVERY & DESIGN FACTORS: TOTAL VARIANCE EXPLAINED

Factor	Initial Eigen Values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.734	37.344	37.344	3.226	32.257	32.257	2.653
2	1.869	18.687	56.031	1.476	14.757	47.014	2.432
3	1.089	10.885	66.916	.680	6.796	**53.811**	2.046
4	.684	6.842	73.758				
5	.580	5.803	79.561				
6	.520	5.200	84.761				
7	.485	4.851	89.611				
8	.428	4.281	93.892				
9	.336	3.364	97.256				
10	.274	2.744	100.00				

Factor 1 Need Identification account for a variance of 3.734 which is 37.34% of the total variance. The second factor Training Delivery accounts for 18.68 % of total variance. Likewise the third factor Training Program design accounts for 10.885% of total variance. The three factors combinely account for 53.811% of total variance. It is recommended that the factors extracted should account for approx 60% of the variance but the value is coming out to be 53.811% which is quite acceptable. This value is coming out to be less; this can be because of the reason that due to cross loadings some statements were deleted after pilot survey which may have resulted in loss of some information. This value is quite acceptable as the level of variance depends on the problem.

The factors are determined based on the percentage of variance. In this approach the no of factors extracted are determined so that the cumulative percentage of variance explained by the factor reaches a satisfactory level. It can also be determined based on Eigen values. In this approach only factor with Eigen values greater than one are retained, the other factors are not included in this model. Hence only first three factors i.e. Need Identification, Design & Delivery are included.

PATTERN MATRIX

An important output from factor analysis is factor matrix also called the factor pattern matrix. The factor matrix contains the coefficients used to express the standardized variables in terms of the factors. These coefficients, the factor loadings represent the correlation between the factors & the variables.

TABLE 8.3: PATTERN MATRIX

	Factors		
	NI	Delivery	Design
Cronbach's Alpha	**0.816**	**0.785**	**0.684**
Sharing T & D needs by manager	.894		
Manager analyses my strengths & weakness in order to determine my training needs	.842		
Consideration of training needs	.638		
Training as a boost in career	.493		
Trainer communicated well with all the participants		.831	
The trainer overall helped me a lot in increasing my knowledge & skills.		.638	
The trainer was well prepared		.633	
The trainer always had feedback from the trainees/participants.		.620	
Coverage of training programs			.838
Provided with all the information required regarding the training objectives			.601

Factor 1 i.e. Need Identification is correlated with 4 of 10 variables (an absolute average value of factor loading > 0.7) with an average loading of 0.717. It is correlated with variables 1,2,3,4 i.e. My Manager always shares my training & Development needs with me, My Manager analysis my strengths & weakness in order to determine my training needs, My training needs and abilities are abilities are always taken into consideration while conducting training programs & Training gave a boost in my career. Likewise factor 2 i.e. Training Delivery Method is correlated with four of 10 variables with an average loading of 0.681(approx 0.7). It is correlated with variables 5, 6, 7, 8 –The trainer was well prepared, The Trainer communicated well with all the participants, The trainer always had feedback from the trainees, The trainer overall helped me a lot in increasing my knowledge & skills. The factor 3 Training Design is correlated with 2 of 10 variables with an average of 0.72. It is correlated with variables 9, 10- I was provided with all the information required regarding the training objectives before the commencement of training & the training course covered all the things I needed to learn.

Hence we found that four variables are correlated with factor 1 i.e. Need Identification. Four Variables are correlated with Factor 2 Delivery of Training Programs & Two variables are correlated with factor 3 Training Program designs which can be seen clearly in following table.

FACTOR SCORES

Factor Scores are composite scores estimated from the respondents on the derived factors. The following table shows the Mean and Standard Deviation of the score for each factor.

TABLE 8.4: FACTOR SCORE DESCRIPTIVES

		N	Mean Regression Scores	Std. Deviation	Std. Error
Need Identification	**Axis bank**	88	.1709167	.89006810	.09488158
	HDFC Bank	110	-.2173503	.85454070	.08147726
	ICICI bank	85	.1043278	1.01904250	.11053068
	Total	283	.0000000	.93102814	.05534388
Delivery	**Axis bank**	88	.2338714	.83770541	.08929970
	HDFC Bank	110	-.1964363	.86712690	.08267731
	ICICI bank	85	.0120860	.95377423	.10345134
	Total	283	.0000000	.90014611	.05350813
Design	**Axis bank**	88	.2388010	.96814588	.10320470
	HDFC Bank	110	-.2125697	.77564826	.07395516
	ICICI bank	85	.0278610	.84667408	.09183470
	Total	283	.0000000	.87800962	.05219225

In order to compare the perception of the respondents of three banks for the above factors, an analysis was carried out using ANOVA.

TABLE 8.5: ANOVA RESULTS FOR TRAINING NEED, DELIVERY & DESIGN FACTORS

		Sum of Squares	df	Mean Square	F	Sig.
Need Identification	Between Groups	8.692	2	4.346	5.162	**.006**
	Within Groups	235.749	280	.842		
	Total	244.441	282			
Delivery	Between Groups	9.070	2	4.535	5.787	**.003**
	Within Groups	219.424	280	.784		
	Total	228.494	282			
Design	Between Groups	10.055	2	5.027	6.789	**.001**
	Within Groups	207.339	280	.740		
	Total	217.394	282			

Above Table shows that the F test values along with degree of freedom (2,280) and significance of 0.006 for Need Identification, 0.003 for delivery of training programs & 0.001 for training Programs design.

Need identification $F(2,280) = 5.162$, $P < 0.05$

Delivery of training programs $F(2,280) = 5.787$, $P < 0.05$

Design of training programs $F(2,280) = 6.789$, $P < 0.05$

Given that $p < 0.05$, we reject the null hypothesis & accept the alternate hypothesis.

The Sample means for training need identification for Axis Bank, HDFC bank & ICICI bank are 2.62, 2.45 & 2.68 respectively lye in the same range i.e. somewhat effective, but when compared, in HDFC Bank training needs are identified more effectively than that in ICICI Bank & Axis bank.

The Sample means for training Delivery for Axis Bank, HDFC & ICICI bank are 1.78, 1.56 & 1.67 respectively though lye in the same range i.e. most effective but HDFC bank is more effective than ICICI bank which is effective than Axis Bank. The order of effectiveness of training delivery techniques is HDFC Bank, ICICI bank & Axis Bank.

The Sample means for training Design for Axis Bank, HDFC Bank & ICICI bank are 2.15, 1.82 & 1.93 respectively. So we found that ICICI bank & HDFC bank are equally effective whereas Axis bank is somewhat less effective. The order of effectiveness of training program design is HDFC Bank, ICICI Bank, Axis Bank.

Combining the results we see that HDFC Bank is the most effective & Axis Bank is least effective in Training Design & Training Delivery techniques but for Training Need Identification HDFC bank is most effective & ICICI Bank is least effective among the three banks.

In order to study further, Multiple Comparison was carried out for the three variables of different banks and the results have been tabulated in following Table.

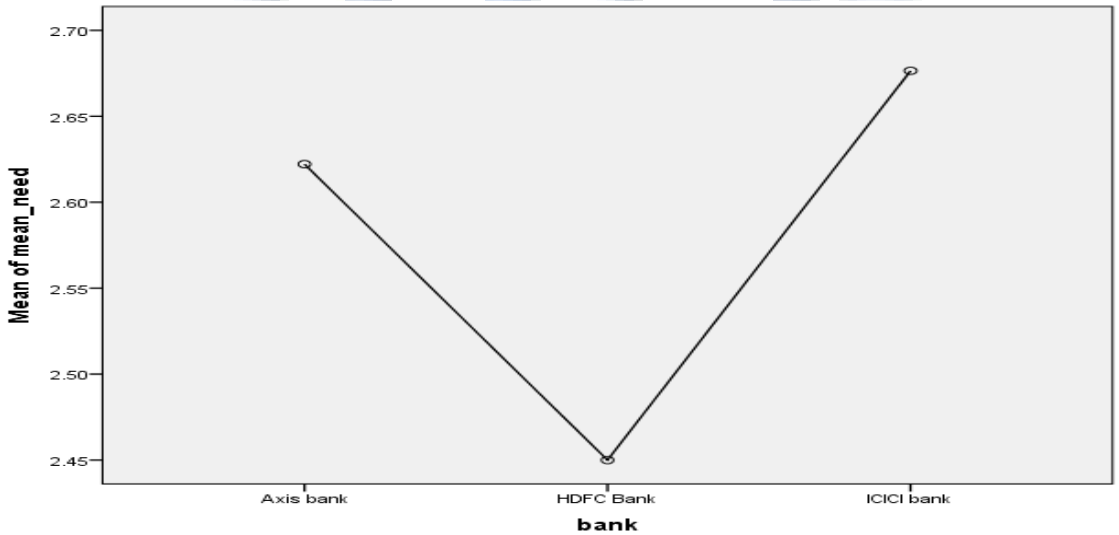
TABLE 8.6: MULTIPLE COMPARISON BETWEEN THREE BANKS FOR TRAINING NEED IDENTIFICATION, DELIVERY & DESIGN FACTORS

Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.
Need Identification	Axis bank	HDFC Bank	.38826701*	.13123232	**.010**
		ICICI bank	.06658896	.13954624	1.000
	HDFC Bank	Axis bank	-.38826701*	.13123232	.010
		ICICI bank	-.32167804*	.13251267	**.047**
	ICICI bank	Axis bank	-.06658896	.13954624	1.000
		HDFC Bank	.32167804*	.13251267	.047
Delivery	Axis bank	HDFC Bank	.43030765*	.12660705	**.002**
		ICICI bank	.22178533	.13462795	.302
	HDFC Bank	Axis bank	-.43030765*	.12660705	.002
		ICICI bank	-.20852232	.12784227	.312
	ICICI bank	Axis bank	-.22178533	.13462795	.302
		HDFC Bank	.20852232	.12784227	.312
Design	Axis bank	HDFC Bank	.45137068*	.12307129	**.001**
		ICICI bank	.21093995	.13086819	.324
	HDFC Bank	Axis bank	-.45137068*	.12307129	.001
		ICICI bank	-.24043073	.12427202	.162
	ICICI bank	Axis bank	-.21093995	.13086819	.324
		HDFC Bank	.24043073	.12427202	.162

NEED IDENTIFICATION

Using Bonferroni from the above table it is evident that for ICICI Bank & HDFC Bank have significant difference in their (significant value<0.05) which is also shown in Mean Plots.

FIG 8.1: MEAN- NEED IDENTIFICATION



The mean values of Axis Bank, HDFC Bank ICICI Bank are 2.62, 2.45 & 2.68 respectively.

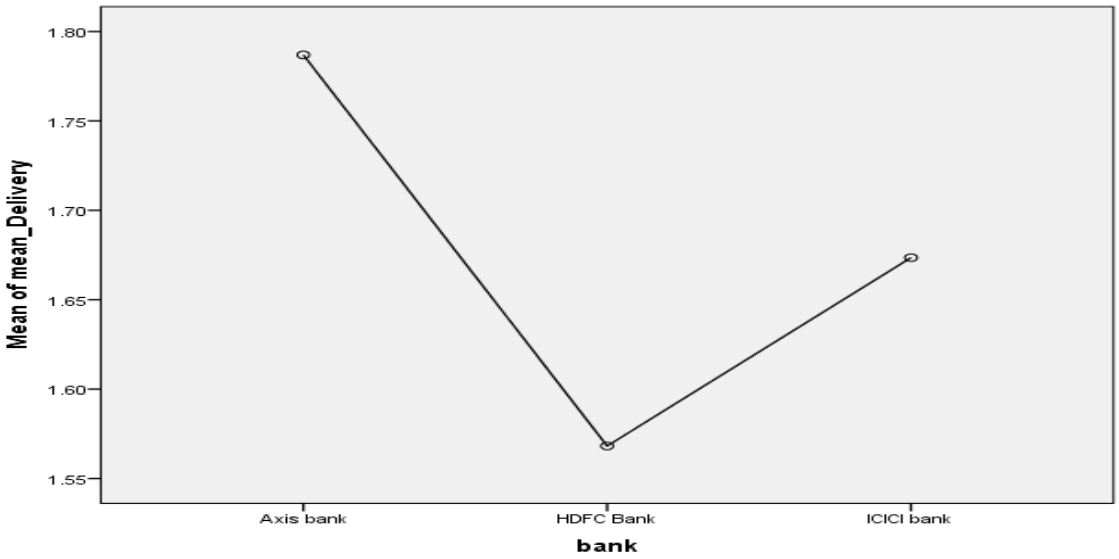
This shows that HDFC bank works more on identifying employee training needs as compared to ICICI Bank. Employees of both ICICI bank & HDFC feels that their training needs are well identified before conducting the programs but statistically the needs are different. Also HDFC & Axis Banks have significant difference in their training need identification programs. This shows that HDFC bank works more on identifying employee training needs as compared to Axis Bank. Employees of ICICI bank & Axis Bank feels that their training needs are well identified before conducting the programs. Although the means are approximately equal but statistically the needs are identified differently.

DELIVERY

Using Bonferroni, for the variable Delivery of Training Programs, we conclude that Axis Bank & HDFC Bank have significant difference in the training delivery methods opted by them.

The mean values of Axis Bank, HDFC Bank ICICI Bank are 1.78, 1.56 & 1.67 respectively.

FIG 8.2: MEAN- TRAINING DELIVERY

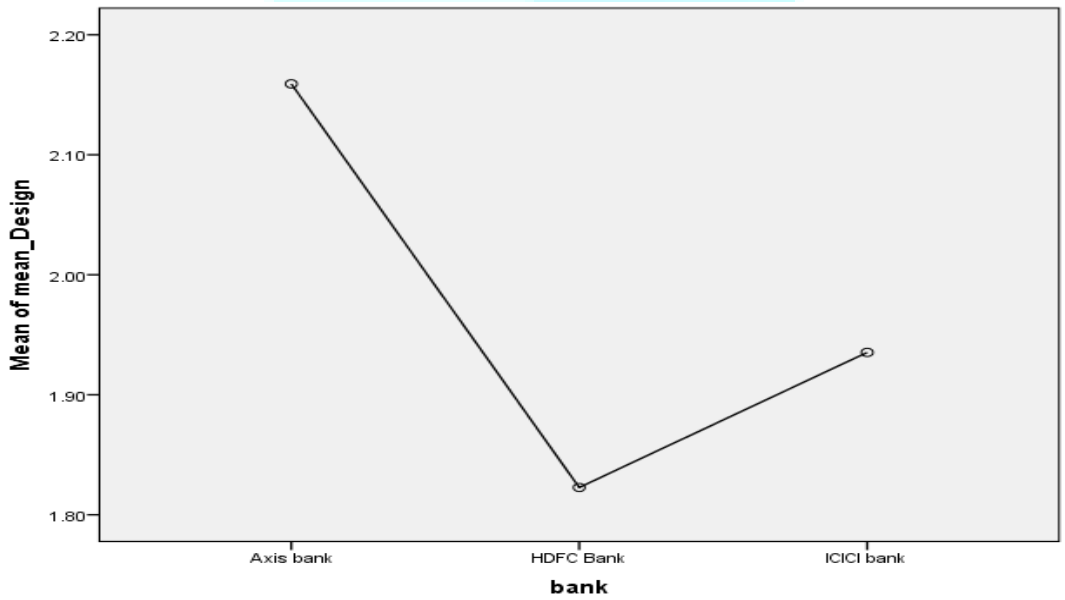


This shows that employees perceive that in HDFC Bank the training delivery techniques are more efficient as compared to Axis bank. Although the means are approximately equal but they differ statistically.

TRAINING DESIGN

Using Bonferroni, for Training Program Design, we conclude that Axis Bank & HDFC Bank have significant difference in the Training program designs.The mean values of Axis Bank, HDFC Bank ICICI Bank are 2.15, 1.82 & 1.93 respectively.

FIG 8.3: MEAN- TRAINING DESIGN



This shows that HDFC bank design better training programs as compared to Axis bank. Employees perceive that HDFC bank designs its training programs very well & axis bank designs its programs at the satisfactory level.

9.0 TRAINING STRATEGIES FOR IMPROVEMENT

- Training must be according to the respective job profile requirements i.e. programs should be totally employee need based.
- Some of the employees feel that training material in various programs is repeated again & again so training programs should be more job specific.
- Training Programs should include more participative & interactive sessions.
- There should be more focus on practical implications rather than theoretical one's.
- Case studies need to be discussed during training programs.
- Training material should be provided before hand to the trainee so that he can have an overview of training program.
- The class room training is very different from real office environment. Training program portrays a very positive picture but in actual banking environment the employee has to survive on his own. So Training programs should be arranged according to the actual working environment.

10.0 CONCLUSION

From the research we have concluded that HDFC Bank is found to be most effective & ICICI Bank as least effective in Training Need Identification among the three banks. i.e. Employee Training Needs are identified in a best manner in HDFC Bank as compared to ICICI & Axis Bank. HDFC Bank is found to be most effective & Axis Bank as least effective in Training Delivery techniques among the three banks. i.e. HDFC Bank focuses on delivery of Training Programs also along with identifying the employee training Needs. In designing Training Programs HDFC Bank takes a lead. HDFC bank is most effective & Axis Bank is least effective for Training Program Designs among the three banks.

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TRENDS IN FOREIGN DIRECT INVESTMENT INFLOWS IN INDIA

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TUNI

ABSTRACT

With the initiation of new economic policy in 1991 and subsequent reforms process, India has witnessed a change in the flow and direction of foreign direct investment (FDI) into the country. This is mainly due to the removal of restrictive and regulated practices. Foreign direct investment in India increased from US $ 129 million in 1991-92 to US $ 6051 million in March, 2005, and to US$ 36,860 million in 2012-13. However, the country is far behind in comparison to some of the developing countries like China. In so far as growth trend of FDI is concerned, there has been quite impressive growth of FDI inflow into the country during this period. However, negative growth rate is noticed during the period 1998-2000 primarily due to falling share of major investor countries, steep fall of approval by 55.7% in 1998 compared to 1997 and slackening of fresh equity. However, traditional industrial sectors like food processing industries, textiles, etc. which were once important sectors attracting larger FDI, have given way to modern industrial sectors like electronics and electrical equipments, etc. This paper analyzes the FDI flows in the country as a percent of total foreign investment inflows.

KEYWORDS
Economic growth, FDI, Capital, Financial markets, reforms.

INTRODUCTION

If a backward and underdeveloped country is interested in rapid economic development, it will have to import machinery, technical knowhow, spare parts and even raw materials,. Here it worth to mention the statement quote by A.K. Cairncross - "It is not possible to buy development so cheaply. The provision of foreign capital may yield a more adequate infrastructure but rarely by itself generates rapid development unless there are already large investments opportunities going a-begging". for this purpose all developing nations accepted FDI as a sole visible panacea for all their scarcities. Further, the integration of global financial markets paves ways to this explosive growth of FDI around the globe.

One of the most striking developments during the last two decades is the spectacular growth of FDI in the global economic landscape. This unprecedented growth of global FDI in 1990 around the world make FDI an important and vital component of development strategy in both developed and developing nations and policies are designed in order to stimulate inward flows. In fact, FDI provides a win – win situation to the host and the home countries. Both countries are directly interested in inviting FDI, because they benefit a lot from such type of investment. The 'home' countries want to take the advantage of the vast markets opened by industrial growth. On the other hand the 'host' countries want to acquire technological and managerial skills and supplement domestic Savings and foreign exchange. India has recognized FDI as an important driver for economic growth and development and has introduced a new industrial policy- 1991, which allowed 51% automatic approval for foreign investment in 34 industries.

AN OVER VIEW OF FDI IN INDIA

The historical background of FDI in India can be traced back with the establishment of East India Company. British capital came to India during the colonial era of Britain in India. After Second World War, Japanese companies entered Indian market and enhanced their trade with India, yet U.K. remained the most dominant investor in India.

Further, after Independence issues relating to foreign capital, operations of MNCs, gained attention of the policy makers. Keeping in mind the national interests the policy makers designed the FDI policy which aims FDI as a medium for acquiring advanced technology and to mobilize foreign exchange resources. With time and as per economic and political regimes there have been changes in the FDI policy too. The industrial policy of 1965, allowed MNCs to venture through technical collaboration in India. Therefore, the government adopted a liberal attitude by allowing more frequent equity participation to foreign enterprises, and to accept equity capital in technical collaborations. But due to Significant outflow of foreign reserves in the form of remittances of dividends, profits, royalties etc, and the government has to adopt stringent foreign policy in 1970s. During this period the government adopted a selective and highly restrictive foreign policy as far as foreign capital, type of FDI and ownerships of foreign companies was concerned.

Government setup Foreign Investment Board and enacted Foreign Exchange Regulation Act in order to regulate flow of foreign capital and FDI flow to India. The soaring oil prices continued low exports and deterioration in Balance of Payment position during 1980s forced the government to make necessary changes in the foreign policy. This brings partial liberalization in Indian Economy. The government introduces reforms in the industrial sector and announced New Industrial Policy 1991, with an aim of competency, efficiency and growth in industry through a stable, pragmatic and non-discriminatory policy for FDI inflow.

SIGNIFICANCE OF THE STUDY

The period under study is important for a variety of reasons.

1. First of all, it was during July 1991 India opened its doors to private sector and liberalized its economy.
2. The experiences of South-East Asian countries by liberalizing their economies in 1980s became stars of economic growth and development in early 1990s.
3. India's experience with its first generation economic reforms and the country's economic growth performance were considered safe havens for FDI which led to second generation of economic reforms in India in first decade of this century.
4. There is a considerable change in the attitude of both the developing and developed countries towards FDI. They both consider FDI as the most suitable form of external finance. 5) Increase in competition for FDI inflows particularly among the developing nations. The study is appropriate in understanding inflows during 1991- 2013.

STATEMENT OF THE PROBLEM

Since 1991 India recognized significant role of FDI in the economic development of the Indian Economy and opened the gates to private sector and invited large amount of foreign direct investment in different Indian industries. Hence, the present study tries to discuss the FDI trends in India.

OBJECTIVES

The objectives of the present paper are,

- To study the trend in FDI inflows in India.
- To study the FDI inflows as a percentage of total foreign investment inflows.

METHODOLOGY

This study is based on secondary data. The required data have been collected from varioussources i.e, , various Bulletins Reserve Bank of India, publications from Ministry of Commerce, Govt. of India, Economic Survey, and various research papers published standard journals for the period 1992-2013.and this paper used analytical tools like simple arithmetic percentages and averages to find out the trend in FDI inflows in India .

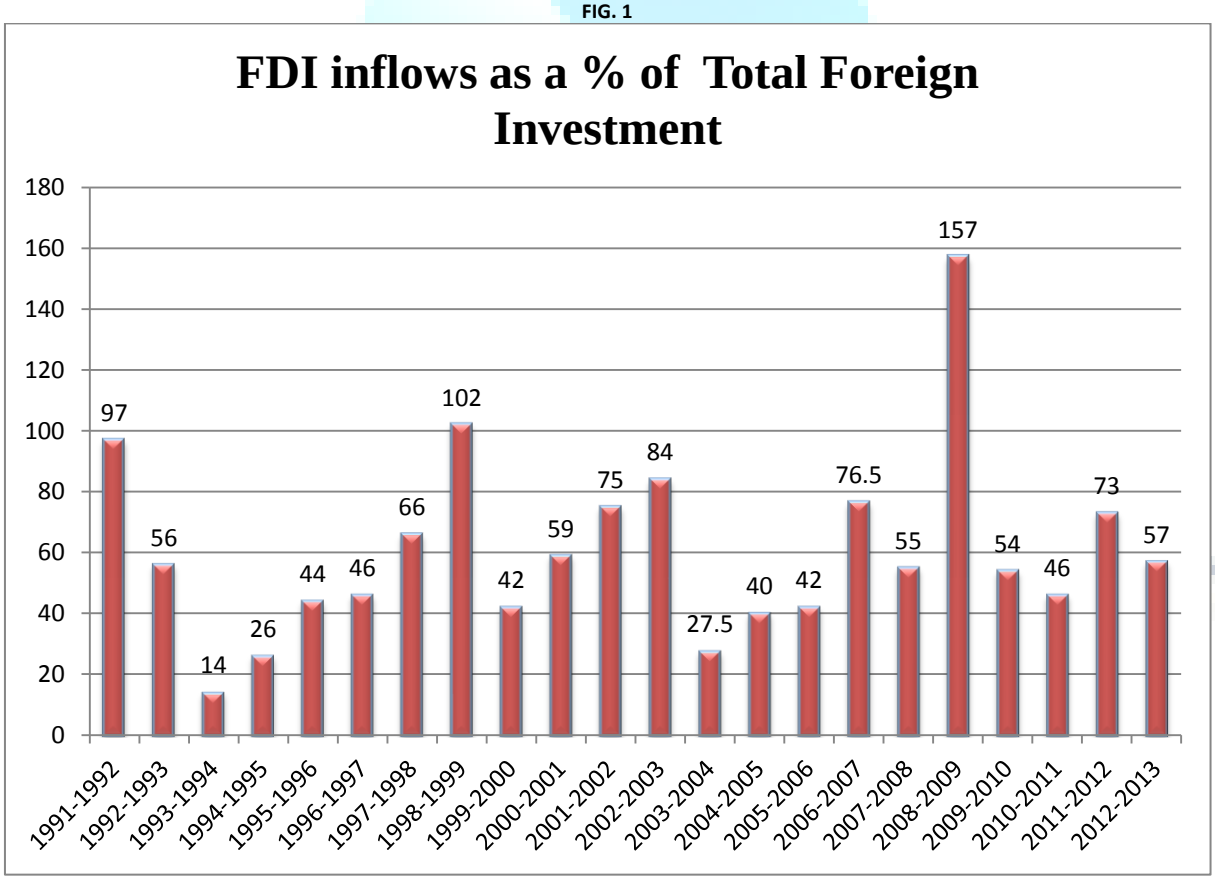
FDI FLOWS IN INDIA

TABLE 1: FDI FLOWS IN INDIA (*in US $ million)*

Year	*Foreign Direct Investment*	*Total Foreign Investment*	*FDI as a % of Total Foreign Investment*
1991-1992	129	133	97
1992-1993	315	559	56
1993-1994	586	4153	14
1994-1995	1314	5138	26
1995-1996	2144	4892	44
1996-1997	284	6133	46
1997-1998	3557	5385	66
1998-1999	2462	2401	102
1999-2000	2155	5181	42
2000-2001	4029	6789	59
2001-2002	6130	8151	75
2002-2003	5035	6014	84
2003-2004	4322	15699	27.5
2004-2005	6051	15366	40
2005-2006	8961	21453	42
2006-2007	22826	29829	76.5
2007-2008	34335	62106	55
2008-2009	37838	23983	157
2009-2010	37763	70139	54
2010-2011	27024	58495	46
2011-2012	46553	63724	73
2012-2013	36860	64630	57
Total	**270195(59.1%)**	**456858(100%)**	**59.1**

(Economic Survey-2013)

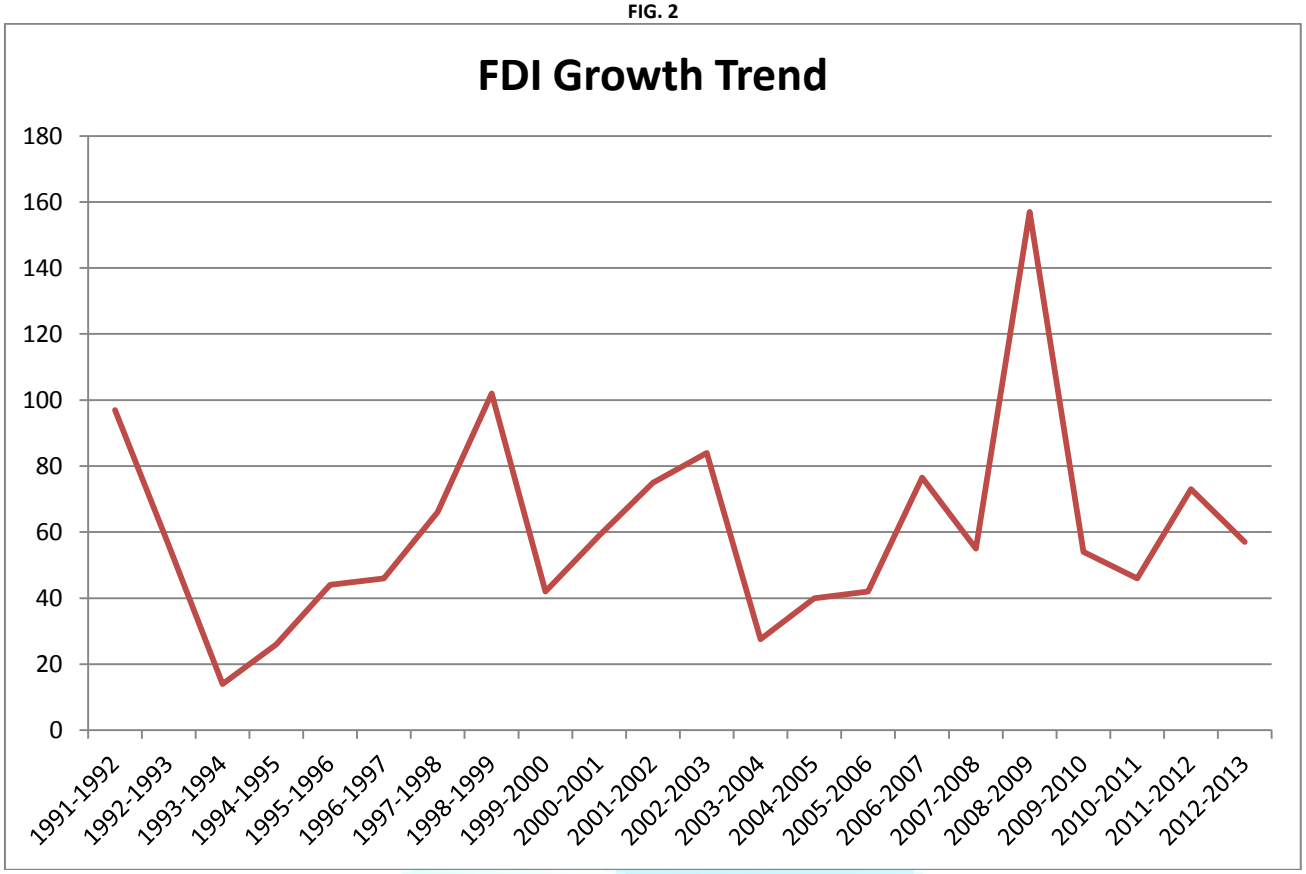
FIG. 1



After announcement of New Industrial Policy (1991), there has been an acceleration in the flow of foreign capital in India. As per data provided by the government of India in economic survey -2013, during 1991-92 to 2012-13,total foreign investment flows were of the order of $ 546.9 billion, out of which about $ 270.2 billion (59.1%) were in the form of FDI and remaining $186.7 billion (40.9%) were in the form of portfolio investment. This data clearly shows that the preference of the foreign firm was more in favour of portfolio investment. In 1991-92 the FDI inflows were about US $ 129 million (i.e., 57% of total foreign investment inflows) which were increased to US $ 36,860 million in 2013(i.e., 57% of total foreign investment inflows). That means the cumulative FDI inflows were increased from US $ 129 million IN 1991-1992 to US $ 2, 70,195 million in 2012-2013.

The foreign direct investment inflows trend has been depicted in this paper shows that there is an increasing tendency in FDI inflows but which is not sufficient for the economic development of Indian economy because the approved amount of FDI inflows are larger than the actual FDI inflows.

FIG. 2



CONCLUSION

Even though global economies are suffering with financial crisis and other economic hurdles, India still stands as a global investment destination. Keeping in view of current requirements and benefits of the nation the government of India comes up with new policies from time to time to increase the foreign direct investment inflows. Because FDI plays a crucial role in enhancing the level of economic growth in the country and also it helps in increasing the trade in the international market, as well as increasing in the exchange rate and foreign exchange reserves of the of hosting country .

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RE CONSIDERING SPENCE: SIGNALLING AND THE ROLE OF EDUCATION

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ABSTRACT

Education is costly, both to the individual because of the opportunity costs involved in terms of tuition, stationary etc. and the income forgone during the study period and to society because of subsidies given to education, the GNP foregone and the externalities if excessive or insufficient education is consumed. If the human capital theory is true i.e. higher earnings of more educated workers are the result of an increase in productivity, society will benefit from promoting education and all will be better off. But signalling model which consider education just a screening device for employers to identify workers who are naturally more productive through education certificates and education level attained, investing in education will be a gross misallocation of scarce resources. Thus, paper tries to identify the misallocation of resources (monetary or non monetary) taking place in the education sector after a brief overview of signalling and human capital theory. The paper further explores the adaptability of signalling theory in the modern Indian context.

KEYWORDS
Human capital theory, signalling, screening device, GNP.

1. INTRODUCTION

In a wide range of empirical studies, it has been observed that schooling and earnings are positively related with causation running from schooling to earnings. These issues are undisputable. Regarding to this issue, two fundamental schools of thought exists: the human capital theory and the signaling theory. If the human capital theory holds true than skills learned in school directly enhance job-related productivity, this is turn results in higher earnings. The screening hypothesis on the other hand posits that schooling is simply used as a screening device which allows employer to access the productivity levels of potential employees. Thus, paper overview briefly the two school fundamental school of thoughts and try to apply the signaling theory when both education and labour market are undergoing changes. The paper is divided into four sections. Section 1 introduces the theme of the paper. Section 2 gives the overview the Spence's work of signaling model. This section also explains the presence of multiple equillbria which all may not be Pareto optimal. Section 3 explains the over investment in Education that current education system of India is witnessing through the lens of the signaling model. The last section concludes the paper.

2. THE SIGNALING MODEL

Forty years ago in 1973, Michael Spence formulated a creative new way of looking at the role of education in relation to the labour market. The idea of signaling formalized in a neo classical framework of analysis had same astounding implication. The most extreme implication of the signaling hypothesis was that education could not add significantly to the productivity of workers. This stood opposite to the popular human capital view that education is a process of building up valuable human capital. Spence departed from the human capital approach by recognising employers as active agents whose beliefs influenced wages rather than taking one dimensional view of education as an investment from the point of view of prospective job seekers. The recognition of two groups of agents interacting in a market place which was replete asymmetry reflected the progress in economic theory brought about by Akerlof's revolutionary research which heralded a whole new dimension in the economic theorising, assisted by game theoretic modelling. This paper attempts to reconcile the signaling hypothesis with the view that education need not be intrinsically worthless through an exploration of Spence's original work, supplemented by the later research done by John Riley and Samuel Bowles. The paper proposes a simple change in the specification of Spence's original model which makes it possible to permit the formation of human capital during the process of education, while retaining the basic framework of the signaling model.

The basic model of job market signaling introduced by Spence proposes that employers view educational degrees as a signal of a workers' productivity. The labour market has informational asymmetry as the job seekers are aware of their productivity, but the employers only found out only after hiring. For e.g. a company director may want to fill managerial posts. During the process of selection, he cannot differentiate easily which applicant would be or won't be good manager. Ha can however, prescribe a basic minimum qualification for applicants such as a bachelor's degree to reduce the number of applicants have some basic ability because f which they were able to obtain the degree. Here, the degree is being used by the graduates to signal picked up in the education process. This is fairly well supported by the existence of degree programmes that are not targeted towards any specific occupation and are general in nature. Also, the prevalence of training or probationary period reaffirms the weak link between the skills attained in college and the demands of the job.

The model developed by Spence involves two groups of agents: employers and job seekers. The employers are unaware of the exact productivity of individual job seekers, but they assign conditional probabilities on the basis of past experiences in hiring. The conditioning factor used is the signal, i.e., the education level of the job seeker. The conditional probability is updated whenever it is failed to be updated by experience. In its simplest formulation, all job seekers are assumed to have one of two levels of productivity: high or low. Following the neoclassical market assumptions, the workers are paid their marginal products. Thus, high productivity workers are paid a high wage, and low productivity workers are paid a low wage. Job seekers on the other hand are aware of their productivity, and the high productivity workers would prefer to invest in a signal (education) to differentiate them from the low productivity workers. In the absence of such signaling, all workers earn a wage that is average of the marginal product of both high and low productivity workers. Thus, normally the high productivity workers will find it beneficial to invest in the signal and thereby raise their wages, till the cost of education remains below the increment in wages they can expect. To achieve this desirable outcome, Spence shows mathematically that the cost of attaining the signal must be inversely proportional to the productivity of the workers.

SELF CONFIRMING BELIEFS AND MULTIPLE EQUILLIBRIA

The model acknowledges the possibility of multiple equillibria, of which not all may be Pareto efficient. Equilibrium in the signaling model is the situation where the beliefs of the employers with regard to the conditional probability of the workers with a specific education level corresponding to a specific productivity level is confirmed or at least, no refuted. The belief has a self confirming mechanism as the wages offered by employer are used by the potential job seekers while deciding to invest in education.

The presence of multiple equillibria exhibits the possibility where everyone loses or in other situation some loses while other some gain. Systematic over investment in education can be a possibility which is an issue of concern. If the employer are risk averse and attach high wages only to very high qualification levels, then job seekers may proceed to invest more in education. The realised rate of return will decline as the cost curve of investing in education has a positive slope. This possibility can be easily seen in real situation as engineers pursuing post graduation degree in management, etc. Term "rat race' is given to such situation by Moen2, according to him, investing in education, a worker improves his ranking, and this in turn increases his incentives to invest in human capital.

[2] Moen, Espen., 'Education, Ranking and Competition for Jobs', Journal of Labour Economics, 1999

Since ranking is a relative measure, however, a worker's investment in education now has a negative external effect on other workers, reducing their rankings. This reflects the kind of over-investment done to jump forward in the job queue.

Moen shows that, when this rat-race effect is taken into account, identical workers may have an incentive to diversify by choosing different levels of investment in education. Furthermore, not only does the ranking effect reduce the underinvestment due to rent sharing between workers and firms, it may actually dominate this positive external effect (which gives rise to the ranking effect in the first place) and lead to overinvestment in education for some parameter values. Bowles shows that in such kind of situation when all job seekers would be better off with a lower qualification as a signal, but the inability to ensure a cooperative outcome results in a sub optimal high cost equilibrium. This game theoretic extension by Bowles is of immense practical applicability as it shows why students cram for exam when only relative grades matter.

3. EXPLORING FURTHER: SIGNALING AND OVER INVESTMENT IN EDUCATION

Becker's (1964) contribution to the theory of human capital has been a path breaking one. He provided a theoretical and empirical analysis of human capital formation with special reference to education by invoking calculational rationality of human agents. The basic essence of Becker's theory suggests that earning are gross of the return on human capital, some people may earn more than others simply because they invest more in themselves. And since abler person tend to invest more than others, the distribution of earning could be very unequal and skewed, even though the ability were symmetrically and not too unequally distributed. Becker paid special attention to specific kind of human capital i.e. on the job training. Becker argues that learning, both on and off the job appears to have same effects as do education, training and other human capital investment.

The two models thus arrive at different conclusions concerning the efficiency of investments in education: individual choices are socially efficient under perfect competition according to the theory of human capital, but workers have a tendency to overeducate themselves under the signaling assumption. Over investment in education arises from the very basic assumption of the signaling theory that credentials only act as signals. It is possible that certain degrees or degrees from certain institutes do have a greater value as signal than others. In India for e.g. technical degrees like B-TECH, M-TECH etc or degrees from institutes like IIT's and IIM's. Such institutions will typically have sought after entrance exams and their graduates would command a relatively attractive salary. Employers recognise the degrees from such institutes as signal of the best workers available in the labour market. The greater the quality as evaluated by the signal, greater is the wage offered, and stricter will be entry barrier. While everyone may be able to invest in some education, the barrier at entry will exclude low productivity candidates from acquiring the highly prized signal. The low productivity individual would than tend to cluster in relatively low quality educational institutes which have lesser stringent screening criterion. A natural implication that this interplay with the quality of education is that a process of self selection arises: the high productivity aspirants are able to gain entry into the institutes offering the highest signals, and then they go on to sharpen their skills during the course of education thereby raising their productivity further. They are aided by the good quality of education at such institutes which supplement their human capital, and ultimately end up earning significantly higher wage than the others. The low productivity aspirants remain confined to lesser quality educational institutes and end up with the lower wages. The entry barrier presents a formidable challenge to these candidates. In order to meet these challenges low productivity person must undertake greater cost, such as enrolling in tuition or coaching institutes preparing students for various competitive exam like IAS, IES and the entrance exam of institutes like IIT, IIM or JNU. This mushrooming of private coaching institutes though facilitate the entry of low ability individuals into the premiere institutes, but simultaneously entail higher costs, which would ultimately act to reduce returns to investment in the signals.

The perceived quality of institutes that are viewed as effective signals of higher productivity is essentially a matter of reputation built by the institute over time. The reputation is beneficial for the institute as it can permit it command higher as its graduates earn a higher wage. In order to maintain this reputation of quality, the institute would ensure stringent screening at entry level to select the best among the candidates in terms of productivity. To cross the stringent entry barrier, candidates may undertake various investments: both monetary and that of time by investing in various remedial classes, or even specialised exam oriented coaching institutes. This entry level cost can be expected to vary inversely with the productivity of the candidate, thereby reaffirming the appropriateness of Spence's assumption. An outcome of the emergence of such coaching institutes is the cost of education may go up for all candidates, as any increment in exam cracking skills provided by such coaching institutes will induce all the students to invest in them in an attempt to increase their chances of selection in the best institutes, and in the process they simply end up raising the level of competition for themselves. This is in accordance with Bowles' result of a war of attrition like situation where a suboptimal outcome results due to failure of cooperation.

4. CONCLUSION

An exploration of both the theories in light of education it is not without the positive impact of schooling on earning together with screening approach work in the labour market. The signaling model is extremely applicable to modern day scenario in both the education and labour market. Signaling theory suggests that as there is presence of information asymmetry in the labour market in the sense that job seekers are aware of their productivity but employers find it out only after hiring. Thus employers hire workers on the basis of minimum required level of education to screen the applicants to ensure that applicant has some basic level of ability required for the job. The job offered may not be necessarily require the skills picked up in the education process but screening on the basis of education done because it reflects the basic ability that such candidate successfully complete the specific training required for the job. In other words, productivity is innate and the workers with the inherent ability to work better are the ones who flourish in school. Those who do well in school have the self-discipline, the ability to accept and follow orders and the team spirit necessary in the workplace. Hence such candidates are more adaptable and trainable for the workplace requirement. This is well supported in the present scenario as prevalence of training or probationary period reaffirms the weak link between the skill attained in the college and the demand of the job. So education acts as a signal to employers that the worker with the higher educational attainment is the better worker.

The signaling theory offers explanations to a wide range of phenomena from the mushrooming growth of coaching institutes to wage differentials of graduates from various disciplines or from different institutes. In order to remain ahead in que of highly rewarding job individuals signals their ability by over investing in education i.e. doing a diploma in computer or course like MBA after completing their degrees. As everyone is following the same suit the standard required for a given job is raised. Therefore even after having professional degrees individuals have to go for advanced courses. Thus, Spence signaling theory formulated forty years ago still explains the undergoing changes in the education and labour market in India.

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CUSTOMER PREFERENCE TOWARDS ORGANIZED BRANDED APPAREL RETAIL OUTLETS IN COIMBATORE CITY

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ABSTRACT

The apparel industry plays a key role in economic development in terms of revenue, foreign exchange and investments and employment generation. Readymade garments have become a status symbol in social circle. The Indian consumers are attracted towards the readymade garments because of fashion consciousness, style and design, brand image, smart look, comfort and relatively less price. The footfalls of the consumers in to the branded retail outlets either Exclusive Brand Outlet or Multi Brand Outlet are increasing day by day and make the industry to grow. Rapidly changing retail environment along with sophisticated and demanding customers have made it mandatory for the retailers to differentiate themselves for meeting the needs of their customers better than their competitors. For competitive survival, retailers are focusing on areas under their control that might give them an edge in the market. In this study, the fashion and style was considered to be the most important factor followed by quality merchandise in influencing the customers in selecting the organized branded retail outlet and hence the retailers are suggested to ensure that these factors are given due importance in the present scenario.

KEYWORDS
Apparel Retail outlets, Brand preference, Customer choice of outlet, Retailing.

INTRODUCTION

Retailing is one of the pillars of the economy in India and accounts for 13% of GDP. The retail industry is divided into organized and un-organized sectors. Over 12 million outlets operate in the country and only 4% of them being larger than 500 square feet in size. Organized retailing refers to trading activities undertaken by licensed retailers, that is, those who are registered for sales tax, income tax, etc. These include the corporate backed hypermarkets and retail chains, and also the privately owned large retail businesses. Un-organized retail or traditional retail refers to small retailers consisting of the local kirana shops, owner-manned general stores, chemists, footwear shops, apparel shops, paan and beedi shops, hand-cart hawkers, pavement vendors, etc.

According to IBEF (India Brand Equity Foundation), the Indian retail market currently estimated at around US$ 490 billion, is project to grow at a Compound Annual Growth Rate (CAGR) of 6 per cent to reach US$ 865 billion by 2023. Food and grocery is the largest category within the retail sector with 60 per cent share followed by the apparel and mobile segment. Organized retail, which constituted 7 per cent of total retail in 2011–12 is estimated to grow at a CAGR of 24 per cent and attain 10.2 per cent share of total retail by 2016–17, according to a study titled 'FDI in Retail: Advantage Farmers' conducted by an Industrial body. Favorable demographics, increasing urbanization, nuclear families, rising affluence amid consumers, growing preference for branded products and higher aspirations are other factors which will drive retail consumption in India. Both organized and unorganized retail are bound not only to coexist but also achieve rapid and sustained growth in the coming years.

REVIEW OF LITERATURE

Naveen Arora, (2011) examined the factors that influence the customers' preference of shopping malls and multi brand retail stores while deciding to visit for shopping. He used Kruskal-wallis test to find the most influencing factors for the customers. The study identified that location, merchandise mix, physical evidences, people and image of the mall influence the customers' choice of mall or multi brand retail store. The study revealed that the location is the most important factor while Store/Mall Image is the least important factor for customers. The study also revealed that presence of unhealthy crowd (which is an uncontrollable factor) repels customers away from store/mall and the type of crowd depends on the location of the store/mall. Efforts for cross-selling by mall/store management, unavailability of free drinking water and more focus on apparels stores have also been found to be important issues for malls/stores. It is concluded that a segment of customers likes to bargain while shopping, and doesn't enjoy shopping at fixed price malls/stores. **Amarendra Pratap Singh (2013)** made a study to understand the perception of consumers about three major retail outlets i.e. Pantaloons, Shoppers stop and Globus in Lucknow. A sample of 150 respondents' was selected and finally 100 samples were left for analysis rejecting 50 samples. It is concluded that majority of consumers were satisfied with the product and services of these stores. It is suggested in the study that the retail stores should emphasize on audio-visual advertising techniques and focus on attracting youth through promotional means. The consumers visiting these stores are brand conscious and their ego must be satisfied by providing them whatever they are looking for in separate sections of these stores. **Jayaprakash Rath, Rajeshkumar Sain & Anjankumar Mohanty (2013)** made a study that investigates the time effect on brand purchase probabilities after homogenizing the data with respect to store switching, size of purchase and frequency of product purchase. Two exponential models have been proposed and their overall effectiveness compared with a naïve model. The contribution of the study is in building realistic model of consumer purchase choice by incorporating the elements of the marketing environment. The study found that in case of garment segment the factors that influence the purchase decision-making is mostly price and quality of material. The factors like brand and durability of material are next in the rank in purchasing garments. The study concludes that the management has to value their customer base by providing supporting information for equating lifetime customer value assessments. Providing criteria to evaluate the quality of competing brands of stereos facilitates the encoding, retrieval and alignment of the sensory attribute in brand choice task.

IMPORTANCE OF THE STUDY

The purpose of this study would contribute to the body of knowledge by in-depth analysis of the various factors that influence the customers in selecting the organized branded apparel retail outlet. The study particularly useful to the retail outlets, customers and it would act as a guide to future shoppers.

STATEMENT OF THE PROBLEM

Rapidly changing retail environment along with sophisticated and demanding customers have made it mandatory for the retailers to differentiate themselves for meeting the needs of their customers better than their competitors. For competitive survival, retailers are focusing on areas under their control that might give them an edge in the market. There are many factors influencing the respondents in selecting the organized branded apparel retail outlet. On this basis, an attempt was made to understand the customer's point of view while selecting the organized branded apparel retail outlet.

OBJECTIVES

1. To identify the factors influencing the customers in selecting the organized branded apparel retail outlets.
2. To identify the factors influencing the customers in purchasing a particular brand from the organized branded apparel retail outlets.

METHODOLOGY USED IN THE STUDY

AREA OF THE STUDY: Area of the study refers to Coimbatore city which is known for textiles, foundries, pumps and motor industries. It also remains as education and health care hub.

i) **SOURCE OF THE DATA:** The study has used primary data which is collected from 200 customers visiting the organized branded retail apparel outlets using structured questionnaire method.

ii) **SAMPLING DESIGN:** Convenience sampling method has been adopted to select the respondents visiting the organized branded apparel retail outlets.

iii) **TOOLS FOR ANALYSIS:** The statistical tools used in the study are Descriptive analysis, spearman's rank correlation co-efficient and Friedman's two-way ANOVA. All the tests were carried out at 5% level of significance.

LIMITATIONS OF THE STUDY

a. The study is confined to Coimbatore city and not covered all the branded outlets due to time constraint.

b. The results obtained from this study cannot be completely generalized to all retail stores.

HYPOTHESIS

1. **Hypothesis (H_0):** There is no significant difference in the average ranks of the factors influencing the respondents in selecting the organized branded apparel retail outlet.
2. **Hypothesis (H_0):** There is no significant difference in the average ranks of the factors influencing the respondents in purchasing a particular brand from the organized branded apparel retail outlet.

ANALYSIS AND INTERPRETATION

SPEARMAN'S RANK CORRELATION

The rank correlation coefficient is a measure of correlation that exists between the two sets of ranks. In other words, it is a measure of association that is based on the ranks of observations. The value of Spearman's rank correlation coefficient will always vary between +1 to -1 whereas +1 indicates a perfect positive correlation and -1 indicates perfect negative correlation between the variables. In this study, the ranks assigned by the respondents for the factors influencing the respondents in selecting the organized branded apparel retail outlet were used in order to find out the agreement in assigning the ranks. When the spearman's rank correlation coefficient is positive, it indicates that the ranks assigned by the respondents are in agreement while negative indicates that they are not in agreement.

TABLE 1: SPEARMAN'S RANK CORRELATION COEFFICIENT – FACTORS INFLUENCING THE RESPONDENTS IN SELECTING THE ORGANIZED BRANDED APPAREL RETAIL OUTLET

Factors	Outlet atmosphere	Quality merchandise	Parking space	Price	Convenient location	Lighting arrangements	Fashion and style	Exclusive outlet	Promotional offers	Salesmen service
Outlet atmosphere	1.000	0.327*	0.312*	-0.249*	-0.007	-0.307*	-0.316*	-0.374*	-0.286*	-0.236*
Quality merchandise	0.327*	1.000	0.078	0.040	-0.089*	-0.325*	-0.281*	-0.322*	-0.387*	-0.200*
Parking space	0.312*	0.078	1.000	-0.151*	0.131*	-0.109*	-0.423*	-0.331*	-0.306*	-0.271*
Price	-0.249*	0.040	-0.151*	1.000	-0.088*	-0.092*	0.025	-0.081	-0.308*	-0.183*
Convenient location	-0.007	-0.089*	0.131*	-0.088*	1.000	0.015	-0.247*	-0.283*	-0.105*	-0.202*
Lighting arrangements	-0.307*	-0.325*	-0.109*	-0.092*	0.015	1.000	0.169*	-0.040	-0.047	-0.143*
Fashion and style	-0.316*	-0.281*	-0.423*	0.025	-0.247*	0.169*	1.000	0.124*	0.056	-0.024
Exclusive outlet	-0.374*	-0.322*	-0.331*	-0.081	-0.283*	-0.040	0.124*	1.000	0.292*	0.101*
Promotional offers	-0.286*	-0.387*	-0.306*	-0.308*	-0.105*	-0.047	0.056	0.292*	1.000	0.282*
Salesman service	-0.236*	-0.200*	-0.271*	-0.183*	-0.202*	-0.143*	-0.024	0.101*	0.282*	1.000

* Significant at 5% level

The correlation coefficient between the outlet atmosphere with the quality merchandise and parking space were found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for price, lighting arrangements, fashion and style, exclusive outlet, promotional offers and salesman service were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the quality merchandise with the outlet atmosphere was found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for convenient location, lighting arrangements, fashion and style, exclusive outlet, promotional offers and salesman service were found to be significant but negatively correlated and hence the ranks assigned are not in agreement. .

The correlation coefficient between the parking space with the outlet atmosphere and convenient location were found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for price, lighting arrangements, fashion and style, exclusive outlet, promotional offers and salesman service were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the price with the outlet atmosphere, parking space, convenient location, lighting arrangements, promotional offers and salesman service were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the convenient location with the parking space was found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for quality merchandise, price, fashion and style, exclusive outlet, promotional offers and salesman service were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the lighting arrangements with the fashion and style was found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for outlet atmosphere, quality merchandise, parking space, price, exclusive outlet, promotional offers and salesman service were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the fashion and style with the lighting arrangements and exclusive outlet were found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for outlet atmosphere, quality merchandise, parking space and convenient location were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the exclusive outlet with the fashion and style, promotional offers and salesman service were found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for outlet atmosphere, quality merchandise, parking space and convenient location were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the promotional offers with the exclusive outlet and salesman service were found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for outlet atmosphere, quality merchandise, parking space, price and convenient location were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the salesman service with the exclusive outlet and promotional offers were found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for outlet atmosphere, quality merchandise, parking space, price, convenient location and lighting arrangements were found to be significant but negatively correlated and hence the ranks assigned are not in agreement. The other correlation coefficients were not significant.

Hypothesis (H_0): There is no significant difference in the average ranks of the factors influencing the respondents in selecting the organized branded apparel retail outlet.

FRIEDMAN'S TWO-WAY ANOVA

To test is there any significant difference in the average ranks assigned by the respondents for the factors influencing in selecting the organized branded apparel retail outlet, the non-parametric tool namely Friedman's two-way ANOVA was applied and the results are presented in the following table.

TABLE 2: FRIEDMAN'S TWO-WAY ANOVA - FACTORS INFLUENCING THE RESPONDENTS IN SELECTING THE ORGANIZED BRANDED APPAREL RETAIL OUTLET

Factors	Average Rank	Rank
Outlet atmosphere	5.82	VII
Quality merchandise	4.40	II
Parking space	6.42	IX
Price	5.15	III
Convenient location	5.58	V
Lighting arrangements	7.19	X
Fashion and style	3.33	I
Exclusive outlet	5.64	VI
Promotional offers	5.28	IV
Salesman service	6.18	VIII

Chi-square	Degrees of freedom	Significance
566.60	9	0.000

(p> 0.05 Not Significant, p< 0.05 Significant)

It is clear from the above table that the fashion and style was ranked first in influencing the respondents in selecting the organized apparel retail outlet. The quality merchandise was ranked second, price was ranked third, promotional offers was ranked fourth, convenient location was ranked fifth, exclusive outlet was ranked sixth, outlet atmosphere was ranked seventh, salesman service was ranked eighth, parking space was ranked ninth and lighting arrangements was ranked tenth among the factors influencing the respondents in selecting the organized apparel retail outlet.

The calculated Chi-square value (566.60) was found to be significant. This indicates that there is significant difference in the average ranks of the factors influencing the respondents in selecting the organized branded apparel retail outlet.

TABLE 3: SPEARMAN'S RANK CORRELATION COEFFICIENT – FACTORS INFLUENCING THE RESPONDENTS IN PURCHASING A PARTICULAR BRAND FROM THE ORGANIZED BRANDED APPAREL RETAIL OUTLET

Factors	Quality	Durability	Brand image	Good colors and design	Smart look & comfortable	Fabric	Price	Availability
Quality	1.000	0.182*	-0.079	-0.353*	-0.471*	0.140*	-0.272*	-0.175*
Durability	0.182*	1.000	-0.139*	-0.523*	-0.456*	0.302*	-0.472*	-0.282*
Brand image	-0.079	-0.139*	1.000	-0.234*	-0.113*	-0.129*	-0.203*	-0.104*
Good colors and design	-0.353*	-0.523*	-0.234*	1.000	0.476*	-0.316*	0.174*	0.047
Smart look & comfortable	-0.471*	-0.456*	-0.113*	0.476*	1.000	-0.224*	0.083	-0.066
Fabric	0.140*	0.302*	-0.129*	-0.316*	-0.224*	1.000	-0.448*	-0.344*
Price	-0.272*	-0.472*	-0.203*	0.174*	0.083	-0.448*	1.000	0.256*
Availability	-0.175*	-0.282*	-0.104*	0.047	-0.066	-0.344*	0.256*	1.000

* Significant at 5% level

The correlation coefficient between the quality with the durability and fabric were found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for good colors and design, smart look and comfortable, price and availability were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the durability with the quality and fabric were found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for brand image, good colors and design, smart look and comfortable, price and availability were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the brand image with the durability, good colors and design, smart look and comfortable, fabrics price and availability were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the good colors and design with the smart look and comfortable and price were found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for quality, durability, brand image and fabrics were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the smart look and comfortable with the good colors and design was found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for quality, durability, brand image and fabrics were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the fabrics with the quality and durability were found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for brand image, good colors and design, smart look and comfortable, price and availability were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the price with the good colors and design and availability were found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for quality, durability, brand image and fabric were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

The correlation coefficient between the availability with the price was found to be positive and significant and hence the ranks assigned are in agreement, whereas the correlation coefficient for quality, durability, brand image and fabric were found to be significant but negatively correlated and hence the ranks assigned are not in agreement.

Hypothesis (H_0): There is no significant difference in the average ranks of the factors influencing the respondents in purchasing a particular brand from the organized branded apparel retail outlet.

FRIEDMAN'S TWO-WAY ANOVA

To test is there any significant difference in the average ranks assigned by the respondents in purchasing a particular brand from the organized branded apparel retail outlet, the non-parametric tool namely Friedman's two-way ANOVA was applied and the results are presented in the following table.

TABLE 4: FRIEDMAN'S TWO-WAY ANOVA - FACTORS INFLUENCING THE RESPONDENTS IN PURCHASING A PARTICULAR BRAND FROM THE ORGANIZED BRANDED APPAREL RETAIL OUTLET

Factors	Average Rank	Rank
Quality	2.34	I
Durability	4.39	IV
Brand image	3.50	II
Good colors and design	4.80	V
Smart look & comfortable	5.03	VI
Fabric	5.76	VII
Price	4.20	III
Availability	5.97	VIII

Chi-square	Degrees of freedom	Significance
826.23	7	0.000

(p> 0.05 Not Significant, p< 0.05 Significant)

It is clear from the above table that the quality was ranked first in influencing the respondents in purchasing a particular brand from the organized apparel retail outlet. The brand image was ranked second, price was ranked third, durability was ranked fourth, good colors and design was ranked fifth, smart look and comfortable was ranked sixth, fabric was ranked seventh and availability was ranked eighth among the factors influencing the respondents in purchasing a particular brand from the organized apparel retail outlet.

The calculated Chi-square value (826.23) was found to be significant. This indicates that there is significant difference in the average ranks of the factors influencing the respondents in purchasing a particular brand from the organized branded apparel retail outlet.

FINDINGS

- Majority (61.8%) of the respondents belong to the age group of 26 - 46 years.
- Majority (62.4%) of the respondents are male.
- Majority (56.2%) of the respondents are married.
- Most (35.0%) of the respondents have completed Under Graduation.
- Most (30.8%) of the respondents are doing business.
- Most (41.0%) of the respondents have one earning member in the family.
- Most (45.4%) of the respondents monthly income of the family is between Rs.25,000 - Rs.50,000.
- Majority (79.6%) of the respondents are in nuclear family type.
- Majority (59.8%) of the respondents are residing in urban area.
- Majority (55.2%) of the respondents make purchase mostly during festival times.
- Most (45.0%) of the respondents are aware of the branded retail outlet through advertisements.
- Most (51.5%) of the respondents are aware of the branded retail outlet through television/radio advertisements.
- Majority (48.2%) of the respondents do shopping for 3 to 5 times in a year.
- Majority (49.8%) of the respondents generally spend Rs.3,000 to Rs.7,000 per shopping.
- Most (38.4%) of the respondents generally spend between 2 to 4 hours per shopping.
- Majority (48.8%) of the respondents are influenced mostly by themselves in purchasing the apparels.
- Majority (46.6%) of the respondents make purchase mostly for themselves.
- Majority (48.2%) of the respondents prefer to buy from multi brand outlets.

SUGGESTIONS

1. As majority of the respondents have given high priority to the factor fashion and style which influences them in selecting the retail outlet, the retailer are suggested to make sure the availability of the branded products which suits the needs of the customers not only to retain the existing customers but also to create new customers.
2. The study reveals that one of the important factor that influences the customers in selecting the organized branded apparel retail outlet is quality, so in order to increase the sales of the retail outlet both multi-brand outlet as well exclusive brand outlet, the retailer must ensure to provide quality products.
3. It is understood from the study that the customer always look for additional benefits while purchasing the apparel either from multi-brand outlet or exclusive brand outlet. Hence the retailers should introduce additional benefits with their products in order to gain competitive advantage in the form of schemes such as buy one get one free, scratch cards, lucky draws and gifts on specific amounts.

CONCLUSION

Competition is getting intense as far as Indian organized retail is concerned. Not only big Indian corporate but big foreign retail brands like Wal-Mart, Metro Cash & Carry are expanding in the retail industry. Due to an increase in economic prosperity and better lifestyle, there is a growing tendency of the consumers to shift towards the organized retail outlets in India. The products offered, the store format, the pricing and the services provided definitely influence the consumers to a great extent in making them loyal towards the outlet.

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FOOD SECURITY IN INDIA: A SYNOPTIC VIEW

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ABSTRACT

Taking the case of India this paper deals with different aspects of food security. Firstly the paper tells about the food security. Secondly this paper brings out facts about programs and policies India followed in achieving food security. Thirdly the paper discuss about economic costs of food security and how far India made progress in achieving food security. Last the paper come up with some suggestions which can help food schemes to be sufficient and significant programs in achieving food security in second highest populated country of the world.

KEYWORDS

economic costs, food security in India, programs and policies, progress.

INTRODUCTION

Food security refers to the availability and access of food to each and everyone. A household is considered food-secure when its occupants do not live in fear of food shortage or starvation. The World Health Organization defines three facets of food security: food availability, food accessibility, and food use. Food availability is having available adequate quantities of food on a daily basis. Food access is having enough resources, both financial and material, to obtain appropriate foods for a healthful diet. Food use is the appropriate use based on knowledge of basic nourishment and care which is necessaries to eradicate malnutrition and hunger, as well as adequate water and sanitation. The Food and Agriculture Organization (FAO) adds a fourth facet: the stability of the first three extent of food security use based on knowledge of basic nutrition and care, as well as enough water and cleanliness. In words of the FAO, "Food security means when all community, always, have physical and financial access to adequate, safe and nourishing food which meets their nutritional wants and food preferences for an energetic and fit life. World Food Day is celebrated every year around the world on 16th October in respect of the date of the founding of the Food and Agriculture Organization of the United Nations in 1945. The day is celebrated extensively by many other organizations concerned with food security, including the World Food Programs. The theme of World Food Day for 2012 is "Agricultural cooperatives – solution to feeding the world".

RIGHT TO FOOD

The memorabilia right to food, and its variations, is giving the right for people to nourish themselves in pride, implying that adequate food is obtainable, that people have the sources to right to use it, and that it effectively meets the individual's nutritional needs. The right to food saves the right of all human beings to get rid from famine, food insecurity and undernourishment. The right to food does not mean that governments have a compulsion to hand out free of cost food to everyone who desires to have, or a right to be fed. though, if people are dispossessed of access to food for reasons without their control, for instance, because they are in custody, in times of battle or after natural disasters, the right imply that government have an responsibility to provide food directly.

REVIEW OF LITERATURE

Angus Deaton and Jean Dreze (2009) in their paper discussed about the trends in calories consumption and nutrition, and interpretations. He found strong verification of sustainable decline in per capita calorie consumption during the last 25 years. [1]

P. J. Gregory et al. (2005) in their paper title, "Climate Change and Food Security" explains that climate change is only one of several changes affecting food systems and that its relative significance varies both between regions and between different community groups within a region. The climate change may affect food systems more than a few ways ranging from direct effects on crop production (e.g. changes in rainfall leading to droughts or flooding, or warmer or cooler temperatures leading to changes in length of growing season), to change in markets, food prices and supply chain transportation. [2]

Ramesh Chand (2005) in his paper title, "With her India's Food policy? From Food Security to Food Deprivation" discussed about the government interference in food grain markets and accumulation of grain stocks in 1990s, causes for decline in consumption, implications of grain accumulation, vicious incentives to private trade, and impact on food grain export. He came out with fact that administration interference in food grain markets meant first and foremost for promoting food security has reached a stage where consumers are being deprived of basic food, when a large share of output is diverted from market to government warehouses. [3]

Marcela Villarreal and Libor Stloukal (2005) in their study discussed on food security about the access, availability, and stability of food security, trends in food demand and food consumption, outlook for agriculture: the wide picture, hunger and under-nutrition around the world, expected trends in food demand, expected trends in nutritional well-being, and other population factors affecting agricultural and food security. They concluded that progress in improving global food security will not happen with business as usual. Enormous efforts will be needed on many fronts as discussed in their paper. [4]

Maithireyi Krishnaraj (2005) in her paper discussed about the gender and food security, and 'feminization' of agriculture. He conducted an empirical field work on general situation about food insecurity among poor women and point to importance of public measures for protection of this vulnerable section. [5]

Mark W. Rosegrant and Sarah A. Cline (2003) in their paper came out with fact that achieving food security needs policy and investment reforms on multiple fronts, including human resources, agricultural research, rural infrastructure, water resources, farm- and community-based agricultural and natural resources management. [6]

V. S. Vyas (2000) stated in his study that ensuring nutritional security requires three fundamental institutions – the state, the market, and civil society. Each recognizes its own role and responsibility in abolishing hunger, and ensuring food security. [7]

Madhura Swaminathan (1999) conducted a study and discussed about the volume of food subsidy from 1966-67 to 1997-1998, FCI: objective and cost, and efficiency of FCI versus private trade: some price comparisons. The data from FCI performance budget explain clearly that increase in procurement price was a serious factor in the increase in economic cost of rice and wheat. [8]

Gordon R. Hopper (1999) in his paper discussed about the food production since independence, food supplies: encouraging and discouraging realities, dietary change and food quality, and determining nutritional requirements. He come out with fact that recently the country is making slow progress in the direction of increasing its food supplies, and will likely continue to make progress in the future, but it has a long way to go before it can claim to have achieved nutritional security for its people. [9]

N. A. Mujumdar (1997) in his paper showing the vulnerability of the economy in term of food security which is emergency import of food grains and highlighted the importance of supply side factors in supporting price stability. [10]

Paul R. Ehrlich et al. (1993) in their study discussed about the nutritional security, misdistribution and absolute shortage of food, green revolution technologies, the outlook for expanding food production, the environmental constraints on increasing food production, and prospect for the future. They concluded that ten million people cannot be nourished even temporarily unless far greater awareness and resource are directed to developing a more productive, environmentally sound agricultural and to improving food allocation. [11]

OBJECTIVES OF THE STUDY

1. To study the food schemes in India and evaluate food security in India.
2. To prove that providing just staple food grains is not sufficient to embark upon health problems of women, children, and old age persons.
3. To evaluate the impact of unsuitable functioning of food distribution and storage.
4. To discuss upcoming food security bill.
5. To suggest what should be done to attain food security to all citizens of India?

SOURCES OF DATA: REPORTS AND WEBSITES

- United Nations International Children's Emergency Fund (UNICEF) report on India- the children nutrition.
- World Bank report on India's undernourished children: a call for reform and action.
- Nandi Foundation Hungama Survey report 2011.
- International Food Policy Research Institute (IFPRI) on 2008 India state hunger index: key finding and facts.
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DISCUSSION AND ANALYSIS

- **CHRONOLOGICAL PERSPECTIVES OF FOOD SECURITY**

It is necessary to have to look at India's brief experiments with decontrol to understand the importance of an extensive food policy. The government's policy reaction to the Bengal food crisis of 1943, which caused death of 1.5 million people, provides us with a briefing of what not to do in a food crisis situation. At first, there was a full liberal policy towards food grains trade, which led to hoarding by middleman, traders, farmers and consumers. Consequently, the state governments introduced a policy of procurement and distribution of food grains, which failed sadly as they did not have the necessary infrastructure and transport facilities to execute the policy. For example, grains were decomposing in Calcutta which is the centre of distribution in the eastern states of the county, as the government had not made preparations to handle incoming stocks. The government took steps towards setting up a wide-ranging food administration, including procurement by the government; the building of buffer stocks and the introduction of ration shops to avoid this type of misfortune.

- **FOOD SCHEMES**

Below Poverty Line (BPL): Under this scheme households having BPL ration cards are issued 35 kg of rice and wheat for 5.65 rupees and 4.15 rupees per kilogram. Last year, the planning commission calculated India's poverty line for rural area at 28.65 rupees per day.

Antyodaya Anna Yojana (AAY): This scheme was started in December 2000, which provides 35 kg of grains at cheap prices to the poorest to poor families. Each month, 25 kg of wheat is given at two rupees per kg, while 10 kg of rice is circulated for three rupees per kg.

Above Poverty Line (APL): There are some plans for the not-so-poor as well. Households not covered under the BPL or AAY are eligible to get 35 kg of grains: rice at a rate of 8.3 rupees per kg and wheat at 6.10 rupees per kg.

Mid-day Meal Scheme: This is the world's largest school feeding agenda which has been working in India from 1995. The aim is to improve nutritional levels among children, as also encouraging enrolment and presence in primary education. According to the provision, Children get cooked food, including vegetables and pulses.

Integrated Child Development Scheme: This scheme launched in October 1975. This is one of the world's biggest and most unique programs for early babyhood development. The purpose of this scheme is to improve the nutritional and health status of children in the age-group 0-6 years.

Annapurna Scheme: This scheme targets senior citizens (65 years or older) and gives Food Security to those not receiving a pension. Each month, beneficiaries get 10 kg of grains without any cost.

Emergency Feeding Program: This scheme covers about 200,000 people in eight Kalahandi-Balangir-Koraput (KBK) districts in Orissa, considered one of the most backward regions in the country. This scheme provides one cooked meal a day during the year, including rice, pulses and vegetables.

Rajiv Gandhi Scheme for Empowerment of Adolescent Girls: The aim of this program is to improve the health of girls between 11 to 18 years, while also helping them understand more about sexual health and child care. Health check-ups and supplementary nutrition is also provided under this scheme.

- **PUBLIC DISTRIBUTION SYSTEM**

Public Distribution System (PDS) is an important Food Security system in India. It was started by the Government of India. It works under Ministry of Consumer Affairs, Food and Public Distribution and regional governments. It distributes subsidized food and other than food items to the meager people of India. The idea of Public Distribution System was put forward around 1942 because of food grains shortage in 2nd World War and Government interference in distribution of food grains started. The Government interferences in distribution of food grains in the food scarcity period continued in main cities, towns & certain food scarcity areas. Distribution System has undergone a number of changes with every Year. The Seventh Five Year Plan gives to it a very important job by bring the whole people of country under Public Distribution System and to make it a stable characteristic in the economy. Major commodities distributed include two staple food grains wheat and rice and two necessary goods sugar, and kerosene, with the help of public distribution shops also known as Ration shops started in a number of states of the country. The Public Distribution System is procured and managed by Food Corporation of India.

The Ministry of Consumer affairs, Food and price distribution and the central government has been setting up central issue prices of food grains occasionally which is identical throughout the country.

TABLE 1: CENTRAL ISSUE PRICES UNDER PDS

Target Groups	Wheat	Rice	Families Covered
Poorest of the Poor (AAY)	2.00	3.00	20 million
Below Poverty Line (BPL)	4.15	5.65	65 million
Above Poverty Line (APL) `	6.10	7.94	Variable

Source: Government of India, Economics Survey 2001-2002.

FALLOUT OF THE P.D.S.

The Public Distribution System of India is not lacking defects. With coverage of around 40 crore BPL (Below Poverty Line) households, an analysis of the PDS have revealed the following structural defects and turbulence:

1. Growing incident of the consumers getting lower grade food grains in ration shops.
2. Untruthful dealers change good quality food grains supplied by the F.C.I (Food Corporation of India) with low-grade stock and sell FCI supply in the black market.
3. Large number of counterfeit cards has found created illegally by fair price shops owner to sell food grains in the open market.
4. Many FPS (Fair Price Shop) dealers use to misbehavior, against the law distribution of commodities, hoarding and black marketing because of smallest salary received by them.

5. Plentiful illegal activity make safe and healthful food unapproachable and too expensive to many poor thus suffers in their malnutrition starvation which create problem of food insecurity.
6. Identification of families to be denoted BPL status and distribution to approved PDS services has been highly asymmetrical in many states. The current development of Aadhar cards by Unique Identification Development Authority of India (UIDAI) will help to solve the problem of identification and allocation of PDS services along with direct benefits Transfers.
7. Local distribution and coverage of FPS are unsatisfactory and the main objective which is stable price of necessary commodities has not met yet.
8. Lack of accountability has inspired a number of middlemen who eat a large share portion of the stock destined for the poor.
9. Transparency should be needed as to which families should be included in the BPL list and which excluded.
10. The rural poor have little knowledge about the PDS and FPS to extremely poor societies.
11. The main obstacle to the well functioning and overall achievement of PDS in India is that the stock assigned to a single family cannot be bought in installments.
12. Many BPL families are deprived of ration cards because either they are cyclic migrant workers or they live in illegal colonies.

- **FOOD SECURITY BILL**

The Food Security Bill is for consideration before the Government of India. The bill aims to provide cheap food grains to around 67 percent of India's 1.2 billion public. In July, the union Cabinet cleared an ordinance to implement the significant national food security bill without waiting for Parliament's monsoon session that is about a month away. For the ordinance to continue as a law, both houses of Parliament must sanction it within six weeks from the start of the next parliamentary session.

The ordinance was tabled for discussion in the lower house or Lok Sabha. If passed, it will be debated in the Rajya Sabha or the upper house. The regulation needs to pass with a simple majority in both houses to continue as a law. The broader aim is to lessen chronic hunger, undernourishment and shortage in India. In World Bank report, "India accounts for a third of the poor people of the world". More than half of the country's children fewer than five are classed as acutely malnourished and about one third of Indians aged 15 to 49 are malnourished. The bill, if approved, would make available cheap food grain to 75 per cent of India's predictable 8330 lakhs rural population and 50 per cent of an estimated 3770 lakhs urban population.

According to the provision in the program, beneficiaries can get a total of five kilograms of subsidized rice, wheat and coarse grains in a month. The state-owned Food Corporation of India will hand out subsidized grains through a countrywide system of 'fair price shops'.

HIGHLIGHTS OF BILL

The National Food Security Bill is a historic initiative for ensuring food and nutritional security to the public. It gives right to the people to get adequate quantity of food grains at affordable prices. The Bill has main focus on the needs of poorest of the poor, women and children. Other features of the Bill are as follows:

- Upto 75 per cent of the rural population and up to 50 per cent of the urban population will have uniform entitlement of 5 kg food grains per month at highly subsidized prices of Rs. 3, Rs. 2, Rs. 1 per kg for rice, wheat, coarse grains respectively. It will entitle about two thirds of our 1.2 billion populations to affordable food grains under the Targeted Public Distribution System.
- The poorest of poor families would continue to receive 35 Kg food grains per household per month under Antyodaya Anna Yojna at subsidized prices of Rs 3, Rs 2 and Rs 1. It is also proposed to protect the existing allocation of food grains to the States, subject to it being limited to average annual off take during last three years.
- Corresponding to the coverage of 75 per cent rural and 50 per cent of urban population at the whole country. State wise coverage will be determined by the Planning Commission. The work of recognition of eligible households is left to the States/UTs, which may structure their own criteria or use Social Economic and Caste Census data.
- There is a special focus on nutritional support to women and children. Expecting and expectant mother, besides being entitled to nutritious food as per the prescribed nutritional norms will also receive maternity benefit no less than of Rs.6000/-. Children in the age group of 6 months to 14 years will be entitled to take home ration or hot cooked meal as per prescribed nutritional norms.
- The Central Government will provide funds to States/UTs in case of short supply of food grains from Central collection, In case of non-supply of food grains or meals to allowed persons, the concerned State/UT Governments will be required to provide such food security allowance as may be prescribed by the Central Government to the beneficiaries.
- In order to address the concern of the States regarding additional monetary burden, Central Government will provide assistance to the States towards cost of intra-State transportation, managing of food grains and FPS dealers' margin. This will guarantee timely moving and efficient usage of food grains.
- Reforms have been initiated for entrance way delivery of food grains, application of information and communication technology (ICT) including end to end computerization, leveraging 'Aadhar' for unique identification of beneficiaries, diversification of commodities under TPDS etc for effective implementation of the Food Security Act.
- Eldest woman of seventeen years of age or above will be head of the household for issue of ration card, and if not available, the eldest male member is to be the head of the household.
- There will be state and district level redresser mechanism with designated nodal officers. The States will be permitted to use the existing machinery for District Grievance Redresser Officer (DGRO), State Food Commission, if they so wish, to save expenditure on establishment of new redressal set up. Redressal system may also include call centers, helpline etc.
- Provisions have also been made for exposé of records relating to PDS, social audits and setting up of Vigilance Committees in order to ensure transparency and accountability.
- The Bill provides for fine to be imposed on public servants or authority, if found guilty of failing to comply with the relief recommended by the District Grievance Redressal Officer (DGRO).
- At the proposed coverage of privilege, total expected annual food grains necessity is 612.3 lakh tons and related probable food subsidy for the Bill at 2013-14 costs is approximately Rs.1, 24,724 crore.

OBJECTIVES OF FOOD SECURITY POLICY

- Announcement of minimum support prices at the time of sowing.
- Procurement or purchases of rice and wheat at these prices, in the event of market prices falling below these levels.
- Maintenance of food buffer for food security and price stability.
- Distribution of rice and wheat to the consumers, particularly to vulnerable sections, at affordable (subsidized) prices.
- Rules of traders' marketing practices through inter alia imposition of stocking limits and levies.

Regulation of imports and exports through canalization, licensing, imposition of trade tariffs, and minimum export prices (MEPs), with a view to maintaining supplies and price stability in the domestic market.

TABLE 2: FOOD SUBSIDY

Year	Food Subsidy (Rs in billion)	Per cent Change Over Preceding Year
2000-01	120.01	-
2001-02	174.94	45.7
2002-03	241.76	38.2
2003-04	251.60	4.1
2004-05	257.46	2.3
2005-06	230.71	-10.4
2006-07	238.28	3.3
2007-08	312.60	31.2
2008-09	436.68	40.0
2009-10	582.42	33.4
2010-11	629.29	8.0

Source: Government of India, Economic Survey 2008-09 and 2010-11.

TABLE 3: RICE AND WHEAT DISTRIBUTED UNDER VARIOUS PROGRAMS (Million tons)

Year	Rice	Wheat	Total
2003-04	25.0	24.3	49.3
2004-05	23.2	18.3	41.5
2005-06	25.1	17.2	42.3
2006-07	25.1	11.7	36.8
2007-08	25.2	12.2	37.4
2008-09	24.6	14.9	39.5
2009-10	27.4	22.3	49.7

Source: Government of India, Economic Survey, 2006-07 to 2010-11.

PRICE SUPPORT PURCHASES/PROCUREMENT OF RICE AND WHEAT

The Food Corporation of India (FCI) established in 1965 is the central nodal agency designated for purchase of food grains at pre-announced support prices. The FCI also establishes its own purchase centers but largely depends on the state agencies, which operate on behalf of the FCI. Some state governments also make purchases to meet the needs of their own initiated public distribution programs, but the quantum of such procurement is a small proportion of total procurement at the national level. The trend in procurement of rice and wheat during the last 16 years is shown in Table - 4.

TABLE 4: TREND IN PRICE SUPPORT PROCUREMENT OF RICE AND WHEAT (Million tons)

Marketing Year	Rice (Oct-Sept)	Wheat (Apr-March)
1996-97	12.97	8.16
1997-98	15.59	9.41
1998-99	12.60	13.19
1999-00	18.23	14.69
2000-01	21.18	16.71
2001-02	22.13	21.03
2002-03	16.42	19.58
2003-04	22.83	16.00
2004-05	24.68	17.16
2005-06	27.66	15.27
2006-07	25.11	9.23
2007-08	28.74	11.19
2008-09	33.68	26.04
2009-10	26.82	27.94
2010-11	32.35	22.08
2011-12	35.00*	28.30

Source: Government of India (2011), Agricultural Statistics at a Glance

HINDRANCE OF OBJECTIVES

- Leakages in food grains provided under public distribution system.
- A lot of food grain wasted in distribution and transport.
- Absence of proper storage houses is another cause of wastage of food grains.
- Food subsidy is rising year by year.
- Major threat to food security in India is black marketing.

ECONOMIC COST

Economic cost of rice and wheat that is distributed under public distribution system is the sum of procurement (support) price paid to the farmers, procurement incidentals, and distribution cost of the grains. The procurement incidentals and distribution cost together account for around 31 percent of the economic cost. This also implies that procurement and distribution costs account for around 45 percent of the procurement price paid to the rice or wheat growers.

TABLE 5: ECONOMIC COST OF RICE AND WHEAT (Rs. per quintal)

Particulars	2007-08	2008-09	Average
RICE			
Procurement Price	1037.13	1216.09	1126.61 (68.6)
Procurement Incidentals	214.91	252.58	233.74 (14.3)
Distribution Cost	297.82	263.81	280.82 (17.1)
Total	1549.86	1732.48	1641.17 (100)
WHEAT			
Procurement Price	903.30	960.53	931.92 (69.1)
Procurement Incidentals	164.02	193.62	178.82 (13.3)
Distribution Cost	244.43	230.27	237.35 (17.6)
Total	1311.75	1384.42	1348.09 (100)

Source: Government of India, Economic Survey 2010-11

MAJOR PROBLEMS TO FOOD SECURITY

UNDERNOURISHMENT

Undernourishment is the situation which is results from eating a diet in which certain nutrients are lacking, in excess, or in the erroneous proportions. Sometime "malnourish"; "malnourishment", "malnutrition" is used instead of "Undernourishment". In most of the world, malnutrition is present in the form of lack of nutrition, which is caused by a shortage of adequate calories and protein—not enough food, and of poor quality. Malnutrition has shown to be an important worry in women, children, and the old age people. Because of pregnancies and breastfeeding, women need additional nutrition. Children can be in a danger of malnutrition even before birth, as their diet is directly connected to the nourishment of their mothers. Breastfeeding can reduce rates of starvation and mortality in children, and educational and awareness programs for mothers could have a great impact on upgrading of these rates.

HUNGER

Hunger is the material sense of willing food. When politicians and social scientists discussed about people suffering from hunger, they generally refer to those who, for continued periods, are incapable to eat adequate food to meet fundamental nutritional requirements.

GLOBAL PERSPECTIVES OF MALNUTRITION AND HUNGER

- The unhappy trend has been confirmed by the Food and Agricultural Organization (FAO), which estimates that over a fifth of India's population still suffers from chronic hunger and that the number of undernourished people in the country increased substantially in the second half of the 1990s.
- According to the World Health Organization (WHO), "nearly 50 per cent of Indian children, who suffer severe deficits in weight and height, are in this condition because of food deprivation".

Despite of a number welfare schemes which offer subsidized food to Indians started in India to remove malnutrition and hunger there is high percentage of under-five suffering from underweight, stunting, and wasting in comparison to other countries.

TABLE 6: UNDERWEIGHT, STUNTING AND WASTING, BY WORLDWIDE, 2000

Region	Per cent of under-fives (2000) suffering from		
	Underweight	Stunting	Wasting
Latin America and Caribbean	6	14	2
Africa	24	35	8
Asia	28	30	9
India	**47**	**45**	**16**
Bangladesh	48	45	10
Bhutan	19	40	3
Maldives	45	36	20
Nepal	48	51	10
Pakistan	40	36	14
Sri Lanka	33	20	13
All developing countries	22-27	28-32	7-9

Source: ACC/SCN 2004

- "Almost 70 percent of India's people lives on less than $2 (around 120 rupees) daily", according to World Bank (WB). The country, second-largest producer of wheat and rice after China, is also address to a quarter of the world's hungry people.
- India is residence of the world's major food anxious population, with more than 200 million people who are hungry.
- Approximately 320 million Indians sleep without food every night, and recent data suggests this already alarming situation is getting worse.

RANKING

Countries with extremely alarming (GHI ≥ 30), alarming (GHI between 20.0 and 29.9) or serious (GHI between 10.0 and 19.9) hunger situation. The Global Hunger Index is composed of the proportion of the undernourished as a percentage of the population, the incidence of underweight children under the age of five and the mortality rate of children under the age of five.

TABLE 7: 15 COUNTRIES WITH EXTREMELY ALARMING HUNGER SITUATION

GLOBAL HUNGER INDEX 2012

Rank	Country	1990	1996	2001	2012
1	Burundi	31.6	35.9	38.0	37.1
2	Eritrea	__	37.8	37.8	34.4
3	Haiti	33.9	32.2	25.8	30.8
4	Ethiopia	42.2	38.6	34.5	28.7
5	Chad	39.3	35.6	30.4	28.3
6	East Timor	__	__	26.1	27.3
7	Central African	27.4	28.4	27.4	27.3
8	Comoros	22.2	26.9	29.7	25.8
9	Sierra Leone	32.7	30.1	30.1	24.7
10	Yemen	29.0	27.6	27.9	24.3
11	Angola	41.9	39.9	33.0	24.1
12	Bangladesh	37.9	36.1	27.8	24.0
13	Zambia	24.8	25.0	27.2	23.3
14	Mozambique	35.5	30.7	28.8	23.3
15	India	30.3	22.6	24.4	22.9

FOCUS OF THE GHI 2012: PRESS

- India's global hunger index shows an improvement in 1996 from 1990 and then reverse is happen from 1996 to 2001 and in 2012, little improvement again seen.

NATIONAL PERSPECTIVES OF MALNUTRITION AND HUNGER

- Developed states of India also have a high number of women and children suffered with malnutrition and hunger.

TABLE 8: PERCENTAGE OF WOMEN AND CHILDREN AMONG ANEMIA: 1998-99

States	Percentage of Women with any Anemia	Percentage of Children with Anemia
Andhra Pradesh	49.8	72.3
Assam	69.7	63.2
Bihar	63.4	81.3
Gujarat	46.3	74.5
Haryana	47.0	83.9
Karnataka	42.4	70.6
Kerala	22.7	43.9
Madhya Pradesh	54.3	75.0
Maharashtra	48.5	76.0
Orissa	63.0	72.3
Punjab	41.4	80.0
Rajasthan	48.5	82.3
Tamil Nadu	56.5	69.0
Uttar Pradesh	48.7	73.9
West Bengal	62.7	78.3
India	**51.8**	**74.3**

Source: National Family Health Survey (NFHS-2), 1998-99.

- In India percentage of women and children suffers with any anemia is 51.8 and 74.3, which is very high after having many food schemes.

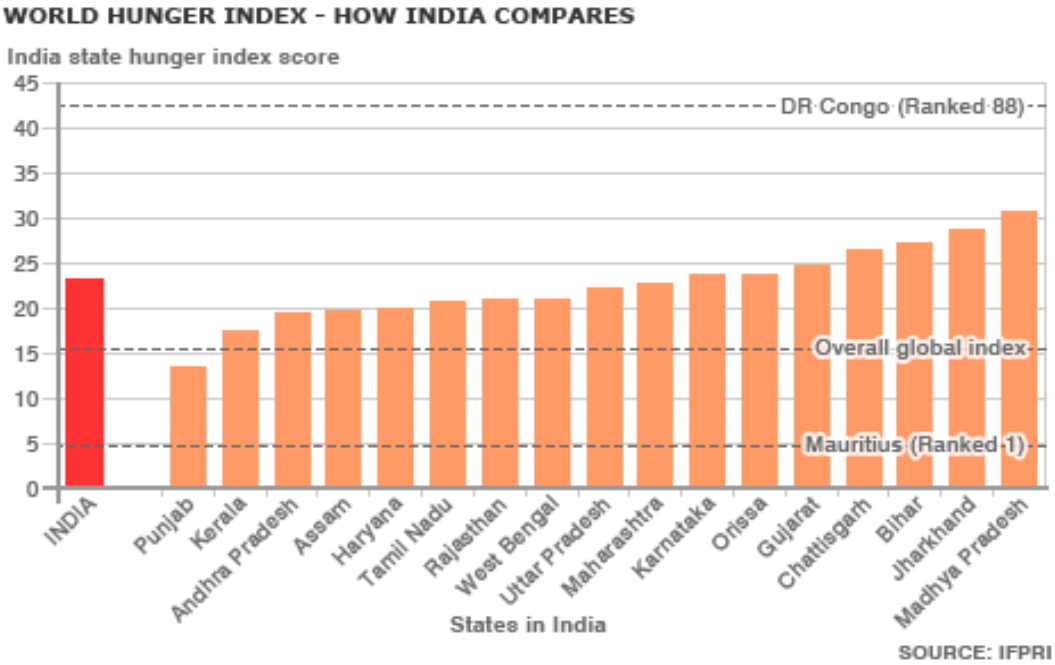
TABLE 9: MALNUTRITION RATE OF CHILDREN IN DIFFERENT AGE GROUPS IN ALL STATES

State	Children Age 0–5 Months Exclusively Breastfed (Per cent)	Children Age 6–9 Months Receiving solid or Semi-Solid Food and Breast milk (Per cent)	Children Under 3 Years who are Underweight (Per cent)
India	46.3	55.8	45.9
Andhra Pradesh	62.7	63.7	36.5
Arunachal Pradesh	60.0	77.6	36.9
Assam	63.1	59.6	40.4
Bihar	27.9	57.3	58.4
Chhattisgarh	82.0	54.5	52.1
Delhi	34.5	59.8	33.1
Goa	17.7	69.8	29.3
Gujarat	47.8	57.1	47.4
Haryana	16.9	44.8	41.9
Himachal Pradesh	27.1	66.0	36.2
J&K	42.3	58.3	29.4
Jharkhand	57.8	65.3	59.2
Karnataka	58.0	72.5	41.1
Kerala	56.2	93.6	28.8
Maharashtra	53.0	47.8	39.7
MP	21.6	51.9	60.3
Manipur	61.7	78.1	23.8
Meghalaya	26.3	76.3	46.3
Mizoram	46.1	84.6	21.6
Nagaland	29.2	71.0	29.7
Orissa	50.2	67.5	44.0
Punjab	36.0	50.0	27.0
Rajasthan	33.2	38.7	44.0
Sikkim	37.2	89.6	22.6
Tamil Nadu	33.3	77.9	33.2
Tripura	36.1	59.8	39.0
UP	51.3	45.5	47.3
Uttaranchal	31.2	51.6	38.0
WB	58.6	55.9	43.5

Source: NFHS-3 (2005–06)

- 42 percent of our children are undernourished.
- According to UNICEF , "1 in 3 of the world's malnourished children lives in India"

FIGURE – 1



- According to UNICEF. "It is going to be difficult for India to use its human resources to develop the nation without making improvements on its health front."

In the struggle in opposition to hunger Nobel Prize-winning economist Amartya Sen has noticed that "there is no such thing as an apolitical food problem." whereas drought and other natural calamities may create food shortage conditions, it is government action or inaction that determines its harshness, and The UN Millennium Development Goals are one of the initiatives of the world aimed at achieving food security. In its list of goals, the first Millennium Development Goal states that the UN "is to eliminate acute hunger and poverty", and that "agricultural production is liable to play an important part in this if it is to be reached on time".

SCAMS AND ISSUES

- Uttar Pradesh food grains scam took place between year 2002 and 2010, in Uttar Pradesh state in India, where in food grains worth Rs.35000 crore (US$5.9 billion), meant to be distributed between the poor, through various welfare schemes like Antyodaya Anna Yojana and midday meal scheme, was diverted to the open market. Some quantity of it was found at the Nepal and Bangladesh borders, as in 2010 safety forces detained Rs.1.17 crore worth of food grains like paddy and pulses being illegally transported to Nepal, another Rs.60.62 lakh worth of grains were confiscated on the Indo-Bangladesh border.
- The below poverty cards were introduced by the revenue-surplus Haryana to lessen poverty. After years, however, the worthy have failed to get the BPL cards but the list of counterfeit beneficiaries has greater than before in Haryana state. It is a challenge that how else would the occupants of the houses be registered as being below poverty line? Shocking revelations have come to light in Haryana's BPL scam in which thousands, well probably lakh of the BPL beneficiaries are exactly the people who should not be eligible to be so. Now the Haryana government has decided to conduct a survey of families living below poverty line in the state.
- A individual inquiry team (SIT), constituted by the Guwahati high court to probe in to the PDS scam in Arunachal Pradesh, has filled charge sheets in six cases against 57 accused, including 24 public servants. The SIT under special investigation cell of Arunachal Pradesh carried out investigation in six cases registered on allegations of irregularity and corruption in the distribution of food grains in the state under various welfare schemes.
- The Uttar Pradesh has failed to score well on midday meal performance audit carried out by inspection regulator, the Comptroller and Auditor General (CAG) of India. In its stand-alone report on the implementation of the scheme in the state, the CAG has pointed out on numerous leaks and slips between the children and the dish. Not only has the scheme turned out to be a huge window for diversions and undue favors to vested interests, in non-compliance with Supreme Court directives [April 2004], the state has failed to provide nutritional support to 1.63crore children of drought affected areas during summer vacations of 2005 and 2007.
- Paddy and Rice worth Rs.1000 crore missing from the god owns of sellers in Punjab. If probably investigated, the food and supplies ministry headed by none other than Adesh Partap Singh Kairon and various Punjab agencies involved in the procurement of paddy may be found at fault and held responsible.
- Midday meal scheme is at the centre of a storm after 23 children died after having their midday meal at a Bihar school. At least 39 students fell ill after consuming food, infected by a dead scorpion, served under the Midday Meal Scheme at their school in Orissa's Dhenkanal district.
- In January 2006, the Delhi Police revealed a scam in Midday Meal Scheme.
- The Times of India reported a scam involving government schools involved scam that's siphon off food grains under the Midday Meal Scheme by faking attendance in December, 2006.
- Madhya Pradesh had undertaken a study on mid-day meal in four districts. According to the study reported that the food scheme is shackled because of corruption, absence of teachers, and non-availability of food in required among and no arrangement of water in many schools.

WASTAGE

India's supply chains are famously afflicted by poor infrastructure and its distribution channels riddled with fraud. Food grains are produced in surplus in the country, but rot due to the lack of proper cold storage year after year. And yet, instead of dealing with this recurring underlying problem, the bill seems to focus on the external aspects of food security without paying attention to effective distribution of food grains.

As millions of Indians surviving on less that Rs.20 a day starve, the Food Corporation of India lost rice and wheat worth Rs.2,050 crore in transfer and storage in the last three years has come to know under the right to information act.

According to the government-owned agency 1107638.8 metric tons (MT) of food grains in its god owns have been lost to wastage since 2010. The arithmetic works out to approximately Rs.700 crore in a year that could adequately feed at least 10 hungry people for a million few weeks.

Looking at these figures, one feels both worried and puzzled that we are doing so much but have so little to show; angry and disturbed at the massive leakages and corruption that has seeped into this structure. The 2005 Planning Commission report reveals that 57 per cent of the PDS food grains did not reach the proposed people. For every spending on the PDS, only 25% reaches the poor.

IMPACTS OF CLIMATE CHANGE

The impacts of climate change can be considered in terms of sensitivity and vulnerability. "Sensitivity" describes the degree to which a individual system or segment might be affected by climate change. Affect of it can be positive or negative. "Vulnerability" describes the degree to which climate change affect a particular system or sector.

Easter ling et al. (2007) assessed studies that made quantitative projections of climate change impacts on food security. It was illustrated that these predictions were highly uncertain and had boundaries. However, the study gives a number of fairly strong findings. The first was that climate change would likely increase the number of people at risk of hunger compared with reference scenarios without climate change. The impact of climate change depended strongly on projected future social and economic development. Additionally, the extent of climate change impacts was projected to be smaller compared to the impact of social and economic development.

SUGGESTIONS AND POLICY IMPLICATIONS

- Vigilance team should be strengthened to identify corruption, which is an added spending for taxpayers.
- Margin of profit should be increased for straightforward business, in which case the market system is more pertinent anyway.
- F.C.I. and other important agencies should provide quality food grains for distribution, which is a large order for an organization that has no real motivation to do so.
- Regular checks & raids should be conducted to eradicate false and fake cards, which is again an added expenditure and not fool proof.
- More Fair Price shops should be opened by civil supplies company in rural areas.
- The Fair Price dealers not often display rate chart and quantity available in the black-boards in front of the shop. This should be compulsory.
- Firm action should be taken in opposition to the culpable to ensure leakages free distribution of food grains.
- The country needs legislation that allows farmers to profit economically and grow independent, instead of forcing them to further depend on the government. The government should provide market incentives, not giving hand-out.
- Make powerful all women and care for their nutrition, human being rights and entitlements and those of their children, through awareness, skills, policies and instruction.
- Minerals and vitamins riches foods should be distributed under various welfare schemes.
- Encourage the production and consumption of culturally appropriate foods that are rich in micronutrients, and micronutrient supplementation when and needed.
- Build awareness, institutional capacity and leadership at national, sub- national, community and global levels for accelerating action on nutrition.
- Well developed god owns should be constructed in every block.
- The Right to Employment is essential for achieving food security.
- Effective execution of programs is important for achieving food security.
- Food grains export should be allowed for only when the country's total population is satisfactorily fed.
- Head of the department should be chosen locally
- A cereal-based diet takes no account of the special needs of growing children, expecting and expectant mother. They also need minerals, vitamin and proteins.

AN IMPORTANT STEP

A pilot program on Nutri-Farms for introducing new crop varieties that are rich in micro-nutrients such as iron-rich bajra, and zinc-rich wheat, is being launched. A sum of upto ₨ 200 crore has been earmarked to start the pilots. It is hoped that agric businesses and farmers will come together to start a adequate number of pilots in the districts, most affected by undernourishment.

CONCLUSION

Today, India has the major stock of grain in world besides China. The government spends Rs 750 billion ($13.6 billion) per year, almost 1 per cent of GDP through various food schemes to ensure food security to the citizen of India, yet 21 per cent leave undernourished. Still now we have not achieved vision of hunger and malnutrition free India. The main barriers to achieve food security to all citizen of India is shortage of infrastructure such as storage houses, food grain market, transport facilities etc, unawareness and illiteracy of poor and needy people, black marketing, lack of basic principal in citizen, and absence of proper observation team. Agricultural play an important role to ensure food security. So agricultural scheme should be given proper consideration and connected with food schemes.

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VENTURE CAPITAL IN INDIA: A REVIEW OF LITERATURE

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ABSTRACT

Venture Capital is one of the most important innovations of the twentieth century in the world's financial sector. It has come to play an important role as a source of capital for those who fail to finance their ideas by means of traditional sources of financing. In comparison to the developed countries the concept of venture capital is quite new for the developing country like India. The Venture Capital Funds can play a very important role in India by supporting the activities of small and medium enterprises not just by providing financial resources but also by their participation in the administration and management of the startup firms. Over the years the venture capital investment in India by domestic and foreign Venture Capital Funds has witnessed increasing trends that is contributing to the entrepreneurial development in India. The underlying paper explores the various aspects of venture capital in India based on the review of literature. Various papers dealing with the venture capital investment in India, pre investment actions of Venture Capital Funds, risk management by the India Venture Capital Funds have been studied in detail to ascertain the various aspects of venture capital investment in the country. The need of the hour is to introduce certain flexibility in the venture capital regulations and provision of various incentives to entrepreneurs so as to stimulate exploration of new ideas in the country.

KEYWORDS
Investment, Limited Partner, Venture Capital, Venture Capital Fund.

JEL CODE
G20, G24.

INTRODUCTION

One of the most important innovations in the financial sector of the world has been the development of the venture capital in the 20th century that has allowed those firms to obtain funds for their operations that could not otherwise obtain the funds from any other source. A number of internationally successful firms like Facebook, Google, Apple were once able to operate because of the capital that these firms received from the Venture Capital funds (Joshi & Subrahmanya, 2014).

Venture capital industry is globally understood as "independently managed, dedicated pools of capital that focus on equity or equity-linked investments in privately held, high-growth companies" (Dossani & Kenney, 2002; Gompers & Lerner, Spring 2001).

Venture capital is an investment by VCFs out of the funds received from the wealthy individuals and institutional investors in the form of shares or a later stock option in potentially high-risk businesses. The beneficiary companies are usually small or medium-sized firms, requiring seed or early-stage funding for innovation and development of technology or products, with high growth potential. High annual returns ranging from 25-75% are expected on such investments. Venture capital is a long-term investment and involves active participation and help from the investor for the development of the company. Often, the presence of the VC investor/s gives the company commercial and financial clout (Kaushik, 2014).

In the Indian context, the concept of venture capital may be defined as investment in the form of equity, quasi-equity and/or a conditional loan, made in new, unlisted, high-risk or high-tech firms, started by technically or professionally qualified entrepreneurs. The venture capitalist expects the enterprise to have a very high growth rate, provides management and business skills to the enterprise, expects medium to long term gains, and does not expect any collateral to cover the capital provided (Pandey, 1998).

The understanding of concept of VC requires an understanding of certain key terms. These are as follows:

VENTURE CAPITAL FIRMS

Venture Capital Firms refer to the firms established by Venture Capitalists that typically comprise small teams with technology backgrounds (scientists, researchers) or those with business training or deep industry experience. The venture capital firm with the help of venture capitalists identifies novel technologies that have the potential to generate high commercial returns at an early stage (Haritha, V, & Reddy, 2012).

VENTURE CAPITALIST

A venture capitalist is a person or investment firm that makes venture investments, and these venture capitalists are expected to bring managerial and technical expertise as well as capital to their investments (Haritha, V, & Reddy, 2012).

VENTURE CAPITAL FUND

A venture capital fund refers to a pooled investment vehicle established by the venture capitalists in the venture capital firm that primarily invests the financial capital of third party investors in enterprises that are too risky for the standard capital markets or bank loans (Haritha, V, & Reddy, 2012).

VENTURE CAPITAL CYCLE

The venture capital cycle starts with raising a venture fund; proceeds through the investment in, monitoring of, and adding value to firms; continues as the venture capital firm exits successful deals and returns capital to its investors; and renews itself with the venture capitalist raising additional funds (Gompers & Lerner, Spring 2001).

The underlying paper reviews the various researches that have been carried out in the context of Indian Venture Capital Industry. The paper studies various aspects of VC in India like the evolution of venture capital regulation, pre-investment evaluation, risk management by Indian Venture Capitalists, role of VC in India, trends of VC investment etc.

ORIGIN OF VENTURE CAPITAL

The first venture capital firm, American Research and Development (ARD) was established by Karl Crompton, President, MIT; General Georges F. Doriot, Professor, Harvard Business School and local business leaders in 1946. The firm was set up as the publicly traded closed-end fund. The major investment in the shares of the fund was made by the individual investors while the institutional investors were not convinced enough to invest in these funds considering the high risk associated with the unproven style of investment. The firm used to make risky investments in companies, which were involved in development of

technology for World War II. While the returns from different investments made by the firm during the 26 years of its existence varied widely the firm earned more than half of its profits by way of investment in Digital Equipment Company in 1957. ARD made an investment of $70,000 in Digital Equipment which later grew to $355 million. A number of other venture capital firms established on the lines of ARD were also set up as closed-end fund. With this start, the new concept of venture capital financing got spread from United States to all the parts of the world. However the scale of development of venture capital financing in different parts of the world vary considerably depending upon number of factors like availability of new ideas, efficiency of the capital markets etc (Gompers & Lerner, Spring 2001).

DIFFERENCE BETWEEN VENTURE CAPITAL AND PRIVATE EQUITY

While Venture Capital and Private Equity are often used interchangeably there is a difference between the two. Venture Capital Funding primarily refers to the early stage financing of the startup companies. It is mainly associated with the financing of the companies involved in developing, launching and expanding of the new products and services. Venture Capital Financing is more than provision of finance to the startup companies by venture capital funds as along with providing the financial support venture capital funds also provide entrepreneurial support, partnership based valued addition, human resources, financial advice, established network with the customers and overall guidance in company strategy. On the other hand Private Equity funds are a large source of funding for the enterprises that are relatively secured with an established track record requiring significant large funds for expansion and growth (Kohli, 2009). While VC funds typically invest small amounts in early-stage companies private equity funds invest larger sums in relatively mature firms (Sarkar, 2015).

STAGES IN VENTURE CAPITAL FINANCING

While VC evolved as a source of early stage financing it provides finance to the companies at various stages. The various stages of VC funding are as follows:

Pre seed Stage: Here, a relatively small amount of capital is provided to an entrepreneur to conceive and market a potential idea having good future prospects. The funded work also involves product development to some extent.

Seed Money: Financing is provided to complete product development and commence initial marketing formalities.

Early Stage / First Stage: Finance is provided to companies to initiate commercial manufacturing and sales.

Second Stage: In the Second Stage of Financing working capital is provided for the expansion of the company in terms of growing accounts receivable and inventory.

Third Stage: Funds provided for major expansion of a company having increasing sales volume. This stage is met when the firm crosses the breakeven point.

Bridge / Mezzanine Financing or Later Stage Financing: Bridge / Mezzanine Financing or Later Stage Financing is financing a company just before its IPO (Initial Public Offer). Often, bridge finance is structured so that it can be repaid, from the proceeds of a public offering (Salgar, 2012).

ROLE OF VENTURE CAPITAL IN INDIAN ECONOMY

Venture capital is an important source of equity for start-up companies. Venture capital can be visualized as "your ideas and our money" concept of developing business. In order to promote innovation, enterprise and conversion of scientific technology and knowledge based ideas into commercial production, it is very important to promote venture capital activity in India. India's success story in the area of information technology has shown that there is a tremendous potential for growth of knowledge based industries. The recent economic slowdown of IT Sector has provided a chance to Venture capitalist to consider investment opportunities in other sectors such as Manufacturing and Service Industry which will be necessary to have overall economic development and to reduce the economic dependency on a single sector (Haritha, V, & Reddy, 2012).

A flourishing venture capital industry in India can fill the gap between the capital requirements of Manufacture and Service based startup enterprises and funding available from traditional institutional lenders such as banks. The gap exists because such startups are necessarily based on intangible assets such as human capital and on a technology-enabled mission, often with the hope of changing the world (Haritha, V, & Reddy, 2012).

Venture capital plays a very important role by promoting the development and growth of innovative entrepreneurships. VC investment can play a very important role in the small and medium enterprises not only in the form of the financial support that the SMEs will get from VCFs but will also gain global exposure and can benefit from the participation of the venture capital fund in the administration and management of the enterprise (Kohli, 2009).

The study of venture development and new venture growth reflects the important role that venture capital could play in the developing nations. The rapid economic growth on account of new ventures and new industry development in the developing countries can provide them a breakthrough on the path of progress. Further the focus on the knowledge and IT industry can lay down the path of development for the developing nations. A found financial system that promotes new ventures has become essential for the growth of any nation. It is also necessary for the developing countries to strengthen the domestic venture capital system along with the legal system to boost up the growth of the venture capital industry in the country (Tang & Wei, 2011).

EVOLUTION OF VENTURE CAPITAL IN INDIA

The concept of Venture Capital is newer in India in comparison to the other countries like UK, USA, and Europe etc. where it has been in existence for many years. During the period when venture capital funds did not exist in India individual investors and development financial institutions like IDBI, IFCI discharged the role of venture capitalists. Other than these the entrepreneurs primarily depended on private placements and public offerings for obtaining funds for starting up the ventures.

In 1973 a committee appointed by Government of India on "Development of Small and Medium Enterprises" emphasized the need to foster venture capital as a source of funding new entrepreneurs and technology. After this some public sector funds were set up but the activity of venture capital did not gather momentum as the thrust was on high-technology projects funded on a purely financial rather than a holistic basis. Later, a study was undertaken by the World Bank to examine the possibility of developing venture capital in the private sector, based on which the Government of India took a policy initiative and announced guidelines for venture capital funds (VCFs) in India in 1988. However, these guidelines restricted setting up of VCFs by the banks or the financial institutions only (Kohli, 2009). Thereafter, Government of India issued guidelines in September 1995 for overseas venture capital investment in India. For tax-exemption purposes, guidelines were issued by the Central Board of Direct Taxes (CBDT) and the investments and flow of foreign currency into and out of India was governed by the Reserve Bank of India (RBI) (Dossani & Kenney, 2002).

As a part of its mandate to regulate and to develop the Indian securities markets, SEBI under Sec 12 of SEBI Act 1992 framed SEBI (Venture Capital Funds) Regulations, 1996. With the establishment of the regulatory framework some domestic VCFs were registered with SEBI and some overseas investment came through the Mauritius route (Kohli, 2009). Thus, there were three sets of Regulations dealing with venture capital activity i.e. SEBI (Venture Capital Regulations) 1996, Guidelines for Overseas Venture Capital Investments issued by Department of Economic Affairs in the Ministry of Finance in the year 1995, and CBDT Guidelines for Venture Capital Companies issued in 1995, which were later modified in 1999. Therefore, there was a need to consolidate all these into one single set of regulations to provide for uniformity and hassle free single window clearance (Avisory Committee on Venture Capital, 2003).

A SEBI committee on Venture Capital headed by KB Chandrasekhar, Chairman, Exodus Communications Inc., California, USA was set up in July 1999 to identify the hindrances in the growth of venture capital and for suggesting some measures so as to facilitate the growth of venture capital activity in India. The committee consisted of industry participants, professionals and the representatives from financial institutions and RBI (K.B. Chandrasekhar Committee, 2000). In order to provide a global perspective to the industry the Indian entrepreneurs from the Silicon Valley were also included in the committee. Thereafter, based on recommendations of the K.B. Chandrasekhar Committee Guidelines for Overseas Venture Capital Investment in India were withdrawn by the Government in September 2000, and SEBI was made the nodal regulator for VCFs to provide a uniform, hassle free, single window regulatory framework. SEBI also notified regulations for foreign venture capital investors. On the pattern of foreign institutional investors (FIIs), Foreign Venture Capital Investors (FVCIs) were also to be registered with SEBI.

Later on, an advisory committee was also set up by SEBI in 2003 under the chairmanship of Dr. Ashok Lahiri, who was the Chief Economic Advisor in Ministry of Finance, Government of India for advising SEBI for the development and regulation of venture capital funds industry in India. On the basis of the recommendations of the committee venture capitalists are now permitted to invest in real estate, removing lock-in period for shares of listed venture capital undertakings, and reducing the proportion of funds raised that have to be invested in unlisted companies from 75% to 66.67% (Tripathy, 2007) .

A 'Committee on Technology Innovation and Venture Capital' was also set up in July 2006 by the Planning Commission of India to examine the issues related to technology innovation and policies for venture capital in India (Kohli, 2009).

VC ECOSYSTEM

VC ecosystem refers to the structure of the venture capital firms. In general, the VC ecosystem comprises three players – Limited Partners (LPs) i.e. fund providers, General Partners (GPs) i.e. fund managers and Entrepreneurs (investee companies). The GPs typically raise funds from LPs for a fixed period. The LPs comprise entities such as pension funds, insurance companies, foundations, corporations, angel investors or any other entities that have surplus funds to deploy. The funds thus raised are then invested by the GPs in the investee firms for a fixed period of time. After about 5-8 years post the investment, GPs look for suitable exit options via any of the following exit routes - Initial Public Offer (IPO), Strategic sale (M&A), Secondary sale to another upstream VC fund or in the worst case, bankruptcy. On exit, the funds are then returned to the LPs and the investment cycle begins all over again. The LPs and GPs are thus the critical players in the VC eco-system that determine the quantum of fundraising (Joshi & Subrahmanya, 2014).

TYPES OF VCF'S IN INDIA

Types of VCFs in India can be categorized into the following four groups.

VCFs promoted by the central (federal) government, controlled development finance institutions: TDICI by ICICI; Risk Capital and Technology Finance Corporation Limited (RCTFC) by Industrial Finance Corporation of India (IFCI); and Risk Capital Fund by Industrial Development Bank of India (IDBI).

VCFs promoted by the state government-controlled developmental finance institutions: Gujarat Venture Finance Company Limited (GVCFL) by Gujarat Industrial Investment Corporation (GIIC); and Andhra Pradesh Venture Capital Limited (APVCL) by Andhra Pradesh State Finance Corporation (APSFC).

VCFs promoted by the public sector banks: Canfina by Canara Bank; and SBI-Caps by State Bank of India.

VCFs promoted by the foreign banks or private sector companies and financial institutions: Indus Venture Fund, Credit Capital Venture Fund and Grindlay's India Development Fund (Pandey, 1998).

VENTURE CAPITAL REGULATION, 1996

The activities of VCFs are regulated by formal legislation of SEBI (Venture Capital Regulations, 1996 & SEBI Foreign Venture Capital Investors Regulations, 2000), FDI and RBI FEMA provisions (Kohli, 2009).

Venture Capital Regulations, 1996 lays down a number of regulations in six chapters and three schedules with regard to registration of VCFs, investment conditions and restrictions, general obligations and responsibilities of VCFs etc.

According to Section 2(m) of Venture Capital Regulations, 1996 issued by SEBI "venture capital fund" means a fund established in the form of a trust or a company including a body corporate and registered under these regulation which -

(i) Has a dedicated pool of capital;

(ii) Raised in a manner specified in the regulations, and

(iii) Invests in accordance with the regulations

According to Section 2(n) "venture capital undertaking" means a domestic company -

(i) Whose shares are not listed on a recognized stock exchange in India;

(ii) Which is engaged in the business for providing services, production or manufacture of article or things or does not include such activities or sectors which are specified in the negative list by the Board with the approval of the Central Government by notification in the Official Gazette in this behalf.

As given in the negative list the SEBI registered venture capital funds cannot invest in the unlisted equity shares or equity linked instruments of venture capital undertaking that are engaged in the business of

- Non-banking financial services excluding those Non-Banking Financial Companies which are registered with Reserve Bank of India and have been categorized as Equipment Leasing or Hire Purchase Companies.
- Gold financing excluding those Companies which are engaged in gold financing for jewellery.
- Activities not permitted under industrial policy of Government of India.
- Any other activity which may be specified by the Board in consultation with Government of India from time to time (Securities and Exchange Board of India, 2010).

Registration under SEBI seems to be a bit bureaucratic, but it offers certain benefits. For example, income is passed to investors without tax in case of trusts registered under the Indian Trusts Act and venture capital companies. FVCIs can freely remit funds to India for investments in Indian VCUs and SEBI registered DVCFs. They are also exempt from both the entry and exit pricing regulations that otherwise apply to foreign investors, such as market-related pricing on divestment. Additionally, the sale of shares by VCFs to company insiders (post listing) is exempt from the SEBI takeover code. Further, VCFs automatically obtain Qualified Institutional Buyer (QIB) status, which is useful for participating in new security placements, and they get exemption from the one-year lock-in for divestment post-initial public offering (IPO) for shares purchased prior to the IPO and are not treated as promoters for purposes of IPO (Deva, 2008).

Under Chapter III, the SEBI Regulations establish investment conditions and restrictions. The investment criteria for a venture capital investor require that it shall disclose to the board its investment strategy and can invest its total funds committed in one venture capital fund. But the investor must invest at least 66.67 percent of the investable funds in unlisted equity shares or equity linked instruments of VCU. Moreover, not more than 33.33 percent of the investable funds may be invested for subscription to initial public offers of a venture capital undertaking whose shares are proposed to be listed. And no more than 33.33 percent may be invested in debt or a debt instrument of a venture capital undertaking that the foreign venture capital investor has already made an investment by way of equity. The 33.33 percent investment limit is also applicable to preferential allotment of equity shares of a listed company subject to a lock-in period of one year, the equity shares or equity linked instruments of a financially weak company, or a sick industrial company whose shares are listed and/or special purpose vehicles that are created for the purpose of facilitating or promoting investment. The venture capital investor must also disclose the duration of the life cycle of the fund (Deva, 2008).

In chapter IV of the Venture Capital Regulations, 1996 general responsibilities of the VCF's has been given that prohibits the funds on inviting subscription from the public. However it states that a venture capital fund may receive monies for investment through private placement of its units (Securities and Exchange Board of India, 2010).

VENTURE CAPITAL ENVIRONMENT IN INDIA

In the initial years, venture capital firms in India encountered a number of problems in developing their businesses. From the in-depth case study of TDICI, Pandey (1998) found that the firm went through the initial constraint of not knowing the venture capital business well, and learnt through experience. It faced problems in raising funds and evaluating prospective ventures. It initially focused its investment in the high-technology business, but gradually shifted the focus towards other potentially high-growth, high-profitable businesses, not just high-tech businesses. It is also noticed that TDICI undertook a number of business development initiatives to popularize the venture capital business in India. It introduced a simple organizational structure for facilitating quick decision making, and developed innovative funding and financing mechanisms.

On the basis of the case study it was found that a developing country requires positive policy initiatives providing an impetus for initiating venture capital activity and the catalytic and development role played by one or a few venture capital firms, committed and professionally competent management team that is dedicated to building the venture capital business, creating simple decision-making structure, and providing managers with operating freedom and an environment that is free from bureaucracy for the development of venture capital industry. Further innovative funding and financing mechanisms to conform with the environmental compulsions and development of value-added services and help systems that create specialization to sustain the venture capital activity is also required (Pandey, 1998).

Dossani & Kenney (2002) consider India to have poor prospects for the development of the venture capital industry because of the history of state directed institutional development and economy being in control of bureaucracy resulting into corruption. However they also consider that India has certain strengths in the form of low cost manpower both skilled and unskilled, a number of small businesses, public equity market and a well grown software industry. For venture capital industry to survive in India the country would have to experience a mixture of interactions between the venture capital institutions and environments so as to suit each other (Dossani & Kenney, 2002).

In India the environment needs to continue being changed for the successful establishment of the venture capital industry. To provide a stimulating environment for the development of venture capital industry in India, the unnecessary regulations that do not serve any important purpose will have to be done away with. The World Bank stimulated the process of Venture Capital Fund in India by funding the Venture Capital Funds in the beginning. Even though these funds were not a huge success they initiated the process of venture investing in the country. Further the development in the software industry provided an appropriate environment for the growth of venture capital industry in India. India still remains a difficult environment for the growth of the venture capital industry because of the bureaucracy and regulations. In order to boost the growth of the venture capital industry in India the government must ease some of the regulations and address the issues related to tax and exchange policies. Further the government must try and reduce the risk involved in venture capital investing if funds are to come from the publicly held financial institutions that are managed by highly risk averse managers (Dossani & Kenney, 2002).

India has an enormous potential in the field of knowledge based industries like information technology, pharmaceuticals, bio-technology, telecommunication etc. While India has inherent strength in the form of cost competitive manpower, technical skill, entrepreneurship etc. the provision of much required risk capital will enable the country to utilize the strengths and explore the untapped potential in the various industries that are not able to grow because of the lack of resources (K.B. Chandrasekhar Committee, 2000).

India has also introduced a number of tax reforms in the years to attract the foreign investors. For example The Indian Income Tax Act 1961 (ITA) exempts income, dividend, and capital gains earned from venture capital investment in India. Section 10 of the ITA provides for incomes that are not included in total income for the year. Any income by way of dividends or long-term capital gains of a venture capital fund or a venture capital company from investments made by way of equity shares in a venture capital undertaking is exempt from income tax. India has come a long way in the venture capital industry and has tried to make itself as a preferred investment hub (Deva, 2008).

DRIVERS OF VC FUNDRAISING

Joshi & Subrahmanya (2014) build up a supply demand framework to understand the factors that determine the fundraising ability of the venture capital funds. While LP's, GP's and entrepreneurs are three players in the venture capital ecosystem LP's and GP"s are on the supply side and entrepreneurs on the demand side. By empirically studying the supply side framework it is found that fundraising ability of VCFs from LPs is more influenced by the macro factors that affect the aggregate fundraising of the VCF while the fundraising ability of GP's is more influenced by the micro factors. The macro factors play a very important role in fundraising by a venture capital fund. The aggregate fundraising by VCF's in Indian economy could have increased on account of the slowing down of the US growth rate; however, inflation acts an impediment to the flow of funds in the Indian economy. Further the strong fundamentals of the Indian economy in the last one decade could also have acted instrumental in the fundraising at the aggregate level. Further the past performance and reputation of the GP's affects the fund raising ability of the VCF's at the micro level. Also, historical deal volume and exits play an important role in determining the fund-raising potential of the individual GP players (Joshi & Subrahmanya, 2014).

PRE-INVESTMENT ACTIONS & RISK MANAGEMENT IN INDIAN VCFS

There are basically four key elements in financing of ventures which are studied in depth by the venture capitalists. These are expertise of the management on board that can bring significant credibility to the company, the expected rate of return on the investment and potential for capital gain, realistic financial requirement and future projections regarding scope, scale of operations, performance etc and financial stake of the owner, family members, relatives and friends (Salgar, 2012).

Soni & Priyan (2013) study the pre-investment actions of the Indian VCFs by conducting a survey of members of Indian VCFs. They find that there are a number of reasons for a high rejection rate of the business plans by the VC Firms primarily being the misfit of business plan in the investment policy preference of the venture capital firm, very high risk, non-agreeable valuation terms, very high/low level of investment required, low contribution of the promoter and expectation of a low return.

The most preferred source of deals for the Indian VCFs is the referrals followed by the deals recommended by the prior investees and active search of the deals itself. The Indian VCF's prefer to invest in ventures by purchasing equity, followed by convertible debt. The use of pure debt is rarely preferred by the VCF's. Further, the firms vary widely in terms of ownership stake that they normally take in the business of investee. The average ownership stake by the VCs may range between16% and 44% approximately.

It is found that while the recently established firms adopt a proactive approach i.e. look for deal themselves the already established firms adopt a reactive approach and prefer to wait for the deals to come to them either through entrepreneurs, referrals, prior investee or VC community. The VCF's conduct a detailed evaluation of the proposal once it passes through the initial screening and evaluate all the information surrounding the venture to judge the probability of success or failure. Indian VCF's use a combination of in-house experts and external specialists for conducting due diligence. VCF's do not consider the environmental conditions i.e. tax benefits and regulations in the industry; significant while decision making. Tax benefits are not relevant in evaluating many deals because VCs see their mission as reaping capital gains rather than providing tax shelters for the investors in their fund. A large number of VCF's prefer syndicated deals mostly at the later stages as compared to early stages. The motives behind syndication are found to be large investment, risk sharing, and need to access specific skills for better management etc (Soni & Priyan, 2013).

The VCF's adopt a number of risk management processes and risk mitigation strategies to deal with identifiable risks. Smolarski, Verick, Foxen, & Kut (2005) identify mainly five type of risks in venture capital investment: pre-investment risk (new investments), risk in existing portfolio companies, portfolio risk, macro-oriented risks, and other.

The major problem is of asymmetric information that has two important issues associated with it which are principal management relationship and portfolio management related issue. This asymmetry in information further gives rise to the problems of adverse selection and moral hazard. The three control mechanisms that can be used to overcome these problems are financial contracting, syndication of financing, incremental or staged financing. Financial contracting is one of the very common mechanisms to control the behavior of the entrepreneurs or the outcomes of the start-up firms thus reducing the moral hazard problem. Syndication of investment reduces the risk of adverse selection and moral hazard by way of confirming the risk with the co-investor. Further incremental or staged financing involves funding of start-ups in stages, more often after certain goals have been achieved at each stage which thus reduces the problem of moral hazard. Portfolio risk is another important aspect of managing risk. Portfolio diversification is an essential and well-known means to control risk exposure by reducing unsystematic (firm-specific) risk.

When studied in comparison to the VCFs in UK, a developed country where the concept of venture capital was introduced much before it came to India; it is found that Indian VCFs prefer syndication to a greater extent than the VCFs in UK as information asymmetry is higher in developing countries than in developed countries. The VCF's in both the countries tend to favor prescreening risk assessment methods for the evaluation of new investments. As far as the risk in

existing portfolio companies is concerned U.K. funds consider aligning management's interest with that of the venture capitalist a significantly more important risk in managing their portfolio companies compared to their Indian counterparts. Indian funds actively diversify their portfolios by investing vertically to a greater extent compared to U.K. funds. With regard to macro and other risks it is found that foreign exchange risk and interest rate risk are more important to UK funds whereas Indian funds consider business-cycle risk, interest-rate risk, and inflation risk as more important. This might be because UK funds specialize to a greater extent as compared to the Indian counterparts due to which they have to manage foreign exchange risk more effectively. U.K. fund managers attend more board meetings for large investments each year and meet with management more often for large and small investments compared to Indian funds. On the other hand, Indian funds attend longer board meetings for large and small investments compared to U.K. funds. Diversification through other sectors of the economy appears more relevant for U.K. funds. On the other hand, Indian funds are more likely to use specialization as a risk mitigation tool. Risk management techniques and risk management styles vary according to country of origin. There is a collective trend within groups in evaluating and controlling, but in considering fund-level risk, including portfolio and macro risks, no consistent risk management policies were captured within the two countries (Smolarski, Verick, Foxen, & Kut, 2005).

FLOW OF VENTURE CAPITAL IN INDIA

Venture Capital Industry is in very early stage in India. Due to the economic liberalization in the economy and the increasing global outlook in India there has been growing interest of the domestic and foreign investors in venture capital. While only 8 domestic VCFs were registered with SEBI during 1996-1998, an additional 13 funds were registered in 1999. Indian venture capital industry has tremendous growth potential provided a proper environment and policy support is provided to the venture capital investors (Dossani & Kenney, 2002).

Venture Capital Investment started in India with the establishment of Technology Development and Information Company of India Ltd. (TDICI) in 1988 with ICICI bank and UTI bank as its promoters. Along with this a number of other venture capital funds, like Gujarat Venture Fund Limited and Andhra Pradesh Industrial Development Corporation, were also started in 1990's by State level Financial Institutions. There was an increase in Foreign Venture Capital Funds in 1990s that focused on providing the development capital without focusing on any specific sectors and looked mainly for opportunities. After the success of these Foreign Venture Capital Funds a number of India-centric Foreign Venture Capital Funds emerged over a period of time. The Venture Capital Industry in India got the real boost in late 1990s with the growth of IT companies and the global dot com boom. However with the burst of the bubble in 2000-2001 Venture Capital Funds suffered huge losses and were able to recover gradually by the end of 2004 (Kohli, 2009).

In 2002 SEBI was made the central regulatory authority for all the VC funds operating in India. This marked an important development in streamlining and regulating the policies pertaining to VC operations in India. Today, there are about 205 foreign and 164 domestic GPs operating in India. The foreign GPs have led the rally of growth of VC investments in India. About 80% of the VC funds invested in India are raised abroad. An increasing numbers of foreign VCs have raised India focused funds since 2005. Several MNCs such as Intel, Qualcomm, SAP and Cisco have set up India focused funds. Microsoft, Google and Amazon have set up their own business accelerators to leverage the innovative technologies developed by the Indian startups. The effort of foreign corporate houses has been supplemented by the Indian industrial conglomerates as well. Many domestic firms such as Reliance, TATA, Aditya Birla group, TVS, Godrej, Patni and Wipro have set up their own VC funds. VCs have funded approximately 2500 companies since 2004. In fact about one-third of the top 500 companies operating in India today are VC funded (Joshi & Subrahmanya, 2014).

Venture capital has become a very important medium of foreign investment into India over a period of time. Venture Capital has seen a phenomenal growth in the recent years which is likely to continue in the future also (Tripathy, 2007).

FOREIGN VENTURE CAPITAL INVESTMENT IN INDIA

Since the opening of the markets in India there have been three major modes of investment for foreign investors which are (i) Foreign Direct Investment regulated by Foreign Investment Promotion Board (FIPB), (ii) Offshore company (usually in Mauritius) operating in India monitored by FIPB in collaboration with the Reserve Bank of India (RBI), and (iii) Direct Investment in Venture Capital Funds, the regulation of Foreign Venture Capital Funds being undertaken by FIPB and Securities and Exchange Board of India (SEBI) (Deva, 2008).

The SEBI (Venture Capital Funds) Regulations were formulated in 1996 to regulate the domestic venture capital funds (DVCF) and to require registration of such funds. It was only in 2000 that legislation was passed specifically dealing with foreign venture capital in India. The SEBI (Foreign Venture Capital Investors) Regulations of 2000 define a "foreign venture capital investor" (FVCI) as an investor that: (1) is incorporated and established outside India; (2) is registered under these regulations; and (3) proposes to make investments in accordance with the SEBI regulations (Deva, 2008).

The flow of venture capital has a positive effect in the economy since it supports the growth the local industries and creates employment. However foreign investors consider a number of factors like legal, social, political, economic and regulatory framework of the country before investing in a particular country. They are more likely to invest in a country that has least procedural and regulatory networks (Deva, 2008).

For purposes of receiving benefits under the SEBI Regulations, an overseas investor must be registered as an FVCI. Before registration, the board would consider certain conditions for eligibility, such as the applicant's track record, professional competence, financial soundness, experience, and general reputation of fairness and integrity. The board would also consider whether the applicant is an investment company, a trust, partnership, pension fund, mutual fund, endowment fund, university fund, charitable institution, or any other entity incorporated outside India; or whether an asset management company, investment manager or Management Company, or any other investment vehicle incorporated outside India. The board would also inquire as to whether the applicant has previously been denied a certificate by the board and whether the applicant is a fit and proper person.

India has been making continuous efforts to create a conducive investment climate in a country by making amendments in the law and regulations governing the venture capital industry in India. Indian venture capital market is driven by a number of other variables like strong growth in the knowledge based industries that are global in nature and are not affected by the domestic issues. Large English speaking population along with the world class professionals and engineers have also enhanced the prospects venture capital investment in India by foreign investors. Further the growth in some of the sectors like Information Technology and Media has also been a motivator for the foreign investors to invest in Indian Companies. However there are certain shortcomings that need to be addressed for making India a better place for venture capital investment. This includes the need for maintaining a balance between the market and the regulatory framework, the need to increase the investment in the fields of education and research, the need to have competent manpower in the regulatory institutions, need to improve corporate governance and financial discipline etc. The improvement in all these aspects would make India a more desirable market from the perspective of venture capital investment (Deva, 2008).

VENTURE CAPITAL INVESTMENT TREND IN INDIA

The Venture Capital industry in India picked up in 1996-97 and reached new heights in 2000 because of the success of India in addressing the Y2K problem and the boost in the IT, Telecom and Internet sectors which allowed global business interactions to become much easier. However the VC activity declined drastically in 2001-2003 when NASDAQ lost 60% of its value in second quarter of 2000. And other public markets declined substantially. Consequently, during

2001-2003, the VCs started investing less money to minimize the risks as a result of which the number of early-stage deals fell sharply from 142 in 2000 to 36 in 2001. The investment in IT related companies also fell drastically. This scenario could change in 2004 only with a renewed investor interest and activity since the Indian economy was growing at a very high rate. Further the Venture Capitalists started focusing on the sectors other than IT because the growth of the Indian economy was no longer limited to the growth of IT sector only. The investment further spread to bio-technology, pharmaceuticals, healthcare, medical tourism, real estate, entertainment and media etc (Aggarwal, 2006).

The following is the industry wise cumulative investment details of SEBI Registered Venture Capital Funds (VCF) and Foreign Venture Capital Investors as on September 30, 2014.

TABLE 1: INDUSTRY WISE CUMULATIVE INVESTMENT DETAILS OF SEBI REGISTERED VENTURE CAPITAL FUNDS (VCF) AND FOREIGN VENTURE CAPITAL INVESTORS (FVCI)

Particulars	as on September 30, 2014 (Rs. in Crore)		
Sectors of Economy	**VCF**	**FVCI**	**Total**
Information Technology	1072	4433	5360
Telecommunication	1299	6480	7096
Pharmaceuticals	376	463	778
Biotechnology	223	141	327
Media/Entertainment	1078	1107	1616
Services Sector	2924	2755	4206
Industrial Products	1241	1319	2243
Real estate	9000	1183	9567
Others	17634	27061	37712
Total	**34847**	**44943**	**68904**
	*excludes Rs.10886 crore of FVCI investments through VCFs		

1. The above report is compiled on the basis of quarterly information submitted to SEBI by registered Venture Capital Funds and Foreign Venture Capital Investors.
2. Due to change in reporting format with effect from the quarter ended 31st March 2010, the investment details for the March '10 and December '09 quarter are not strictly comparable (Securities and Exchange Board of India, 2014).

Table 1 show that there has been huge venture capital investment in the areas of Information Technology, Media/Entertainment, Real Estate and Telecommunications by VCFs and FVCIs.

In the early stages, venture capital investments were mainly in the manufacturing sector. However, with changing trends and increased liberalization, companies in consumer services and consumer retail space emerged as top contenders for VC funding, attracting almost 50% of total VC investments. Other key industries included IT and IT-related services, software development, telecommunications, electronics, biotechnology and pharmaceuticals, banking and finance/insurance, public sector disinvestment, media and entertainment, and education (Kaushik, 2014).

There was a sharp increase in the investment made by the VCFs in the year 2014 both in terms of volume and value as funds sought to invest in fast-growing e-commerce and online service firms. In 2014, VC funds invested $2.1 billion across 1,108 deals marking an increase of 47.7% from 2013 when VC funds invested $1.4 billion across 246 deals, according to data compiled by VCCEdge, the financial research arm of VCCircle.com. In the past year travel bookings, home furnishings, car booking companies have been very successful in raising a significant amount of capital. While there has been huge investment by the VCFs in the previous year the exit by these funds from existing investments still remains a concern primarily on account of weak capital markets in the recent years. However exits by way of mergers and secondary markets have now gained some momentum (Sarkar, 2015).

A completely new field that is attracting venture capital is agriculture. This has been fuelled by the realization that food security is a vital, long-term necessity. Studies suggest that in future, for every Rs 100 increase in GDP, Rs 41 will be spent on food. At the recently held Global AgInvesting Conference, data released indicated that agro businesses would provide better returns of about 11%, compared to 3-5% yield from bonds and equities. Agriculture could well become the new Mecca for venture capital investments. Leading VC firms such as Venture Dairy, Anterra Capital (a spin-off of Rabobank's proprietary venture capital investment team), SAEF (Small Enterprise Assistance Funds) and Rabo Equity Advisors' India Agribusiness Fund have already entered this market (Kaushik, 2014).

Since 1988, ICICI has played a prominent role in promoting venture capital investments in India and currently manages funds over $2 billion. In fact, India recorded a 13% increase in the amount invested against the global rise of 2%. At $45.8 million, India posted an all-time-high median value at the profitable stage in 2013, the highest value ever seen in any market across all of the development stages since 2007.

Early-stage funding has gone down and more funds have been diverted to later, more profitable stages or spread out in multilevel funding, indicating that investors are cautious about high risks. However, top players such as Sequoia Capital, Rabobank, Google Venture, Seed Venture Fund and World Bank's IFC are investing in India. IFC is the leading investor, with $1.4 billion.

Most VC investors, both local and global, have leveraged the Mauritius Treaty route to invest in India because tax is only payable in the country of the investor's residence. The SEBI (Securities and Exchange Board of India) can work towards further simplifying the investment procedures and offer attractive IPO and M&A exit ratios.

Another trigger to invest in India is that both China and India are the top two growing global economies. The new pro-business Indian government has also inspired confidence and foreign investment worth Rs 17,000 crore has already been made. So the prospects look rosy for the growth of venture capital in India (Kaushik, 2014).

A COMPARISON OF VENTURE CAPITAL INDUSTRY IN INDIA AND CHINA

The development of VC and new venture growth of India and China have a number of similarities and differences. Even though the amount of VC investment in India and China is small in comparison to the amount invested in countries like USA and countries in Europe there has been a growing VC investment in both the countries since 2006. While both the countries concentrate on IT, healthcare and services, little attention has been paid to new and high technology based industry. In terms of geographical distribution of VC investment the IT hubs of the two countries i.e. Bangalore of India and Beijing of China have been the major attraction for VCFs. The investment is further more concentrated in the economic and financing centers' of the two countries. There has also been some growing investment in interior cities like Pune and Hunan of India and China respectively. Further foreign capital is a major source of VC investment in both the countries. While VC industry is in the initial stage in both the countries the amount of VC investment is much higher in China than India (Tang & Wei, 2011).

GROWTH AND FUTURE OF VENTURE CAPITAL IN INDIA

The K.B. Chandrasekhar Committee identified five critical success factors for the growth of the venture capital industry in India.

- The regulatory, legal and tax environment of the country should provide a flexible environment to the VCFs for the growth of the industry.
- Resource raising, investment, exist processes should be made as flexible as possible.
- The venture capital industry should be institutionalized and should protect the interest of investors and investees.
- The Indian VCFs should have global exposure and investment opportunities.
- The development of infrastructure should be given importance for faster conversion of Research & development and technological innovation into business ideas.

Along with this FVCI should be able to able to enter easily into the Indian markets since these provide the capital in a highly risky area and management expertise on account of the experience that they have gained over a number of years (Haritha, V, & Reddy, 2012).

The number of players offering growth capital and the number of investors is rising rapidly. The successful IPOs of entrepreneur-driven Indian IT companies have had a very positive effect in attracting investors. The Indian government initiatives in formulating policies regarding sweat equity, stock options, tax breaks for venture capital along with overseas listings have all contributed to the enthusiasm among investors and entrepreneurs, as has the creation of the dot.com phenomenon. A viable venture capital industry depends upon a continuing flow of investment opportunities capable of growing sufficiently rapidly to the point at which they can be sold yielding a significant annual return on investment. If such opportunities do not exist, then the emergence of venture capital is unlikely.

Therefore there is a strong potential for growth of Venture Capital industry in India. All that is required are the comprehensive efforts on the part of the government and business entrepreneurs. This combined effort can create a stimulating environment for the growth of venture capital industry in India (Haritha, V, & Reddy, 2012).

ISSUES IN THE GROWTH OF VENTURE CAPITAL IN INDIA

According to Dr. Dossani a member of the committee on Technology Innovation and Venture Capital formed by the Planning Commission in India in September 2005 there are some deficiencies that restrict the growth of the venture capital industry in India. According to him the entrepreneurs in India even though possess the cost and management skills but lack the talent to convert early stage ideas into viable business. They also lack proper networking and their networks are limited to some personal connections and networks with brokers. There is a shortage of complimentary capital like debt capital and the equity markets are underdeveloped for the listing of the early stage firms. Moreover there are not many firms providing early stage funding (Deva, 2008).

There are certain issues that must be taken into consideration for the success of the venture capital industry in India. The profitability of the start-up companies should not be the only focus of the entrepreneurs in India since such an approach could be counterproductive. This approach may hinder the development of the start up and may deter it from achieving its true potential. The VCs should provide continuous funding in small amounts to the start-up firms and should be more involved in their management and decision making. The entrepreneurs in India generally lack expertise in marketing, sales and business development areas. Hence, finding the appropriate marketing, sales and business development people is one area where Indian start-ups need help. Indian entrepreneurs are hesitant in giving control and usually prefer to take funding from family and friends to start business firms. Indian start-ups lack financial transparency and often have limited experience in implementing effective financial processes. This usually makes the task of the VC much more difficult not only during the due-diligence phase, but also in helping the start-up grow rapidly. Therefore it is believed that simply directing the Indian entrepreneurs to implement processes during monthly or quarterly board meetings may prove to be futile because many entrepreneurs might not know how to execute on the instructions.

One of the most worrisome aspects of the VCs' new-found zeal to invest in India is that most VCs want to continue to invest in Indian start-ups in areas they are most familiar with, i.e., in IT, telecom and Internet products and services. The other really worrisome aspect is that many US-based VCs believe that they can help the growth of Indian start-ups, and provide good returns to their own shareholders by making decisions based on periodical visits to India, sending one of the senior partners in the VC firm to India to set up a subsidiary that can help its portfolio companies, hiring a junior partner in India. However, none of this approach might work due to lack of cross-border experience (Aggarwal, 2006).

In addition to the challenge of raising funds in tough market situations, the biggest challenge for a venture capitalist in India is to find the right set of passionate resources for each of their portfolio companies to support their growth at early stages. The reason many companies fail at early stages is not only because they are not able to mobilize funds at initial stages, but because they are not able to attract the right talent to work with them and to guide them. Those VCs who are able to bring the right resources along with their funding are the ones that will succeed in the long Term (Next Big What, 2013).

SCOPE FOR FUTURE RESEARCH

One of the major problems in VC research is that data is available only for the firms that were able to receive VC funding and not for those who did not get VC funding. More research needs to be done on the early history of the VC-backed companies before they received the venture capital. Also it will be interesting to know how VCFs work, make decisions, attract, motivate and retain talent etc. An insight into the relationship between GPs and LPs will enable a better understanding of the fundraising by the VCFs (Rin, Hellmann, & Puri, 2011).

SUMMARY

Venture Capital has come to play a very important role in India. With the formation of Venture Capital Regulations, 1996 by SEBI and some flexibility offered by the Government of India to VCF's there has been a positive trend in the Venture Capital Industry. While more and more FVCI are attracted towards India DVCFs are also playing an important role in providing venture capital investments and promoting innovative entrepreneurships. After initially concentrating mainly on the IT and manufacturing sector VCFs have now started investing in other promising sectors in India like health, bio-technology, pharmaceuticals, e-commerce etc.

Over the years there has been growing investment by the FVCI in India. What is required is a provision of a more flexible regulatory framework that makes it easier for such investors to invest in the country. Further certain issues with regard to the lack of expertise of the Indian entrepreneurs in converting their ideas into business plans, their lack of knowledge in the fields of marketing and finance, their sole focus on profit making that can act as counterproductive to the growth of firms needs attention so as to stimulate the growth of the Venture Capital Industry in India.

When compared to China India has a very less amount of Venture Capital investment in the country. However the strong fundamentals of the country have been able to attract more and more investors over a period of time in diversified sectors. The need of the hour is that Government should come forward with some incentives and introduce flexibility in the regulations to attract more and more venture capital investors.

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IMPORT-EXPORT DEMAND FUNCTIONS AND BALANCE OF PAYMENT STABILITY IN INDIA: A CO-INTEGRATION AND VECTOR ERROR CORRECTION MODEL (1974-75 TO 2012-13)

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ABSTRACT

This research assesses the determinants of imports and exports demand functions and how they directly affect balance of payment stability in India. The research focuses on empirically measuring the relative strength and weaknesses of both imports and exports demand functions and to examine using Marshal – Lerner hypothesis the condition under which balance of payments adjustment work in India's economy. The analytical framework employed is an econometric methodology which encompasses wide range of tests for stationarity, Johansen cointegration, and specification of vector error correction mechanism, results of vector error correction model shows significant causational relationship in one model. Specifically, from the values of exchange rate coefficients in the two models, the paper knots balance of payment adjustment to regime of exchange rate stability in India. The paper therefore recommends exchange rate adjustment as a potent instrument of achieving balance of payment stability in India.

KEYWORDS

Balance of Payments, Co-integration, Exports, Imports, and Stationarity*.*

INTRODUCTION

Macroeconomic policy aims to maintain equilibrium in the balance of payment condition over a long period of time. Because, it is recognized that deficit in balance of payment condition automatically retards the attainments of other macroeconomic objectives. Disequilibrium in India's balance of trade will significantly affect the way resources are domestically allocated just as disequilibrium in internal sector is translated into unemployment or inflation among others, likewise the external sector used to be affected. The use of economic fine-tuning measures via expenditure-changing and expenditure-switching monetary and fiscal policies to affect prices, interest rate, and exchange rate can be a potent way to put an economy on a right path to growth and development.

Available evidence generally reveals that, most developing economics including India have suffered from foreign exchange earnings decline in the early 1980's. This follows largely a collapsed in their export prices and given that most of them specialized in limited line of exports. Exports growth in India remarkably slows down partly due to Asian crisis. (N. K Chandra 2012)

The comfortable balance of payments witnessed during the First Plan period was short-lived. Rapid industrial growth involves large imports of capital goods and large foreign exchange expenditure. Apart from this, the country's balance of payments was burdened by sizeable food imports and the import-dependent consumer tastes of its elite. Thus, India ran into foreign exchange difficulties hardly a year into the Second Plan. This led to some *ad hoc* attempts at rationing foreign exchange 'aid' much of it tied to imports from the 'aid'-givers. Since that time, there has always been a strong undercurrent of balance of payment difficulties, surfacing periodically in the form of crises.

REVIEW OF LITERATURE

In relation to the immense significance of international trade as a veritable way to achieve economic growth and development particularly in emerging economies, a number of empirical studies on the determinants of exports and imports demand functions have been carried out. The objective here is to review some of those already undertaken studies as a guide to the choice of appropriate variables used in this study. The models that explain the determinants of exports and imports include those by Olayide (1968), Rhomberg (1968), Maizels (1968), H*outhakker* and *Magee* (1974*),* Ajay*i* (1975), Ajakaiye (1985), *Goldstein and Khan* (1978), and Goldar (1989). Rano (2007)

Sahadevan (1999) analyzed the impact of monetary policy on the behavior of rupee exchange rate and international reserve during the period of 1992:04 to 1999:03. The study analyzed how the RBI offsets the pressure that monetary shocks exerts on exchange rate and reserves. Based on the estimates on Girton-Roper model of exchange market pressure the study examined the RBI's policy of maintaining exchange rate and reserves over the study period. The values of the offset coefficient ranging between -0.81 to -0.93 signify that pressure on exchange rate is not completely offset by the domestic monetary expansion (contraction) either by depreciation (appreciation) of rupee or by running down (accumulating) foreign exchange reserves or by some combination of both, but is partially being naturalized by some other means. The controls of international trade and capital flows do provide significant insulation from exchange market pressure. When exchange rate and reserve level are considered to be indicators of government's performance and when they are being maintained at 'politically correct' levels, the economic reasoning underlying the model becomes irrelevant. The statistically significant intercept term as against the postulation of the model is a manifestation of these institutional realities.

Beig et *al* (1999*)* using a similar monetary model to Weymer (1995) estimated exchange market pressure, and index of intervention activity for India over a period 1975-98 using annual data. The findings show that during the study period the exchange market pressure has fluctuated with positive negative values indicating upward (downward) pressure from the US dollar. The RBI was found to counter this pressure by intervening extensively in the in the foreign exchange market as indicated by large index of intervention values. From 1991 onwards, when the exchange market is supposedly free from control, the RBI has been intervening even more in the foreign exchange market as indicated by higher index of intervention activity values. It is reasoned that with the removal of controls from foreign exchange market RBI has had to intervene strongly to counter the speculations in the market, and protect rupee from appreciation because of large inflows. A cross check was also carried out by calculating a monetary conditions index for this period. The values of the monetary conditions index suggest that monetary authorities tend to intervene in the market through monetary policy in response to exchange market pressure.

Arize (2002) and Upender (2007) considered this issue in relation to India. Using the system approach of Johansen (1995) and the robust single equation approaches of Phillips and Hansen (1990) and Stock and Watson (1993), Arize (2002) found evidence in favor of cointegration over the period 1973-1998 in 35 out of 50 countries, including India. The results *of* Upende*r* (2007) based on the augmented Dickey-Fuller (ADF) and the Phillips- Perron (PP) tests on India's nominal exports and imports from 1949/50 to 2004/05, and also on the residuals from the cointegration regressions, indicated that India's exports and imports were cointegrated.

Dilip Dutta and Nasiruddin *Ahmed* (2006) in the aggregate import demand function for India, import volume is found to be cointegrated with relative import price and real GDP. In all, the authors argued that growth spurt prior to 1999 was fragile and volatile. They concluded that 1980s' reforms and their success provided crucial first-hand evidence to policymakers that gradual liberalization can deliver faster growth without causing disruption.

IMPOTANCE OF THE STUDY

The 'structural adjustment' of the early nineties was supposed once more to make India internationally competitive, and thus repair the perennial balance of payments problem. m. The trade deficit did shrink for a few years, but began by the mid-nineties to expand once more, as industrial production, particularly the production of import-intensive consumer durables, boomed. The boom petered out quickly, however, and by the early 2000s the average rates of growth of GDP and industrial production in the post-1991 period were in fact no better than in the eighties. The study will help in contributing to the existing literature on balance of payment in Indian context, as well as policy formulation and implementation aim at attaining sustainable balance of payment stability.

STATEMENT OF RESEARCH PROBLEM

In the year 1991, India experienced the worst ever BOP crisis since independence. The year 1990-91 witnessed three major developments which contributed to this crisis-(i) substantial increase in oil price following Gulf war that led to substantial increase in the import's bill of the country. Further the remittances from Indian workers employed in Kuwait also stopped, (ii) decline in exports due to disintegration of USSR and (iii) problems on the domestic front (like fiscal imbalance, double digit inflation, political uncertainty etc.). India's credit rating got downgraded and was denied access to external commercial credit markets. The net balance on invisibles account turned negative, trade deficit reached new peak and a net outflow of Non-Resident Indian (NRI) deposits occurred in 1990. All these led to a dwindling of India's foreign exchange reserves from a level of Rs. 5480 crore at the end of August 1990 to Rs. 1666 crore on 16th January 1991. Though emergency borrowings from the I.M.F. provided some temporary relief, the decline in reserves continued. By June 1991, the level of foreign exchange reserves dropped to the extent that they were barely sufficient to finance imports for a fortnight. The Government of India was on the verge of default on payment of external borrowings in June1991.

The current account deficit narrowed down in the year 2000-01 to about 0.5 percent GDP. India witnessed surplus in the current account for three consecutive years i.e. 2001-02, 2002-03, and 2003-04**.** This surplus was accompanied by strong net capital inflows. The current account recorded deficit since 2004-05 that is increasing. The deficit was caused by a burgeoning excess of merchandise imports over exports, which was left uncompensated by the net surplus in invisibles. The increase in imports occurs due to increase in the international price of crude and other major items of imports like gold.

OBJECTIVES

Against the above overview, the broad objective of the research is to focus on empirically assessing the determinants of imports and exports demand functions and how they affect balance of payments favorability in India using Johansen cointegration and vector error correction mechanism. Other specific objectives include:

1. to estimate the income, exchange rate elasticities and other elasticities in both imports and exports demand functions.
2. to ascertain the speed of adjustment in India's balance of payment situation by testing the *Marshall- Lerner* adjustment condition in the balance of payment.
3. to offer, based on research findings, concrete recommendations.

RESEARCH METHODOLOGY

The theoretical foundation on which the model was constructed is simple linear relationship between exports and imports as dependent variables on the one hand and on the other hand, the independent variables include, among others: gross domestic product, exchange rate, index of openness, employment level, level of foreign reserves, among others with the particular reference to India using vector error correction mechanism which made it strikingly different from previous studies.

The theoretical foundation of the import and export demand models here is rooted in the works of Khan (1074), Narasimhan & Princhett (1993) and Thirlwall (1999) which were modified and used by Yekini (1999), Aliyu (2001) Okoh (2002) and Rano (2007).

VECTOR AUTOREGRESSIVE MODEL

Vector autoregressive model (VEC) originates from reduced form VAR model. The unrestricted VAR stated each variable is a linear function of its own past values and past values of all other variables. A reduced form VAR of order *p* in levels of the variables can be expressed as follows:

$y_t = \Omega + \Phi_1 y_{t-1} + \Phi_2 y_{t-2} \ldots\ldots \Phi_p y_{t-p} + B\mu_t$ (3.1)

Where y_t is an (n x 1) vector of endogenous variables such that $y_t = (y_{1t,} y_{2t,} \ldots\ldots y_{nt})$; Ω is the vector constant; Φ_i is an (n x n) matrix of coefficients of lagged endogenous variables ($\forall$ i = 1, 2, 3,….,p) ; B is an (n x n) matrix whose non-zero off–diagonal elements allow for direct effects of some shocks on more than one endogenous variable in the system; and μ_t are uncorrelated or orthogonal white-noise structural disturbances i.e. the covariance matrix of μ_t is an identity matrix (μ_t, μ_t') = 1. Equation (3.1) can be rewritten in compact form as:

$y_t = \Omega + \Phi(L)\, y_{t-i} + B\mu_t$ (3.2)

Where Φ(*L*) is an (n x n) finite order matrix polynomial in the lag operator *L*. It should be noted that there exist a two method of identification in VAR framework, one among the method is to use variance-covariance matrix of the VAR framework by applying triangular process this can be done by applying Cholesky decomposition to the variance covariance matrix of the reduced form residuals μ_t Aliyu (2009).

The equation 3.1 in VAR model can be re-written in VEC approach as;

$\Delta y_t = \lambda_1 + \sum P^{-1} \Gamma_i y_{t-1} + \prod y_{t-p} + \varepsilon_t$ (3.3)

Δ is first difference lag operator, y_t denotes (n × 1) matrix of the random variables included in the model having stationarity properties of I(1). While λ_1 is the vector constant coefficient and ε_t is the vector of white noise process and contains information regarding the short-run relationships among the variables. The matrix $\prod$ denotes the long-run information contained in the data. It is the rank of $\prod = \psi\beta$, β the matrix of cointegrating vectors; the elements of ψ are known as the adjustment parameters in the vector error correction model. The rank implies that variables are cointegrated using the maximum eigenvalues and trace statistics test which are both adopted in this research.

SOURCE OF DATA

The research utilizes annual data for the period of 1974-75 to 2013-14. The data was sourced from one independent source: handbook of statistics on the Indian economy published by Reserve Bank of India, 2014.

MODEL SPECIFICATION

The functional Imports and Exports demand functions can be expressed in a Log-Linear form as:

$\mathbf{lnMP_t = \alpha_1 + \alpha_2 lnGDP + \alpha_3 lnEXR + \alpha_4 lnFRV + \alpha_5 lnIOP + \alpha_6 lnDlib + u_t}$ **(i)**

$\mathbf{lnEX_t = \beta_1 + \beta_2 lnGCF + \beta_3 lnEXR + \beta_4 lnGDP + \beta_5 lnEMP + \beta_6 lnDlib + u_t}$ **(ii)**

Where:

MP_t= Total Imports Volume
EX_t= Total Exports Volume
GDP = Gross Domestic Product
EXR = Exchange Rate
FRV = Foreign Exchange Reserve
IOP = Index of Openness
GCF = Gross Capital Formation
EMP = Employment Level
D*lib* = Dummy Variable
U_t= Error Term

The coefficients of imports equation α_2,α_3,α_4, α_5, and α_6, are the elasticities of income, exchange rate, foreign reserve, index of openness, and liberalization policy variables of Indian economy. On a priori expectations, only α_3 is < 0; while α_2, α_4, α_5, and α_6> 0. On the other hand, coefficients of exports equation that is: β_2, β_3, β_4, β_5, and β_6 are the elasticities of gross capital formation, exchange rate, income, employment, and liberalization policy variables. On a priori expectations, however, β_4< 0: while β_2, β_3, β_5, and β_6> 0.

Two dummy variables were included, one each in the import and export demand models to capture the period before and after the introduction of liberalization policy in the country during 1990. Both imports and exports were liberalized and the liberalization was further facilitated by the success many Asian countries have had owing to it. The dummies are binary 0, 1 variable. 1 is for post liberalization and 0 for pre –liberalization. Their coefficients are expected to assume any value between greater than or less than zero.

RESULTS AND DISCUSSION

The study uses descriptive and analytical tools analyzing the data. These includes statistical test of stationarity as a precondition for any time series analysis, Johansen cointegration, vector error correction model, impulse response functions and variance decomposition applies to each of the two models.

UNIT ROOT TEST

The Augmented Dickey Fuller Unit root test is to establish the order of integration of the time series variable hand in hand with Kwiatkowski-Philips-Schmidt-Shin (KPSS) test. The aim of any statistical analysis is to draw inference regarding the configuration of the population using sample observations. Most time series variables are non-stationary, and to obtain the level of stationary, they need to be differenced *d* time(s), expressed as I*(d).Egwaikhide* (1999) states that regression analysis in which one or more non-stationary variables are used in the model produces biased estimates or spurious results first discovered by Yule. Yule showed that (spurious) correlation could persist in nonstationary time series even if the sample is very large. According to Granger and Newbold, *an R^2>d is a good rule of thumb to suspect that the estimated regression is spurious*. Gujarati D N (2012)

There are many ways of testing for unit roots; the earliest was Augmented Dickey Fuller (ADF) Test. Others include Philips-Perron (PP), Test, and Kwiatkowski-Philips-Schmidt-Shin (KPSS) test. In this study we employ both the ADF and the KPSS tests. In ADF methods, the null hypothesis is that the time series have a unit root, that is, they are non-stationary. If the calculated test-statistics for our variables in their level forms are more negative than the critical values, the null hypothesis is rejected, suggesting that the variables are stationary in their level forms, i.e. they are I(0). In case where the variable is not stationary at levels, as it is so far, it has to be differenced. If the calculated test-statistics for our variables in their first differenced form are more negative than the critical values, the null hypothesis can be rejected, suggesting that our variables are stationary after differencing, which is denoted as I(1). However, in KPSS test the null hypothesis is that the time series has no unit root; that is they are stationary. If the t-statistics is insignificant, we accept the null hypothesis otherwise we reject it. The results of Augmented Dickey Fuller and Kwiatkowski-Philips-Schmidt-Shin unit root test are presented below:

TABLE 1: UNIT ROOT TEST (WITH INTERCEPT)

LEVEL FORM

Variables	ADF	KPSS
***Ln*MP**	-0.656878	0.166943
***Ln*GDP**	-1.181458	0.193271
***Ln*EXR**	-0.710185	0.133070
***Ln*FRV**	-1.494168	0.149126
***Ln*IOP**	-0.804558	0.175057
***Ln*EX**	-0.804684	0.175055
***Ln*GCF**	-1.898223	0.132058
***Ln*EMP**	-2.697996	0.194231

FIRST DIFFERENCE

Variables	ADF	KPSS
***Ln*MP**	-4.644461*	0.088713*
***Ln*GDP**	-7.176577*	0.046535*
***Ln*EXR**	-4.061313*	0.132694**
***Ln*FRV**	-4.202026*	0.080741*
***Ln*IOP**	-4.806496*	0.072719*
***Ln*EX**	-4.806656*	0.072713*
***Ln*GCF**	-6.730458*	0.152585*
***Ln*EMP**	-4.188390*	0.167652*

Source: E-views version 8, user work, 2015

Note * indicates significance at 1% and ** at 5%

The Mackinnon (1996) 1% critical value is -3.485 and the KPSS (1992) 1% critical value is 0.739 thus, denotes the rejection null hypothesis of unit root in ADF test and the acceptance of same null hypothesis of stationarity in KPSS test.

The results of the ADF, and KPSS tests in table (3) show that none of the series is stationary at their levels. Since their test statistics are smaller than Mackinnon 1% critical value of -3.485. When the test is apply to first difference of the series, they all become stationary. i.e, they are integrated order of I(1). Results based on the KPSS deviate partly from those of the ADF. The KPSS test applied in the level variables fails to reject null hypothesis of stationary and accept stationary in their first difference. It seems the results from KPSS and ADF are same. Therefore it can be concluded that the series are integrated of order I(1) and they have a long run relationship.

JOHANSEN TEST OF COINTEGRATION

The Johansen test is a test for cointegration that allows for more than one cointegrating relationship, but unlike the Engle-Granger method, but this test is subject to asymptotic properties, i.e. large samples. If the sample is too small then the results will not be reliable and one should use Auto Regressive Distributed Lags (ARDL).

TABLE 2: JOHANSEN TEST OF COINTEGRATION OF IMPORT DEMAND

Hypothesised No of CE(s)	Trace Statistics	0.05 C.V	Max-Eigen value Statistics	0.05 C.V
None*	124.5937	95.75366	47.91470	40.07757
At most 1*	76.67901	29.92620	29.92620	33.87687
At most	46.75281	47.85613	20.56781	27.58434
At most 3	26.18499	29.79707	16.63082	21.13162
At most 4	9.554173	15.49471	5.961230	14.26460

Source: E-views version 8, user work, 2015

The result from trace statistics above indicates two cointegrating equations whereas the maximum eigenvalue suggest the existence of only two cointegrating equations at 5 percent level of significance.

As the speed of adjustment coefficients provide additional base for inferring short run dynamic among these variables. If we select r =1 and normalize the cointegrating vector with respect to import, then the long run equilibrium relationship can be shown as:

TABLE 3: IMPORT DEMAND COINTEGRATED COEFFICIENTS (EQUATION 1 AND 2)

$lnMP_t$	lnGDP	lnEXR	lnFRV	lnIOP	lnDlib
1.0000	-6.9354 (1.7309)	3.44516 (0.6025)	-1.4916 (0.2124)	3.3473 (0.3823)	-2.0299 (0.4149)
1.0000	1.0000	-0.1289 (0.1849)	-0.7860 (0.1317)	-0.2067 (0.1729)	0.6541 (0.2146)

Note: standard errors are included in the bracket

From the tabular presentation above we derived the cointegrated equations of import demand and its determinants. The normalized equations and the value of vector cointegration can be represented as:

$lnMP_t$= -6.9354GDP + 3.44516EXR –1.4916 FRV + 3.3473IOP -2.0299Dlib + u_t (iii)

$lnMP_t$ = -0.1289EXR - 0.7860FRV – 0.2067IOP +0.6541Dlib + u_t (iv)

Although equation (iv) has some important implications as well but we restricted the analysis on equation (iii) because it corresponds greatly with theoretical expectations. The cointegrating parameters on the above equation (iii) shows that the explanatory variables have great impact on import volume. All the explanatory variables are statistically highly significant at 5% level. However, the explanatory variables have theoretically consistent signs apart from exchange rate which is incorrectly signed. All things being equal, higher import will reduce gross domestic production significantly and also leads to decline in foreign reserve of India. The results also show that liberalization policy help India in curtailing import level significantly.

VECTOR ERROR CORRECTION MODEL (VECM)

In time series analysis a variables exhibit long run relationship is expected to have an error-correction component, showing how equilibrium will converge towards short run adjustments. Therefore, we aimed to identify the effects of the estimated long-run equilibrium on the short-run dynamics. This implies whether the parameter of the error correction term is correctly sign and significantly different from zero, (vector of import demand function). The VEC is presented as follows:

TABLE 4: VECM OF IMPORT DEMAND

Variables	Coefficients	t-value	p-value
ECM(-1))	-0.860602	-4.738579	0.0001
D($lnMP_t$(-1))	0.349343	1.657616	0.1116
D(lnGDP(-1))	0.897814	1.377072	0.1823
D(lnEXR(-1))	0.592489	2.51784	0.0208
D(lnFRV(-1))	-0.172491	-1.393068	0.1775
D(lnIOP(-1))	0.147808	0.637281	0.5305
D(Dlib(-1))	0.421326	3.366055	0.0028

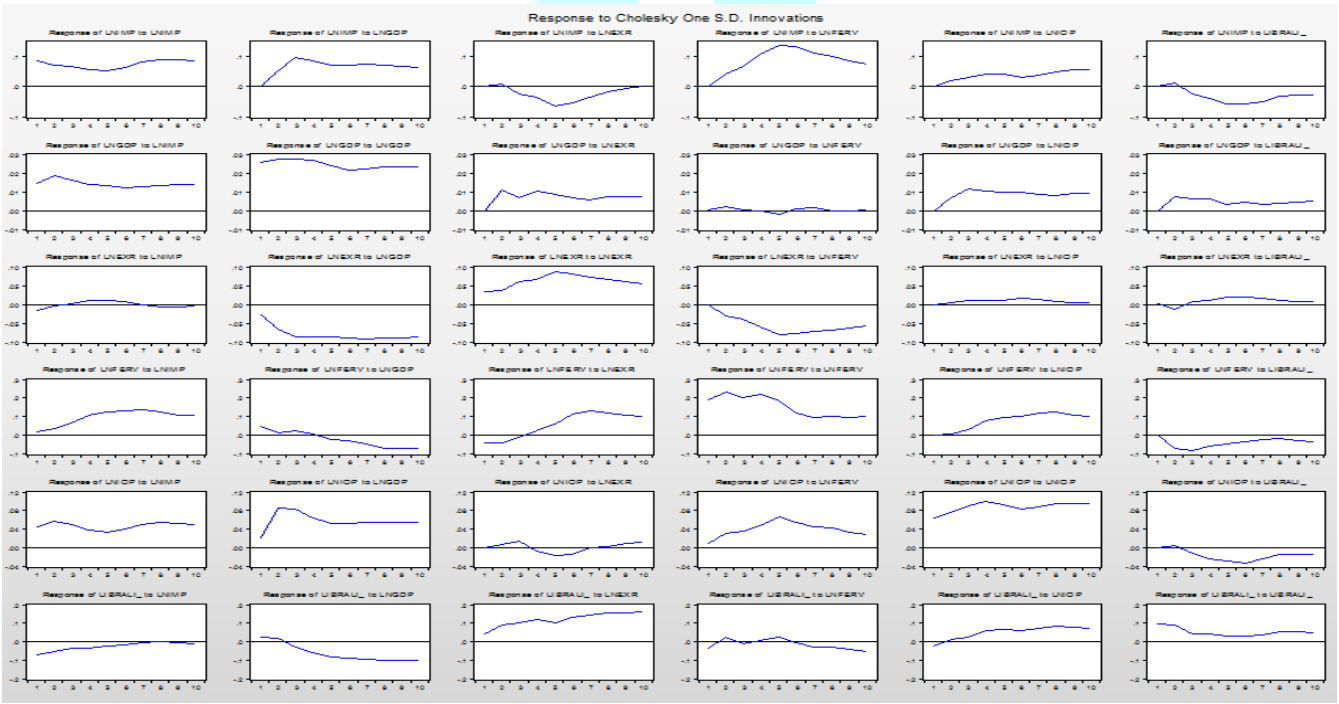
R^2 = 0.74 Adj R^2 = 0.58 D.W. = 2.27 F = 4.85

The error correction model results is correctly sign and statistically highly significant at 1 percent level. This implies that the coefficient of -0.86 is suggesting that about 86 percent disequilibrium in import demand is corrected within the year under study. Therefore, when imports are below or above equilibrium level it adjusts approximately by 86 percent to restore the equilibrium within first year. The sign of the coefficient of vector error correction must be negative and significance for us to conclude that there is cointegration in the model; by implication it means convergence towards equilibrium level in the future. The value of R^2 which gives the overall fitness of the model has a higher value; hence reveals a strong explanatory power of the independent variables in the model. The F-statistics shows that the coefficients of the independent variables in the model are all non-zero. D.W statistics shows an element of positive autocorrelation.

IMPULSE RESPOSE FUNCTION OF IMPORT DEMAND

The impulse response function of import demand is developed tracing the effect of innovations from the vector endogenous variables in the VECM model. Figure 4.3 below shows the responses of endogenous variables to its own shock and that of others variables. For instance, the responses of imports level on its own in the short run and long run are both positive 0.05 percent, and 0.08 percent respectively. While the response of import on income is also positive in both short run and long run as 0.07 percent and 0.07 respectively. The responses of import on exchange rate are totally negative in both periods which are -0.07 percent in the short run and -0.00 percent in the long run. Import responses to foreign reserves are totally positive in short run and long run as 0.14 percent and 0.07 percent. Import response on index of openness is also totally positive in short run and long run as 0.04 percent and 0.05 percent respectively. And lastly, the responses of import on liberalization are totally negative in both short run and long run as -0.06 and -0.03 respectively. This implies 1 percent of depreciation in exchange rates will lead to 7 percent increases in import and 7 percent rise in income.

FIGURE 1: IMPULSE RESPONSES OF IMPORT DEMAND



VARIANCE DECOMPOSITIONS OF IMPORT DEMAND

The variance decomposition helps break down the forecast variance of imports level into component that can be attributed to each of the various shocks tracing the relative importance of the various fluctuations. The findings from variance decomposition of import level account for 100 percent for its own shock, it further decline to 22.47 percent after five years and 23.91 percent after ten years. While income account for 25.04 percent fluctuations in 5 years and slightly decrease to 21.17 percent in long run, it can also be shown the effect of exchange rate on the import fluctuation is less than that of income, as it account for 6.23 and 4.55 percent in both short run and long run respectively. Foreign reserve on import has the greatest effect in both short run and long run, as it accounts for 36.21 and 37.88 percent respectively. While trade openness has least effect on import, as it accounts for 4.56 and 6.52 percent in short run and long run respectively. Lastly, policy variable proxied as dummy variable accounts for 5.48 and 5.96 percent respectively in both short and long run periods. The result of variance decomposition is depicted below:

TABLE 5 VARIANCE DECOMPOSITION OF IMPORT

Time	$lnMP_t$	lnGDP	lnEXR	lnFRV	lnFRV	lnDlib
1	100.0	0.00	0.00	0.00	0.00	0.00
5	22.4	25.0	6.23	36.2	4.56	5.48
10	23.9	12.2	4.55	37.9	6.53	5.96

Source: E-views version 8, user work, 2015

TABLE 6: JOHANSEN TEST OF COINTEGRATION OF EXPORT DEMAND

Hypothesised No of CE(s)	Trace Statistics	0.05 C.V	Max-Eigen value Statistics	0.05 C.V
None*	129.6541	95.75366	36.70034	40.07757
At most 1*	92.95378	29.92620	33.88739	33.87687
At most	58.06639	47.85613	28.16311	27.58434
At most 3	29.90328	29.79707	20.66497	21.13162
At most 4	9.238315	15.49471	9.198765	14.26460
At most 5	0.039550	3.841466	0.039550	3.841466

Source: E-views version 8, user work, 2015

The result from trace statistics above indicates four cointegrating equations whereas the maximum eigenvalue suggest the existence of no cointegrating equations at 5 percent level of significance respectively.

TABLE 7: EXPORT DEMAND COINTEGRATED COEFFICIENTS (EQUATION 1 AND 2)

$lnEX_t$	lnGCF	lnEXR	lnGDP	lnEMP	lnDlib
1.0000	1.7835 (0.6261)	2.2701 (0.5225)	-5.2298 (0.9343)	-2.2124 (0.7265)	-2.3845 (0.4677)
1.0000	1.0000	2.6800 (0.5604)	-3.2478 (0.3944)	1.0086 (0.3882)	-1.9892 (-1.9892)

Note: standard errors are included in the bracket

From the tabular presentation above we derived the cointegrated equations of export demand and its determinants. The normalized equations and the value of vector cointegration can be represented as:

$$lnEX_t = 1.7835GCF + 2.2701EXR - 5.2298GDP - 2.2124EMP - 2.3845Dlib + u_t \quad \text{(v)}$$

$$lnEX_t = 2.6800EXR - 3.2478GDP + 0.2081EMP - 1.9892\ Dlib + u_t \quad \text{(vi)}$$

Although equation (vi) has some important implications as well but we restricted the analysis on equation (v) because it corresponds more with theoretical expectations as far as the signs are concerned. The cointegrating parameters on the above equation (v) shows that the explanatory variables have great impact on export volume. Exchange rate, employment, income and liberalization policy are all overwhelmingly statistically significant at 1% whereas gross capital formation is statistically significant at 5%. However, only exchange rate, and capital formation have theoretically consistent sign while income, employment and liberalization policy instruments were incorrectly signed. Higher value of exchange rate and capital formation will stimulate export demand whereas rising income is and employment are likely to reduce it which contradicts the theory. The results also show that liberalization policy in India does not favor export demand function within the period under review.

VECTOR ERROR CORRECTION MODEL (VECM)

In time series analysis a variables exhibit long run relationship is expected to have an error-correction component, showing how equilibrium will converge towards short run adjustments. Therefore, we aimed to identify the effects of the estimated long-run equilibrium on the short-run dynamics. This implies whether the parameter of the error correction term is correctly sing and is significantly different from zero, (vector of export demand function). The VEC is presented as follow:

TABLE 8: VECM OF EXPORT DEMAND

Variables	Coefficients	t-value	p-value
ECM(-1))	-0.017027	-0.393248	0.6979
D($lnEX_t$(-1))	0.263922	1.071901	0.2954
D(lnGCF(-1))	0.058137	0.356332	0.7250
D(lnEMP(-1))	-0.225933	-0.531468	0.6004
D(lnGDP(-1))	0.468355	0.576855	0.5699
D(lnEXR(-1))	-0.031469	-0.088431	0.9303
D(Dlib(-1))	0.117576	1.039002	0.3101

R^2 = 0.51 Adj R^2 = 0.22 D.W. = 1.77 F = 1.77

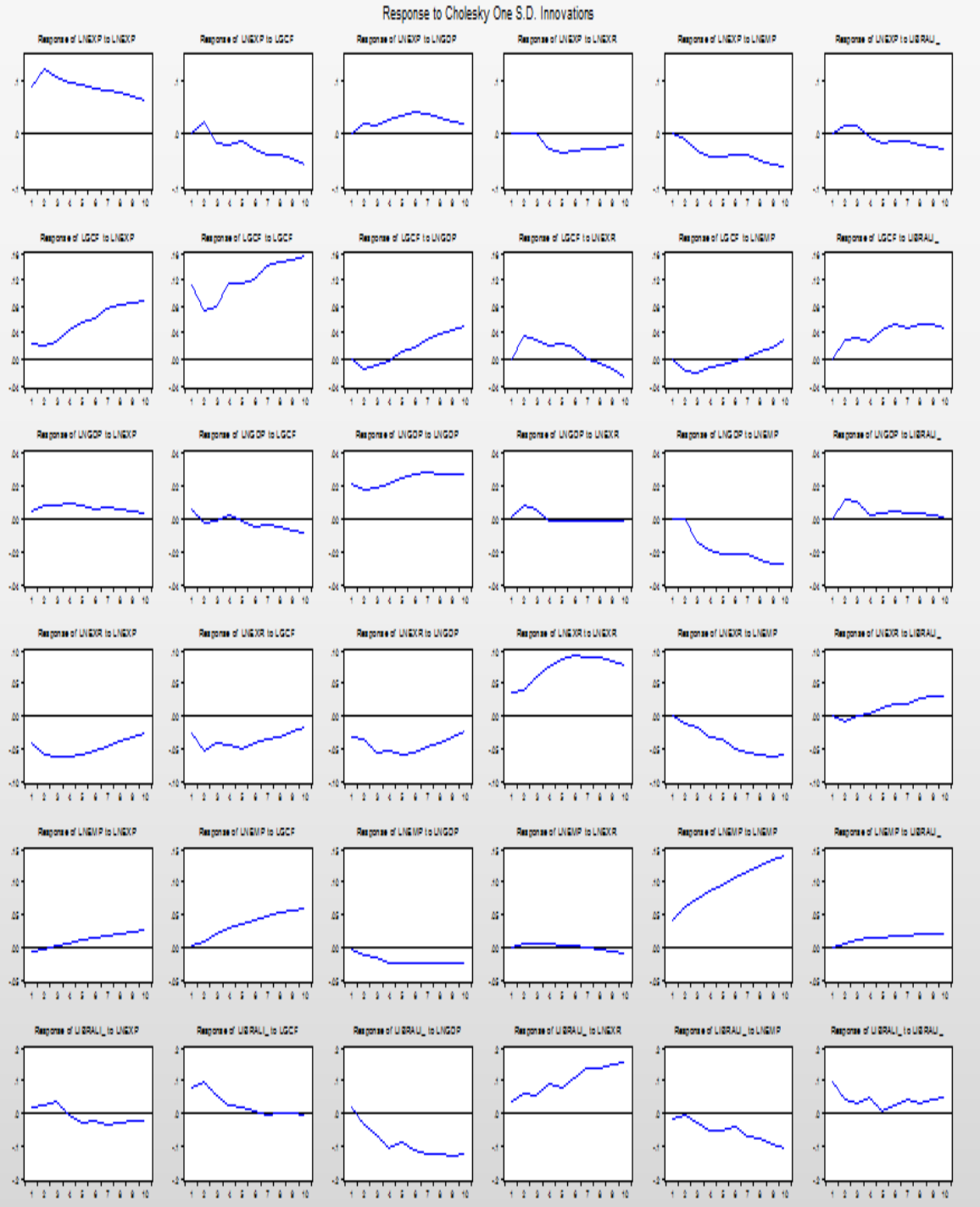
The error correction model results is correctly sign but statistically insignificant at 5 percent level. This implies that disequilibrium in export demand is not corrected within the years under study. Therefore, when exports are below or above equilibrium level it does not adjusts in restoring its equilibrium position within first year. The sign of the coefficient of vector error correction must be negative and significance for us to conclude that there is cointegration in the model; by implication it means convergence towards equilibrium level in the future which is actually not so in case of export demand function. The value of R^2 which gives the overall fitness of the model has average value; hence reveals a less explanatory power of the independent variables in the model. The F-statistics shows that the coefficients of the independent variables in the model are all non-zero. D.W statistics shows no autocorrelation at 10 percent level.

IMPULSE RESPOSE FUNCTION OF EXPORT DEMAND

The impulse response function of export demand is developed in order to trace the effect of innovations from the vector endogenous variables in the VECM model. Figure 4.4 below shows the responses endogenous variables to its own shocks and that of other variables. For instance, the responses of export level on its own in the short run and long run are both positive 0.09 percent, and 0.06 percent respectively. While the response of export on gross capital formation is totally negative in both short run and long run as -0.01 percent and -0.06 respectively. The responses of export on income are totally positive in both periods which are -0.04 percent in the short run and 0.02 percent in the long run. Export responses to exchange rate are totally negative in short run and long run as-0.04 percent and -0.06 percent. Export response on employment is also totally negative in short run and long run as -0.04 percent and -0.06 percent

respectively. And lastly, the responses of export on liberalization are totally negative in both short run and long run as -0.02 and -0.03 respectively. This implies 1 percent of depreciation in exchange rates will lead to 4 percent increases in export and a corresponding 4 percent rise in income.

FIGURE 2: IMPULSE RESPONSES OF EXPORT DEMAND



VARIANCE DECOMPOSITIONS OF EXPORT DEMAND

The variance decomposition helps break down the forecast variance of imports level into component that can be attributed to each of the various shocks tracing the relative importance of the various fluctuations. The findings from variance decomposition of export level account for 100 percent for its own shock, it further decline to 82.1 percent after five years and 64.7 percent after ten years. While gross capital formation accounts for 2.15 percent fluctuations in 5 years and 8.63 percent in long run, it can also be shown the effect of exchange rate on the export fluctuation is higher than that of income, as it account for 6.72 and 10.3 percent in both short run and long run respectively. Income on export has the least effect in both short run and long run, as it accounts for 0.65 and 0.42 percent respectively. Employment on export however has effects, as it accounts for 7.32 and 13.6 percent in short run and long run respectively. Lastly, policy variable proxied as dummy variable accounts for 1.09 and 2.23 percent respectively in both short and long run periods. The result of variance decomposition is depicted below:

TABLE 9: VARIANCE DECOMPOSITION OF EXPORT

Time	$lnEX_t$	lnGCF	lnEXR	lnGDP	lnEMP	lnDlib
1	100.0	0.00	0.00	0.00	0.00	0.00
5	82.1	2.15	6.72	0.65	7.32	1.09
10	64.7	8.63	10.4	0.42	13.6	2.28

Source: E-views version 8, user work, 2015

FINDINGS

Results from Jonansen test of cointegration revels several cointegrating equations in both import and export demand functions respectively. Following the use of vector error correction model we found that there is a long run relationship in import which is not the case with export demand function. These would be very useful for policy formulation and implementation. A result of the estimated vector autoregressive model shows that:

Current income level exerts significant influence on both Imports and Exports demand functions. This is theoretically consistent, and does obviously reflect the actual imports and exports patterns in the country. As world income increases, India's export shrinks because of very higher income elasticity.

In absolute terms, exchange rate significantly affects imports more than exports and this largely, is due to the intrinsic nature of India's exports and multifarious nature of its imports.

The Marshall-Lerner condition is said to hold in India. The absolute sum of coefficient of elasicities is greater than one from the two models.

It was further discovered that index of openness in the import model stimulates more export while, liberalisation proxied by a dummy variable is anti-exports rather stimulates imports.

In the long run, other factors not included in the model but captured by the error correction mechanism in imports model exert negative influence on imports, while the same in the exports model exert also negative influence on exports. Thus, although disequilibrium in the short run is possible, but this suggests that there is no room for convergence in the long run.

RECOMMENDATIONS

To achieve a better foreign trade and exchange rate policy and promotion of balance of payment stability, the research recommends that:

1. Although openness is inevitable in today's global world, sequencing of phases of liberalization is highly desirable, especially in a developing economy like India, this is especially so because the coefficient of dummy variable in the export model was considerably negative.
2. Fulfilment of the Marshall-Lerner condition unveils the need for ensuring greater stability in the foreign exchange market for the attainment of a stable exchange rate.
3. Income restriction and expenditure switching measures to free resources for direct investment in the former and to sway attention away from wasteful consumption in the latter should also be put in place.
4. As the sum of elasticities in both models is greater than one, currency devaluation would have positive impact on trade balance and hence balance of payment favourability.

CONCLUSION

The research presents empirical analyses of the import and export demand functions in the Indian economy from 1983-84 to 2013-14. Although there was no consensus on the specific factors affecting imports and exports demand models, most applications of these models to different countries adopt a similar approach, we use vector autoregressive and vector error correction model. Results from Jonansen test of cointegration revels several cointegrating equations in both import and export demand functions respectively. Following the use of vector error correction model we found that there is a long run relationship in import which is not the case with export demand function. These would be very useful for policy formulation and implementation.

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