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   REVIEW OF LITERATURE

   NEED/IMPORTANCE OF THE STUDY

   STATEMENT OF THE PROBLEM

   OBJECTIVES

   HYPOTHESES

   RESEARCH METHODOLOGY

   RESULTS & DISCUSSION

   FINDINGS

   RECOMMENDATIONS/SUGGESTIONS

   CONCLUSIONS

   SCOPE FOR FURTHER RESEARCH

   ACKNOWLEDGMENTS

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- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
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EFFICIENT MARKET HYPOTHESIS: A PRIMARY EXPLORATORY STUDY ON RELEVANCE OF INFORMATION BIAS

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ABSTRACT

Efficient Market hypothesis one of the most controversial theories about price equilibrium establishment in stock market has shown its potentiality of influencing stock markets even after generations after it has been propounded. EMH proposes information efficiency and the concept of randomness but fails to consider Informational bias in explaining the over reactivity of investors in the capital market. The diversity of investments, broker categories and the vastness of geographical distribution connected by informational technologies makes this study a must. The study explore the relevance of information bias with respect to only semi and strong form Hypothesis of EMH theory but not the weak form hypothesis which proposes historical and future share prices are independent.

KEYWORDS

Efficient Market Hypothesis**,** Information Bias, Stock price, Informational Sources.

1. INTRODUCTION

A widely accepted, acknowledged and also the most questioned theory of all times on capital markets is Efficient-Market Hypothesis which asserts the financialmarkets as "Informationally efficient" and generally believed stock markets were extremely efficient in reflecting information about individual stocks and the stock market as a whole. It was accepted as a view that when new information arises, the news spreads very quickly and is incorporated into the prices of securities without delay. The view implied, neither technical nor the fundamental analysis would enable an individual investor to achieve returns greater than those that could be obtained by holding a randomly selected portfolio of individual stocks. There are three common forms in which the efficient-market hypothesis is commonly stated—**weak-form efficiency**, **semi-strong-form efficiency** and **strong-form efficiency**. In **weak-form efficiency**, future prices cannot be predicted by analyzing prices from the past. In **semi-strong-form efficiency**, it is implied that share prices adjust to publicly available new information very rapidly and in an unbiased fashion, such that no excess returns can be earned by trading on that information.In **strong-form efficiency**, share prices reflect all information, public and private, and no one can earn excess returns.

The efficient-market hypothesis was developed by Professor Eugene Fama at the University Of Chicago Booth School Of Business as an academic concept of study through his published Ph.D. thesis in the early 1960s at the same school. It was widely accepted up until the 1990s, when behavioral finance economists started gaining importance, Investors and researchers have disputed the efficient-market hypothesis both empirically and theoretically. Behavioral economists attribute the imperfections in financial markets to a combination of cognitive biases such as overconfidence, overreaction, representative bias, information bias, and various other predictable human errors in reasoning and information processing.Alternative theories have proposed that cognitive biases cause these inefficiencies, leading investors to purchase overpriced growth stocks rather than value stocks. EMH allows the fact that when Investors faced with new information, some investors may overreact and some may underreact.i.e. Any one person can be wrong about the market—indeed, everyone can be—but the market as a whole is always right. But good no. of Critics have argued EMH combined with too much of Informational bias leads to Panicking among investors and leads to stock market crash.

2. REVIEW OF LITERATURE AND SIGNIFICANCE OF THE STUDY

Dr. RashmiSoni(2012)[1]in her published research on "Validity of Efficient Market Hypothesis in the Indian Stock Market" has opined that share prices readily discount all historical share prices and publicly available information. But it does not reflect insider information readily and therefore there is a possibility of making abnormal returns in such cases. She also opines that announcement of various information relating to the companies are not much useful for making profits.

Kent daniel and Sheridan Titman(2000)[2] of National Bureau of Economic Research in their working paper "Market Efficiency in Irrational world" opine that Individuals make systematic mistakes in the way that they process information and they also argue that in reality, individuals have limited processing ability, and hence use vague, ad hoc rules to translate the information they receive into estimates of cash flows and firm valuations and hence make mistakes out of overconfidence or under confidence or will go back to rely on technical and Fundamental alaysis.

Jeremy Grantham (2011)[3] is Co-founder and Chief Investment Strategist of Grantham Mayo Van Otterloo (GMO), a Boston-based asset management firmhas stated that the EMH is responsible for the financial crisis of 2007–2010, claiming that belief in the hypothesis caused financial leaders to have a "chronic underestimation of the dangers of asset bubbles breaking".

At the International Organization of Securities Commissions annual conference, held in June 2009, the hypothesis took center stage. **Martin Wolf**[4]**,** the chief economics commentator for the Financial Times, dismissed the hypothesis as being a useless way to examine how markets function in reality.

Paul McCulley[5], managing director of Pacific Investment Management Company, has opined that the hypothesis had not failed, but was "seriously flawed" in its neglect of human nature.

In the light of above literature reviewed it is felt to go in-depth to study what is information bias, how does it relevant to stock markets with special reference to efficient-market hypothesis.

3. INFORMATION BIAS: (A REVIEW OF THEORY AVAILABLE)

Information bias is a type of cognitive bias, and involves distorted evaluation of information. Information bias occurs due to people's curiosity and confusion of goals when trying to choose a course of action.Information bias may happen due to the belief that, the more information that can be acquired to make a decision, the better, even if that extra information is irrelevant for the decision.

i. *Factorsthat can hamper the best use of information.*

a) **Familiarity.**Repetition and its resultant familiarity can be a more important factor in our belief than any kind of analysis or evidence. Unfortunately, "common knowledge" is often incorrect.
b) **Inconsistency.** Trouble applying consistent judgmental and evaluative strategies in similar cases. Information from one source will receive more favorable treatment than information from another
c) **Pressure.** Under pressure, information tends to be processed using shortcuts, simplification, and superficial analysis (stereotyping, pigeonholing, quick impressions, skimming will be used simply as a means of coping with time or action constraints.
d) **Contrast.** The mind exaggerates differences, perhaps as a means of distinguishing the items.
e) **Mental Effort.** Information that is easy to understand is much more likely to influence us than difficult, tedious, or ambiguous information.
f) **Privilege.** Rare and restricted takes on an automatically greater value and appears more credible than information that just anybody can obtain.
g) **Preconception.** Our current concerns tend to control our perceptions and interpretations of incoming information
h) **Hasty Generalization.** Generalizations on the basis of very small samples, often one or two or three instances are judged to be representative.
i) **Sequence:** information presented or received first and last given more importance than it would otherwise deserve.information arriving in the middle of a project may be unfairly discounted or ignored.

4. OBJECTIVES OF THE STUDY

a. To explore the informational sources used, priority given and biases existing among investors.
b. To explore the significant difference among trading decision before and after announcement of information

5. RESEARCH METHODOLOGY ADOPTED

a) Scope of the study: The study explore the relevance of information bias with respect to **only semi and strong form Hypothesis** of EMH theory but not the weak form hypothesis which proposes historical and future share prices are independent Hence no past data of share prices are analyzed.

b) Research Design:
Since there have been few Indian exploratory studies on Relevance of Information Bias to Efficient marketing hypothesis after generations of its proposal, the research is pursued on exploratory research design.

c) Study Population:
To analyze the extent of relevance of Information Bias to Efficient Market hypothesis in India one must consider Investor, investment brokers and the behavior of Stock market on various instances of Information based stock market bubble. Hence the study population consists of all the all the people who are in either direct contact or the indirect contact with the capital market. This is a pretty large population to cover under a exploratory study.

d) Sample size:
The size of investors, traders, swingers and brokers together in stock market is very high in India. Since detail study of opinions of all of these people towards Relavance of information is very difficult and times consuming, therefore, the study adopted convenience random sampling method and selected 22 respondents.

e) Instrument:
A questionnaire has been administered to 22 respondents to gather accurate and precise responses from respondents. Casual interaction with Investors, traders as well as brokers is also used to gather information.

f) Sources of the Study
The study based on both primary and secondary data. Primary data collected from the sample respondents by adopting convenience random sampling method through questionnaire. The secondary data collected through sources like, Published articles, reports, papers, books etc.

g) Tools and Techniques
The study uses tools like tabular method, five points scale is applied to interpret the data systematically and draw the meaningful conclusions.

6. RESEARCH FINDINGS

A) RESPONDENT PROFILE BY ANNUAL INCOME

Annual Income	Respondents	Percentage
Less than 5,00,000	6	27.27
5,00,001-10,00,000	13	59.09
10,00,001-20,00,000	3	13.63
20,00,001-30,00,000	0	0
30,00,001-Above	0	0

Source: survey data

B) RESPONDENT PROFILE BY SOURCE OF INCOME

Source of income	Respondents	Percentage
Govt. Employees	5	4.2
Employee of MNC	7	75.0
Employee of domestic company	3	6.3
Full time Investor	7	14.5

Source: survey data

C) **EXPLORATORY RESPONSES ON THE INFORMATIONAL SOURCES USED**

Question	Yes	Percentage %	No	Percentage %
News papers	18	81.88	4	18.18
Television	22	100	0	0
Websites	08	36.36	14	63.36
Professionals in the market	22	90.9	2	9.1%

Source: survey data

D) SOURCE WISE EVALUATION OF INFORMATION USED TO EXPLORE INFORMATIONAL BIAS

I. NEWSPAPERS (LEVEL OF AGREEABILITY ON THE GIVEN FACTORS)

CRITERIA	Agreeability			
	Always	Some times	Rarely	Never
Read Business and Financial papers	27.27%	18.18%	22.72%	13.63%
Read Business section in General news papers	45.45%	13.63%	9.09%	9.09%
Read editorial	18.18%	18.18%	31.81%	13.63%
Read editorial completely	9.09%	31.81%	4.54%	36.36%
Look at market watch	54.54%	18.18%	9.09%	0%
Search information in Newspapers before trading	45.45%	22.72%	13.63%	0%
Collect additional information from other sources	22.72%	18.18%	13.63%	27.27%

Source: survey data

II. TELEVISION (LEVEL OF AGREEABILITY ON THE GIVEN FACTORS)

CRITERIA	Agreeability			
	Always	Some times	Rarely	Never
Constantly track news from Business channels	68.18%	22.72%	4.54%	4.54%
Watch panel Discussions from market experts	31.81%	31.81%	27.27%	9.09%
Interviews with Industry experts	36.36%	31.81%	22.72%	9.09%
Complete believe what comes in television	9.09%	22.72%	13.63%	54.54%
Do you feel some information is always masked	54.54%	27.27%	18.18%	0%
Do you observe Sponsored/endorsed/ dressed up information.	45.45%	22.72%	27.27%	4.54%
Do they provide Complete information	22.72%	27.27%	31.81%	18.18%
Do you compare Information from different channels	40.90%	22.72%	27.27%	4.54%
Does Television Forecast Work In Stock Markets	22.72%	18.18%	31.81%	27.27%

Source: survey data

III. WEBSITES (LEVEL OF AGREEABILITY ON THE GIVEN FACTORS)

CRITERIA	Agreeability			
	Always	**Some times**	**Rarely**	**Never**
Constantly track news from Business Websites.	18.18%	9.09%	4.54%	4.54%
Refer informational reports form market related websites.	9.09%	4.54%	13.63%	9.09%
Do you check authenticity of articles published in these websites?	4.54%	9.09%	18.18%	4.54%
Do you visit company official websites	18.18%	9.09%	4.54%	4.54%
Do you consider reports published in official\market websites.	13.63%	13.63636%	9.09%	0%
Have seen anomalies in data published.	18.18%	9.09%	4.54%	4.54%

Source: survey data

IV. PROFESSIONALS IN MARKET (LEVEL OF AGREEABILITY ON THE GIVEN FACTORS)

CRITERIA	Agreeability			
	Always	**Some times**	**Rarely**	**Never**
Do you consider information form professionals (Market experts, Credit rating agencies, brokers & Economic research centers)	68.18%	18.18%	13.63%	0%
Do you take their advice for your final decision	45.45%	22.72%	18.18%	13.63%
Do you check authenticity of information given by them	36.36%	40.90%	13.63%	9.09%
Do they give instanious information on investment	50%	36.36%	9.09%	4.54%
Do you compare Information from different Professionals	31.81%	27.27%	31.81%	9.09%
Does their Forecast Work In Stock Markets	68.18%	18.18%	13.63%	0%

Source: survey data

E) AGREEABILITY ON FACTOR FOCUSED INFORMATION BIAS AMONG RESPONDENTS

Factor based statement on Information Bias	Level of agreeability				
	Strongly agree	Agree	Neither agree nor disagree	Dis-agree	Strongly- Dis agree
advertisements bring familiarity and prompt trading decisions	54.54%	36.36%	0%	9.09%	0%
Experience Trouble applying consistent judgment in similar cases	31.81%	36.36%	0%	22.72%	9.09%
Trading is always a troublesome activity	27.27%	40.90%	0%	27.27%	4.54%
Exaggeration of difference and overconfidence happens	45.45%	22.72%	0%	18.18%	0%
Don't want to put too much of mental effort	27.27%	36.36%	13.63%	13.63%	9.09%

Source: survey data

7. INTERPRETATION OF MAJOR FINDINGS

a) Major source of information for investment decisions are Professionals, Television medium and the newspapers. The much propagated success of web technologies and the much marketed websites of Brokers and commercial sites are yet to show their potentiality for being the most sought information source by the traders.

b) Respondent investors consider newspapers seriously, considerable percentage also reads the editorial section and market watch sections. But majority read it completely at very rare occasions. Majority of the investors generalize the information on the basis of title or the abstract printed.

c) Majority of the respondent investors constantly tack information arising out of television media, seek insights from industry experts and panel discussion, at the other hand there exists a strong sentiment of getting influenced by fabricated and masked information from this media, it is the major source which enhances familiarity and also enhances professional knowledge of traders.

d) The small amount of respondent traders who track information from websites seek them only for time purpose, majority wont check their authenticity and the reports published in these websites
e) Professionals who work in capital markets are the most sought after informations sources, even though there exists a considerable amount of bias against their opinion majority respondents do believe that their forecasts and their ability of getting insider information works for them in majority of times.
f) In all the above said information sources, there is a strong relevance of information bias from the factors such as Familiarity, generalization, want of not getting involved in troublesome decisions, inconsistency of judgment and the latency of not interested in applying too much of mental effort.

8. CONCLUSION

Efficient Market hypothesis one of the most controversial theories about price equilibrium establishment in stock market has shown its potentiality of influencing stock markets even after generations after it has been propounded. EMH proposes information efficiency and the concept of randomness but fails to consider Informational bias in explaining the over reactivity of investors in the capital market. The diversity of investments, broker categories and the vastness of geographical distribution connected by informational technologies makes this study a must. But the small group of respondents could only communicate the existence of relevance for information bias not its validity and verifiability to every corner of capital markets. Hence the researcher feels an commanding need to go in further detail as the scope of further research.

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COMPARATIVE ANALYSIS OF THE PARAMETERS OF DYNAMIC CHANNEL ALLOCATION FOR COLLISION LESS DATA TRANSMISSION

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ABSTRACT

Channel allocation deals with the allocation of channels to cells in a cellular network. Once the channels are allocated, cells may then allow users within the cell to communicate via the available channels. Channels in a wireless communication system typically consist of time slots, frequency bands and/or CDMA pseudo noise sequences, but in an abstract sense, they can represent any generic transmission resource. In Dynamic Channel Allocation (DCA) frames are transmitted. During the transmission of the frames, collision might be occurring, which make the retransmission of the frames .Transmission of the frames can be done either in continuous time or in a slotted manner. Sensing of the channel is also providing help during the transmission. A single channel is used for the whole communication.

KEYWORDS
Channel acquisition, pseudo noise sequences, offered traffic, frequency reuse, non-uniform.

INTRODUCTION

In this paper we describe a description of channel's Parameter over Dynamic Channel Allocation. Parameters define about Channel Capacity, sensing, Multiple Channel Connections, Packet Transmission, Frame relay and Congestion over transmission.

In dynamic channel allocation all sufficiently high-quality, un-interfered channels can be allocated to users becoming active [3].The demand for wireless telephony and multimedia services is growing at an increasing rate [2].Access Point is the slot, Which is used to connect the multiple system with the common medium. Frequency allocation is similar for the channel. All APs share the same frequency, which increase collision that should be minimized and avoided if necessary, using parameters of channels. The Channel parameters in use should be tailored to the channel Conditions. In cell manner frequency can be reused so that channel utilization can be improved.

PARAMETERS FOR DCA

1:- STATION MODEL

The model consists of N independent stations. Each station generates one frame at a time, and is blocked until the previous frame has been successfully transmitted. That is, a station cannot have multiple frames queued for transmission. In practice, Ethernet, for example, requires a 100 bit transmission time gap between consecutive frames

FRAME TRANSMISSION

Whenever an end station MAC receives a transmit-frame request with the accompanying address and data information from the LLC sub layer, the MAC begins the transmission sequence by transferring the LLC information into the MAC frame buffer.

- The preamble and start-of-frame delimiter are inserted in the PRE and SOF fields.
- The destination and source addresses are inserted into the address fields.
- The LLC data bytes are counted, and the number of bytes is inserted into the Length/Type field.
- The LLC data bytes are inserted into the Data field. If the number of LLC data bytes is less than 46, a pad is added to bring the Data field length up to 46.
- An FCS value is generated over the DA, SA, Length/Type, and Data fields and is appended to the end of the Data field.

After the frame is assembled, actual frame transmission will depend on whether the MAC is operating in half-duplex or full-duplex mode.

The IEEE 802.3 standard currently requires that all Ethernet MACs support half-duplex operation, in which the MAC can be either transmitting or receiving a frame, but it cannot be doing both simultaneously. Full-duplex operation is an optional MAC capability that allows the MAC to transmit and receive frames simultaneously.

2:- SINGLE CHANNEL ASSUMPTION

A single Channel is available for all communication. All stations share one medium. All stations can transmit on it and all can receive from it. The QoS is always a major concern for the services offered through cellular systems and it is observed that there are always trade-offs among various parameters [5].

The increasing number of higher data rate devices clearly states that dynamic channel allocation with some innovative techniques will help solve the problem of spectrum efficiency [6].

3:- COLLISION ASSUMPTION

When two or more frames are transmitted at the same time and a collision takes place. Frames involved have to be retransmitted. If two devices send a frame at the same time, the two electrical, optical or radio signals that correspond to these frames will appear at the same time on the transmission medium and a receiver will not be

able to decode either frame. Such simultaneous transmissions are called collisions. A collision may involve frames transmitted by two or more devices attached. If transmitted frames overlap in time, the resulting signal is garbled. Frequency assignment is a major problem in designing wireless networks [4].

4:- TRANSMISSION DISCIPLINE

In computer networking and telecommunication, a frame is a digital data transmission unit that includes frame synchronization, i.e. a sequence of bits or symbols making it possible for the receiver to detect the beginning and end of the packet in the stream of symbols or bits. If a receiver is connected to the system in the middle of a frame transmission, it ignores the data until it detects a new frame synchronization sequence.

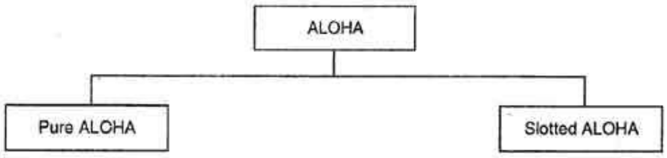
CONTINUOUS TIME

Frames can be transmitted at any time

Slotted time

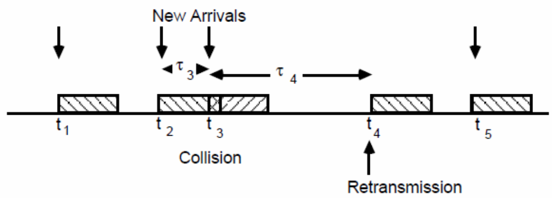
Frames can be transmitted at particular time points
During transmission frames may be collide with each other and they find acknowledge with the delivery that either frames are deliver or to be resend.
Aloha is a multiple access protocol at the data link layer and proposes how multiple terminals access the medium without interference or collision.
There are two different versior.s/types of ALOHA:

(I) PURE ALOHA



Types of ALOHA

- In pure ALOHA, the stations transmit frames whenever they have data to send.
- When two or more stations transmit simultaneously, there is collision and the frames are destroyed.
- In pure ALOHA, whenever any station transmits a frame, it expects the acknowledgement from the receiver.
- If acknowledgement is not received within specified time, the station assumes that the frame (or acknowledgement) has been destroyed.
- If the frame is destroyed because of collision the station waits for a random amount of time and sends it again. This waiting time must be random otherwise same frames will collide again and again.
- Therefore pure ALOHA dictates that when time-out period passes, each station must wait for a random amount of time before resending its frame. This randomness will help avoid more collisions.
- Figure shows an example of frame collisions in pure ALOHA.

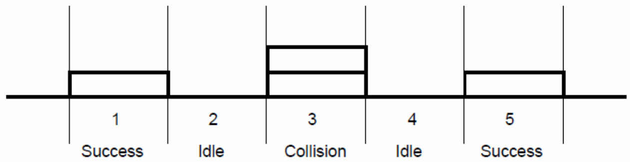


- In fig there are four stations that .contended with one another for access to shared channel. All these stations are transmitting frames. Some of these frames collide because multiple frames are in contention for the shared channel. Only two frames, frame 1.1 and frame 2.2 survive. All other frames are destroyed.

(II) SLOTTED ALOHA

When a node has a packet to send, it waits until the start of the next slot to send it – Requires Synchronization[1].

- Slotted ALOHA was invented to improve the efficiency of pure ALOHA as chances of collision in pure ALOHA are very high.
- In slotted ALOHA, the time of the shared channel is divided into discrete intervals called slots.
- The stations can send a frame only at the beginning of the slot and only one frame is sent in each slot.



- In slotted ALOHA, if any station is not able to place the frame onto the channel at the beginning of the slot *i.e.* it misses the time slot then the station has to wait until the beginning of the next time slot.
- In slotted ALOHA, there is still a possibility of collision if two stations try to send at the beginning of the same time slot as shown in fig.
- Slotted ALOHA still has an edge over pure ALOHA as chances of collision are reduced to one-half.

5:- SENSING CAPABILITY

A collision occurs when two or more workstations listen to the medium at the same moment, hear nothing, and then transmit their data at the same moment.
Station cannot sense the channel before trying to use it.
Stations can tell if the channel is in use before trying to use it
Listen while talking! If another transmission is sensed, discontinue the transmission. Send a jamming signal.

A. TIME DIVISION MULTIPLE ACCESS

Time is slotted. A station gets the slot on a round robin fashion. A type of polling scheme (Hub polling as opposed to roll-call polling).
If station doesn't use its slot, it goes idle.
Highly efficient in heavy traffic, poor in low traffic

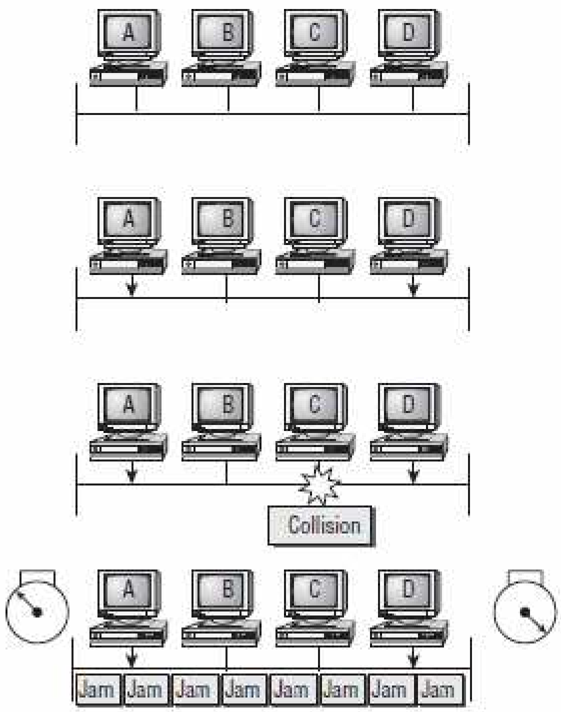
B. FREQUENCY-DIVISION MULTIPLE ACCESS:

Same as Time-division, but this time on a broadband cable allocating its frequency-bands to different stations on a rent or a lease basis.
Poor efficiency if not used.

C. BIT-MAP PROTOCOL

Time is slotted and these slots are to be grabbed. Stations indicate their willingness to grab a slot on a contention-slot train in the order of their ID. After that, they get the time slots in the order of their appearance on the train slot.

CSMA/CD was created to overcome the problem of those collisions that occur when packets are transmitted simultaneously from different nodes. And trust me—good collision management is crucial, because when a node transmits in a CSMA/CD network, all the other nodes on the network receive and examine that transmission. Only bridges and routers can effectively prevent a transmission from propagating throughout the entire network! When a host wants to transmit over the network, it first checks for the presence of a digital signal on the wire. If all is clear (no other host is transmitting), the host will then proceed with its transmission. But it doesn't stop there.



Carrier Sense Multiple Access with Collision Detection (CSMA/CD)

When a collision occurs on an Ethernet LAN, the following happens:

1. A jam signal informs all devices that a collision occurred.
2. The collision invokes a random backoff algorithm.
3. Each device on the Ethernet segment stops transmitting for a short time until their backoff timers expire.
4. All hosts have equal priority to transmit after the timers have expired.

CSMA/CD is a set of rules determining how network devices respond when two devices attempt to use a data channel simultaneously (called a collision). Standard Ethernet networks use CSMA/CD to physically monitor the traffic on the line at participating stations. If no transmission is taking place at the time, the particular station can transmit. If two stations attempt to transmit simultaneously, this causes a collision, which is detected by all participating stations. The stations that collided attempt to transmit again after a random time interval. If another collision occurs, the time intervals from which the random waiting time is selected are increased step by step. This is known as exponential back off.

CONCLUSION

Collision can never be halt but we just avoid it. With this paper we would like to show the role of parameters in dynamic channel allocation.

All the parameters work at their different level for the transmission of data. Frames collide some times with high traffic load and have to be retransmitted, so with these parameters DCA shows transmission of data with less collision.

Future work: - In channel allocation methods there are lots of factor which are change with time i.e., noise, load, number of users in limited network and so on. So a wide range of network is needed for the collision free fast transmission.

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A STUDY OF OVERDUES IN SELECTED PACS'S: WITH SPECIAL REFERENCE TO MANGALAGIRI BRANCH OF GDCCB LTD., TENALI, DURING 2008-'12

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ABSTRACT

The co-operative structure occupies an eminent position in the institutional framework of agricultural credit. Without a strong primary unit at the base, effective organization, mobilization of resources and operational efficiency cannot be built in the credit structure. The PACS's are the bottom-tier of the Short Term Cooperative Credit Structure functioning at the grassroots (Gram Panchayat) level. These are Primary Societies owned by farmers, rural artisans etc. and intended to promote thrift and mutual help among the members; cater to their credit requirements and provide credit-linked services like input supply, storage and marketing of agricultural produce etc. with their wide out-reach in the rural areas with accessibility to the small and marginal farmers and the other marginalized populations have been playing a vital role in dispensation of agricultural credit. Primary agriculture co-operative societies(PACS's) are the major part of rural area; they are providing the source of money to the farmer, which is easily available for the cultivation of farm. This paper is evaluating the performance of the selected PACS's of Guntur District Central Cooperative Bank and describing their progress during the study period 2008-'12.

KEYWORDS

PACS, Cooperative credit, Performance.

INTRODUCTION

Village Co-operatives are the critical mass contact points and the shortcomings noticed in the delivery of credit service occur at this level. Co-operative Societies are already established and functioning, hitherto, have been categories into two distinct groups – one catering to the short and medium term requirements and the others catering to the needs of long-term requirements of cultivators. Most of these societies were found to be non-viable. The farmers have to traverse long distance to obtain term loans that too without an assured arrangement for follow-up finance, input supplies, processing, shortage and marketing facilities. Mutual loyalties, long standing affinities and relationship could not be built up under such unitary and occasional credit delivery practices. The need to attendant in potent instrument of economic development at the grass root level, which is capable of discharging multi-credit and multi-functional services have, therefore, become long overdue, if not imminent.

OVERDUES

The working of the co-operative movement in India shows that punctuality in the repayment of loans has been conspicuous by its absence. The inevitable result has been a sharp rise in the amount of overdues. The rise in the overdues is not restricted to one region.

The overdues are loans with interest there on not repaid on due dates. The quantum of overdues in a credit institution varies significantly depending on the reference date. The incidence of overdues in the agricultural credit system has been increasing over the years and has been steadily eroding the financial soundness of the system. It has consequently attracted considerable attention and has been examined by several committees and researchers. A committee set up by Reserve Bank of India under the Chairmanship of Dr. C.D.Datey made the first major comprehensive study on these lines in 1974.

The mounting overdues in the co-operatives dispensing with short-term and medium- term agricultural credit in the country has been causing serious concern to the Government of India, the Reserve Bank of India, the State Governments and to the Co-operative credit institutions themselves. The overdues of primary agricultural credit societies as well as those of central co-operative banks which are parts of the co-operative credit structure have been raising steadily over the past five years despite the stabilization arrangements which were designed to take care of situation arising out of crop failures caused by natural calamities.

The Planning Commission in the draft outline of Fifth Five Year Plan has also drawn the attention to the growing problem of overdues in the co-operatives. The All India Rural Credit Review Committee also focused attention on the alarming situation created by the rising overdues in many states.

The seriousness of the problem could be gauged from the fact that almost whole of the co-operative credit structure has come to an end in certain parts of the country because of the backlog of these long standing overdues. A fairly large percentage of the owned funds of the co-operative societies are at present blocked up in the form of arrears. There is strong evidence to the effect that assets of many central banks have become frozen and many societies have run into a state of stagnation.

Overdues have been in existence almost ever since the co-operative movement began to take its roots in the country. The overdues were fairly high even before depression but with its onslaught in the 1930 the problem was accentuated which paralyzed the movement as a whole in the country. Though the overdues situation considerably cased during the Second War period, it raised its ugly head again during the post-war era.

PROBLEM OF THE STUDY

The present study is undertaken with the problems of overdues in selected PACSs so as to identify the reason for overdues to suggest appropriate measures to overcome overdues.

OBJECTIVES

The specific objectives of the study are crystallized as follows:

1. To study the nature of PACSs.
2. To examine the reasons of overdues for the sampled PACSs.
3. To assess the impact of relinquishing the loan or interest or both by Government.
4. To suggest measures to improve the recovery performance of PACSs.

HYPOTHESES

The study proposed to test the following hypotheses.

1. There is no significant difference in nature and extent of overdues among different sample societies.
2. Larger the mobilization of funds greater will be the loan lending organizational capacity.
3. Administrative failures lead to decline in recoveries.
4. Proper and timely legal action reduces the defaulters.

METHODOLOGY

The methodology adopted in the present study is presented under three heads namely, sample design, database and analytical tools.

SAMPLE DESIGN

This aspect covered selection of study area, PACSs and respondents. Guntur District was purposively chosen as the universe of the study. In the first stage the GDCCB Ltd., Branch, Mangalagiri was selected for the study, since the area under Mangalagiri Mandal is agriculturally progressive and has ever increasing demand for agricultural credit. In the second stage a 'sound' credit society (NUTAKKI) and 'week' credit society (KAAZA) were taken based on certain selected economic indicators. They are presented in Appendix. Opinion survey is conducted to know the performance of the selected PACS. For this purpose, a random sample of 50 borrowers under the jurisdiction of each of the PACS is taken.

DATA BASE

The database covers the sources of data and period of study. Though the major requirement of the data is met through the field study, primary and secondary sources from the database. The main aspects of societies like organizational as well as operational aspects are collected from APCOB, the GDCCB, Tenali, and its Mangalagiri Branch and selected PACSs under its jurisdiction.

The study covers a period of five years from 2008-12 which has been considered sufficient for a study of its kind which seeks to evaluate the recovery performance of Primary Agricultural Credit Co-operative Societies.

TOOLS OF ANALYSIS

The data collected have been proposed to be analyzed by drawing inferences on the objectives stated above.

1. The conventional, average, percentage and tabular analysis have been preferred to a study the recovery performance of PACSs.
2. Opinion survey has been conducted to know the reasons for overdues.

FINANCIAL STRUCTURE OF SELECTED PRIMARY AGRICULTRE COOPERATIVE SOCIETIES

Information regarding the working capital and its level and composition for the 2 sample societies is presented in the following tables.

TABLE - 1: COMPOSITION OF WORKING CAPITAL OF THE NUTAKKI PACS INDICATORS DURING 2008-'12 *(Rs. in '000)*

Particulars	2008	2009	2010	2011	2012
Share Capital	1,316	1,316	1,327	1,327	1,331
Government funds	15	17	18	22	26
Reserve funds	69	70	88	98	101
Deposits	-	-	-	-	-
Borrowings	3,089	4,168	5,299	6,375	7,484
Working capital	4,489	5,571	6,732	7,822	8,943

Source: Records of the Nutakki PACS.

The financial structure of the sample Nutakki PACS is seen vulnerable as the working capital consists of increased borrowings year by year i.e., from 68% to 83% and at the same time deposit mobilization is conspicuous by its absence in all the years of study. This indicates thin capital base of the society i.e., increased borrowings with absence in deposit mobilization. This should be improved by increased mobilization in share capital and deposits to maintain the stable financial position.

TABLE - 2: COMPOSITION OF WORKING CAPITAL OF THE KAAZA PACS INDICATORS DURING 2008-'12 *(Rs.in '000)*

Particulars	2008	2009	2010	2011	2012
Share Capital	1,040	1,040	1,540	1,540	1,476
Government funds	103	114	120	122	122
Reserve funds	169	190	210	220	238
Deposits	-	-	-	-	-
Borrowings	4,568	5,290	5,764	6,805	8,035
Working capital	5,880	6,634	7,634	8,687	9,871

Source: Records of the Kaaza PACS.

The financial structure of the Kaaza PACS is also seen vulnerable as this consists of increasing borrowings year after year i.e., from 77% to 81% with deposit mobilization is conspicious by its absence in all the years of study, leading to indication of thin capital base of the society. This one-sided movement of the society is to be balanced by improving deposit mobilization and improved share capital. This two-sided intervention will help the society to reduce the ill-effects.

Comparing both the PACS, we observe that the composition of working capital under the given particulars of Table-1 and 2 deviate in the same pattern. But it is evident to note that the working capital composition in Nutakki is high compared to Kaaza during the period of study indicating its liquidity position, leading to mark Nutakki as strong PACS compared to Kaaza PACS.

PERFORMANCE OF SELECTED PRIMARY AGRICULTRE COOPERATIVE SOCIETIES

Based on the selected indicarors the performance of Nutakki and Kaaza PACS are analysed below as per the data in Table - 3 and 4.

TABLE - 3: PERFORMANCE OF NUTAKKI PACS BASED ON SELECTED INDICATORS DURING 2008-'12 *(Rs. in '000)*

Particulars	2008	2009	2010	2011	2012
No. of Members	3,859	3,876	4,008	4,060	4,270
Loans and Advances	4,356	5,234	6,436	7,254	8,523
No. of Borrowers	237	264	278	359	432
Average loan per borrowing member	18.38	19.83	23.15	20.21	19.73

Source: Records of the Nutakki PACS.

Nutakki PACS is further examined in its performance by the selected indicators like number of members, number of Borrowers and the amount of loans and advances. It is seen that the number of members have increased from 3,859 to 4,270 during the period of study. Numbers of borrowers have also seen increased from 237 to 432 during the period of study. But, the point for attention is that only 6% to 10% of the members are receiving loans and advances. This may be due to the reason of lack of funds which is clearly seen in Table – 1 with zero deposit mobilization and very low funds i.e., between 15% to 26% received from the government. This may be the reason for why the majority of the farmers are held under the clutches of money lenders and commercial banks. Borrowings from NABAARD are also not upto the reach and requirements of the farmers. But the slide for quite impressing is that nearly 95% to 97% of the working capital is utilized for loan and advances. This shows that the performance of the PACS is good for the purpose of the funds utilization.

TABLE - 4: PERFORMANCE OF KAAZA PACS BASED ON SELECTED INDICATORS DURING 2008-'12 *(Rs. in '000)*

Particulars	2008	2009	2010	2011	2012
No. of Members	1,668	1,679	1,694	1,724	1,816
Loans and Advances	3,156	3,234	5,266	5,927	6,437
No. of Borrowers	143	154	248	237	289
Average loan per borrowing member	22.07	21	21.23	25.00	22.27

Source: Records of the Kaaza PACS.

The above table indicates the particulars of Kaaza PACS with the selected indicators. The average loan per borrower is 21% to 25% which is high compared to Nutakki PACS. The number of borrowers also form 8% - 16% to the total number of members indicating its lack of funds in terms of zero deposits and low funds from the government . The funds were not properly utilized for the purpose of loans and advances as only 53% to 69% were utilized and rest of the 31% of funds are misused leading to mean that the performance of Kaaza PACS is not upto the mark.

LEGAL ACTION

The legal and administrative measures initiated by the GDCCB for year-wise overdues recovery. As a consequence of concerted administrative and executive measures taken by the GDCCB chronic overdues in the late seventees have been very much reduced. As on 31 March 2012, they formed 12 per cent of total overdues. They are 15.94 per cent in the case for Guntur division. There is scope for further reduction of chronic overdues by coercive and legal means. Our present study focuses on the coverage of overdues position by legal action in the selected PACS of the present study i.e., Nutakki and Kaaza PACS. The Table - 5 offers details concerning the coverage of overdues by legal action in Nutakki PACS.

TABLE - 5: COVERAGE OF OVERDUES BY LEGAL ACTION IN NUTAKKI PACS DURING 2008-'12 *(Rs.in '000)*

Year	Year-wise Overdues		Negotiation		Judgments		Execution of petition		Yet to be covered	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
2007-'08	95 (100)	3,742 (100)	22 (23)	901 (24)	8 (9)	851 (23)	32 (33)	1,438 (38)	33 (35)	552 (15)
2008-'09	78 (100)	3,265 (100)	21 (27)	707 (22)	7 (9)	603 (18)	36 (46)	1,563 (48)	14 (8)	392 (12)
2009-'10	74 (100)	2,973 (100)	16 (21)	482 (16)	6 (8)	312 (20)	33 (44)	1,925 (65)	19 (26)	254 (9)
2010-'11	73 (100)	2,941 (100)	19 (26)	724 (25)	4 (5)	461 (15)	38 (52)	1,573 (54)	12 (17)	183 (6)
2011-'12	64 (100)	2,530 (100)	27 (42)	486 (19)	9 (14)	233 (9)	24 (37)	1,685 (67)	11 (17)	126 (5)

Source: Records of the Nutakki PACS

By administering legal action Nutakki PACS shows that the dues recovered are improving year by year i.e., from 85% in 2007-'08 to 95% in the year 2011-'12, with defaulters to be covered are 33 members in 2007-'08 to 11 members in the year 2011-'12, action interms of Negotiations, Judgements and Execution of petitions are administered for recovery of overdues. Execution of petitions played a major role in recovering overdues with 38% of the amount recovered in 2007-'08, 48% of the amount recovered in 2008-'09, 65% in 2009-'10, 54% in 2010'-11 and 67% in the year 2011-'12 . Next to execution of petitions negotiations are fruitful in recovering the amount with 24%, 22%, 16%, 25% & 19% respectively from 2007-'08 to 2011-'12 respectively.

TABLE - 6: COVERAGE OF OVERDUES BY LEGAL ACTION IN KAAZA PACS DURING 2008-'12 *(Rs.in '000)*

Year	Year-wise Overdues		Negotiation		Judgments		Execution of petition		Yet to be covered	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
2007-08	65 (100)	1,664 (100)	21 (32)	621 (37)	18 (28)	445 (27)	16 (25)	465 (28)	10 (15)	133 (8)
2008-09	48 (100)	1,288 (100)	16 (33)	479 (37)	12 (25)	349 (27)	11 (23)	358 (28)	9 (19)	102 (8)
2009-10	44 (100)	1,321 (100)	13 (30)	378 (29)	11 (25)	369 (28)	14 (30)	398 (30)	6 (15)	176 (13)
2010-11	43 (100)	1,349 (100)	10 (23)	380 (28)	11 (26)	367 (27)	13 (30)	376 (28)	9 (21)	226 (17)
2011-12	34 (100)	1,382 (100)	14 (41)	392 (28)	8 (24)	376 (27)	7 (21)	382 (28)	5 (14)	232 (17)

Source: Records of the Kaaza PACS

Kaaza PACS shows that year-wise overdues has reduced from 1,664 in 2007-'08 to 1,382 in 2011-'12. Legal action was initiated in terms of Negotiations, Judgements and execution of petitions to recover the default amount and to reduce the default. Though the default amount has reduced from 1,664 in 2007-'08 to 1,382 in 2011-'12. The default amount yet to be covered has increased from 8% in 2007-'08 to 17% in 2011-'12, which indicates that the legal action was not proper in redemption of the default amount. Negotiations at Kaaza PACS are fruitful by generating an average of 31.8% of the default during the period of study. Execution of petitions and Judgement contributed an average 28% and 27% of the recovered default amount.

Comparing both the PACS Nutakki showed its highest performance in recovering the 95% of default with legal action. Kaaza has also initiated legal action but not upto the mark as there is 17% of the default amount to be recovered at the end of 2011-'12. Implementation of petitions and negotiations account for nearly 70% - 75% of defaulters and default recovery. It is strongly felt that the action may be initiated at Kaaza PACS to improve the recovery amount position and even at Nutakki PACS though the recovery is negligible against the cases by keeping aside the considerations of favouritism, political influence and interferences, social affiliations and to boost up and change the drive for 100% recovery. This involves strengthening of executive and supervisory personnel who play a major role in recovery performance.

ACTION

Information relating to Recovery of overdues by action drawn from the records of sample societies is presented in the Table - 7.

TABLE - 7: RECOVERY PERFORMANCE OF NUTAKKI PACS DURING 2008-'12 *(Rs. in '000)*

S. No.	Year	Demand	Collection	Balance	% of Recovery
1	2007-'08	630	503	127	80
2	2008-'09	519	418	101	81
3	2009-'10	355	298	57	84
4	2010-'11	267	232	35	87
5	2011-'12	161	143	18	89

Source: Records of the Nutakki PACS.

Apart from legal action the administrative staff extends their efforts to reduce the chronic overdues and to improve the recovery position. Every PACS has a paid secretary, clerk and an attender. The staff of Nutakki were improvising their efforts in recovering overdues. We observe from the Table-7 that the recovery performance of Nutakki has increased from 80% in 207-'08 to 89% in 2011-'12.

TABLE - 8: RECOVERY PERFORMANCE OF KAAZA PACS DURING 2008-'12 *(Rs. in '000)*

S. No.	Year	Demand	Collection	Balance	% of Recovery
1	2007-'08	489	321	168	66
2	2008-'09	270	210	60	78
3	2009-'10	236	139	97	59
4	2010-'11	323	213	110	66
5	2011-'12	342	216	126	63

Source: Records of the Kaaza PACS.

The recovery performance of Kaaza is observed from the Table-8. The average recovery performance of Kaaza is only 66.4% which is far less than the average recovery of Nutakki which is 82%. This speaks about the work staff. This observation undoubtly suggests that the staff of Kaaza has to improve their efficiency in work to improve the recovery performance of Kaaza.

OPERATING STAFF

The sample societies are under the supervision of the personnel of the GDCCB. Each society has a paid secretary (now rechristened as Secretary) and an attender. It is to be noted that the representatives of large and medium farmers hailing from forward castes dominate their managing committees. Against this background the Secretary is not in a position to look after the work of the society without pulls and pressures. Naturally, he becomes an instrument in the hands of managing committee, sub-serving their needs and promoting their cause.

The salary paid to the Secretary is also a paltry sum and he is expected to devote all his time and attention to the cause of the society. Due to the low salary paid he is forced to resort to the patronage of the borrowers especially the delinquents for making both ends meet. He engages himself inside business more often than not to secure an additional income. Fraudulent practices are forced indulged in by the Secretaries. There are no prospects of promotion for the Secretaries and, therefore, the motivation and devotion are lacking and they look upon the present job as a stop-gap arrangement. This state of affairs needs to be remedied not only by enhancing the emoluments of the Secretary and creating avenues for promotion but also by checking their malpractices. If this is done, it is possible to recruit and induct personnel with better training and experience. Short-term training in regard to methods of book-keeping and budgeting may be instrumental in improving their performance. Periodic inspection and close supervision will improve the quality of lending and automatically the recovery performance.

POLICIES FOR REDUCING DEFAULTS AT FARM LEVEL

The channels of misallocation range from ceremonial expenses to non-farm business activities involving varying degrees of risk and profitability. Since credit is fungible it is impossible to prevent its diversion. In the words of Howse, credit card systems, single channel marketing, stop orders, and the like are designed to make sure that credit is in fact used for planned purposes and that repayments are collected. In almost every case, however, within a couple of years of the implementation of the system, farmers are selling their produce 'by moon-light' or under other member's names to escape the stop order system, and there are many, often very clever subterfuges to escape repayment. That in charge then recruit more credit controllers, court cases are initiated, and assets are confiscated. Frustration rises, and eventually either the project is run along military lines or it dissolves into an administrative nightmare.

One of the basic factors contributing to misallocation on the part of small and marginal farmers is the deficit in their family budgets and inevitability of ceremonial expenditure that encounters almost all rural households. The lower rate of interest associated with co-operative credit acts as a powerful inducement to diversion of credit resulting in misallocation. The remedy is to enhance the rate of interest on co-operative credit to such an extent as to leave the margin between the market rate of interest and the co-operative rate of interest as small as possible. Besides rationing credit, this would result in an efficient allocation of scarce credit from social point of view. The inducement to postpone the repayment gets diluted. The imposition of penal rates of interest especially on willful defaulters and its rigorous enforcement leads to a reduction of overdues. In a democratic setup, rigorous measures are difficult to enforce due to lack of political will. Gunnar Myrdal characterizes this phenomenon as the 'soft state'.

ATTITUDINAL FACTORS

Widespread default demonstrates to rural people that the Government is not able or not willing to enforce contracts. Political interference, if across the board, permits all defaulters to take a longer free raid; if selective, it favours certain groups or individuals. Default can be a source of conflict between those who strain themselves to repay and those who do not and fail to suffer for it. To the extent that the pattern of the default mirrors the rural power structure, equity is violated by the manipulation of collection activities.

Political intervention in the dispensation of credit and its management by financial intermediaries including credit co-operatives has become a prominent phenomenon in the programmes of rural development in India. Credit meals are organized with increasing frequency and the State governments of Maharashtra, Tamil Nadu and Karnataka have written off co-operative loans taken by small farmers. The poor rural folk tend to take loans only with the motive of not repaying and their expectations are raised for political gains. In order to assess the attitude of the sample units questions are asked regarding their opinion of co-operative credit namely its timeliness adequacy, of loan subsidy or write off. Table - 9 summarizes the details thereof.

TABLE - 9: ATTITUDINAL FACTORS REGARDING CO-OPERATIVE CREDIT

Item	Nutakki		Kaaza		Total	
	Yes	No	Yes	No	Yes	No
In-Time Loan	39	11	32	18	71	29
Adequate Loan	32	18	18	32	50	50
Loan write off	29	21	34	16	63	37
Loan subsidy?	21	28	37	13	58	42

Source: Sample Data.

71% of the samples felt that the loan provided is in time and 50% of the samples opinioned that loan provided is adequate. Majority of the sample units i.e., 63% of the respondents are expecting loan write off which is not a healthy sign for the PACS to strengthen. 58% of the sample are expecting loan subsidy which is not a favourable attitude to repay the co-operative credit leading to hindrance of performance of PACS.

Comparing the attitude of sample units of Nutakki and Kaaza 58% of Nutakki respondents and 68% of the Kaaza respondents are expecting loan write off. Respondents of Kaaza are more dangerous in their attitude to repay loans than that of Nutakki. Respondents of 42% are expecting loan subsidy at Nutakki while this is 74% at Kaaza. This reflects their attitude towards repayment of loans. So, attitudinal factors are also to be considered by the administrative staff of concerned PACS in motivating the borrowers towards loan repayments and its advantages in the succeeding cycles of their borrowings. Regular awareness and motivation campaigns are to be conducted in PACS to boost up the morale of the borrowers. Thus, attitudinal factor may be one of the reasons to be considered at Kaaza PACS for its low recovery performance.

STRUCTURAL REMEDIES

The small and marginal farmers because of their uneconomic holdings fail to generate income, which hardly leaves any surplus far honouring their loan repayments. Agricultural prices fluctuate erratically with a slump in the harvest season and a boom in the off-season. Owing to variability in prices and deficiency in market intelligence the small and marginal farmers tend to be the losers. They are hardly in a position to make use of regulated markets, due to a negligible proportion of marketable surplus and the poor infrastructural facilities. Agrarian reform of a far reaching nature and character seem to hold some prospect for improving the economic status of these vulnerable groups. Crop insurance and price stabilization measures are needed to improve and stabilize their incomes. The promotion and development of farm related enterprises like dairy and poultry would go a long way in creating additional employment and income. The implementation of these programmes is very much in the air. If they are properly grounded the prospects for delivery and recovery of co-operative credit seem to be bright.

These can be considered to streamline the system in respect of procedures and policies.

INTERNAL AND EXTERNAL REFORMS

1. In respect of crop loans, for overcoming delays in sanctioning and disbursing loans, it is recommended that the normal credit limit statements for short terms loans be prepared once in three years.
2. The due dates for Rabi crop loans may be postponed from 30th June to 31st August at the borrower level so that the repayment dates are consistent with the marketing season.
3. In case of term loans, a case by case analysis may be undertaken to provide access to more institutional credit.
4. The unit cost at siz monthly intervals be reviewed and appropriately fixed in accordance with the market prices, the assets and the repaying capacity of the borrower.
5. Further, the synchronization of investment credit and working capital needs to be attempted.
6. The supervision on the pre and post sanction of credit should be effectively taken up. For this, the PACSs must undertake the marketing of agricultural produce of their members.
7. This warrants godown facility for storage, if the procedure of linking of credit with marketing and processing which is presently restricted to some crops, can be extended to other crops including fruits, vegetables and other horticulture products. In this connection, substantial Government's assistance for agro-processing units must be provided to co-operatives.

LINKAGES AND SUPPORTING SERVICES

These are quite vital for the successful functioning of co-operatives. The credit programmes are tied up with various developmental agencies to effectively bring even the non-viable societies into variable units. The political will in framing an effective long term credit policy with provision or recovery of their dues and the objective of view of the willful defaulter is quite essential.

THE LEGAL PROVISIONS

The Legal Provision should be further improvised in respect of security for individual borrower and also for group loans. For effectively combating the process of recovery the following suggestions are made:

1. Provision for grant of recovery certificate by registrar.
2. Sale of property without intervention of court.
3. Delegation of registrars powers to officers of the bank.
4. Purchase of land put to auction by the state governments.
5. Declaring officers of co-operatives as public servants.

CONCLUSION

Measures for reducing co-operative overdues may be variously classified. At the institutional level, they relate to streamlining of management, strengthening the supervisory staff, restructuring the working capital by raising the share of owned resources, and prompt legal and executive action covering all delinquents. In all these respects the performance of the GDCCB seems to be improving as it has been deleted from the set of weak Central banks and is awarded 'A' Certificate and included in the set of strong CCBs.

However, the PACS under study Nutakki and Kaaza are putting their efforts to improve the recovery performance, but still sub-serve to the interests of the societies. They are merely acting as loan disbursing associative rather than genuine co-operative institutions. Both the societies neither have deposits nor started deposit mobilization. As Nutakki PACS being originally rich with good water facility and commercial crops put itself a head of Kaaza PACS as it is rain-fed region though it grows commercial crops like Tobacco, cotton and chilly.

Unfortunately, the attitudinal factors of defaulters of Kaaza are quite deviating from Nutakki leading to expectation of loan write off and subsidy. If the co-operatives are to be saved from the menace of delinquency their governance is to be transformed in such a way as to create a favourable climate for loan recovery irrespective of political or caste affiliations, and favouritism. This is the challenge that confronts the members of the primary societies and their leadership.

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APPENDIX

INDICATORS USED IN THE PRESENT STUDY THE FOR SELECTION THE PACS

Selected indicators	S_1	S_2	S_3	S_4	S_5
1. Timely supply of credit	/	/	/	/	X
2. Supply of farm inputs	/	/	/	/	X
3. Payment of dividend on share capital	/	X	/	X	X
4. High member deposits	X	/	X	/	X
5. Earning profit	/	/	/	X	X
6. Trained staff	/	/	/	/	X
7. Healthy politics	/	/	/	X	X
8. Responsible members	/	/	X	X	X
9. Own building for society	/	/	/	/	X
10. Strage/godown facility	/	/	/	/	X
11. Paid Secretary/Manager	/	/	/	/	/
12. Elected board	/	/	/	/	X
13. Credit – market linkage	/	X	X	X	X
14. Low overdues	/	/	X	X	X

/ - Refers to strength
X - Refers to weaknes

Source: Mohan. N. 1989 , Development of Monitoring evaluation mechanism for impact of Co-operatives (India), paper presented at the CIRDAP Regional Workshop from 2-15 September, 1989 in Hanoi, Vietnam

FDI IN AVIATION: WILL IT SERVE AS A GAME CHANGER FOR INDIAN AIRLINES INDUSTRY?

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ABSTRACT

Connectivity is the backbone of today's global economy as it brings people to business, tourists to vacation destinations and products to markets. All are significant to India's development. Instead of flourishing and delivering economic benefits, India's aviation industry is struggling and recovery is hampered by high taxes, inadequate infrastructure, lack of trained human resources, high costs and restrictive investment policies. The opening up of the Indian aviation industry for foreign investors have opened up new doors and new desires to revive the industry but still many analysts doubt the ability of foreign airlines to rejuvenate the domestic airlines as most airlines are facing losses due to higher costs and taxes. In such a scenario, why would any airline come to India unless it has a feasible business model that would give a strategic advantage?

KEYWORDS

FDI, Foreign Direct Investment in Indian Aviation, Indian Aviation Industry, Future of Indian Aviation Industry.

INTRODUCTION

Connectivity is the backbone of today's global economy as it brings people to business, tourists to vacation destinations and products to markets. All are significant to India's development. Instead of booming and delivering economic benefits, India's aviation industry is struggling and recovery is hampered by high taxes, inadequate infrastructure, lack of trained human resources, high costs and restrictive investment policies.

The aviation sector is one of the vital economic drivers for prosperity, development & employment in a country. Aviation sector in India handles a propos 2.5 billion passengers across the world in a year; moves 45 million tonnes (MT) of cargo through 920 airlines, using 4,200 airports and deploys 27,000 aircraft. In the coming 10 years India is likely to be among the top 5 nations in the world with respect to aviation sector.

THE CURRENT ENVIRONMENT

In 1994 India's Air Corporation Act of 1953 was repealed giving private airlines the opening to schedule serviced flights. Following this repeal, a host of new airlines have sprung up to meet India's need for air travel. India still remains notably underpenetrated in the civil aviation sector: at present there are only 0.52 departures per 1,000 people in India and less than 2% of Indians travel by air each year. However this creates a huge opportunity as India has 1.2 billion people and an intensifying and upwardly mobile middle class. Domestic passenger traffic crossed the 60.7 million mark at the end of 2011. Domestic passenger growth year-on-year was 17.2%, in-line with the year-to-year increase expected from a rapidly growing emerging economy with a relatively small passenger base. India's domestic passenger growth is estimated to boost by roughly 15% per year by 2020. This growth rate, if sustained, would put domestic air travel at over 210 million domestic passengers per year by 2020.Despite these encouraging demographics, the Indian carriers have failed to translate the demand for air travel into profits. For the year ended March 2012, 5 out of the 6 major airlines in India were loss making. So, the original cause needs to be examined for the profitability shortfall, and groundwork needs to be laid out to comprehend where India's aviation market is heading.

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STATEMENT OF THE PROBLEM

Although connectivity is the need of the day in today's globalized world, India's aviation industry is struggling and is unable to keep pace with their global counterparts. In spite of several positive factors like growth in business, growth in passenger traffic etc., the progress and growth is being hampered by high taxes, inadequate infrastructure, lack of trained human resources, high costs and restrictive investment policies.

The issue which becomes important in this scenario is whether FDI in domestic airlines industry will be able to bring about a change in our domestic aviation industry?

OBJECTIVES

1. To study the need for FDI in Indian Civil Aviation.
2. To analyze the sectoral loopholes in our aviation industry.
3. To analyze the market requirements of our aviation industry.
4. To study the challenges faced by the Indian airlines companies due to changing market scenario.

CHALLENGES IN THE INDIAN AVIATION MARKET

In spite of the robust demand for air travel, the following factors have driven the airlines into losses:

1) Inability of the Indian airlines to accomplish cost parity with their global peers - It is important that the Indian airlines accomplish cost parity with the rest of the world to ensure the viability of the industry. The higher costs from taxes and infrastructure bottlenecks have not been able to be passed along to customers, leading to an erosion of the Airline's balance sheets, which in turn raises the operating costs of running their business. Aviation fuel tax (AFT) is a major worry for the airlines. The Indian airlines pay almost 60% more for fuel than their counterparts in international markets as it has a number of layers of tax. Also, Infrastructure bottlenecks create supplementary costs for the airlines. For example, the re-built Mumbai airport was engineered to handle a normal annual passenger load of 29 million passengers per year. According to the Airport Authority of India, the total Number of passengers handled for the 2011-12 year was 30.75 million and this is set to amplify meaningfully going forward. In addition to the physical constraints of the airport there are personnel constraints in the aviation industry. India requires 2,200 qualified air traffic controllers and currently only has 1,700. Since customers consider an airline's punctuality metric when choosing carriers, the airlines have been modifying the scheduled block hours. The times reported are often longer than the Directorate General of Civil Aviation's uniform block flight times. This creates havoc for the air traffic controllers. The infrastructure bottlenecks convert into higher costs for the airlines. In addition to these regulatory and structural constraints, India also has one of the highest borrowing costs globally. According to IMF data, the cost of borrowing in India was about 12%. Since investors demand a risk premium to reimburse them for the added risks of investing in the aviation business, so the real cost of capital is even elevated. Adding additional layers of inefficiencies and taxes on top of these costs creates a challenging atmosphere for the Indian businesses.

2) Imbalance between the supply and demand for aircraft in India - The number of aircraft in India competing for passengers has continued to outpace the rate of new passengers. The demand for aircraft, as measured by the revenue per passenger kilometer, has grown rapidly in India; however, the supply, as measured by the available seat kilometer, has grown more rapidly than demand. Additionally, over the last decade the load factors for all domestic airline companies have remained below industry standard load factors of 80% or higher. The Break - Even load factor is the percent of seats that need to be filled at the airline yield rate to break-even. When we look at Jet Airways, we can see their break-even rate is at or above 80%, while their actual seat factor is time and again below this needed hurdle rate. The airlines have not allowed the demand for air travel to catch up before adding up new aircraft to their fleet; this in turn causes them to drop fares to increase load factors, causing the competition to do the same in an ongoing negative spiral.

3) Lack of differentiation within the domestic carriers leading to intense competition - The lack of differentiation between the domestic carriers has forced them to compete on price. Following on from the point above, the airlines have shown that they are keen to price fares below their breakeven rate, Compounding losses for the sector. The percentage of Indian travel classified as low cost has continued to add to from 1% in 2004 to an amazing 70% and growing as of 2011.Price competition has accelerated as the legacy carriers and new airlines in the industry have rushed to hold closer the low cost carrier model. Hence, there are multiple airlines competing on price that have no cost advantage in this space.

4) Non-implementation of standard risk management practices by airlines management - Management has not implemented standard risk practices in the airline industry. In 2007 the Federal Reserve Bank of India removed its ban on fuel hedging, yet airlines have not started hedging their fuel exposure in a meaningful way. Fuel costs are often the airlines largest cost at 40-50% of operating costs and are notoriously erratic. Since Indian airlines have not embraced hedging as a way to mitigate risk, they expose themselves to swings in commodity and foreign exchange prices, over which they have no control. By implementing prudent risk management, the airlines could structure their balance sheet to protect owners' equity from the vagaries of the market. The hedged balance sheet removes the basis risk caused by currency exposures and fuel costs. It is significant to point out that most airplane leases are payable in a foreign currency and that fuel costs are typically payable in U.S. dollars. This means that the weakening Rupee increases operating costs. The current practice of the major Indian airlines is to leave these risks unhedged. As we all know that the U.S. dollar has continued to build up against the Rupee over the prior years. Simultaneously the (ATF) fuel price has continued to increase from the 2009 (relative) lows. Hence, both risks have been allowed to eat away the industry profits; weakening the airlines financial position.

5) Price wars among the various players including India's flag carrier - The participants in the industry, including India's flag carrier are engaged in a price war. Many of the private carriers boast better performance metrics, and have lengthened rapidly at the expense of Air India. In an attempt to regain market share, some of the players, including Air India, have often belligerently priced tickets lower their breakeven rates. Air India has relied on the fact that it is a subsidiary of the Indian Government to streamline obligations on more favorable terms, and for further equity infusions by the Indian Government. The propping up of Air India, at the expense of the Indian taxpayer, enables Air India to continue its predatory pricing initiative. The net result of the Government backstop is the destabilization of the Indian airline industry, and a loss of confidence by potential investors. The market share amongst the Indian carriers remains uneven, and continues to realign amongst the players. The long-term secular growth of aviation in India should allow a handful of players to grow and thrive.

6) High levels of leverage of the carriers - The Indian airlines tend to have an elevated level of financial leverage. The financial leverage appears, both on and off their balance sheets. The use of the sale and leaseback method for acquiring planes is common internationally, but Indian airlines have generally followed this route without regard to a sensible structuring of the capital stack. A sale and leaseback is the selling of an aircraft to a third party who then leases the plane back to the company. The leasing company earns a return for captivating the market risk of the aircraft as well as providing the leasing service to the company. This method is perfectly practical when the goal of the airline is to maintain their financial flexibility, or manage other risks associated with heavy capital investments.

For example, in Jet Airway's fourth quarter 2012 earnings results conference call, KG Vishwanath pointed out that Jet Airways was planning on selling 10 -12 airplanes in 2013 ; the sale would be structured as a sale leaseback to try to raise USD $200 million. Management's reasoning for selling these assets into the sale and leaseback structure was to pay down costly Indian debt. However given their Auditors statement that Jet Airways did not have the capability to raise cash, it is possible that the attraction for management to use these proceeds for operating needs will likely happen. Given the dire losses being taken in the Indian aviation industry it is important to examine if the airlines are turning to the sale and leaseback method as an earnings/loss smoothing mechanism at the shareholders expense.

FDI IN INDIAN AVIATION: AN ATTEMPT TO BOOST THE AILING SECTOR

Recently, government permitted 49 percent FDI in the civil aviation sector, in order to revitalize the chronic sick industry of the country. Though earlier also FDI in civil aviation was allowed but foreign airlines were excluded from investing in domestic airlines. Foreign airlines were allowed to participate in the equity of companies operating cargo airlines, helicopter and seaplane services, but not in the equity of an air transport undertaking operating scheduled and non-scheduled air transport services. The Government has now permitted foreign airlines to invest, under the Government approval route, in the capital of Indian companies operating scheduled and non-scheduled air transport services, up to the limit of 49 percent of their paid up capital.

In year 2011-12, except Indigo, all airlines have posted losses. Kingfisher Airlines, which is burdened with a debt of over Rs 7,000 crores, has been in the forefront of pushing for permission to allow foreign airlines to invest in domestic carriers. Most of the Indian carriers are suffering losses because of high taxes on jet fuel, rising airport fees, costlier loans, poor infrastructure, rising ATF prices and cut-throat competition.

Though Kingfisher Airlines has been pushing for FDI to boost the sector, Jet Airways and Indigo have expressed reservations saying allowing global players in would lead to cartelization and takeovers of Indian carriers. However, with 49 percent cap, takeover by foreign carriers is unlikely to happen.

Now the question is whether FDI in domestic airlines by foreign airlines will be able to change the fortunes of the sector or not. Given the fact that except for Indigo, all airlines posted losses in the past fiscal, there are genuine problems with the sector. While on one hand, poor infrastructures, high airport charges, lopsided tax structure and cut throat competition are plaguing the industry, inefficiencies in the management of few airlines cannot be ruled out. In 2011-12, Indian carriers posted a combined loss of 12,000 crores.

Many analysts doubt the ability of foreign airlines to rejuvenate the domestic airlines as most airlines are facing losses due to higher costs and taxes. In such a scenario, why would any airline come to India unless it has a viable business model that would give a strategic advantage?

The problem of the industry right now is of profitability and not only investment-related. The profitability-related issues need to be addressed primarily, which clearly cannot be done by foreign carriers as they cannot change the tax or the fare structures here. In such a scenario, it is unlikely that a foreign carrier will accept the liability of Rs7000 owed by Kingfisher Airlines. Earlier in 2001, when Government of India tried to sell out the loss making national carrier, it had no takers and disinvestment plans were shelved due to the absence of buyers.

Despite aforesaid apprehensions, there is no doubt that aviation sector will certainly get the benefits with the capital infusion. Allowing FDI in aviation would pave way for much-needed equity infusion in Indian carriers, which were in dire need of funds.

Foreign carriers such as British Airways and Virgin Atlantic Airways Ltd already have expressed interest in investing in Indian carriers. Further, there has been a need to consider financing options available for private airlines in the country, for their operations and service up gradation, and to enable them to compete with other global carriers. Denial of access to foreign capital could result in the collapse of many of our domestic airlines, creating a systemic risk for financial institutions, and a vital gap in the country's aviation infrastructure.

FDI IN INDIAN AVIATION: AN IMPACT ANALYSIS CASE STUDY

Irrespective of the ability of foreign carriers to rejuvenate the aviation industry, FDI by foreign airlines in domestic airlines is a welcome decision. India's airlines need capital to grow. While the 49% cap on foreign investment aligns with general practice globally, the complete exclusion of foreign airlines from investing in Indian carriers is unique to India.

Given that foreign airlines could own 100% of mass rapid transit systems, ports, hotels, toll roads or tunnels, the restriction makes little sense alongside India's other foreign investment policies. Moreover, there are indications of policy reforms in the aviation sector to set up of a Civil Aviation Authority which would revamp the aviation regulator. Now, let us analyze how the move will affect various stakeholders:

AIRLINES

1. The move is expected to provide much-needed cash flow to private airlines.
2. It is likely to result in an improvement in technology, both in terms of ground handling and flight operations.
3. It will bring in the best international management practices.
4. The aviation industry is divided. More successful players such as Jet Airways and Indigo have expressed their reservation in the past. There are also fears that bigger carriers may resort to cartelization. Loss-making airlines, of course, see FDI as the knight in shining armour.
5. There are also fears that this may lead to a takeover of Indian carriers.
6. Indian Airline companies' positive reaction is understandable as foreign equity flow will help them reduce debt. Total combined debt of all the airline companies in India is about 48,000 crores.
7. Spice jet, the only profit making company in India, will look forward for some strategic investors and make their company look more attractive to the current Aviation sector scenario in India.
8. Air India will be the greatest beneficiary as government will look forward to divest its stake in the airline which would help them to generate revenue.

GOVERNMENT

1. Implementing the proposal will mean likely political opposition from few political parties especially Government's strongest ally Trinamool Congress.
2. Security is another concern. The government will have to keep a tab on dubious investors entering India through this route.

PASSENGERS

1. Fares may become competitive
2. Quality of service may go up due to competition
3. Better international connectivity
4. The outbound traveler will have more varied choices, if they want to travel to far destinations.

RELAXING FDI NORMS IN AVIATION: PROS AND CONS

Greater FDI in aviation is reckoned by experts to offer certain inevitable disadvantages to the Indian aviation companies and foreign enthusiastic investors in the aviation sector of India, and also to Indian professionals and other people, besides some essential and outstanding advantages. In the following are given pros and cons of FDI in aviation sector in India.

PROS OF FDI IN AVIATION

- New airlines may come up in India.
- Increased competition will be a boon for customers as their will be cheaper airfares, better and lavish facilities & latest technology.
- FDI will infuse cash flow into the bleeding Indian airline industry.
- Government will gradually reduce its equity in PSUs in the sector.
- Better International Connectivity.
- FDI will improve the current account deficit situation of the airline sector.

- There will be greater income to the aviation sector of India by domestic and international tourism, and other related sectors of Indian economy.
- Better will be chances for employment in the aviation sector of India.
- FDI in aviation will have a positive bearing on all players involved in tourism industry - be it hotels, tour operators or travel companies.
- FDI is the safest form of fund raising.
- It will also prove beneficial in terms of visa fees, as it will be easier to obtain the visa at a lower price.
- It will also be beneficial in terms of exploring destinations.
- Travel Industry should gain as well, when the market grows, the bottom lines should improve for travel trade industry too.

CONS OF FDI IN AVIATION

- Rising ATF prices has increased the air fare in the last two years. The move to allow FDI may result in further increase in air fare making air travel costlier for common man.
- Government has already structured a bailout plan for debt-laden Air India. However, it is difficult to say whether FDI in aviation will help the Indian national carrier.
- Delhi airport has increased its tariff structure by 353 percent recently. This will result in increasing the air fare and will make the airport costlier for Indian carriers. Analyzing the current tariff structure at Delhi Airport, allowing FDI in aviation may result in increasing tariff at other airports as well.
- Current Indian aviation industry is facing infrastructure shortage to handle the existing fleet of Indian carriers. The airports in tier-II and tier-III cities are still under development due to fund and land issues. FDI in Aviation will demand huge infrastructure to accommodate the big size aircrafts and upgraded technology of the foreign carriers.
- Fear of a takeover of Indian airlines by the Global giants.
- Security is a major issue. Government will have to keep an eye on dubious investors entering India through this route.
- UPA Government will face opposition from its strongest ally Trinamool Congress.
- The business competition in the Indian aviation market will be more and intense, and will favor the big players. The presence of greater number of aviation companies will reduce the overall profitability.
- Cost of employment for highly qualified and talented aviation professionals will rise regularly. Indian aviation companies will need to become more efficient, circumspect, and professional.
- The money will be pumped from abroad and they will be controlling the market. More and more company collaborations will take place, which the traditional travel agents won't be able to compete with.

KEY CONDITIONS SET BY GOVERNMENT FOR FOREIGN INVESTMENT: AN ANALYSIS

In India the civil aviation has not been profitable for most of the carriers and therefore, after opening of the skies for the private players, there may be quite a few instances where the private airlines have bundled up in a short span of time. Given the present state of affairs of the carriers, most of which are not doing well on the financial grounds, it is only a guess game whether anyone would be interested in taking up the stake through the FDI route. The experts from this school of thought are of the opinion that the current state of mess is the result of extravagant policy measures of the airlines and their poor management.

The Government has this time carved out the policy in such a manner so as to give extra protection to Indian Airlines. The announcement by the Committee lists certain specific conditions which form the basis for permitting FDI up to 49% by a foreign airline.

Firstly, for a Company (in which 49% FDI has been allowed) to obtain a scheduled operator's license, its principal place of business and registered office must be in India, the Chairman and at least two- third of the directors of the company must be Indian citizens and substantial ownership and effective control should be in the hands of Indian nationals.

Secondly, any foreign national who will be associated with Indian scheduled or non-scheduled operations, i.e. who will be appointed to the board of the Indian airline which has received FDI, must also go through and obtain security clearance, presumably from the Ministry of Home Affairs before beginning any work in India. Lastly, the Committee has also mentioned that all import of technical equipment as a result of the investment under the 49% limit must be approved by the Ministry of Civil Aviation. Though these specific conditions have been mentioned, the directives for implementation are yet to be announced.

From a general reading of the conditions mentioned by the Committee, it is apparent that the grant of FDI to foreign airlines is simply to bolster the ailing Indian Aviation sector by access to another avenue for funds and equity infusion. It is evident that the intention is to ensure that control and management of Indian Scheduled airlines stays in Indian hands. While the permission for FDI by foreign airlines has been long anticipated for rescuing the aviation industry in India, whether this strategy will succeed remains to be seen.

CHALLENGES DUE TO FDI IN INDIAN AVIATION MARKET

Travel professionals believe there are certain drawbacks of FDI in aviation for the travel agents. Many believe that FDI in aviation will also help India to develop to a certain level, but majorly it poses many challenges for our Indian Aviation like:

1. Because the foreign companies will control the entire airline field, 49 per cent FDI in aviation will enable international carriers to modify the policies as per their benefit, and definitely it will affect the Indian travel trade.
2. FDI in aviation will not provide a permanent cure to the problems being faced by the travel agents.
3. The travel agents should ask for more government help. They should teach their staff about the importance of both inbound and outbound tourism and the staff should be capable enough to understand the same. There is large unorganized sector of travel agents and tour operators. They should be brought to a very professional level.
4. The travel trade has to gain a professional service status, airlines must introduce/facilitate credit card sales like they do in western world, and many more such issues need to be addressed by the trade bodies."

ROADMAP FOR FUTURE ADVANCEMENT FOR INDIAN AIRLINES INDUSTRY

Let us now discuss a road map to restore India's aviation industry back into profitability. For the same, we will create an exemplary/ideal business policy model for our aviation industry to overcome several challenges for a turnaround to happen, since capital infusion can seldom be a solution to a weak business model. We now lay out these factors; when/if implemented will have the needed impact of turning the Indian aviation industry around:

1. The Indian Government needs to reassess its ban on foreign direct investment by airline companies and lift the ceiling on the percentage of investment allowed.
2. A regulatory body needs to be established that addresses predatory pricing and product dumping. The regulatory body needs to address the basic supply and demand imbalance.
3. Taxation of the airlines as well as airline costs (e.g. ATF) needs to be brought in line with global industry norms.
4. Aggressive expansion in airport construction needs to be initiated.
5. Airlines need to differentiate themselves by product offering.
6. The Indian Government needs to create a fair and level playing field for the airlines to compete.
7. India is severely lacking in experienced personnel in the aviation sector. If the Indian Government were to allow FDI from the aviation sector, this would bring with it a seasoned talent pool.

8. The industry is lobbying for a predatory pricing commission to be put in place. This step may be needed to stabilize the industry, and to provide confidence to potential investors. The psychology of misjudgment suggests that investors become more risk averse in a bear market, and more risk tolerant in a bull market. This means that investors without domain experience in aviation will likely shy away from making such investments.
9. India's market participants and Government agencies need to address the tax structure that is heavily penalizing the airline industry.
10. Only FDI alone can't revive the aviation sector in India because issues like pricing and marketing strategies need to be resolved as well. Proper marketing strategies are required along with the FDI to boost the sector.

The majority of airlines assets are stressed, which present an opportunity to enter this market at the right entry point. Recapitalizing and restructuring a company could significantly reduce financing costs to support returns. Additionally, it would be necessary to implement a well-conceived plan by Government and Industry experts to ensure overall operating performance improves. Lastly, if/as several of the roadmap initiatives are implemented, the Indian Aviation Industry should be able to further improve returns. Such an investment strategy could lead to potential returns, which are quite satisfactory.

SUMMING UP

The recent FDI liberalization is indeed most welcome, both in terms of the relatively liberal framework and in terms of the clarity. Clearly, the importance of civil aviation is being recognized. It is also recognized that good airports, a choice of airlines and good ground handling facilities are integral parts of infrastructure and are needed if the growth rate is to be sustained. From that perspective, a holistic view of FDI, outbound regulations, tax issues including tax on aviation turbine fuel, etc., should be seen in an integrated manner. One hopes that political compulsions will not stand in the way of the growth of this important sector.

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FACTORS INFLUENCING THE EMPLOYEES' INTENTION TO CHANGE JOB FROM PUBLIC TO PRIVATE SECTOR BANKS & VICE VERSA: AN EMPIRICAL STUDY OF BANKING SECTOR EMPLOYEES IN INDIA

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ABSTRACT
The factors that influence an employee's intention to change job have been matter of concern for employers who want to attract the best talent and retain it for better operation of their business. This study examines the factors governing the perception of employees of public sector banks to join private sector banks and vice versa. For better understanding, the researcher has analysed those factors also that discourage the employees of banking sector from job change across private and public sectors. For the purpose of study, four factors namely job security, work stress, decision making power and numbers of working hours have been considered which may influence the intention of private sector bank employees to join public sector. On the other hand, four different factors namely compensation policy, career growth, working conditions and geographic location have been considered to study the intention of public sector employees to join private sector banks. Data have been gathered from 753 employees of different public and private sector banks of India. Questionnaire has been tested by using Cronbach's Alpha for validity and reliability. The value of alpha is calculated as 0.75 which is considered to be reliable. Convenient sampling technique has been used to collect data from both public and private sector banks. The principal statistical tools used for data analysis are mean, standard deviation and chi-square test. Based on the findings, some suggestions for the banking industry have been given which can be useful in designing the compensation policies for the employees.

KEYWORDS
Indian Banks, Job change, Public sector bank, Private sector banks, Turnover Intentions.

INTRODUCTION
The growth of business organizations, with only a very few exceptions, depends on the talent pool available with the organization. Thus it is a major area of concern for an employer to attract the best talent in the market and retain it for better management and operation of the business area. It is quite natural that the business organizations in the private sector tend to poach upon the rival organizations for their human resources to have an edge over its competitors.

Recently another trend has been noted where the employees have been found changing jobs from private sector to public sector and vice-versa. This area requires a separate study as the factors influencing such decisions are entirely different from those involving the shift within private sector.

The entirely different work culture in these two types of organizations – public sector and private sector has resulted in an entirely different set of factors influencing the intention of employees to take a decision in this regard. While the private sector is known for its long working hours and high work related stress, the public sector has invariably been plagued by low compensation levels and less growth opportunities.

Banking sector in India has evolved over a period of time, from public sector dominated industry to a balanced mix of public sector and private sector. The emergence of private sector banks has offered an opportunity for the public sector employees to switch to the private sector which has its own set of advantages in terms of better compensation and growth opportunities. Also the relatively less stress related to work and working environment in public sector employees provides an opportunity for private sector employees, who may prefer job security over higher compensation level.

This study examines the factors influencing the employees' intentions towards job change from one sector to other in the banking industry.

REVIEW OF LITERATURE
Employee turnover intention is the desire of an employee to quit his existing job. It is the most commonly faced problem by all the organisations today. A Study conducted by Knapp (2008) indicates that this is a major area of concern for the employers as job leaving, or turnover, has a number of negative effects on a workplace, including increased costs to fill open positions, lower employee morale, and decreased customer satisfaction. It takes time for new employees to gain knowledge about systems and procedures. Turnover also increases the burden on other employees in the organisation, potentially causing them to pick up extra work while a position is being filled. Extra work added to an already full load may increase dissatisfaction. Because of these effects, it may be prudent for employers to identify the causes of workplace satisfaction and try to improve it. Turnover is often affected by workplace satisfaction. If employees are dissatisfied with some aspect of their work environment, they are more apt to seek employment elsewhere. Many studies have been conducted to find out the relationship between job satisfaction and employees turnover intentions. An empirical study conducted by Ali shows that a significant negative association exists between job satisfaction and employees' turnover intention. The highest correlation with turnover intention was of Pay, Promotion, Fringe benefits and contingent rewards. Job Satisfaction Survey (JSS) questionnaire was used for data collection from 212 private sector colleges' lecturers in Pakistan. Pearson Correlation and Multiple Regression tests were used to test the hypothesis. Similarly Steven and John (2008) conducted a study to assess job satisfaction facets and turnover intention of software developers. They took nine facets of job satisfaction in order to see its impact on turnover intention. Turnover intention showed a significant negative correlation with all job satisfaction facets including pay, promotion, supervision, benefits, rewards, working conditions, nature of work, worker and communication. Randhawa (2007) conducted a study to find out the relationship between job satisfaction and turnover intentions. The data was collected from 300 scientists by simple random sampling technique. The correlation between the measure of job satisfaction and turnover intentions was found to be negative and significant. This indicates that higher the job satisfaction of a person, the lower of his intention to quit the job. Adeboye & Adegoroye (2012) found the antecedents of turnover intention which can be categorized into five; personal, job-related, organizational, contextual and attitudinal variables out of which the study focused on only two job-related and organizational variables. A descriptive survey design was adopted for the study, and the sample size had 100 bank employees of Africa. For the purpose of this study, data was collected through questionnaire which was analysed using Pearson Product Moment Correlation (PPMC) and T-test analysis. The results showed that when an individual perceived his career to be progressing, his turnover intention would decrease and vice versa.

A research was conducted by Shukla & Sinha (2013) with the objective of identifying the key factors for employees' turnover and the extent to which the identified factors influenced employees' turnover. A self developed questionnaire, measured on a Likert Scale was used to collect data from 44 employees of Indian urban and semi-urban banks. Quantitative research design was used. The data analysis was carried out by calculating mean, standard deviation and linear correlation. The difference between means of variable was estimated by using t-test. The findings of the study state that the Work Environment, Job Stress, Compensation (Salary), Employee relationship with management, Career Growth are the factors which significantly influenced employee turnover in banking sector.

All these studies indicate that employees' intention to job change is a strong reflection of job dissatisfaction. Compensation, job stress, working environment and career growth are the major factors influencing employees' intention to job change.

OBJECTIVES OF THE STUDY

The study encompasses an analysis of different factors that influence employees' intention to job change from public sector to private sector banks and vice-versa. This would provide vital inputs to assist the banks in designing their HR policies to attract talent and to avoid the turnover. The study is conducted with the following objectives:

1. To analyse the factors influencing the employees' intention to job change from public sector to private sector banks and vice versa.
2. To analyse the factors which restrict the employees from job change from private to public sector banks and vice versa.

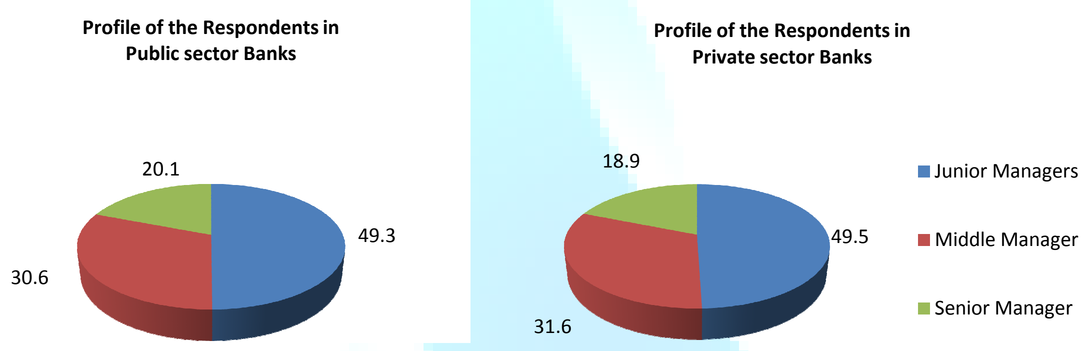
METHODOLOGY

The study is based on survey method. The data for the study has been collected through two sources - Primary Data and Secondary Data. Convenience sampling was administered in the study. The responses to the questions prepared for the purpose were sought from a sample of 800 managers in the selected banks. The responses in respect of 753 respondents could be finally approved for the analysis. For the study, participants were selected from the three management levels - senior, middle and junior in the ratio of 2:3:5 that are numbering 80, 120 and 200 respectively in each type of bank.

RESULTS & DISCUSSION

For the better understanding of the study, the profile of the respondents in terms of management level has been provided in figure 1.

FIGURE 1: PROFILE OF THE RESPONDENTS



(The figures are the percentage values of the different categories in the total sample size)

The table 1 depicts the opinion of the employees working in the private sector banks on joining the public sector banks. The tables 2 and 3 detail the reasons given by the private sector bank employees to join the public sector banks in respect of employees at all levels taken together and at different management levels respectively. The tables 4 and 5 depict the reasons given by the private sector bank employees for not joining the public sector banks in respect of employees at all levels and at different management levels respectively.

TABLE 1 - OPINION ON JOINING THE PUBLIC SECTOR BANKS BY THE EMPLOYEES WORKING IN THE PRIVATE SECTOR BANKS (SAMPLE SIZE, N=370)

Want to join public sector banks	Number	Percentage
Yes	59	15.9%
No	311	84.1%

TABLE 2 - REASONS GIVEN BY THE PRIVATE SECTOR BANK EMPLOYEES TO JOIN THE PUBLIC SECTOR BANKS (N=59)

Reasons	Number*	Percentage
1.Job Security	**56**	**94.9%**
2. Less work stress	**38**	**64.4%**
3. Decision making power	**21**	**35.6%**
4. less no. Of working hours	**7**	**11.9%**

(* indicates the number of reasons given by the respondents as multiple reasons were allowed)

TABLE 3 - REASONS GIVEN BY THE PRIVATE SECTOR BANK EMPLOYEES AT DIFFERENT MANAGEMENT LEVELS TO JOIN THE PUBLIC SECTOR BANK (N=59)

Reasons	Junior Mgmt level (N=28)	Middle Mgmt level (N=28)	Senior Mgmt level (N=3)
1.Job Security	28 (100.0)	28 (100.0)	0 (0.0)
2. Less work stress	24 (85.7)	14 (50.0)	0 (0.0)
3. Decision making power	4 (14.3)	14 (50.0)	3 (100)
4. less no. Of working hours	3 (12.5)	4 (14.3)	0 (0.0)

Note: Figures in parenthesis are in percentage.

TABLE 4 - REASONS GIVEN BY THE PRIVATE SECTOR BANK EMPLOYEES FOR NOT JOINING THE PUBLIC SECTOR BANK (N=311)

Reasons	Number*	Percentage
1.Better compensation policy	**273**	**87.8%**
2. Career growth	**297**	**95.5%**
3. Better working environment	**204**	**65.6%**
4. Better geographic location	**45**	**14.5%**

(* indicates the number of reasons given by the respondents as multiple reasons were allowed)

TABLE 5 - REASONS GIVEN BY THE PRIVATE SECTOR BANK EMPLOYEES AT DIFFERENT MANAGEMENT LEVELS FOR NOT JOINING THE PUBLIC SECTOR BANK (N=311)

Reasons	Junior Mgmt level (N=111)	Middle Mgmt level (N=107)	Senior Mgmt level (N=93)
1.Better compensation policy	104 (93.8)	100 (93.5)	69 (74.1)
2. Career growth	111 (100.0)	103 (96.8)	83 (88.9)
3. Better working environment	87 (78.1)	55 (51.6)	62 (66.7)
4. Better geographic location	7 (6.3)	17 (16.1)	21 (22.2)

Note: Figures in parenthesis are in percentage.

It is observed from the table 1 that the percentage of employees who want to shift from private sector to public sector is very less that is 16%. Subsequent tables indicate that job security followed by the less work stress are the two most important reasons given by the employees for their inclination towards public sector banks. However the factors which restrict them from job change to public sector are career growth and better compensation in the private sector banks. The better working environment is also significant reason for their decision to stay with private sector banks. On analyzing the reasons influencing job change at different management levels, it has been found that at junior and middle management level, employees of private sector banks want to change job to public sector banks for job security and less work stress. However middle and senior management level employees of private sector banks give significant weightage to decision making power in public sector banks as there is a well defined system in the public sector banks for decision making process.

The study has also examined the factors influencing the employees' retention in private banks. At junior and middle levels, better compensation policy, career growth and better working environment have been rated as preferred factors. Although the employees at senior level also consider the better geographic location as an important factor which encourages them to stay with private sector banks.

Similarly, the data obtained from the public sector bank employees have been tabulated and analysed below. The table 6 depicts the opinion of the employees working in the public sector banks on joining the private sector banks. The tables 7 and 8 detail the reasons given by the public sector bank employees to join the private sector banks at all levels and at different management levels respectively. The tables 9 and 10 depict the reasons given by the public sector bank employees for not joining the private sector banks in respect of employees at all levels and at different management levels respectively.

TABLE 6 - OPINION ON JOINING THE PRIVATE SECTOR BANKS BY THE EMPLOYEES WORKING IN THE PUBLIC SECTOR BANKS (N=383)

Joining	Number	Percentage
Yes	187	48.8%
No	196	51.2%

TABLE 7 - REASONS GIVEN BY THE PUBLIC SECTOR BANK EMPLOYEES WHO WANT TO JOIN THE PRIVATE SECTOR BANK (N=187)

Reasons	Number*	Percentage
1.Better compensation policy	148	79.1%
2. Career growth	137	73.3%
3. Better working environment	81	43.3%
4. Better geographic location	64	34.2%

(* indicates the number of reasons given by the respondents as multiple reasons were allowed).

TABLE 8 - REASONS GIVEN BY THE PUBLIC SECTOR BANK EMPLOYEES AT DIFFERENT MANAGEMENT LEVELS TO JOIN THE PRIVATE SECTOR BANKS (N=187)

Reasons	Junior Mgmt level (N=67)	Middle Mgmt level (N=67)	Senior Mgmt level (N=53)
1.Better compensation policy	50 (75.0)	56 (83.3)	42 (78.9)
2. Career growth	50 (75.0)	53 (79.2)	34 (63.2)
3. Better working environment	25 (37.5)	36 (54.2)	20 (36.8)
4. Better geographic location	20 (29.2)	33 (50.0)	11 (21.1)

Note: Figures in parenthesis are in percentage.

TABLE 9 - REASONS GIVEN BY THE PUBLIC SECTOR BANK EMPLOYEES FOR NOT JOINING PRIVATE SECTOR BANKS (N=196)

Reasons	Number*	Percentage
1.Job Security	179	91.3%
2. Less work stress	56	28.6%
3. Decision making power	67	34.2%
4. less no. Of working hours	25	12.8%

(* indicates the number of reasons given by the respondents as multiple reasons were allowed).

TABLE 10 - REASONS GIVEN BY THE PUBLIC SECTOR BANK EMPLOYEES AT DIFFERENT MANAGEMENT LEVELS FOR NOT JOINING THE PRIVATE SECTOR BANK (N=196)

Reasons	Junior Mgmt level (N=109)	Middle Mgmt level (N=42)	Senior Mgmt level (N=45)
1.Job Security	106 (97.4)	36 (86.7)	37 (81.3)
2. Less work stress	42 (38.5)	14 (33.3)	0 (0.0)
3. Decision making power	31 (28.2)	14 (33.3)	22 (50.0)
4. less no. Of working hours	11 (10.3)	8 (20.0)	6 (12.5)

Note: Figures in parenthesis are in percentage.

The results of tables 6 and 7 indicate that almost 50% of the employees working in the public sector banks want to join private sector banks. The factors that attract them most to the private sector are better compensation package and career growth. Also better working environment is one of the cited reasons. However the factors which restrict them from changing job from public sector bank to private sector is job security. It is also observed from the tables 7 and 8 that although all the factors influence the employees of public sector banks to change job to private sector banks but better compensation package and career growth are the two most dominant reasons at all managerial levels. The study also reveals that job security is the most important retention tool at all managerial levels in public sector banks. However the junior and middle management level employees of public sector banks also give weigtage to less work stress and decision making power for not joining the private sector banks. The senior management employees have also given decision making in public sector as an important reason for not joining private sector banks.

In brief it can be concluded that not many people from private sector banks want to join public sector banks whereas a significant proportion of public sector employees are willing to join private sector banks. This reflects upon the effectiveness of compensation policy in private and public sector banks in attracting and retaining the talent. While compensation and career growth are the key factors which either attract the public sector employees towards private sector or retain the private sector employees, job security, though significant, is not a predominant factor.

The present study has lead to the finding that the employees of private sector banks are not very much inclined to join the public sector. The factors which restrict them from job change to public sector are career growth, better compensation and better working environment in the private sector banks. This is applicable for all the managerial levels. Although a small proportion of the private sector bank employees want to switch to public sector banks, job security followed by the less work stress are the two most important reasons cited by the junior management employees, the middle and senior management level employees give significant weightage to decision making power in public sector banks.

SUGGESSTIONS

It can be safely inferred that the intention of an employee to change job is a strong reflection of low level of satisfaction among the employees. Therefore the researcher offers to make some recommendations for the public sector in the banking industry which might be useful in addressing the above mentioned issues.

1. The industry level compensation agreements make it difficult for public sector banks to retain and motivate the talented employees. This study recommends that public sector banks should be given more freedom in deciding their own HR policies rather than industry level agreement. Autonomy needs to be given to public sector banks to decide on their compensation policies including compensation levels, structure and delivery. These policies should be designed in such a manner that they can cater to market forces. Simply revising the compensation levels and structure and freezing it for a fixed period will not serve the purpose. These policies should continuously respond to the changes in the environment.
2. The employees of the public sector banks feel that although various types of allowances are given to them but the quantum of these allowances is not commensurate with the work performed by them. Public sector banks should design the compensation structure in such manner that the allowances match with the job requirements of the employees.
3. The banks should formulate Employee Stock Option Plan (ESOP) for linking the employee growth with the organisational growth. In order to see that banks are able to operate ESOP schemes, the Government should encourage banks to get listed on the stock exchange.
4. In public sector banks the issue is not limited to low compensation levels. The incremental growth is also slow and not many people are willing to wait for long time when other sectors are offering better initial as well as incremental packages. The public sector banks while framing their compensation policies should not only benchmark their compensation levels with the banking industry but they should observe the changes in the economy at large including other government establishments which have the potential to attract the same talent pool.
5. The existing pay structures for various scales in public sector banks are not attractive enough for employees to seek promotion and shoulder higher responsibilities. This results in lack of enthusiasm among most employees towards promotions, resulting in an attitudinal stagnation. Therefore it is suggested to differentiate the pay structure between scales, as to attract employees to appear eagerly for the promotion process, both for career advancement as well as for substantial financial benefits.
6. There is a strong case for provision of better working environment for the employees of banking industry, where their work responsibilities involve financial implications. Therefore good working environment in terms of accelerated promotion, foreign postings, deputation to subsidiaries (for which period the higher pay at subsidiaries can be made applicable), assignment to a high-quality training programme, a paid holiday with family, etc should be provided to employees of public sector banks to enhance their motivation level.
7. In public sector banks, the rural service undergone by the officers does not entitle them for any monetary incentive. As a consequence, there is reluctance on part of the officers to go to the rural branches, especially the branches located in far flung, remote areas. It is very essential to incentivise the officers posted to rural branches. A special allowance should be introduced in the Banking Industry for the officers working in the rural branches identified. This will motivate the officers working in rural branches and help in achieving the socio-economic objective of the government.

The results of this study indicate that the banks, especially in public sector, should improve their compensation policies to attract, retain and motivate their talent pool. This study can help the decision makers in public sector banks to focus on major factors while determining their employees' compensation and thus working to meet the organizational objectives and goals. Such information should also help human resource management of private sector in devising appropriate human resource strategies for attracting, retaining and motivating the talent pool.

LIMITATIONS OF STUDY

1. The employees of private banks were a bit reluctant in participating compensation related survey.
2. This was very troublesome to approach the senior managers of public sector and private banks due to their busy schedule of meetings and frequent out station tour programmes.
3. The top management of both public and private banks were not approached for questionnaire survey.
4. The rural branches are not included in the survey that may influence the findings.
5. The subjective perception of the individual may influence the findings.

SCOPE FOR FUTURE RESEARCH

For future research more variable can be added e.g. personal factors, other organizational factors etc., which may influence the employees' intention to change can also be added to the present study. The study can be made more detailed for the banking industry by including more demographic factors e.g. perception of the employees working in urban and rural areas, analysis of age and experience factors within different management levels etc. Other than survey, more methods of data collection e.g. observation method and personal interview method can be included to gain further insight into the subject. The results of the study can be extended to other sectors of the economy involving private and public sector organisations.

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HIGHER EDUCATION IN INDIA: CONFRONTING THE CHALLENGE OF CHANGE

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ABSTRACT

Higher education in India is undergoing rapid changes. The challenges are multifaceted and multidimensional. The state of Indian higher education has always been in the dock, more specifically for its quality. India still lacks in terms of right faculty, right infrastructure, meaningful research and development projects and equitable reach and equal access to higher education. Globalization and privatization have imposed new challenges, whereas the nation is still entangled in solving the basic issues of accessibility to higher education for all. In the wake of the transition from elitist to mass education, universities and colleges are also under tremendous pressure to enhance access and equity on the one hand, and to maintain high standards of quality and excellence, on the other. Today the notion of equity not only implies greater access to higher education, but also opportunities for progress. The notions of equity and access must go beyond minority to diversity, from caste to gender. My paper makes an attempt to examine the recent changes and reforms proposed and their possible effects on the health of our higher education.

KEYWORDS
Liberalisation, education, reforms, equity, access, excellence.

INTRODUCTION

Our university system is, in many parts, in a state of disrepair... I am concerned that in many states university appointments, including that of vice-chancellors, have been politicised and have become subject to caste and communal considerations, there are complaints of favouritism and corruption. . In almost half the districts in the country, higher education enrolments are abysmally low, almost two-third of our universities and 90 per cent of our colleges are rated as below average on quality parameters.

Prime Minister Manmohan Singh in 2007

At the dawn of the 21st century, when India is confronted with the reality of collapsing past, and in the process, attempts to carve out a new paradigm for future, we find it facing both quantitative and qualitative changes – quantitative in terms of economic growth and technological innovations, and qualitative in terms of an evolving society governed by altogether different values and ethos. The processes of liberalization and technology have not only led to economic integration of markets at the global level but have caused the compression of the 'economic' and 'learning space' also. In the contemporary era of knowledge-driven economy, both formal and informal education has to play an increasingly vital role in promoting economic solidarity, social cohesion, individual growth, sustainable development, and a culture of peace and world citizenship. It has opened up new challenges and opportunities for higher education sector in India to keep pace with the fast changing reality and shifting priorities.

DISCUSSION

Kapil Sibal, former HRD Minister, was reported to have said in an interview that "what Manmohan Singh did to the economy in 1991 must be done to the education sector in 2009 (Interview, *India Today*)". He also underlined the fact that the implementation of reforms in the education sector cannot wait any longer. With this objective, he is feverishly pushing ahead with a number of reforms, all of which share a common objective, which is to expedite neo-liberal reforms in higher and technical education. Having introduced the thematic background for reforms, he came out with a long list of reforms ranging from the abolition of examination system for class 10th to the establishment of foreign universities. However it must be mentioned that these hasty initiatives envisaged and initiated by the Minister were totally unilateral and arbitrary in nature as the principles of federal polity and participatory governance were undermined and ignored completely. Along with this initiative of the HRD Minister came various steps initiated by UGC and CBSE, like the introduction of semester system, grading system and various other measures.

There seems to be a visible shift in the mode of implementation of the neo-liberal agenda. Whereas the reforms were openly advocated as the only viable alternative in the nineties, the new initiatives are smartly veiled in content and form. In the nineties the privatisation of higher education was sought to be shamelessly justified by classifying higher education as a non-merit good under the dictates of GATS regime as contrasted with primary education classified as merit good. Ban of appointments of permanent faculty was justified on the basis of the convenient but spurious argument that tenure (temporary) appointment will bring about more accountability and improvement in quality. However the new rhetoric favours permanent faculty, better funding and establishment of new institutions for better access. Dismissing competitive globalisation as outdated, a new mantra of collaborative engagement through Public-Private-Partnership (PPP) model is envisaged. It is another matter that this new venture is nothing but a subtle way for private appropriation of public funds, as seems to be the case in Haryana. Handing over Govt. schools to the private agencies in Haryana appears to be nothing but a kind of disinvestment in education, not for the benefit of the people, but for the benefit of the corporate sector.

The XI plan for higher and technical education (HTE) gives an apt illustration of this strategy. Prime Minister called the 11th plan as a National Education Policy, aimed at focussing on ensuring equity, excellence and access in the field of higher education. The plan proposed to increase public spending on education quite substantially. The allocation were raised nine fold from Rs. 9600 crore in the 9th plan to Rs. 84963 crore. Out of this amount Rs. 30682 crore was set aside for new initiatives like the opening up of 16 central universities, 14 worls class central universities, 370 colleges, 8 IITs, 7 IIMs, 10 NITs, 20 IIITs, 5 IISERs, 2 SPAs and 50 centres for training and research in frontier areas. All these new ventures required an estimated amount of Rs. 2,52,260/ crore for implementation as per the estimates of the Planning Commission. It indicated a gap of Rs. 2,52,260/ crore between the outlay and the estimated cost of implementation. There was another proposal of the Planning Commission which said that an amount of Rs. 1,00,000/ crore would be further required for setting up 200 more universities in the country during the 11th plan. All these figures mentioned above simply mean that for all these noble initiatives of ensuring equity, excellence and access, only 8% of the total amount required will be contributed by the public sector. The remaining 92% will have to be contributed by private sector.

In the light of this background, the Planning Commission suggested to provide necessary enabling framework to attract private investment and PPP in HTE sector was proposed as the appropriate strategy for its implementation of expansion. This is strange concept of mixing business with charity. What the Planning Commission proposed to do was not only de-facto commercialisation of HTE institutions but also privatisation of public assets of existing public institutions. It shows that the increased allocations in HTE are nothing but a clever strategy to lure private entrepreneurs into HTE and give them complete control over these institutions. Today there is a deliberate myth created around not-for–profit PPP just to camouflage the discredited self-financing mode and to save them from the legal embargo against profiteering. The central and many state governments are in the process of taking many initiatives to operationalize this PPP model through various administrative or legislative measures. One of the basic models of PPP is the one which has been operating successfully in India in the form of Aided colleges and schools where the private sector invests in infrastructure and runs the operations and management of the institutions as per the rules and regulation of the govt. But the govt., in its over enthusiasm for privatisation, has adopted another model of PPP in which private sector invests in infrastructure and runs operations and management, and the responsibility of the government is to pay the private investor for the specified services. In response, the Indian system of higher education has unleashed a major program of reforms. Many of these reforms can be traced back to a policy template provided by the National

Knowledge Commission (NKC) set up by the Prime Minister in 2005, and chaired by a diasporic Indian technocrat, Sam Pitroda. Based on what the NKC saw as 'global imperatives', many of its recommendations for reform in higher education drew heavily on neo-liberal policy ideas circulating around the world (Srivanstva, 2007). It maintained, for example, that, 'to respond to the global challenges more strongly than ever before, India today needs a knowledge-oriented paradigm of development to give the country a competitive advantage in all fields of knowledge' (NKC 2006: 11). Some of these measures initiated by the govt. to pursue this path of neo- liberalisation are:

1) Constitution of National Commission for Higher Education and Research (NCHER)
2) Bill on Foreign University and off-campus centres of foreign universities
3) Bill on prohibition of unfair practices in unaided institutions
4) Proposal for differential pay scales to teachers
5) Mandatory accreditation of institutions by NAAC

1) Constitutions of NCHER: The central govt. has been trying feverishly to introduce a bill in Parliament for the constitution of NCHER which will replace all existing apex bodies like UGC, AICTE, MCI and BCI. Yash Pal Committee recommendations for the constitution of NCHER are based on the premises of academic autonomy and decentralisation of decision making process at every level – university, college and individual. But ironically what is proposed in the form of NCHER is nothing but a supreme body with overarching powers and responsibilities. The proposed NCHER is entrusted with responsibilities such as national policy framework, academic innovation and regulation, coordination and financing of higher education. In a country like India this kind of attempt at universality will surely be detrimental to the possibility of diversity and innovation which are the essentials for quality education. There is no clear provision for mandatory consultations at any level. In my view what is required to be proposed is a body with responsibilities restricted only to the area of policy advice, academic innovation and coordination of all other existing regulatory bodies. The issues like financing and coordination of the universities and colleges should be left to the existing bodies such as UGC, MCI and AICTE. There should be a mandatory mechanism for consultation with the states, university and teachers' representatives in the formulation of policies. All such recommendation should be sent to the respective governments or universities for consideration and implementation through proper democratic process.

2) Bill on foreign universities: Statistics show that there is a huge gap between the demand and supply. The HRD ministry thinks that the foreign institutions could fill this gap to a large extent. But realistically speaking, the foreign institutions cannot fill this gap. The govt. has been trying to pass a bill in Parliament for setting up of foreign universities and their off-campus centres in the country even in the face of a strong resistance from teachers' bodies. Due to the lack of numbers in Parliament it has failed to get the bill passed so far. It seems that the govt. has not learnt its lessons from earlier mistakes of setting up private deemed universities. Even at that point the argument was that the private universities will help in improving the three basic parameters – quality, equity and access. However our experience of the last two decades proves to the contrary, with the result that now Yash Pal Committee has called for a review of the system. Ironically the same committee has extended a new proposal of setting up of foreign universities within the framework of strict regulations (Yashpal committee, 40). This kind of proposition is absolutely misplaced. If any foreign university enters India, it will not be altruistic purposes or for the love of India. It will entirely be a mercenary pursuit intended for profiteering alone. Improvement of quality has to come from within, through an internal process. Collaborations and coordination with foreign universities in academic field can definitely be a useful exercise. Hence instead of opening up our education sector for foreign players, what is needed is the active collaboration between Indian and foreign universities in the field of academics and research. This kind of mutual interaction will create possibilities for our young minds to get and share ideas across cultures, and benefit in the process.

3) Bill on prohibition of unfair practices and inclusive higher education: Bill on prohibition of unfair practices and inclusive higher education has already been passed by the Parliament. A Central umbrella legislation empowering Central and State governments to regulate admission, fees and content of education in private professional educational institutions had become necessary to offset the judgment of the Supreme Court in TMA Pai Foundation case in 2002, which had set aside the provisions made for common entrance test and differential fees through the Unnikrishnan judgment in 1993. In response to the large public demand for a comprehensive legislation to restore the dimensions of equity and excellence in private professional education, attempts were made first in 2005 by MHRD to enact a central legislation for regulating private educational institutions. The second draft was prepared by a committee appointed by UGC in 2007. However the provisions of the bill seek to legitimise corporatisation and commercialisation of higher education by incorporating the vocabulary and ethics of business in the administration of educational institutions. The bill appears to have created an impression that the Central government has positively responded to the long standing public demand for stringent regulations to rein in private professional educational institutions. The provisions in the bill for awarding a maximum of three years imprisonment and fine of Rs.50 lakhs for charging capitation fee and issuing misleading advertisements or wilfully giving wrong information in the prospectus are certainly laudable. But any presumption that the bill would ensure social and academic accountability of private professional educational institutions seems totally unwarranted. "Transparency is an essential, but not adequate condition for equity and excellence. The Bill would ensure transparency, but not social and academic accountability in the functioning of educational institutions (Shiv kumar, *The Hindu*)". By identifying transparency as the only mandatory good practice, the bill seeks to equate educational practices with business practices. Profiteering is justified, provided the account books are open. The bill overcomes the restrictions on commercialisation of education, which law courts have been consistently upholding. TMA Pai judgment, even with its reformist bent, had ruled that profiteering in education was unconstitutional. The new bill only recognizes corporate responsibilities and corporate ethics. Imparting education would cease to be charitable activity, even in name, and become a business activity, sanctioned by law, with the enactment of the bill. The restrictive interpretation of unfair practices would keep the vast majority of academic and social offences out of the ambit of the present bill.

Under the stated position of the bill to ensure transparency in the functioning of educational institutions is hidden the unstated objective. There are no provisions to regulate the three vital concerns of students, namely admission, fees and content of courses. Through its studied silence on these aspects, the bill seeks to limit social and academic accountability of educational institutions to merely ensuring transparency in the process of admission and levy of fees. The larger issues of social justice and excellence in education are totally ignored. Even the issue of exploitation of teachers at the hands of the managements has not been adequately addressed.

4) **Differential pay scales for teachers:** One of the proposals discussed at the meeting of the Central Advisory Board of Education held on 31st Aug. 2009 was to discuss and suggest a structural framework of differential pay scales to teachers of central universities. This was done under the pretext of luring Indian Scholars working abroad back with a hefty pay packages and privileges. However this nefarious intent could not succeed as in the present context of falling Indian currency and the lack of ideal conditions in Indian universities for scholarly pursuits will always deter them from taking a reverse migration. On the contrary this provision is likely to be exploited by mediocre scholars to make their entry into our world class institutions. In addition, this kind of regressive policy of differential salary would encourage greater disparities and frustration, and would spoil the atmosphere of academic freedom and security so necessary for teachers to grow and excel intellectually. Incentives for a few also means disincentive for others. The creation of two streams of teachers – one privileged and the other less privileged – will undermine the collegiality and atmosphere of collaborative learning. What is required is a decent and secure living for all the teachers so as to attract and retain talent in the education system.

5) Mandatory Accreditation of institution: The Higher Education sector intends to ensure the quality of the educational process with the help of accreditation agencies established for the purpose. The main agency which accredits universities and colleges in general education is the National Assessment and Accreditation Council (NAAC) established by the UGC in 1994, whereas a similar function is done for technical education by the National Board of Accreditation (NBA) set up by AICTE in 1994, and for agricultural education by the Accreditation Board (AB) set up by ICAR in 1996. NAAC proposes to introduce the India Education Index (IEI) for ranking institutes based on academic, research performance and other parameters. The proposal for mandatory accreditation of all educational institutions is nothing but a blind imitation of the American model. The govt. has constantly issued instructions to the institutions to go for the mandatory inspection of the committee, linking it to the grant of funds by govt. agencies. However the fact is that the real problem is not that the institutions are not accredited. Real issue is the lack of proper infra-structure and trained faculty which hinders the element of quality in our educational institutions. More than 75% of the higher education institutions – public and private both – fall way below the standards set by NAAC and leave much to be desired. There has been no visible improvement in the quality of education even in the institutions accredited by NAAC.

The immediate need is to focus on improving the infra-structure, physical and human, and then think of anything like accreditation. To begin with, we can start with a mandatory disclosure of norms and, then, try to improve facilities in institutions by giving grants and human resources. There is also a considerable difference of opinion regarding the practices and procedures adopted by NAAC. There is no standard and effective procedure adopted keeping in view the demographic and socio-cultural factors that play it out in the institutions. The practice of the past few years has also brought out the arbitrariness and lop-sidedness in the assessment of institutions. Corruption, as a necessary norm of Indian culture, too plays a part in one form or the other, overtly or covertly. The registration of private agencies for the purpose of accreditation and the mandatory nature of accreditation will only bring in more corrupt practices in the system which is already reeling under the stress of mal-practices especially in the technical and medical streams. The mandatory accreditation will only accentuate existing inequalities and create a negative complex of inferiority in the smaller rural institutions. In my view, the affiliating universities could be entrusted with the task of periodic assessment and UGC could do the same in case of universities. The basic intent should be to ensure improvement of the existing system, not to deter them on the pretext of inadequacies.

CONCLUSION

In this paper, I have argued that, faced with a growing policy anxiety in India about the risks it confronts in view of the contemporary stream of reformative changes envisaged by the govt. in higher education. It is true that to survive in the fiercely competitive global knowledge economy our universities and colleges need to be re-engineered. The Indian Government has begun to view these reforms as inextricably linked to the requirements of the global economy and the shifting architecture of global higher education. The Government has therefore greatly increased its level of investment in higher education. As overdue and welcome as the initiative is, I have argued that while additional resources are clearly necessary to reform Indian higher education, they are not sufficient. This is so because the problems of the Indian system of higher education are deep, and relate to a range of dilemmas arising out of the historical, social, cultural and economic contexts. I have suggested that unless these dilemmas are squarely addressed, the Indian system of higher education will continue to struggle, producing isolated pockets of academic excellence but leaving the nation as a whole poorly served. What is required is a well thought out, truly democratic in nature and indigenous in content policy framework to renovate and rejuvenate our education system.

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A TECHNIQUE WITH DIFFERENTIATED SAMPLING IN ANOMALY DETECTION SYSTEM FOR OUTLIER IDENTIFICATION

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ABSTRACT

Anomaly detection is the process of identifying unusual behavior and also a small group of instances that deviate remarkably from the existing data. The real world application of anomaly detection includes intrusion or credit card fraud detection that requires a most efficient framework for identifying the deviated data instances. The technique called principal component analysis (PCA) which require large amount of computation memory requirements and therefore it is not suitable for large scale data like online applications. Therefore a new technique called online oversampling principal component analysis (osPCA) algorithm along with online updating technique is used for detecting the existence of outliers from a large number of data. When oversampling a data instance the online updating technique enables the osPCA to update the principle direction effectively without solving the eigenvalue decomposition. The feasibility of osPCA provides more efficient and accurate results. The work extends by detecting outliers from high dimensional dataset using some clustering techniques with lesser time consumption.

KEYWORDS

Anomaly detection, online updating, oversampling principal component analysis, least square, KDD dataset.

1. INTRODUCTION

Anomaly detection also called as outlier detection is a process of searching of an item that does not conform to an expected pattern. These patterns that are detected are generally called as anomalies. These kinds of anomalies are translated to critical and actionable information in several application domains. Practically anomalies are patterns in data that do not match a well defined notion of normal behavior. The major task in data mining is the difficulty of detecting the outliers from a large set of data objects and this motivates multiple number of anomaly detection techniques [1], [2]. Anomaly detection finds its use in wide variety of applications that lead to illegal or abnormal behavior, such as credit card fraud detection, homeland security, and network intrusion detection, and insurance fraud, medical diagnosis, marketing, or customer segmentation, intrusion detection for cyber-security [4]. These real world applications contain only a limited amount of labeled data, how to detect anomaly of unseen events draws attention from the researchers in machine learning and data mining areas.

The existences of anomalies are often determined from the amount of deviated data. The presence of such kind of deviated data immensely affects the distribution of data. The calculation of least squares and data mean associated with the linear regression model is both sensitive to outliers. In that event, anomaly detection needs to solve an unsupervised yet unbalanced data learning problem. The most frequently cited sentence for the meaning of outliers is "one person's noise is another person's signal". Many approaches are framed for detecting outliers from a large scale of data as well as high dimensional data yet most of the known methods are least theoretically applicable to high dimensional data.

A well known framework called Principal component analysis (PCA) along with LOO (leave one out) strategy calculates effect of outlierness from the derived principal direction of the data set without the presence of target instance and that of the original data set. However in the real-world anomaly detection problems dealing with large amount of data, adding or removing a target data instance produces only a negligible difference in the resulting eigenvectors and it is not elementary to apply the (decremental PCA (dPCA) technique for detecting the anomalies [3], [5]. The LOO anomaly detection procedure with an oversampling strategy will strikingly increase the computational load as well as the storage capacity. Henceforth, the problem of detecting outliers in machine learning, data mining literature lose their algorithmic effectiveness for high dimensional data. Eventhough a well known power method is able to produce approximated PCA solutions; it cannot be extended easily to applications with streaming of data. For this reason an online updating technique along with osPCA is framed, which allows to efficiently calculate the approximated dominant eigen-vector without storing the entire covariance matrix. In order to increase the speed of the system a clustering technique called hierarchical clustering is used in accordance with osPCA online updating technique. Correlated to other anomaly detection methods like ABOD, PCA with LOO strategy, osPCA and power methods the proposed framework incomparably reduces the imperative computational costs and memory requirements. And thence the proposed method is eminently desirable in online, streaming data, or large-scale problems. The proposed clustering technique along with the online updating osPCA is computationally preferable to precedent anomaly detection methodologies.

2. RELATED WORKS

Previously many number of outlier detection techniques have been proposed. One among those is the well known PCA method. This PCA is a renowned unsupervised dimension reduction method to determine the principal directions of the data distribution. In LOO strategy the principle direction of the data set can be calculated without the presence of target instance and that of the original data set by adding or removing the abnormal (or normal) data instance. It is examined that removing (or adding) an abnormal data will produce a greater difference in the principal direction when compared to same operation performed with the normal data [3], [5]. In such a way, the outlierness can be discovered by the variation of the resulting principal directions.

Though PCA is a well known dimension reduction method, it is not suitable for real-world an anomaly detection problem which deals with a large amount of a data. Therefore, adding or removing a target instance will create only a negligible difference in the resulting eigenvectors. The PCA method retains characteristics of the data set which contributes most of its variance by handling with the lower-order principal components. This method is sensitive to outliers, and the main data structure is represented with the help of few principal components [3]. In these techniques, the presence of an outlier data instance is determined by many processes, but one of those processes is to determine the corresponding principal direction of the data set. Thus, whenever an outlier data instance is introduced, accordingly the principal direction will create corresponding angle changes. That is, adding or removing an outlier data or a deviated data instance will cause larger effect on these principal directions.

Consequently, the variation of principle directions while removing or adding an instance is discovered. Accordingly, the first principal direction is greatly affected whenever an outlier or a deviated data instance is added or removed from the existing data set. In such a case the first principal direction is affected badly. Therefore, the initial principal direction is varied and that forms a large angle between itself and the old one. Therefore, in such kind of situations the initial principal direction will not get affected and it only form an extremely smaller angle between the old initial principal direction and the new one if the normal data instance is removed from its original data set. By means of this observation the LOO procedure is used in each and every individual point by adding or removing (with or without) effect. The same procedure is used with the LOO technique but with the incremental strategy. This methodology enables adding a data instance to determine the possible variations of the principal directions from the above mentioned strategies it was found that the principal directions are significantly affected with the removal of an outlier data instance while this variation of the principal direction will be much smaller with the removal of a normal data instance. Conversely adding an outlier data instance will also cause significantly larger influence on the principal directions while the variation of the principal direction will be notably smaller with adding a normal data instance. However, it is not applicable for detecting the presence of outliers from a large scale data, since in case of a large scale data or streaming data removing a single outlier will not create such a difference in the resulting principal direction.

To address the above problem another technique called oversampling PCA (osPCA) is proposed [3]. This is because, the effect of "with or without" a specified data instance might be diminished when the size of the data is large. Thence to overcome the problem, this oversampling strategy employs duplicating the target instance on such an oversampled data, and this makes detecting of outliers to be much easier.

In the PCA scheme for anomaly detection, n PCA analysis for a data set with n data instances in a p-dimensional space has to be performed, despite it is computationally infeasible to compute. In the practical anomaly detection problems like real world anomaly detection problems this may not be so easy to discover and monitor the variation of the principal directions caused by the presence of a single outlier. Since in a real-world data set, the size of the data is typically large and thence detecting the presence of outlier from such a large amount of data is really a tedious task.

The power method for osPCA is a simple iterative algorithm which does not need to compute matrix decomposition. This method requires only the matrix multiplications and it does not bother about decomposition of matrix that is formed. Due to these reasons the computation cost can be mitigated in calculating the computational cost. But this method is computationally expensive and also it cannot be applied for large-scale anomaly detection techniques. In order to reduce the computational cost and the memory requirements of the anomaly detection system a new methodology called osPCA with online updating technique was proposed. Though the cost of computation is not so expensive as well it does not require large amount of memory the time taken to train the entire set of real world data is tremendous. This training delays the other activities of the system and therefore a new framework has to be proposed in order to reduce the system response time and the performance time. However the computational complexity and the memory requirements for the online osPCA method is very low when compared to other methods including osPCA power method.

It is undesirable that the above described methods are typically implemented in batch mode. Therefore it is not so elementary to perform the anomaly detection problems with online data (large-scale data) or streaming data.

3. PROPOSED WORK

With regards to the above mentioned methodologies some of the techniques for enforcing anomaly detection is mentioned below

A. DATA TRAINING

The data training set is a set of data used in different areas of information science. The main objective of training the data set is to conceive a potentially predicated relationship. While considering a real time KDD (knowledge d discovery in databases) which consists of a large amount of data instances. This data training methodology includes training the undefined and unstructured data set in such a way that these data sets are arranged accordingly in the database. The KDD data set or any real time can be used for this purpose. The most dominant application which requires detection in online updating strategies is credit card fraud detection, fault detection, detection in cyber security. Many of the anomaly detection techniques need a set of completely pure normal data set to train the model. However, these kind of anomaly detection techniques implicitly assumes that these anomalies can also be treated as patterns that are not observed before.

By this reason, an outlier may be defined as the data point which is highly unique from the rest of the data instances, based on some predefined measure. And therefore, several outlier detection schemes are proposed in order to verify how efficiently the problem of anomaly detection can be pledged.

B. CLEANING DATA

The training data set can be selected based on the user assumption in case of handling a real-world data instances. The main goal of data cleaning phase is to identify the suspicious outliers. A set of data instances from the original data set after the data training process is taken as the predefined input. These data sets may be contaminated due to noise, incorrect data labeling etc., but they become an error free data due to training of data. Using LOO strategy the absolute value of cosine similarity is determined to measure the difference of the principle direction and obtain the suspicious outlier scores. When the suspicious outlier score is higher, it implies the higher probability of being an outlier data instance. The ranking for all the data instances can be made after calculating the suspicious outlier scores for each data instances. The over-sampling principal component analysis outlier detection algorithm is used for cleaning the data. The data cleaning process aims to filter out the most deviated data using osPCA. This process is done offline before performing the online anomaly detection process. The percentage of training normal data instance to be disregarded can be determined by the user. While performing the data cleaning process the smallest score of outlierness is used which of the remaining training data instances as the threshold for outlier detection. The trained data extracted from the data cleaning process is completely recycled by the online detection process in order to detect each arriving target instance.

C. CLUSTERING THE DATA

The process of training the data is done based on the user assumption and hence there may be a problem that even an outlier data can be considered as a normal data instance. This is because of training the data based on the assumption made by the user.

Clustering method is the best solution for the above mentioned problem. The type of clustering used here is the hierarchical clustering. This kind of clustering technique creates an easily understandable hierarchical cluster model for the data instance. Thereby it tend to increase the speed of the anomaly detecting system and also the amount of time consumption of the remaining processes tend to get reduced accordingly. The clusters are usually formed for the input data instances, where the outlier calculation is applied to each cluster for detecting the exact outlier data instance. The score of outlierness is updated accordingly from the process of data cleaning.

D. ONLINE DETECTION

As soon as the data cleaning process is completed, the suspicious points are filtered. As a result a pure normal data is obtained to which the online anomaly technique is to be applied. The main objective of the online anomaly detection method is to identify the newly arriving abnormal data instance. Similarly the oversampling process is also applied for the newly arriving instance. The idea behind this method is to determine the mean and standard scores that are computed from all normal data points. Once when the mean and the standard deviation is calculated, a newly arriving data instances will be marked as an outlier if it's suspicious score than the previously calculated values.

For a KDD dataset there are four categories of attacks which are to be considered as an outlier data instance.

- DoS (Denial of Service), example, ping-of-death, teardrop, etc.,
- U2R, it is the unauthorized access to local super user privileges by a local privileged user, example, and various buffer overflow attacks.
- PROBING, surveillance and probing, example, port-scan, ping –sweep, etc.,
- R2L, unauthorized access from a remote machine, example, guessing password.

FIG. 1 ARCHITECTURE

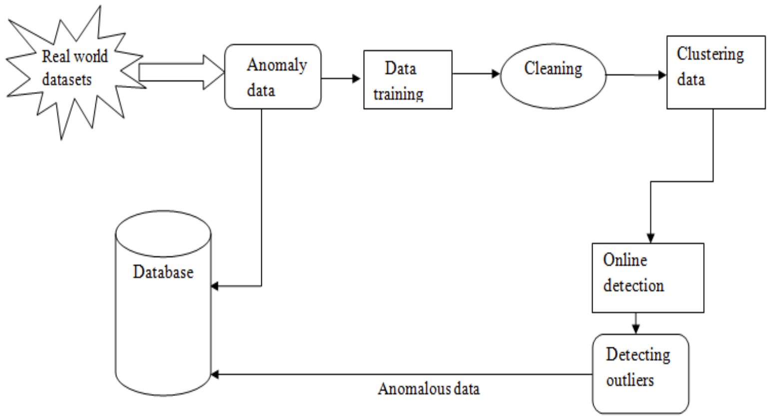


Fig.1 depicts the architecture of the proposed anomaly detection system. The input is the KDD data set which is obtained from the KDD website. It consists of thousands of data sets including both the normal data instance and the outlier data instances. This KDD data set is considered as the anomaly data set and is processed based on the proposed methodology.

Any real world data sets excluding KDD data set can also be given as the input anomaly data. These data sets are trained in the data training process. After storing these data sets into the database it is cleaned in the data cleaning process. These processes include filtering of the most deviated or outlier data. The cleaning block includes extracting the normal data from the contaminated data set. The data cleaning process calculates the score of outlierness of each receiving test input data instance. The data cleaning determines the threshold and report the correct and incorrect rates over the receiving data instances.

The clustering of data instance includes priority wise or range wise clustering of data which makes searching and cleaning of data faster which in turn makes the implementation becomes much easier. The result of clustering or the data cleaning is fed as input to the online detection process. It aims at detecting the newly arriving abnormal instance.

As a result of the online anomaly detection process, the possible suspicious data instances, say abnormal data instances are detected and these sets of data are stored separately stored in the database and therefore whenever a new data set is taken for processing the suspicious data sets can be detected easily and ignored in order to obtain the system security. Therefore any unauthorized access from a remote machine, unauthorized access to a local super user machine or any probing attacks can be easily detected. Eventhough these kinds of data instances resembles same as the normal data instances with a background noise that characterize as a normal data. The attacked data files can be listed out as a suspicious data instances by comparing its features with the some predefined list files. Many of the connections are being used by the DoS and probing attacks and therefore the proposed framework must able to capture even those kinds of data that represents the same characteristics. However the connection feature of the data content was the important characteristics for detecting R2L (the unauthorized access from a remote machine) and U2R (the unauthorized access to a local super user privileges) attack types, while the time-based and the connection-based features were the most important features for detecting and determining the DoS (denial-of-service) attack types.

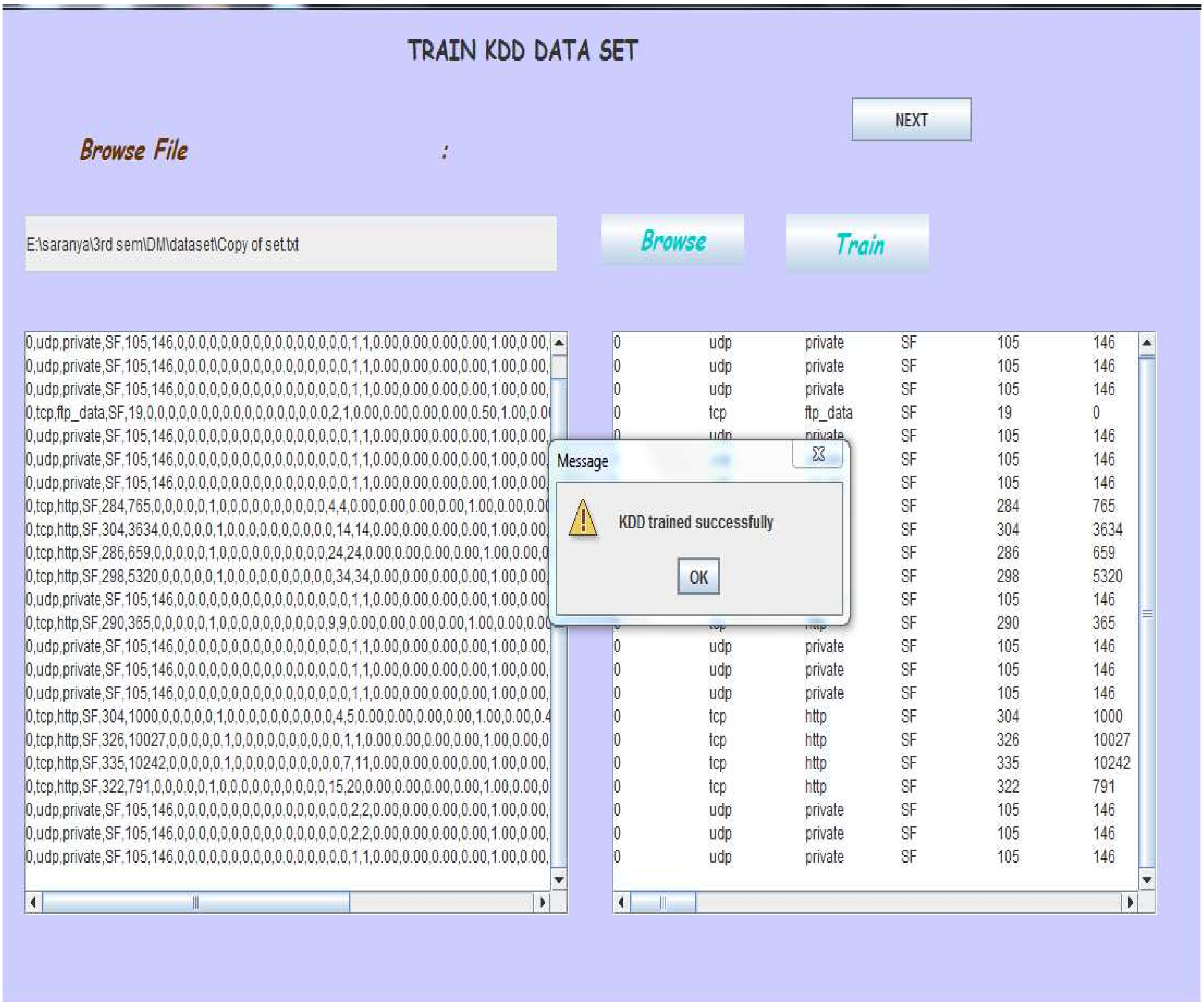
E. OUTLIER DETECTION

Since it impossible for a human analyst to investigate practically all the outlier detection scenarios, the clustering technique along with the online osPCA is proposed which involves faster detection of outlier data instances and storing it in a separate field on the database. So, whenever a real time data like credit card data has to be detected through online then the previously investigated results can be used in order to compare it with the newly arrived data and henceforth the suspicious data instances can be detected and blocked. These kinds of anomaly detection techniques can be most probably used in many application domains which consist of real world data sets. The online osPCA with clustering technique achieves slightly a larger false positive rate than the other anomaly detection methods. It also achieves a comparable performance significantly less computation time along with less memory requirement; this is because the proposed framework does not require storing the entire data matrix during the online detection process.

As soon as the anomalous data sets are detected they are separately stored in the database and whenever a newly arriving data instance that possess the same characteristics of the already detected anomalous data then the system is given an alert message or an acknowledgement that the newly arrived data is the suspicious data, this helps the system user to protect the original data sets from the attacker sets of data and also ignore these kinds of data automatically. Thus the proposed work involves obtaining much faster and more efficient results when compared to other methods.

4. RESULTS

Initially the input to the system is given as a text file which is then trained by the anomaly detection system in order to convert it into the datafields which are then stored onto the database for further calculations and proceedings. The results generated for the above methods is given as below:



5. CONCLUSION

An anomaly detection methodology for detecting intrusions and suspicious data sets are proposed in this paper. To support the applicability of anomaly detection schemes, several clustering techniques are used accordingly along with the online osPCA methodology by determining the outlier scores for each data instances. This outlier scores are framed in order to rank the outliers in an efficient manner. Moreover the proposed method does not require storing the entire data matrix during the online detection process. Therefore, when compared to other anomaly detection methodologies the proposed framework produces a better result. On the other hand, it can be used for detecting anomalies in large scale data including online data stream or any unbalanced data distribution (includes network security problems). The future work can be extended in order to have a high detection rate and also to increase the speed of the anomaly detection system which automatically deletes the anomalous data from the original data set.

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AN IMPROVED APPROACH OF RISK ANALYSIS FOR IT & ITES ORGANIZATIONS

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ABSTRACT
As most of the service delivery organizations use information technology (IT) systems to process their information for better support of their core business objectives, risk management plays a critical role in protecting an organization's information assets. Various models are being carried out to handle the risks by IT companies. The Risk Management model discussed in this study is a true recognition of the improvised risk management practices leading towards better safer and less hazardous working places in the Industries. Risk management, the process designed to identify critical business functions and workflow, determine the qualitative and quantitative impacts of a disruption, and to prioritize and establish recovery time objectives. Among the important processes of risk management, the risk analysis (determination) process is considered as critical and necessary as the process focus on determination of risks identified within IT systems of organization so that to dimension the need of control plans, risk mitigation process to bring down the risks to acceptable limits of management. This study is to discuss the various challenges faced by ITeS (Information Technology enabled Systems) companies, risks associated with them and the analytic techniques practiced in industries now for risk determination to manage interruption risks. This study concludes with an improved approach for risk analysis arrived based on the inputs of studies undertaken on the risk management practices followed by both IT and ITeS organizations. The improved approach is widely accepted for its effective and efficient way of handling risks pertaining to IT systems. The ultimate goal is to help organizations to better manage IT-related mission risks.

JEL CODE
M49

KEYWORDS
IT, ITeS, FMEA, Risk, Risk Analysis, Risk Management.

INTRODUCTION
The principal goal of an organization's risk management process should be to protect the organization and its ability to perform their pre-established objective, not just its IT assets. Nowadays, Risk Management is also used as a tool identifying business opportunities to design and modify the IT products and solutions. The elementary Risk Audits for System Breakdown failures, Fire Safety, Electrical safety, Comprehensive Safety, Business Interruption Risk Analysis, Flood Risk Management etc has been practiced for the improvements of the Risk level in the organizations. The preventive maintenance, scheduled maintenance in Industries and extensive use of techniques like **FMEA** and Logistic Risk Management with the use of sophisticated instruments like **data logger** has improved the trends of Risk Management to the truly international standard. A successful risk management program will rely on (1) senior management's commitment; (2) the full support and participation of the IT team; (3) the competence of the risk analysis team which must have the expertise to apply the risk determination methodology to a specific site and system, identify mission risks, and provide cost-effective safeguards that meet the needs of the organization; (4) the awareness and cooperation of members of the user community, who must follow procedures and comply with the implemented controls to safeguard the mission of their organization; and (5) an ongoing evaluation and determination of the IT-related mission risks. Based on a comprehensive review of literature and theoretical background of the risk, the suitable risk analysis tool is studied and found as an improved approach than the prevailing practice in IT industries.

LITERATURE REVIEW
a) **QUOTE**
"*Even the basic building design is not very conducive to set up a unit. The structures are not convenient for housing facilities like air conditioning vents, service shafts and other things*" - Nakul Subramanyan, FirstSource's infrastructure and administration vice-president, IT conference, SEZ-India 2008.

b) **UNDERSTANDING RISK, THREAT & VULNERABILITY**

A study by Anadi Kishore Sethi – "The Indian Trends in Risk Management Practices"

- **Risk** is the net negative impact of the exercise of vulnerability, considering both the probability and the impact of occurrence. **Risk** is a function of the **likelihood** of a given **threat-source's** exercising a particular potential **vulnerability**, and the resulting **impact** of that adverse event on the organization.
- **Threat** is the potential for a particular threat-source to successfully exercise a particular vulnerability.
- **Vulnerability** is a weakness that can be accidentally triggered or intentionally exploited. A flaw or weakness in system security procedures, design, implementation, or internal controls that could be exercised and result in a security breach or a violation of the system's security policy.

c) **INSTANCES FOR RISK, THREAT & VULNERABILITY**

TABLE 1: VULNERABILITY/THREAT PAIRS

Vulnerability	Threat	Threat Actions
Flaws in the security design of the system; new patches have not been applied to the system	Unauthorized users (e.g., hackers, disgruntled or terminated employees, computer criminals, terrorists)	Obtaining unauthorized access to sensitive system files based on known system vulnerabilities
Data center uses water sprinklers to suppress fire; No tarpaulins to protect hardware and equipment from water damage in case of failed sprinklers	Fire, negligent persons	Water sprinklers being turned on in the data center

d) **RISK MANAGEMENT**

It is the process of identifying risk, assessing risk, and taking steps to reduce risk to an acceptable level. The objective of performing risk management is to enable the organization to accomplish its mission(s) by

1) better securing the IT systems that store, process, or transmit organizational information;
2) enabling management to make well-informed risk management decisions to justify the expenditures that are part of an IT budget; and
3) assisting management in authorizing (or accrediting) the IT systems on the basis of the supporting documentation resulting from the performance of risk management.

Risk management encompasses the processes: **risk identification, risk assessment**, **risk determination (Analyze), Control Plans, risk mitigation**, and **evaluation & re-assessment**.

i) **Risk Identification** is the process of identifying any real or potential condition that can cause degradation, injury, illness, death or damage to or loss of equipment or property. Experience, common sense, and specific analytical tools help identify risks.

ii) **Risk assessment** is to determine the extent of potential threat and the risk associated with an IT system throughout its SDLC. The output of this process helps to identify appropriate controls for reducing or eliminating risk during the risk mitigation process.

iii) **Risk Analysis / Determination:** The purpose of this step is to analyze and assess the level of risk to the IT system. The determination of risk for a particular threat/vulnerability pair can be expressed as a function of

- likelihood of a given threat-source's attempting to exercise a given vulnerability
- magnitude of impact should successfully exercise the vulnerability
- Adequacy of planned or existing security controls for reducing or eliminating risk.

iv) **Control Plans**: Decision-maker must choose the best control or combination of controls, based on the analysis done. The following factors should be considered in recommending controls and alternative solutions to minimize or eliminate identified risks:

- Effectiveness of recommended options (e.g., system compatibility)
- Legislation and regulation * Organizational policy
- Operational impact * Safety and reliability.

The control recommendations are the results of the risk analysis process and provide input to the risk mitigation process, during which the recommended procedural and technical security controls are evaluated, prioritized, and implemented.

v) **Risk mitigation** In prior to Risk mitigation process, the risk analysis report shall need to be generated which helps senior management, the mission owners, make decisions on policy, procedural, budget, and system operational and management changes. It involves prioritizing, evaluating, and implementing the appropriate risk-reducing controls recommended from the risk analysis process. Because the elimination of all risk is usually impractical or close to impossible, it is the responsibility of senior management and functional and business managers to use the **least-cost approach** and implement the **most appropriate controls** to decrease mission risk to an acceptable level, with **minimal adverse impact** on the organization's resources and mission. Organizations can analyze the extent of the risk reduction generated by the new or enhanced controls in terms of the reduced threat likelihood or impact. .

vi) **Supervise and Review:** Once controls are in place, the process must be periodically reevaluated to ensure their effectiveness. Workers and managers at every level must fulfill their respective roles to assure that the controls are maintained over time. The risk management process continues throughout the life cycle of the system, mission or activity.

e) **RISK DETERMINATION TECHNIQUES**:

The risk determination is generally achieved by a deterministic and/or a stochastic method. There are techniques that combine the technology and expertise in identifying foreseeable failure modes of service or resource or process for its elimination. These are intended to recognize and evaluate the potential failure and its effects identify actions that could reduce or eliminate the potential failure chances.

STATEMENT OF THE PROBLEM

IT or ITeS organizations often face issues leading to their business interruption mainly due to infrastructure failures or lapses in logistics support. It includes support from own employees or external technical support like service provider, vendors. The key challenges can be classified as below:

Physical infra requisites	Logistics support	Technical support
Δ IT Hardware & Software	Δ Physical security access	Δ Hardware support
Δ AC & Power	Δ Space & Hygiene maintenance	Δ Telecommunication Infrastructure

The above similar challenges provide enough support for the growing ITES industry to pursue their aggressive business development strategy includes **Risk Management.** Some of the ITeS organizations that are the offshoot of Indian IT giants like Infosys, TCS, Wipro, and CTS are already aware of the sophisticated estimation techniques that their parent company has been using to manage their projects. But the other new organizations are yet to understand the significance of risk management process and gain competencies in this area.

NEED AND SIGNIFICANCE OF THE STUDY

It is nowadays essential that there are techniques exist which combines the technology and expertise in identifying foreseeable failure modes of service or resource or process for its elimination and also to protect the organization and its ability to perform their pre-established objective, not just its IT assets. These are intended to a) recognize and evaluate the potential failure and its effects, b) identify actions that could reduce or eliminate the potential failure chances.

In this study, we discuss the improved approach **Risk-Level Matrix** for risk analysis and existing widely used technique **FMEA** in detail to understand the significance of them in risk management.

SCOPE & LIMITATIONS OF THE STUDY

The study is limited to the scope only towards risk management approaches for IT and ITeS organizations as the study considered features of IT products and services alone. At the same time, there were limitations that need to be acknowledged and addressed regarding the present study. The important limitation that has to do with the extent to which the findings can not be generalized beyond the cases studied.

OBJECTIVES OF THE STUDY

a) To explore the risk management concepts and risks associated with IT or ITeS organizations
b) To expedite the existing risk analysis methodologies and assess limitations of the tools used in industry
c) To find out suitable risk analysis model based on the findings and suitability

DATA COLLECTION & DISCUSSION

Based on the industry experience, study done through relevant articles and information collected from ITeS organizations, risks associated with ITeS Organizations and analysis techniques used by them to assess and manage risks are captured. The risks faced by IT or ITeS organizations can be classified as detailed below:

a) RISKS ASSOCIATED WITH ITES ORGANIZATIONS

7.a.1) **BUSINESS RISKS**

i) **Governance** – without oversight, business leaders will be able to create shadow IT components or entire organizations and within IT there are fewer barriers to creating unapproved environments. It is important to understand the provider's business model to ensure they have a reasonable burn rate operating at a profit and not dependent on investment

ii) **Regulatory** – ensuring compliance with the myriad of rules including SOX (Sarbanes-Oxley Act), DPA (Data Protection Act), OHSAS (Organization Health Safety And Security), ISMS (Information Security Management Systems) and others while taking advantage of the economic model

iii) **Vendor alignment** – many vendors are researching and developing cloud products so companies may be caught unaware if a key vendor changes their business model from installed or dedicated hosting to a cloud SaaS (Software As A Service) only model.

7.a.2) **TECHNOLOGY RISKS**

i) **Staff** –Difficult to keep IT expertise as many options get open for them in the industry and want to profit from the price paid by early adopters

ii) **Infrastructure** –Network / IT Infrastructure is the most important component of any model which is highly prone for risk factors

iii) **Data** – Location of data within the network cloud may change so location restrictions must be incorporated to avoid global issues of privacy, ownership, security and discovery. When the data moves, provider must ensure old copies are securely destroyed.

iv) **Security** – securing data at rest and in transit is fundamental when using external network resources such as the internet. Once the data is secure, limiting access via identity management is critical but may require integration creating a point of vulnerability.

b) MAJOR SECURITY FLAWS OBSERVED IN COMMON & IMPACT ON IT/ITES INDUSTRIES

TABLE 2: THREATS & IMPACT

Threat-Source	Motivation	Threat Actions / Impact	
External hackers	Challenge Ego Rebellion	Hacking Social engineering	System intrusion, break-ins Unauthorized system access
Internal hackers (poorly trained, disgruntled, malicious, negligent, dishonest, or terminated employees)	Curiosity Ego Intelligence Monetary gain Revenge Unintentional errors and omissions (e.g., data entry error, programming error)	Assault on an employee Blackmail, Interception Browsing proprietary data Computer abuse, Fraud and information bribery, theft	Input of falsified, corrupted data Malicious code (e.g., virus, logic bomb, Trojan horse) Sale of personal information System bugs, sabotage
Computer criminal	Destruction of information Illegal information disclosure Unauthorized data alteration	Computer crime (e.g., cyber stalking) Spoofing	Fraudulent act (e.g., replay, impersonation, interception)
Cyber Terrorism	Blackmail Destruction Exploitation Revenge	Terrorism. Information warfare	System attack (e.g., DDoS), penetration, tampering
Industrial espionage (companies, foreign governments, other government interests)	Competitive advantage Economic espionage	Economic exploitation Intrusion on personal privacy, Social engineering	Unauthorized access to classified, proprietary, and/or technology-related information

c) RISK ANALYSIS TOOL WIDELY USED IN INDUSTRIES

Risk Analysis Technique is to identify, estimate, prioritize and evaluate risk of possible failures at each stage of a process.

FMEA is one of the popular tools for risk analysis widely used in many organizations. It is a proactive process used to look more carefully and systematically at vulnerable areas or processes. FMEA begins with identifying each element, assembly, or part of the process and listing the potential failure modes, potential causes, and effects of each failure. A risk priority number (RPN) is calculated for each failure mode and it is used as an index for measuring the rank importance of the items identified. FMEA can be employed before purchase and implementation of new services, processes or products to identify potential failure modes so that steps can be taken to avoid errors before they occur. In FMEA, failures are prioritized according to how serious their consequences are, how frequently they occur and how easily they can be detected. An FMEA also documents current knowledge and actions about the risks of failures for use in continuous improvement. It is used for process control, before and during ongoing operation of the process. The outcomes of an FMEA development are actions to prevent or reduce the severity or likelihood of failures, starting with the highest-priority ones. It may be used to evaluate risk management priorities for mitigating known threat vulnerabilities. FMEA helps select remedial actions that reduce cumulative impacts of life-cycle consequences (risks) from a systems failure (fault).

TABLE 3: FMEA – SAMPLE TEMPLATE

IT PROCESS: Problem/Incident/Service/Change Management									**Control plan**			**Ratings after implementation of control plan**			
Id	Activity	Failure Mode	Failure Effect	Severity	Cause	Occurrence	Detection	RPN	Description	Target	Responsibility	Severity	Occurrence	Detection	RPN
1	**Analyze the root cause of the problem**	Improper analysis	Wrong output Delayed closure; Non closure	9	Over look / Negligence	5	1	45	1. To include RCA tools as a practice 2. Train all IT engineers & familiarize on these	9 - Feb	IT Manager	5	1	5	**25**
					Lack of training	5	5	**225**							

After ranking the severity, occurrence and detectability the **Risk priority number (**RPN) can be calculated as **RPN = S × O × D** that will range between 1 and 1000. The higher the number, the greater the risk your process has at that point. High RPN items are flagged and mitigation actions initiated. Then that step can be re-evaluated allowing you to quasi-quantify the amount of risk removed from your process. In the above FMEA template, we considered **225** as threshold value for applying control plans and re-assess the RPN.

TABLE 4: CATEGORIZATION OF CRITICAL PARAMETERS: OCCURRENCE / SEVERITY / DETECTION

Rating	**Occurrence - `O'** (Cause of a failure mode and the number of times it occurs)	**Severity - `S'** (all failure modes based on the functional requirements and their effects)	**Detection - `D'** (Current controls that prevent failure modes from occurring)
1	No known occurrences on similar products or processes	No effect	Certain - fault will be caught on test
2	Low (relatively few failures)	Very minor (only noticed by discriminating customers)	Almost Certain
3	Moderate (occasional failures)	Minor (affects very little of the system, noticed by average customer)	
4/5/6	High (repeated failures)	Moderate (most customers are annoyed)	Low
7/8	Very high (failure is almost inevitable)	High (causes a loss of primary function; customers are dissatisfied)	Moderate
9/10		Very high and hazardous	High; Fault will be passed to customer undetected

FMEA is used extensively towards

a) Development of system requirements that minimize the likelihood of failures.
b) Methods to design and test systems to ensure that the failures have been eliminated.
c) Evaluation of customer requirements to ensure that those do not rise to potential failures.
d) Identification of certain design characteristics that contribute to failures, and minimize or eliminate those effects.
e) Tracking and managing potential risks in the design avoid recurrence of the failures.
f) Ensuring that any failure occured won't injure the customer or seriously impact system.

Limitations of FMEA: (Source: http://www.qualityportal.com)

a) The initial output of an FMEA is the prioritizing of failure modes based on their risk priority numbers. This alone does not eliminate the failure mode. Additional action that might be outside the FMEA is needed.
b) FMEA may only identify major failure modes in a system. Identifying failure modes is a team brainstorming activity. If the team forgets to list it, an important failure mode could be left alone, waiting to occur.
c) FMEA is a prioritization tool. It doesn't eliminate failure modes or effects by itself.
d) It takes time to get into the details.
e) High repeatability and reproducibility.
f) Might miss a failure mode or an effect outside the experiences of the company.
g) Customers, especially end-users and suppliers, often have a better view on failure modes than internal personnel.
h) Many FMEAs focus only on the customer requirements (specifications). Sometimes internal productivity losses, equipment damage, scrap, and rework have very severe effects on the company.
i) Templates are great but every product being made in a process is not exactly the same.
j) A control might apply to one effect of a failure mode but not another.
k) FMEA will not be a living document if it is not tied to the control plan. As new potential failure modes are identified, they should be added to the FMEA and control plans developed for them.

SUMMARY OF FINDINGS / SUITABILITY OF ANALYSIS TOOL

The existing methods are mostly based on the failure events experienced or assumed by the people involved in process execution. Even though the methods satisfy the customers to certain extent, they do not completely ensure the avoidance of failure events or extends required guidance to customers to reduce the risk factors. Hence the approach on the assets, resources involved in the system could be analyzed for a better method in risk analysis.

i) Selection of right tool for risk analysis should be based on below **needs**:

TABLE 5: NEEDS OF RISK ANALYSIS TOOL

(a) Factors/Assets affect the organization's ability to accomplish its mission or its objectives	(d) Processes where these controls installed
(b) Recent changes have been made to these processes to improve their robustness in preventing the risk having a detrimental effect on the business	(e) Measurement of effectiveness of these provisions
(c) Provisions made to contain, reduce or control risk	(f) Critical services or products are to be identified and they must be prioritized based on minimum acceptable delivery levels and the maximum period of time the service can be down before severe damage to the organization results

ii) Selected tool should **provision** to mitigate risk / provision to safeguard organization from:

TABLE 6: PROVISIONS TO BE MADE AVAILABLE IN ANALYSIS TOOL

(a) Attack by competitors, disgruntled employees, computer viruses	(g) Delayed receipt of product or payment
(b) Loosing customers, suppliers, employees, reputation	(h) Hazards injurious to health of personnel and/or the environment
(c) Decline in orders, revenue, profit, market share	(i) Accidents to personnel and equipment
(d) Dissatisfying customers, shareholders, employees	(j) Breakdown of equipment, plant, machinery, relationships
(e) Prosecution by regulators, customers, employees	(k) Business disruption by computer failure, loss of information, strikes, weather.
(f) Delayed delivery	

SOLUTION SUGGESTED / AN IMPROVED APPROACH

Through this study, we propose **Risk-Level Matrix** which can highly suit the present business environment in both IT & ITeS organizations well and the same is proved from various implementations. The detailed procedure of the approach is as below:

Step (i) IDENTIFICATION OF CRITICAL SERVICES: The ranking of critical services is measured through information gathered by observing the impact of a disruption to service delivery, loss of revenue, additional expenses and intangible losses. Key functions of ITES organizations can be categorized into 3 **groups** viz.,

TABLE 7: KEY BUSINESS PROCESSES/FUNCTIONS/DEPENDENCIES

IT Processes (Expertise)		IT Infrastructure (Equipment)		IT Services	
Network Admin	System Admin	Gateway Routers	Business Portals	Intranet connectivity	Email services
IT security support	Backend support	LAN switches	Business Laptops	Client network connectivity	IT Hardware support
IT development	Field support	Network Servers	Network Monitors	Internet connectivity	IT Applications support
IT solution architect		Firewalls & IDS	Access controllers		Alert Monitoring

Step (ii) DETERMINATION OF RATINGS FOR RISK ANALYSIS TEMPLATE

Overall risk is derived by multiplying the ratings assigned for threat **likelihood** (e.g., probability) and threat impact with the asset rank and the **Asset rank** is based on Asset value which is calculated as **C^2 x I^2 x A^2** (C-Confidence, I-Integrity & A-Availability).

TABLE 8: OVERALL RISK

Overall Risk (Asset Rank x Probability x Impact)			
Rank	Category	Range of values	
		From	To
1	Low	0	2
2	Moderate	3	8
3	High	9	36
4	Severe	37	64

TABLE 9: ASSET VALUE/RANK

Categorization – Asset Value/Rank			
Rank	Asset Value (C*C+I*I+A*A)	Range of values	
		From	To
1	Low	1	6
2	Moderate	7	17
3	High	18	34
4	Very High	35	48

The **impact** and **probability** is for each threat and will generally differ based on the past history and/or the expectation of the particular threat to occur in future. The thresholds for the above were defined by dividing the highest Overall risk by four and bucketing the same evenly. Such definitions are purely decided by Tactical team of organization and approved by top management

TABLE 10: CATEGORIZATION – CIA (CONFIDENCE / INTEGRITY / AVAILABILITY)

Rating	C – Confidence	I - Integrity	A - Availability
1	LOW - No impact if compromised	LOW - No impact if compromised	> 5 days
2	Medium - Some impact if compromised	Medium	1-5 Days
3	High Significant impact	High Significant impact	1 day
4	Very High / Severe / highest Impact	Very High / Severe / highest Impact	0

As mentioned earlier the rating for impact and probability are measured against each threat and vulnerability determined on the assets involved in meeting up business objectives.

Step (iii) PREPARATION OF RISK ANALYSIS TEMPLATE:

Populate the identified critical components including Expertise Resources, Equipments and Services as ASSET in below template along with their attributes like Confidence [C], Integrity [I], Availability [A]. The template helps identifying their rank and overall risk value and then the residual risk, obtained after applying the effectiveness of existing control plans. It also tracks for the proposed control plans to either nullify the risk or reduce them to the acceptable limits by top management.

TABLE 11: RISK ANALYSIS REPORT

Assets			C	I	A	Asset			Threats	Impact*	Probability ranking*	Overall Risk Value*
			Values			Value	Class	Rank				
Id	Name	Group	Confidence	Integrity	Availability	C^2 x I^2 x A^2	Very High / High / Moderate / Low	1 to 4	Identified Threats	Impact against Threat	Occurrence of Threat	Asset Rank x Impact x Probability

Overall Risk Class	Overall Risk rank	Existing Control Rating #	Existing Residual Risk	Proposed Control Rating	Proposed Residual Risk	Management decision on risk
Severe / High / Moderate / Low	0 to 4	Average of all controls Existing (0 to 4)	Overall Risk -Existing Control Rating (0 to 4)	Average of all Proposed controls	Existing Residual Risk-Proposed Control Rating	Accept / Reduce / Transfer / Avoid

***Overall Risk Value is measured as per Table 6.2 and values for Impact and Probability is from Table 6.6:**

To measure **proposed residual risk value**, existing residual risk needs to be assessed based on the existing controls against the risk factors (Average of all controls Existing). Assets with Existing Residual value of High and Very High would be mitigated to reduce the risk value to Proposed Residual Risk value less than High. The process is referred as **Risk Mitigation**.

TABLE 12: CATEGORIZATION – IMPACT / PROBABILITY / EXISTING-CONTROL

Control Rating	Impact	Probability	Existing Control
0	no impact	Unlikely to occur	no effective control
1	low	Possible to occur- 2-3 times in every 5 years	basic control -less effective
2	moderate	Possible to occur - once every year	Standard control -covers but not all
3	high	Highly Probable every month	comprehensive
4	Very High /severe	Certain every week	complete control

Step (iv) CONCLUSION & ACCEPTANCE FROM MANAGEMENT: Proposed residual risk value shall be discussed with Top management and conclude for either **acceptance** or further **reduction** of risk value or **transfer** the risk or **avoidance**. As this would impact business relation, concurrence from client organizations is sought during business agreements.

TABLE 13: RESIDUAL RISK CALCULATIONS

Existing Residual Risk	Overall Risk - Existing Control Rating
Proposed Control Rating	Average of all Proposed controls
Proposed Residual Risk	Existing Residual Risk - Proposed Control Rating

The risk remaining after the implementation of new or enhanced controls is the residual risk. Practically no IT system is risk free, and not all implemented controls can eliminate the risk they are intended to address or reduce the risk level to zero or to the acceptable level agreed by senior management. This concludes the best analysis of risk pertaining to IT or ITeS systems and the tool has been tested for acceptability and adoption.

ADVANTAGES OF USING RISK-LEVEL MATRIX

1. The approach is not based on the risk priority numbers and hence the actions required outside this tool are very minimal.
2. As the tool is meant for all critical services, need to wait for failures to occur.
3. It takes less time to get into the details.
4. Rating scales are very specific and easily understandable by both employees and Management.
5. The processes are broken into easily manageable tasks.
6. "Identification of critical services" Includes all stakeholders to ensure a better view on failure modes. No dedicated team and time to be spared for using this tool and no superficial look is required as the analysis is on the on-going services.
7. Apart from the customer requirements (specifications), this tool considers internal productivity losses, equipment damage.
8. Teams often have root causes as failure modes. A failure mode is the failure to perform the intended function.
9. Templates are simple and direct. Controls are as perceived.
10. A control might apply to one effect of a failure mode but not to another. For example, final inspection is a control against a defect impacting a customer, but it may not be a control against rework or scrap.
11. It eliminates failure modes or effects by itself.
12. The control plan tells people how to react when a failure mode occurs. New potential failure modes are identified and they are added to the control plans developed for them.

TARGET AUDIENCE

This study provides a common foundation for experienced and inexperienced, technical, and non-technical personnel who support or use the risk management process for their IT systems. These personnel include

a) Senior management, who make decisions about the IT security budget.	h) Business or functional managers, who are responsible for the IT procurement process
b) CIO/CTO, who ensure the implementation of risk management	i) Technical support personnel (Network, System, Application, Database administrators; Data security analysts), who manage and administer security for IT systems
c) The Designated Approving Authority, who decides to allow operation of IT system	j) IT system and application programmers, who develop and maintain code that could affect system and data integrity
d) The IT security manager, who implements the security program	k) IT quality assurance personnel, who test and ensure the integrity of IT systems and data
e) Information system security officers (ISSO), who are responsible for IT security	l) Information system auditors, who audit IT systems
f) IT system owners of system software and/or hardware used to support IT functions.	m) IT consultants, who support clients in risk management.
g) Information owners of data stored, processed, and transmitted	

CONCLUSION

Risk management provides a logical and systematic means of identifying and controlling risk. It is not a complex process, but does require individuals to support and implement the basic principles on a continuing basis. Risk management offers individuals and organizations a powerful tool for increasing effectiveness and reducing accidents. Since risk analysis is an important process of risk management, the tool meant for risk analysis should be flawless and effective. Also the process should be accessible and usable by everyone in every conceivable setting or scenario. It should ensure that all business managers will have a voice in the critical decisions that determine success or failure in all our operations and activities. Properly implemented, the discussed tool will always enhance performance. India has become one of the most attractive destinations for key players across the globe for indirect investment, FDI (Foreign Direct Investment), new ventures etc with economy rising at a rate higher than 9%. Export increasing year on year basis with increase in clientele base across the globe for products, services and supports. The participation with the global players has not only helped to bring the global technology, standards and practices to India but the Indian Standards of practices has improved up to international standard. The risk management practices in the subcontinent leading towards better safer and less hazardous working places in the Indian Industries.

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DERIVATIVES MARKET IN INDIA

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ABSTRACT

Derivatives trading commenced in India in June 2000 after SEBI granted the approval to this effect in May 2000. SEBI permitted the derivative segment of two Stock exchanges, i.e. NSE and BSE, and their clearing house/ corporation to commerce trading and settlement in approved derivative contracts. To begin with, SEBI approved trading in index futures contracts based on Standard & Poor (S&P) CNX Nifty Index and BSE-30 (Sensex) Index. This was followed by approval for trading in options based on these two indices and Options on individual securities. The derivatives trading on the NSE commenced with S&P CNX Nifty Index futures on June 12, 2000, Index Options Commenced on July 4, 2001 and trading in Options on individual securities commenced on July 2, 2001. SEBI-RBI approved the trading on interest rate derivative instruments. The mini derivative future & Option contract on S&P CNX Nifty was introduced for trading on January 1, 2008 while the long term option Contracts on S&P CNX Nifty were introduced for trading on March-3-2008. Finally, a 30-year ban on forward trading was also lifted in 1999. The economic liberalization of the early nineties facilitated the introduction of derivatives based on interest rates and foreign exchange. A system of market-determined exchange rates was adopted by India in March 1993. In August 1994, the rupee was made fully convertible on current account. These reforms allowed increased integration between domestic and international markets, and created a need to manage currency risk. Given the fast change and growth in the scenario of the economic and financial sector have brought a much broader impact on derivatives instrument. As the name signifies, the value of this product is derived on the prices of currencies, interest rates (i.e. bonds), share and share indices, commodities, etc. not going into very back; financial derivatives just came into existence in the year 1980's.

KEYWORDS
Contract, derivatives, nifty, sensex.

INTRODUCTION

The origin of derivatives can be traced back to the need of farmers to protect themselves against fluctuations in the price of their crop. From the time it was sown to the time it was ready for harvest, farmers would face price uncertainty. Through the use of simple derivative products, it was possible for the farmer to partially or fully transfer price risks by locking-in asset prices. These were simple contracts developed to meet the needs of farmers and were basically a means of reducing risk.

A farmer who sowed his crop in June faced uncertainty over the price he would receive for his harvest in September. In years of scarcity, he would probably obtain attractive prices. However, during times of oversupply, he would have to dispose off his harvest at a very low price. Clearly this meant that the farmer and his family were exposed to a high risk of price uncertainty.

In 1848, the Chicago Board Of Trade, or CBOT, was established to bring farmers and merchants together. A group of traders got together and created the 'to-arrive' contract that permitted farmers to lock into price upfront and deliver the grain later. These to-arrive contracts proved useful as a device for hedging and speculation on price charges. These were eventually standardized, and in 1925 the first futures clearing house came into existence.

Today derivatives contracts exist on variety of commodities such as corn, pepper, cotton, wheat, silver etc. Besides commodities, derivatives contracts also exist on a lot of financial underlying like stocks, interest rate, exchange rate, etc.

REVIEW OF LITERATURE

DERIVATIVES DEFINED

Derivative is a product whose value is derived from the value of one or more basic variables, called bases (underlying asset, index, or reference rate), in a contractual manner. The underlying asset can be equity, forex, commodity or any other asset. For example, wheat farmers may wish to sell their harvest at a future date to eliminate the risk of a change in prices by that date. Such a transaction is an example of a derivative. The price of this derivative is driven by the spot price of wheat which is the "underlying"

In the Indian context the Securities Contracts (Regulation) Act, 1956 (SC(R) A) defines

"Derivative" to include

1) A security derived from a debt instrument, share, loan whether secured or unsecured, risk instrument or contract for differences or any other form of security.
2) A contract which derives its value from the prices, or index of prices, of underlying securities.

Derivatives are securities under the SC(R) A and hence the trading of derivatives is governed by the regulatory framework under the SC(R) A.

Derivative products initially emerged as hedging devices against fluctuations in commodity prices, and commodity-linked derivatives remained the sole form of such products for almost three hundred years. Financial derivatives came into spotlight in the post-1970 period due to growing instability in the financial markets. However, since their emergence, these products have become very popular and by 1990s, they accounted for about two-thirds of total transactions in derivative products. In recent years, the market for financial derivatives has grown tremendously in terms of variety of instruments available, their complexity and also turnover. In the class of equity derivatives the world over, futures and options on stock indices have gained more popularity than on individual stocks, especially among institutional investors, who are major users of index-linked derivatives. Even small investors find these useful due to high correlation of the popular indexes with various portfolios and ease of use.

OBJECTIVES OF THE STUDY

1. To know the derivative market in India.
2. To know the changes in derivative market in last decade w.r.t Indian market.

FACTORS DRIVING THE GROWTH OF DERIVATIVES

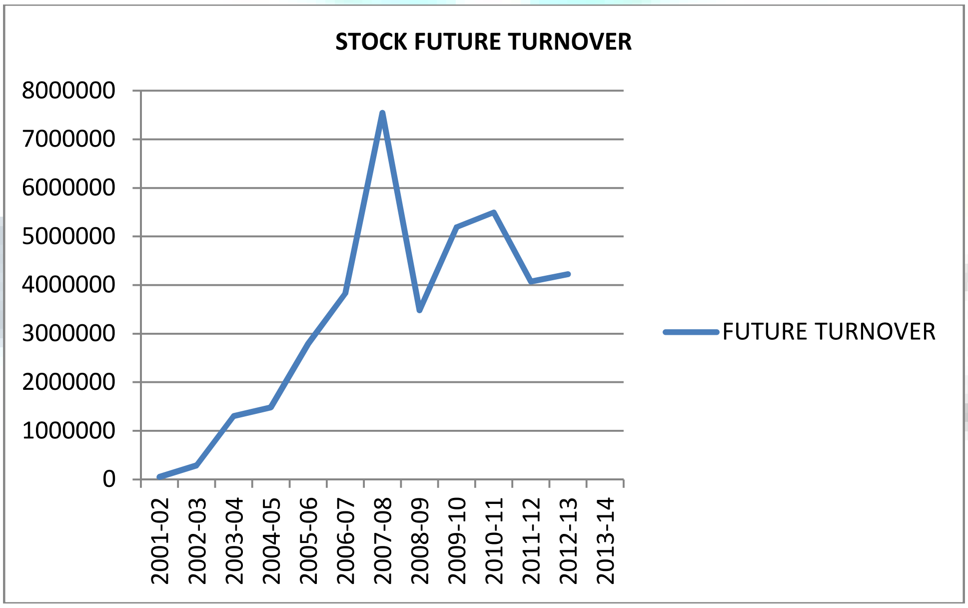
Over the last three decades, the derivatives market has seen a phenomenal growth. A large variety of derivative contracts have been launched at exchanges across the world. Some of the factors driving the growth of financial derivatives are:

1) Increased volatility in asset prices in financial markets.
2) Increased integration of national financial markets with the international markets.
3) Marked improvement in communication facilities and sharp decline in their costs.
4) Development of more sophisticated risk management tools, providing economic agents a wider choice of risk management strategies, and
5) Innovations in the derivatives markets, which optimally combine the risks and returns over a large number of financial assets leading to higher returns, reduced risk as well as transactions costs as compared to individual financial assets.

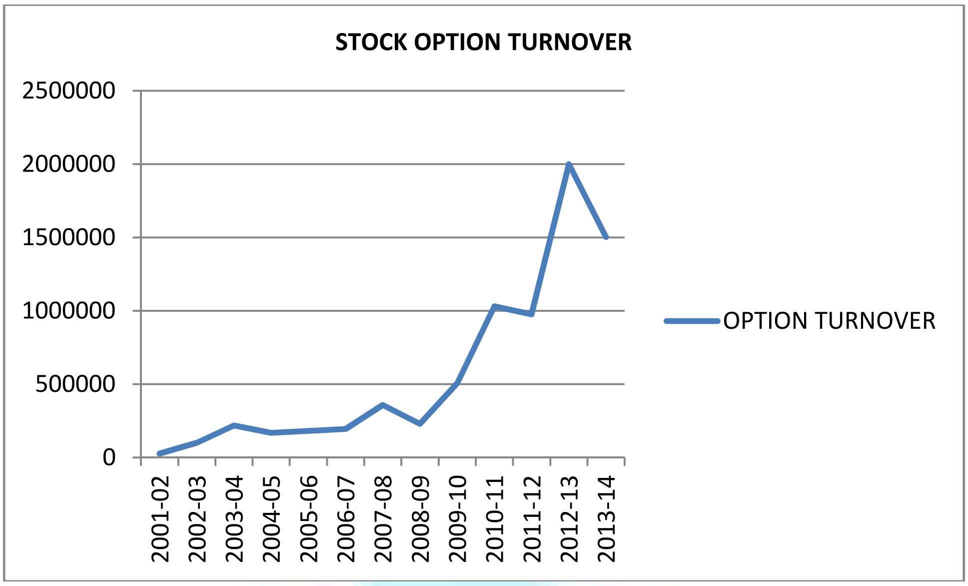
BUSINESS GROWTH IN DERIVATIVES SEGMENT

Year	Index Futures		Stock Futures		Index Options		Stock Options		Total	
	No. of contracts	Turnover (cr.)	No. of contracts	Turnover (cr.)	No. of contracts	Turnover (cr.)	No. of contracts	Turnover (cr.)	No. of contracts	Turnover (cr.)
2013-14	70370065	2021833.51	107046500	2936216.91	616449053	18038319.40	52326030	1501819.02	846191648	24498188.80
2012-13	96100385	2527130.76	147711691	4223872.02	820877149	22781574.14	66778193	2000427.29	1131467418	31533003.96
2011-12	146188740	3577998.41	158344617	4074670.73	864017736	22720031.64	36494371	977031.13	1205045464	31349731.74
2010-11	165023653	4356754.53	186041459	5495756.70	650638557	18365365.76	32508393	1030344.21	1034212062	29248221.09
2009-10	178306889	3934388.67	145591240	5195246.64	341379523	8027964.20	14016270	506065.18	679293922	17663664.57
2008-09	210428103	3570111.40	221577980	3479642.12	212088444	3731501.84	13295970	229226.81	657390497	11010482.20
2007-08	156598579	3820667.27	203587952	7548563.23	55366038	1362110.88	9460631	359136.55	425013200	13090477.75
2006-07	81487424	2539574	104955401	3830967	25157438	791906	5283310	193795	216883573	7356242
2005-06	58537886	1513755	80905493	2791697	12935116	338469	5240776	180253	157619271	4824174
2004-05	21635449	772147	47043066	1484056	3293558	121943	5045112	168836	77017185	2546982
2003-04	17191668	554446	32368842	1305939	1732414	52816	5583071	217207	56886776	2130610
2002-03	2126763	43952	10676843	286533	442241	9246	3523062	100131	16768909	439862
2001-02	1025588	21483	1957856	51515	175900	3765	1037529	25163	4196873	101926

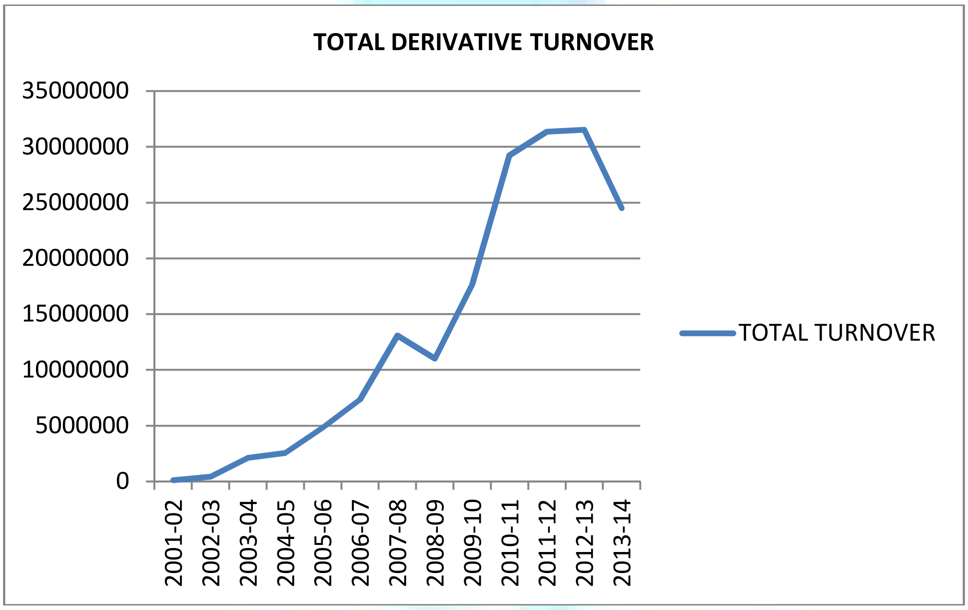
Source: http://www.nseindia.com/content/fo/fo_businessgrowth.htm



The trading volume on NSE's stock future market has seen a steady increase since the launch of the first derivatives contract, i.e. stock futures in June 2000 & 2001. Table gives the value of contracts traded on the NSE.. A total of 203587952 contracts with a total turnover of Rs. 7548563.23 crore were traded during 2007-2008. And from 2007-08 onwards the market is downsizing.



The trading volume on NSE's stock option market has seen a steady increase since the launch of the first derivatives contract, i.e. stock options in June 2000 & 2001. Table gives the value of contracts traded on the NSE.. A total of 66778193 contracts with a total turnover of Rs. 2000427.29 crore were traded during 2012-2013. And in 2013 the market is downsizing.



The trading volume on NSE's stock derivative market has seen a steady increase since the launch of the first derivatives contract, i.e. Index futures in June 2000 & 2001. Table gives the value of contracts traded on the NSE.. A total of 1205045464 contracts with a total turnover of Rs. 31349731.74 crore were traded during 2011-2012. And from 2012-13 onwards the market is downsizing.

DERIVATIVE PRODUCTS

Derivative contracts have several variants. The most common variants are forwards, futures, options and swaps. We take a brief look at various derivatives contracts that have come to be used.

FORWARDS: A forward contract is a customized contract between two entities, where settlement takes place on a specific date in the future at today's pre-agreed price.

FUTURES: A futures contract is an agreement between two parties to buy or sell an asset at a certain time in the future at a certain price. Futures contracts are special types of forward contracts in the sense that the former are standardized exchange-traded contracts.

OPTIONS: Options are of two types

CALLS: give the buyer the right but not the obligation to buy a given quantity of the underlying asset, at a given price on or before a given future date.

PUTS: give the buyer the right, but not the obligation to sell a given quantity of the underlying asset at a given price on or before a given date.

SWAPS: Swaps are private agreements between two parties to exchange cash flows in the future according to a prearranged formula. They can be regarded as portfolios of forward contracts. The two commonly used swaps are :

INTEREST RATE SWAPS: These entail swapping only the interest related cash flows between the parties in the same currency.

CURRENCY SWAPS: These entail swapping both principal and interest between the parties, with the cash flows in one direction being in a different currency than those in the opposite direction.

PARTICIPANTS IN THE DERIVATIVES MARKETS

The following three broad categories of participants

HEDGERS: Hedgers face risk associated with the price of an asset. They use futures or option markets to reduce or eliminate this risk.

SPECULATORS*:* Speculators wish to bet on future movements in the price of an asset. Futures and options contracts can give them an extra leverage; that is, they can increase both the potential gains and potential losses in a speculative venture.

ARBITRAGEURS: Arbitrageurs are in business to take advantage of a discrepancy between prices in two different markets. If, for example, they see the futures price of an asset getting out of line with the cash price, they will take offsetting positions in the two markets to lock in a profit.

NSE'S DERIVATIVES MARKET

The derivatives trading on the NSE commenced with S&P CNX Nifty Index futures on June 12, 2000. The trading in index options commenced on June 4, 2001 and trading in options on individual securities commenced on July 2, 2001. Single stock futures were launched on November 9, 2001. Today, both in terms of volume and turnover, NSE is the largest derivatives exchange in India. Currently, the derivatives contracts have a maximum of 3-month expiration cycles. Three contracts are available for trading, with 1 month, 2 months and 3 months expiry. A new contract is introduced on the next trading day following the expiry of the near month contract.

PARTICIPANTS AND FUNCTIONS

NSE admits members on its derivatives segment in accordance with the rules and regulations of the exchange and the norms specified by SEBI. NSE follows 2–tier membership structure stipulated by SEBI to enable wider participation. Those interested in taking membership on F&O segment are required to take membership of CM and F&O segment or CM, WDM and F&O segment. Trading and clearing members are admitted separately. Essentially, a clearing member (CM) does clearing for all his trading members (TMs), undertakes risk management and performs actual settlement. There are three types of CMs:

SELF CLEARING MEMBER*:* A SCM clears and settles trades executed by him only either on his own account or on account of his clients.

TRADING MEMBER CLEARING MEMBER*:* TM–CM is a CM who is also a TM. TM–CM may clear and settle his own proprietary trades and client's trades as well as clear and settle for other TMs.

PROFESSIONAL CLEARING MEMBER*:* PCM is a CM who is not a TM. Typically, banks or custodians could become a PCM and clear and settle for TMs.

TRADING MECHANISM

The futures and options trading system of NSE, called NEAT-F&O trading system, provides a fully automated screen–based trading for Nifty futures & options and stock futures & options on a nationwide basis and an online monitoring and surveillance mechanism. It supports an anonymous order driven market which provides complete transparency of trading operations and operates on strict price–time priority. It is similar to that of trading of equities in the Cash Market (CM) segment. The NEAT-F&O trading system is accessed by two types of users. The Trading Members(TM) have access to functions such as order entry, order matching, and order and trade management.. Various conditions like Immediate or Cancel, Limit/Market price, Stop loss, etc. can be built into an order. The Clearing Members (CM) uses the trader workstation for the purpose of monitoring the trading member(s) for whom they clear the trades. Additionally, they can enter and set limits to positions, which a trading member can take.

TURNOVER

The trading volume on NSE's derivatives market has seen a steady increase since the launch of the first derivatives contract, i.e. index futures in June 2000. Table gives the value of contracts traded on the NSE. A total of 77,017,185 contracts with a total turnover of Rs.2,547,053 core were traded during 2008-2009

CONCLUSION

In India derivative market has increased drastically from 2001-02 to 2012-13 i.e 101926 crores in 2001-02 to 31533003.96 crores in 2013-14. It means 300 times increased within 11 years. And we can see the tremendous change in derivative market year by year. This change affected by some factors like government policies, budgets, bullion market, inflation, economical and political condition, etc

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CORPORATE GOVERNANCE IN BRICS: A COMPARATIVE STUDY

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ABSTRACT

Corporate Governance a long used term has been gaining importance with a series of scams taking place all over the world. Its increasing popularity in the corporate world and others has enticed many authors to research on it. It basically focuses on the FAT principal, i.e. Fairness, Accountability and Transparency. It will be interesting to understand how the rules of Corporate Governance differs across the growing emerging economies, popularly known as BRICS. Thus, in this paper we have undertaken a comparative study as to how corporate governance framework varies among Brazil, Russia, India, China and South Africa. BRICS comprises of countries with diverse cultural background different business orientations, political ideologies, ownership structures and legal origins, the corporate governance framework of each of these countries focuses on protecting and maintaining stakeholders' interests and investors' confidence in general. The study concludes that the five countries have a common approach towards the formation of a significantly important mechanism for ensuring corporate governance, that is, the formation of Audit Committee comprising of either non-executive directors or independent directors or both.

KEYWORDS
BRICS, Corporate Governance, FAT.

INTRODUCTION

Corporate Governance – a term which originated long way back but became popularized recently with a series of scams happening all over the world. The subject mooted in the year 1600 with a Royal Charter being granted to the East Indian Company in which a Court of Directors was constituted for the first time to safeguard the interest of shareholders and other investors. This Court was similar to the Board of Directors of now-a-days companies in terms of authority and responsibility. The phrase Corporate Governance is directly aimed at this Board of Directors as is clearly conveyed in the definition of Corporate Governance given by its father Sir Adrian Cadbury. According to him, Corporate Governance means the way in which a company is directed and controlled. It implies having a strong base of mission and values deeply engrossed in the culture of the corporation. Briefly, Corporate Governance can be summarized by *FAT principle*, that is, *Fairness, Accountability and Transparency* in the operations and management of corporate entities.

Good governance is particularly important for the developing economies in order to bring them in a level with developed world and also to alleviate poverty. Initially, the focus of corporate governance was restricted to individual corporations only but recently many international guidelines have been issued with an emphasis on the role which good governance can play in promoting economic growth and business integrity.

BRICS is such a group of developing economies with a severe corporate governance crisis. With its growing importance for the global economic and political scenario, it is particularly important to understand the corporate governance practices of these nations. Different models of corporate governance are applicable in these countries depending upon the varying circumstances.

The term BRIC was coined by *O'Neill* (2001), an economist of Goldman Sachs, in a paper entitled *"The World Needs Better Economic BRICs"*. BRIC is an acronym for a group of countries namely, Brazil, Russia, India, and China - the big four emerging economies in the world. Goldman Sachs in 2003, in another report entitled "*Dreaming with BRICS: The Path to 2050*", predicted that by 2050 the economies of the BRICS countries taken together could eclipse the economies of the current richest countries taken together. These four countries taken together currently account for more than a quarter of the world's land area [38,518,338 km. (2010 estimate)] and more than 40% of the world's population [2,851,302,297 (2010 estimate)].

Goldman Sachs further predicted that China will become a global manufacturing hub and India will act as a global service provider, while Brazil and Russia will become dominant suppliers of raw materials because they have abundant natural resources (e.g., soy and iron ore in Brazil and oil and natural gas in Russia). It is worth noting that, among the four countries, Brazil remains the only nation that has the capacity to continue simultaneously with all the functions, that is, manufacturing, servicing and resource supplying. South Africa which has a comparative advantage in agriculture, mining (world's largest producer of platinum, gold chromium) and manufacturing products, joined the group on December 24, 2010 and the group was renamed as BRICS – with the "S" standing for South Africa – to reflect the group's expanded membership.

For these predictions to be a reality, among other things, it is also necessary to have a strong corporate governance framework. A brief analysis of the corporate governance practices of these nations is given below.

CORPORATE GOVERNANCE IN BRAZIL

Corporate governance made a headway in Brazil in mid-1990s when the National Institute of Boards of Directors, (Instituto Brasileiro de Conselheiros de Administração, IBCA) later the Brazilian Institute of Corporate Governance was set up in 1995 (Instituto Brasileiro de Governança Corporativa, IBGC). In the early 1950s and 1960s, most Brazilian private firms were controlled by majority shareholding families which prevented the boards from acting in an efficient and independent way. In 1976, a new Brazilian Corporate Law (Lei das Sociedades por Ações no Brasil, Lei 6.404) was enacted which replaced the old and outdated code enacted in 1940.

The IBGC issued the Code of Best Practices in Corporate Governance in 1999 and soon in 2001, the São Paulo Stock Exchange (Bovespa) brought in listings by levels of governance (Níveis Diferenciados de Governança) and the "new market" (Novo Mercado) was tied to corporate governance norms.

There are currently four special listing segments established by the BM&F Bovespa:

a. Bovespa Mais;
b. Level 1;
c. Level 2; and
d. Novo Mercado.

The basic difference between the segments is the level of the applicable governance practices. The most popular listing segment is the *Novo Mercado*, which has the highest level of corporate governance requirements.

TABLE 1: MAIN FEATURES OF BOVESPA'S SPECIAL SEGMENTS FOR STOCK LISTINGS

Particulars	Novo Mercado	Level 2	Level 1	Basic Law
Minimum free float	25%	25%	25%	No Provision
Type of Shares	Only Common Shares (Shares WITH voting rights).	Common Shares and Preferred Shares (Shares WITHOUT voting rights) with some special features.	Common Shares and Preferred Shares	Common Shares and Preferred Shares
Board of Directors	At least 5 , with 20% of independent members	At least 5 , with 20% of independent members	At least 3 members	At least 3 members
Finance Reports under Standards	US GAAP or IFRS	US GAAP or IFRS	Optional	Optional
Tag along Rights	100%	100% of Common Shares ,and 80% for preferred Shares	80% for Common Shares	80% for Common Shares
Adoption of Arbitrage Clause	Obliged	Obliged	Optional	Optional
Additional Financial Disclosure	Yes	Yes	Yes	Do not apply

CORPORATE GOVERNANCE IN RUSSIA

Corporate governance mechanism of Russia is influenced by the Anglo-Saxon stock market and model. The evolution of corporate governance in Russia is particularly since it was the result of a large-scale institutional experiment performed by the Russian government in the early 1990's with vigorous support of international financial institutions. Negative attitude of external investors and western partners towards Russia and Russian business reached its peak during the 1998 financial crisis and poor implementation of formally well-developed corporate legislation influenced the government to strengthen enforcement mechanisms and develop the stock market regulation and corporate governance model which was created in late 1990's.

Federal Commission on the Securities Market (FCSM) drafted amendments to the law on joint-stock companies and to the law on the securities market in 2000-2001. The Russian government issued the Code of Corporate Governance with the help of FCSM in 2002. The Code formed the basis of MICEX-RTS listing requirements. Russian stock exchange has five listing-levels:

- Quotation list A, level 1 (or A1).
- Quotation list A, level 2 (or A2).
- Quotation list B.
- Quotation list V.
- Quotation list I.

These requirements are presented in Table 2, as effective on 1 February, 2012.

TABLE 2: LISTING REQUIREMENTS OF MICEX-RTS

Particulars	A1,A2	B,V	I
Independent directors	3	1	1
Audit committee	Fully independent; failing that, non-executive	Fully non-executive	Not required
HR & Compensations committee	Fully independent; failing that, non-executive	Fully non-executive	Not required
30-day notice of AGMs	Yes	Yes	Yes
Directors and executives required to report ownership and trades in issuer's shares	Yes	Yes	Yes
Audited annual IFRS/US GAAP accounts	Yes	Not required	Not required
Maximum ownership concentration by a single entity and its affiliates	75%	90% (B) no cap provided (V)	No cap provided

CORPORATE GOVERNANCE IN INDIA

Since the time of Independence in 1947, public companies in India were only required to comply with limited governance and disclosure standards enumerated in the Companies Act of 1956, the Listing Agreement of the market regulator, and the accounting standards set forth by the Institute of Chartered Accountants of India (ICAI). India's corporate governance regime was particularly weak prior to 1991 and ever since the liberalization of the Indian economy in 1991, the need for better corporate governance framework was all the more felt with a series of corporate scandals happening in a row such as Harshad Metha, Ketan Parikh scam, UTI scam, the vanishing company scam, the Bhansali scam and so on.

One of the most significant developments in the area of corporate governance and investor protection was the establishment of the securities market regulator, the Securities and Exchange Board of India in 1992. The Confederation of Indian Industry (CII) released a Desirable Code for Corporate Governance in 1998 followed by the codes of two consecutive committees constituted by SEBI. The immediate outcome was the formulation of *Clause 49 of the Listing Agreement* which is the most significant recent development in Indian legal regime relating to corporate governance. This clause, introduced in 2000 and subsequently revised, details the standards of corporate governance which every listed company is required to adopt and follow. Clause 49 of the listing agreement prescribes various corporate governance mechanisms in the following subject areas:

a. Board of Directors and Independent Directors
b. Audit Committees
c. Subsidiary Companies
d. Disclosures
e. Report on Corporate Governance
f. Compliance Certifications

Similarly, the Government of India, through Ministry of Corporate Affairs (MCA) took many initiatives to strengthen the corporate governance framework in India. Some such measures are as follows:

a. Voluntary Guidelines on Corporate Governance released in 2009
b. Green Initiatives
c. Serious Fraud Investigation Office ("SFIO")
d. Investor Grievances Management Cell ("IGMC")
e. National Foundation for Corporate Governance ("NFCG")

One of the recent developments is the enactment of a new company law for India, the *Companies Act, 2013*, replacing the six decades old and outdated company legislation. The new Act has several measures to strengthen the legal framework of corporate governance such as class action suits, whistleblower policy, corporate social responsibility, prohibition of insider trading, entrenchment provisions among others. However, it is too early to comment upon the implementation and working of these new measures.

CORPORATE GOVERNANCE IN CHINA

Corporate governance in China emerged and developed as the country shifted from a planned economy to a market economy. It gained momentum with the process of state owned enterprises reform and private enterprises growth. The establishment and growth of China's capital market and the evolution of Chinese enterprises from government affiliates to modern companies have made it necessary to establish a new corporate governance framework.

There are many entities that play an important role in shaping companies' behaviors in China. They can be roughly divided into two main groups: those operating inside the company, and those operating outside the company. The inner circle consists of the shareholders' general meeting, boards, and management. The outer circle is composed of regulators (chiefly the CSRC), stock exchanges (SSE and SZSE), the legal system, the auditing system, and institutional investors. The country also has a strong legal framework for corporate governance comprising four levels such as basic laws, administrative regulations, regulatory provisions, and self-disciplinary rules. Besides such stringent corporate governance provisions, China suffers from the problem of concentration of state ownership and lack of independence among board directors.

CORPORATE GOVERNANCE IN SOUTH AFRICA

South Africa is the only developing country where the emergence and development of corporate governance was not stimulated by any significant crisis in the corporate sector but by the concerns of competitiveness following the re-admission of South Africa to the global economy. In South Africa, corporate governance was institutionalized through the King Reports on Corporate Governance ('the King Codes'). The King Codes were published by the King Committee, which was formed by the Institute of Directors of Southern Africa in 1992. Till now, three reports of King Committee have been released.

Further, various Guidelines and Practice Notes are released by the Institute of Directors from time to time in order to supplement the principles that are enunciated in King III. In addition to these, the Institute had issued a document entitled 'Code of Responsible Investing in South Africa' ('CRISA') which came into effect on 1st February 2012. It encourages institutional investors to promote sound governance in companies in which they invest.

COMPARATIVE ANALYSIS OF CORPORATE GOVERNANCE IN BRICS

S.No	Basis of Difference	Brazil	Russia	India	China	South Africa
1.	Regulatory Bodies	The Brazilian Securities and Exchange Commission (CVM) and The Stock Exchange (Bovespa)	The Federal Commission for the Securities Market	The Securities Exchange Board of India (SEBI) The Ministry of Corporate Affairs (MCA)	China Securities Regulatory Commission	The Institute of Directors
2.	Name of the code	(i)CVM Recommendations on Corporate Governance (ii) Code of Best Practice of Corporate Governance issued by IBGC (iii) Brazilian Civil Code for Limited Liability Companies	(i)The Code of Corporate Conduct (CCC) (ii)Civil Code of the Russian Federation (Civil Code).	No specific corporate governance code for all companies Clause 49 of the Listing Agreement for listed companies voluntary guidelines for corporate governance issued by MCA	Code of Corporate Governance for listed companies in China	The King Codes- The King Reports on Corporate Governance
3.	Structure of Board	Two-tier i. Fiscal Board/Supervisory Board ii. Board of Directors	Unitary	Unitary	Two-tier i. Supervisory Board ii. Board of Directors	Unitary
4.	Composition of Board	The Corporate Law of brazil states that the board of directors must be comprised of at least three members, with no limit on the maximum number of directors. However, as per the Brazilian Code, Board of	The Russian Corporate Law does not specify the minimum number of directors for LLCs. On the other hand, in JSCs, the minimum number of directors depends on the number of shareholders of the company. (i) companies with up to	As per Indian Companies Act, 1956, a private company must have a minimum of two directors whereas a public company must have at least three directors. There is no limit on the maximum number of	The Chinese Corporate does not specify any minimum or maximum number of directors. The board composition shall be in compliance with laws and regulations governing the company.	The board should comprise of both executive and non-executive directors, with a majority of non-executive directors. Further, one-third of the non-executive directors shall retire by rotation

		Directors may vary in size and can consist of between 5 and 9 members according to the needs of the company.	1,000 shareholders: at least five directors; (ii) companies with between 1,000 and 10,000 shareholders: at least seven directors; (iii) companies with more than 10,000 shareholders: at least nine directors. There is no legal maximum number of directors.	directors		each year.
5.	Number of Independent Directors	Any corporation listed in the special trading segments of the stock exchange, such as the New Market and Level II must have at least 20 per cent of the members of the board of directors as independent members.	The Board should comprise of at least one-fourth of the total number of members as independent directors. Further, in any event, it is recommended that the company's charter should provide that the Board should include at least 3 independent directors.	As per Clause 49 of the listing agreement, in the case of a listed company, at least 50% of the total number of directors must be non-executive directors. Further, if the chairman of a company is a non-executive director, at least one-third of the total number of the company's directors must be non-executive. On the other hand, if the chairman is an executive director, then at least one-half of the total members should be independent directors.	Article 123 of CCL as amended in 2006, requires the listed companies to have independent directors on its board. However, the definition and number of independent directors shall be decided by the respective State Council.	King 3 requires boards to be comprised of a majority of nonexecutive directors, of whom the majority should be independent. Every year the directors who are classified as independent should have their independence assessed by the board, particularly those that have been on the board for longer than nine years. The results should be reported.
6.	Frequency of Board Meetings	To ensure the effectiveness of the Board, the number of the Board Meetings will be determined by the company's circumstances. Board meetings should not be more frequent than once in a month.	It is recommended that meetings of the Board should be conducted on a regular basis in accordance with an approved plan generally at least once in every 6 weeks.	A minimum of 4 Board meetings must be held in each year. There should not be a time gap of more than 4 months between any 2 Board meetings.	The Board shall meet periodically and shall convene interim meetings in a timely manner when necessary and the meetings of the Board of a listed company shall be conducted in strict compliance with the prescribed procedures.	No such provisions are laid down for the frequency of board meetings. But, it was said that The Chairman should meet the CEO prior to Board Meetings to discuss important issues.
7.	Tenure of office of directors	Directors should preferably have one-year terms of office. Reelection is desirable to build a seasoned, productive Board, but should never be automatic. It should only be possible after a formal performance evaluation. All Directors should be elected at the same General Meeting.	Not covered.	In the case of public companies and private companies which are subsidiaries of public companies, one-third of the total number of directors are permanent directors and two-thirds of the directors are rotational directors. One-third of the rotational directors must retire by rotation at every annual general meeting. The term of any director required to retire by rotation cannot exceed three years and this term can be extended by re-appointment only. A director retiring by rotation can be re-appointed at the same annual general meeting.	Appointment agreements shall be entered into by a listed company and its directors to clarify such matters as the rights and obligations between the company and the director, the term of the directorship, the director's liabilities in case of breach of laws, regulations or articles of association, and the compensation from the company in case of early termination of the appointment agreement for cause by the company.	Not covered.

8.	Separation of positions of chairman and CEO	In order to avoid concentration of power and to enable an adequate supervision of management, the two positions should be filled by different people. Moreover, it has been recommended that CEO should not be a member of the Board. The CEO may be a Director, provided the Board also holds regular executive sessions.(The part of the Board meeting attended neither by the CEO nor the Officers). The CEO should attend the Board meetings as a guest. If the positions of Chairman and CEO are exercised by the same person and a separation of roles is momentarily impossible, it is recommended that independent directors undertake the responsibility of leading discussions involving conflicts between the roles of the CEO and the Chairman.	There is no such provision. However, the “director general” cannot serve concurrently as the chairman of the supervisory board.	There is no such provision. The same individual may perform both the roles.	There is no such provision.	The CEO and chairman positions should be separate. The board should be led by an independent non executive chairman who should not be the CEO of the company.
9.	Composition of Audit Committee	The Audit Committee should preferably be made up of independent members of the Board of Directors. Directors also serving as Officers should not take part in the Audit Committee. The Committee should set up its own Internal Regulation and consist of at least three members, all of whom familiar with basic financial and accounting matters. At least one member should be more experienced in accounting issues, audits, and financial management.	In order to provide due objectivity, the audit committee should include only independent directors. If, for objective reasons, this is impossible, the audit committee should be headed by an independent director and its members should be independent and non-executive directors. members of the audit committee should possess special knowledge of the basics of accounting and financial reporting. The Audit Committee shall be chaired by an independent director. At least 1 independent director from the Audit Committee shall be an accounting professional.	The Audit Committee shall have a minimum of 3 members, all being non-executive directors, majority of the members being independent. At least 1 member must have financial and accounting knowledge. The chairman, being an independent director, shall remain present at the company’s AGM to respond to the shareholders’ queries.	The audit committee shall be chaired by an independent director, and independent directors shall constitute the majority of the committees. At least one independent director from the audit committee shall be an accounting professional.	The audit committee should consist of at least three independent members, all of whom should be independent non-executive directors. The chairman of the board should not be the chairman of, nor a member of, the audit committee. The audit committee chairman should be elected by the board, set the agenda and be present at the AGM.
10.	Frequency of meetings of Audit Committee	The Audit Committee should meet regularly and should also meet with the Board, the Fiscal Council (when established), the CEO, the other officers, and independent auditors.	The audit committee should hold meetings at least once a month and prepare its recommendations for the board of directors of the company	The Audit Committee must meet at least 4 times a year –once in every 4 months and once before the finalization of accounts. The quorum for the meetings of the Audit Committee will be 2 or one-third of the total number of members, whichever is higher At least 2 of the members constituting a quorum must be	There is no specific provision regarding frequency of Audit Committee Meeting.	The audit committee chairman should, in consultation with the company secretary, decide the frequency and timing of its meetings. The audit committee should meet as frequently as necessary to perform its role, but should meet at least twice a year. Reasonable time

				independent.		should be allocated for all audit committee meetings. There should be at least one meeting a year, or part of a year, where the external and internal auditors attend without the management being present.
11.	Whistleblower Policy	There is no specific regulation.	Under a recent amendment to the Criminal Code, a person who is a part of a criminal group and who reports a crime to the investigators can ask to enter into a collaboration agreement with the investigation. Under such an agreement the individual may be protected by the State and the punishment may also be reduced. There is no other statutory protection for whistleblowers.	Clause 49 of the Listing Agreement imposes a non mandatory requirement on listed companies to have a whistle blowing policy. A company may establish a mechanism for employees to report to the management concerns about unethical behaviour, actual or suspected fraud or violation of the company's code of conduct or ethics policy. This mechanism could also provide adequate safeguards against victimization of employees who use the mechanism and direct access to the chairman of the audit committee in exceptional cases. There is no other statute in force, which provides statutory protection for whistleblowers.	There is no specific provision.	The audit committee should review arrangements made by the company to enable employees and outside whistleblowers (including customers and suppliers) to report in confidence concerns about possible improprieties in matters of financial reporting, or compliance with laws and regulations, that may have a direct or indirect effect on financial reporting. The audit committee should ensure that the company has appropriate arrangements in place for the balanced and independent investigation of whistle blowing reports and for taking any action necessary as a result of such reports.
12.	Accountability for disclosure	The CEO should make pertinent information accessible to all the parties concerned, as soon as available, in addition to information that is mandatory by law or regulation, with substance prevailing over form. The company should provide balanced and top quality information addressing both positive and negative points, to enable the reader to correctly understand and appraise the organization. Any information that may influence investment decisions should be disclosed immediately an simultaneously to all parties that may have an interest. The internet and othe technologies should be used as much as possible to improve speed and allow for a broad and timely disclosure of such information.	It is advisable that an internal company document setting forth rules of and approaches to disclosure (Regulation on Information Policy) be approved by the board of directors. It is expedient that this document contain a list of items subject to disclosure (in addition to those items requiring disclosure by law) as well as rules for their disclosure, including the mass media that should be used for disclosure and the regularity of disclosure. The company should promptly disclose information about all factors that may be material to shareholders and investors.	Listed companies must comply with the mandatory provisions set out in Clause 49 of the Listing Agreement. The annual report of a listed company comprises the company's financial statements, the directors' report and such other disclosures as are required under Clause 49 of the Listing Agreement. In relation to unlisted public companies and private companies, the directors must disclose in the directors' report all the pertinent information.	The secretary of the board of directors shall be in charge of information disclosure. In addition to disclosing mandatory information, a company shall also voluntarily and timely disclose all other information that may have a material effect on the decisions of shareholders and stakeholders, and shall ensure equal access to information for all shareholders	The board should ensure that the company makes full and timely disclosure of material matters concerning the company.

CONCLUSION

Though, the BRICS comprises of countries with diverse cultural background different business orientations, political ideologies, ownership structures and legal origins, the corporate governance framework of each of these countries focuses on protecting and maintaining stakeholders' interests and investors' confidence in general. Some of these have well developed corporate governance codes while others are on a move towards strengthening their corporate governance rules.
Also, as per *Corporate Governance Codes in BRICS Nations: A Comparative Study,* "Some countries have precisely defined provisions while some may have general and broadly defined principles with respect to certain provisions. While, the codes of Russia and India are very precise about existence of certain percentage of independent and external directors in the board, as one-fourth (in Russia) and one-third or half (in India) depending on the merit of individual case, the Chinese and South African Code of Good Governance is very subjective but has strong inclination towards maintenance of independence in Boards. In a more extreme case, the Brazilian Code is of the view that the Board be formed exclusively by external and independent directors. However, the number of directors may vary according to the organization's industry, size, complexity of activities, stage of its life cycle, and its need to form committees."
However, all the five countries have a common approach towards the formation of a significantly important mechanism for ensuring corporate governance, that is, the formation of Audit Committee comprising of either non-executive directors or independent directors or both. A similar emphasis is given on the constitution of Nomination and Remuneration Committees, though certain other committees are also required in some of the nations.
Such similarities are bound to be there in any mechanism ensuring good corporate governance in any part of the world. However, because of the differences in corporate cultures, country's customs and traditions and legal environment, corporate governance practices have their distinctive features in each of these countries.

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EFFECT OF INSTITUTIONAL PRESSURES ON THE RELATION BETWEEN FINANCIAL AND SUSTAINABLE PERFORMANCE OF FIRMS

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ABSTRACT

In this study we have investigated the effects of pressures inserted by institutional actors such as government and media on the relation between firms' financial and their sustainable development performance. For this purpose we studied 49 Indian firms from financial & real estate sector and from utilities & refining sector. It is logically expected that due to higher institutional pressures, utilities & refining sector firms would perform better on their sustainability with regards to their financial perform, and the opposite is expected from financial & real estate sector. Based on the ESG parameters to measure corporate sustainable development, we used community, employees, environment, and governance factors' scores to measure the firms' sustainable development and we used return on net worth, and net profit margin to measure firms' financial performance. We used Pearson's Correlation to analyze the relation between firms' sustainable and financial performance. As hypothesized, we found that the high risk industries which face higher institutional pressures perform better on sustainability with regards to their financial performance as compared to the low risk industries. Though we could not provide evidence to establish the direction between such relationship, due to the short period analysis and the restriction on the size of the sample which has been the biggest drawback of our study, we did provide some proof to establish that sustainable development efforts does send positive market signals

JEL CODE
L00

KEYWORDS
sustainable development, institutional pressure, financial.

I. INTRODUCTION

There have been a large number of researches done in the past which tried to establish the relation between sustainable development of companies in form of environmental, social and economic performance, and their financial performance. The results have been mixed. While most of the researches showed a positive relation between both, many showed no relation at all between two and yet some showed a negative relation. At the same time there has been no study that tried to establish effect of institutional pressures on the relation between financial and sustainable performance of firms.

The most important aspect of our research is that we understand that firms in different industries respond differently to sustainability given their financial performance. There are many reasons for such differences, such as level of environmental and social impact, motivation and pressures from outside agencies to name a few (Dong-shang Chang and Li-chin Regina Kuo (2008), P.Bansal (2005), Natalia Semenova and Lars G. Hassel (2008), Constantin Belu (2009), Bert Scholtens and Yangqin Zhou (2008)). In our study though, we will focus only on analyzing the effects of institutional pressures on the sustainable performance of the firms given their financial performance, for firms in high and low risk industries.

II. LITERATURE REVIEW

MEANING OF SUSTAINABLE DEVELOPMENT

'Sustainable Development' is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.' The WCED (World Commission on Environment and Development) asserted that sustainable development required the simultaneous adoption of environmental, economic and equity principles. Further researches have provided the pillars that supposedly make up sustainable development. These pillars, commonly known as ESG are: economic prosperity, environmental integrity and social equity, and good corporate governance (Elkington, 1998; WCED, 1987).

ENVIRONMENTAL INTEGRITY THROUGH CORPORATE ENVIRONMENTAL MANAGEMENT

Every firm leaves an environmental footprint no matter how small. Activities which make for such footprints may range from office lighting to waste and emissions thrown in the atmosphere. Pollution control or compliance refers to 'end-of-pipe' solutions, where the firm disposes its waste responsibly (Hart, 1995).

SOCIAL EQUITY THROUGH CORPORATE SOCIAL RESPONSIBILITY

For a firm to be socially responsible it should take into account the expectations of all the stakeholders and not just the financial ones (Carroll, 1979). Corporate social responsibility is made up of three pillars which are, environmental assessment, stakeholder management, and social issues management (Wood, 1991). Hence a socially responsible firm would build strong stakeholder relationships through transparent operations, represent stakeholder interests in decision-making, and distribute the value created by firms equitably among all relevant stakeholders. Social issues management is the process of addressing social issues, such as the decision not to employ child labor, not to produce socially undesirable products, and not to engage in relationships with unethical partners (Frederick (1994), Fahey and Narayanan (1984), Starik (1995), Freeman (1984))

ECONOMIC PROSPERITY THROUGH VALUE CREATION

Firms create value through the goods and services that they produce (Bowman and Ambrosini, 2000). When a firm creates and captures value, it distributes this value to consumers through its goods and services, to shareholders through dividends and equity, and to employees through salaries.

RELATION BETWEEN CORPORATE SUSTAINABLE DEVELOPMENT AND FIRM'S FINANCIAL PERFORMANCE

The results of studies which tried to establish a concrete relation between a firm's sustainable and financial performance have been mixed. The reasons for such differences can be many including industrial diversity, size of the firm, geographical factors and socio-cultural trend. Stanwick and Stanwick, 1998; Russo and Fouts, 1997; Wagner and Schaltegger, 2004; Wagner, 2005; Porter and van der Linde (1995); Lundgren (2007); Dowell et al. (2000); Konar S, Cohen M. 2001; King A, Lenox M. 2002; Guenster et al . (2006), Waddock SA, Graves SB. 1997; Sturdivant and Ginter, 1977; Brammer and Millington, 2005; Frooman, 1997; Freeman, 1984; Orlitzky et al. (2003); Preston and O'Bannon (1997), among others show a positive relation between the two; Walley and Whitehead, 1994, Friedman, 1970; Brummer, 1991; Jensen, 2001; Williamson, 1964; Jensen and Meckling, 1976); Sethi (1979) show a negative relation, while Watson et al. , 2004 and Fogler and Nutt, 1975 Aupperle, K. E..A B. Carroll.and Hatfield. 1985; Alexander, G. J., and R. A. Buchholz. 1978; Freedman Jaggi 1992 propose a neutral relation.

III. HYPOTHESES DEVELOPMENT

ARGUMENT 1

Studies mentioned in the literature review which tried to establish a relation between a firm's sustainable and financial performance have all considered a resource based view. The resource-based view argues that effective corporate strategies build rent-earning resources and capabilities. Firm resources can include tangible assets, such as the firm's financial reserves, physical plant and equipment, and its raw materials; and intangible assets, such as the firm's reputation, culture, and intellectual capital (Grant, 1991). The studies imply that the relation between a firm's sustainable and financial performance depends on the firm's resources, however these studies did not take into account the firm's institutional based factors in reaching their conclusions. Institutional theory takes into account the social factors and situations within which it works. Failure to conform to such institutional norms is important, non compliance of which could threaten the firm's survival and can endanger its resources and legitimacy (DiMaggio and Powell, 1983; Oliver, 1991; Scott, 1987). Institutions can include the government, professional associations, public opinion, or the media. Institutional theory is relevant to corporate sustainable development because: 1) an individual perceive a firm based on the basis of its commitment to sustainable development activities. This may affect the acceptability and value of the firm (Bansal and Roth, 2000); 2) individual who perceive differently about the openion on a firm's sustainable development would exchange the ideas to establish norms and common beliefs (Hoffman, 1999; Wade-Benzoni et al., 2002); and 3) sustainable development has no longer remained to be an isolated phenomenon, with international bodies deliberating on sustainability issues and establishing regulations and agreements which shall be complies internationally (Frank, Hironaka, and Schofer, 2000). Meyer and Rowan assert that: 'as the issues of safety and environmental pollution arise, and as relevant professions and programs become institutionalized in laws, union ideologies and public opinion, organizations incorporate these programs and professions' (Meyer and Rowan, 1977: 345). Jennings and Zandbergen (1995) argue that coercive, mimetic, and normative institutional pressures influence the rate at which sustainable development practices are implemented by the firms.

ARGUMENT 2

We argue that the institutional pressures and their effects are not same or similar throughout all the industries. The institutional pressures tend to be much higher in high risk industries compared to low risk industries. High risk industries comprise of firms which leave a bigger environmental footprint such as utilities and refining, agriculture, air transport, building materials, chemicals and pharmaceuticals, construction, forestry and paper mining & metals, oil and gas, power generation to name a few; on the other hand low risk industries comprise of firms which doesn't leave a big environmental footprint, such as, information Technology, media, consumer / mortgage finance, property Investors, and telecoms. While the institutional pressures are higher in high risk industries compared to low risk industries, we believe that the effects of such pressures on the firms from both type of industries tend to be different. High risk industries would tend to react promptly and more aggressively as the response from such pressures compared to the low risk industries because of the learning experiences. High risk industries face such pressures very frequently and a non compliance leads to heavy penalties, financial or otherwise. The opposite should be true for low risk industries. So over the time, the high risk industries learn to act more swiftly to institutional pressures as compared to low risk industries.

The above arguments lead us to propose the following hypothesis:

H1: *Institutional pressures would have a positive impact on the relation between a firm's sustainable development performance and its financial performance for high risk industries' firms, but would not have a positive impact on such relation for low risk industries' firms.*

IV. RESEARCH METHODOLOGY

To measure the sustainable performance of firms on the basis of ESG criteria, we have used the scores of community, employees, environment, and governance factors which are available from CSRHUB which is the world's largest corporate social responsibility (CSR) and sustainability ratings and information database.

In order to measure firms' financial performance we used their return of equity and their net profit margin which takes into account both the firms' market and operating performance, making it a comprehensive measure. Such data was retrieved from http://moneycontrol.com/.

We have used a total of 49 firms, 28 of which are from high risk industries mostly comprising of utilities and refinery, and 21 are from low risk industries mostly comprising of finance and real estate firms.

In order to test our hypothesis and analyze the relation between firms' sustainable development and financial performance we have used Pearson Correlation. Due to the small size of our sample, the data violated certain assumptions of parametric tests. To deal with this anomaly we used several measures such as removing or modifying the outliers and log-transforming the data to name a few. All such analysis was run using the SPSS package.

V. RESULTS

The results of the Pearson Correlation for high and low risk industries' firms are as follows:

PEARSON CORRELATION FOR LOW RISK INDUSTRY

		Community	Employees	Environment	Governance	SP
logROE	Pearson Correlation	.230	.341	-.011	-.111	.166
	Sig. (2-tailed)	.098	.075	.075	.052	.040
	N	28	28	28	28	28
logNPM	Pearson Correlation	-.029	-.133	-.211	.272	-.070
	Sig. (2-tailed)	.088	.051	.029	.017	.073
	N	27	27	27	27	27
logFP	Pearson Correlation	-.070	-.075	-.172	-.011	-.122
	Sig. (2-tailed)	.072	.070	.038	.096	.054
	N	28	28	28	28	28

PEARSON CORRELATION FOR HIGH RISK INDUSTRY

		Community	Employees	Environment	Governance	SP
logROE	Pearson Correlation	-.009	.134	.102	-0.492	.066
	Sig. (2-tailed)	.080	.058	.068	.038	.079
	N	19	19	19	18	19
logNPM	Pearson Correlation	.157	.209	-.192	-0.551	-.007
	Sig. (2-tailed)	.055	.042	.046	.027	.098
	N	17	17	17	16	17
logFP	Pearson Correlation	.078	.200	.023	-.322	.064
	Sig. (2-tailed)	.176	.143	.093	.207	.280
	N	18	18	18	17	18

Due to small size of the sample and despite using various techniques to validate the data to meet the assumptions for parametric tests, many of the correlations are still not significant at 0.05 level. Hence we have considered 0.10 as our level of significance to analyze the results.
It is clear from the results that the relationship between sustainable development performance (as denoted by SP) and financial performance (as denoted by logFP) is more positive for the high risk industries as compared to the low risk industries. This supports our hypothesis. Important thing to note is that this relation is in fact negative for the low risk industry. For the high risk industry also the relation is marginally positive and close to zero, which is also not significant even at 0.10 level. The reason for such result is that our data was taken for only one year. Sustainable development is a long term process which often requires huge investments. Analyzing the relationship between sustainable development performance and financial performance for a very short period of time cannot lead to definite results and no conclusion regarding such relation should be made. Though, such results are compatible with our research because it is not the purpose of our research to establish the direction of such relationship, rather in our research we are making a comparison of such relationship between high and low risk industries. Our assumption is that no matter the direction of such relation in short term, the differentiating properties of such relation for high and low risk industries as conferred by the institutional factors should persist in the short run.
Other important thing to note in our result is that relation between return on equity (as denoted by logROE) and sustainable development performance is positive for low risk industry and marginally positive for high risk industry. This gives us some evidence to believe that higher sustainable development performance of a firm gives a positive signal to the market, positively affecting the market's performance. This result is in the lines with Frooman J. (1997), Orlitzky M, Schmidt FL, Rynes SL. (2003), Orlitzky (2001), Lundgren T. (2007), McGuire et al. (1988), Moskowitz M. (1972), Dowell et al. (2000), Konar and Cohen (2001), and Guenster et al. (2006). The relation between net profit margin (as denoted by logNPM) and the sustainable development performance is negative in both high and low risk industries. This is probably due to the fact as mentioned earlier that firms would not be able to recover their investments they make for sustainable development activities in short run.

VI. CONCLUSION

Using the date from 49 firms of high and low risk industries we have provided a proof for our argument that the institutional pressures affect the relation between firms' sustainable development and financial performance differently in high and low risk industries. Firms in high risk industries as compared to firms in low risk industries tend to act more swiftly towards the institutional pressures and invest more efficiently (as shown by a positive relation between the sustainable performance and financial performance) in sustainable development (social, environmental and governance) activities. Though we could not provide evidence to establish the direction between such relationship, due to the short period analysis and the restriction on the size of the sample, which have been the biggest drawback of our study, we did provide some proof to establish that sustainable development efforts does send positive market signals.
Leaders from firms of both types of industries can use this research to assess the importance of the institutional factors which may have a serious implication on their sustainable and financial performance.

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FOREIGN DIRECT INVESTMENT: ECONOMIC GROWTH AND ISLAMIC BANKING INDUSTRY

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ABSTRACT

The purpose of this paper is to investigate the effect of FDI and Islamic banking on the increase of economic growth in Islamic countries in the 1990-2010 periods. The IPS unit root test indicates that variables are stationary in level and Hausman test suggests that we should apply the fixed effects model. The estimation of the model parameters leads us to conclude that FDI and the Islamic banking industry have a positive and significant effect on economic growth and variables such as human capital, economic infrastructure and capital formation have also positive effect on GDP. On the other hand, GDP, human capital and infrastructure attract FDI but Islamic banking has a weak positive effect on FDI attraction.

JEL CLASSIFICATION

F21, O16, D24.

KEYWORDS

Foreign Direct Investment; Economic Growth; Islamic Banking.

INTRODUCTION

The Islamic banking is a type of banking versus conventional banking. The different between conventional and Islamic banking is on interest rate: in conventional banking interest rate is fixed but in Islamic banking one isn't fixed. In Islamic banking the interest rate varies depend on the profit of project. There are many Islamic contracts that Islamic banks apply for the loans. According to these contracts (such as Mozareba, Moshareka,..) the interest rate isn't fixed inverse of capitalism banks.

Nowadays, Islamic financial markets were developed around the World even in Europe continent. There are more than 400 institutions spread over 51 countries (Dubai Islamic Bank 2009). The first modern Islamic bank was opened in Egypt. Then this type of banking was developed in the countries such as Malaysia, Pakistan and so on.

In Islamic countries there is other phenomenon that affects on economic activities. There are three dedicates that foreign direct investment was spread in these countries. The developing and certain Islamic countries usually have the problems abut physical capital; foreign direct investment could comprise the lack of capital in these countries. Both, foreign direct investment and banking activities are the important variable in economy of these countries and the impact of these factors is different in each country, therefore the aim of this paper is the study of foreign direct investment and Islamic banking on economic growth in Islamic countries.

Borensztein and Gregorie & Lee (1978) show that foreign direct investment in an endogenous model cause of economic growth in developed countries. Blomstorm et al. (1996) indicate that foreign direct investment improves economic growth in developing countries. On the other hand, Balasubramanyam et al. (1996) show that foreign direct investment, plays more important role in economic growth as compared to export. Carkevic and Levine (2005) also showed that foreign direct investment leads to the increase of economic performance. However, Gory and Greenaway (2004) proved that FDI does not have any influence on economic growth. Tajgardoon, Behname and Noormohamadi (2012) have showed that there is a bidirectional relationship between Islamic banking and FDI (the feedback relationship). It means that FDI reinforce Islamic banking and Islamic banking attracts foreign direct investment. Behname (2008, 2011) has shown that economic growth is a determinant of foreign direct investment.

FOREIGN DIRECT INVESTMENT, ISLAMIC BANKING AND ECONOMIC GROWTH

Romer (1986) has developed a framework for the effect of foreign direct investment on economic growth. Fedderke and Romm (2006) by the spirit of De Mello (1997) and Ramirez (2000) develop a model for the study of impact of foreign direct investment on economic growth. They apply an augmented Cobb –Douglas function

$Y=Af(L, K_p, E)=AL^{\alpha}K_p^{\beta}E^{1-\alpha-\beta}$ (1)

where Y stands for real output, Kp apply for the domestic capital stock, L shows labor, and E is stock of FDI.

$E=(L,K_p,K_f^{\gamma})^{\theta}$ (2)

where K_f stands for forein capital. Combining Eqs. (1) and (2) they obtain

$Y=AL^{\alpha+\theta(1-\alpha-\beta)}K_p^{\beta+\theta(1-\alpha-\beta)}K_f^{\gamma\theta(1-\alpha-\beta)}$ (3)

Finally they can generate the dynamic production function by taking logarithms and tim derivatives of Eq. (3):

$g_y=g_A+(\alpha+\theta(1-\alpha-\beta)g_L+(\beta+\theta(1-\alpha-\beta)gK_p+(\gamma\theta(1-\alpha-\beta))gK_f$

where gi is the growth rate of i=Y, A, L, Kp and Kf. By assumption $\alpha+\beta<1$, we can result that foreign direct investment has a positive effect on economic growth g_y.

On the other hand, the credit of bank is an important factor in economy. The banks by development of credit system improve domestic and foreign investment and increase production, then the activity of banks could be cause of the economic growth. When the banks decrease the interest rate or increase the credit, investors rise investment by increasing investment aggregate demand would increase, increasing aggregate demand augments real output and so on. After a period, economic growth would increase.

DATA AND METHODOLOGY

Before estimation of the model, we should be ensured of the stationarity of the series. Dickey-Fuller, Augmented Dickey and Phillips-Perron tests are used to measure the stationarity of time-series variables, however, for panel data which have higher power in comparison to the time-series, other tests are applied. These tests are: Im, Pasavan and Shin (1997, 2002), Levin, Lin and Chu (1992). Among different unit root tests in econometrics literature, the LLC and IPS are more conventional than others. Both of these tests have been made based on ADF.

Assuming that data are homogeneous, LLC test has been made for dynamics of autoregressive coefficients for all panel data. However, IPS more generally considers heterogeneity for these dynamics.

The benchmark model of autoregressive is as follows:

$$Y_{it} = \rho_i Y_{it-1} + \delta_i X_{it} + \varepsilon_{it} \qquad (1)$$

where shows i = 1,2,…N of the countries from the times of t=1,2,….,T. X_{it} are exogenous variables in the model. ρ_i is the autoregressive coefficient and ε_{it} is the error term. If ρ_i <1, Y_i is weak stationary and if ρ_i =1, then Y_i has a unit root. In this paper, IPS test was used for the unit root, as the different economic structures for the respective countries. Behname (2011a,b)

TABLE 1: UNIT ROOT TEST AND PANEL DATA

GDP	INF	BAN	HUM	GCF	FDI	EX
-2.21*	-1.55*	-6.77*	-2.43*	-2.53*	-4.64*	-2.96*

The variables are stationary at the 5% confidence level.

As defined in Table 1, all the variables were significant in the 5% level of confidence. It means the variables are stationary, and so, spurious regression is avoided. The Hausman test is used to select the fixed effects or random effects models. This test shows that the fixed effects model is appropriate.

DATA AND METHODS

The main variables for economic growth in this study include investment, banking sector (credits of Islamic bank in the host economy), GDP per capita, infrastructure (telephone line), inflation, productivity, human capital and foreign direct investment.

We apply a linear panel data model for analysis of FDI and Islamic banking effects on economic growth. The basic specification for the model is as following:

$$GDP_{it} = \beta_0 + \beta_1 INF_{it} + \beta_2 BAN_{it} + \beta_3 HUM_{it} + \beta_4 GCF_{it} + \beta_5 FDI_{it} + BX_{it} + \varepsilon_{it}$$

where GDP is the real gross domestic product per capita growth of country i, INF stands for infrastructure, BAN is a proxy for Islamic banking sector and HUM stands for human capital in the host economy. FDI is the foreign direct investment and GCF is gross capital formation as a percentage of GDP. The group of X includes a group of variables to test the robustness of results (e.g. dummy variables, interaction of FDI with other variables, inflation…). We could consider the endogenous form of the model i.e. FDI to be a dependent variable.

The sources of variables are UNdata, World Development Indicators, FMI and Growth Data Resources. To calculate the Credits to Private Sector allocated by Islamic banks we follow two steps:

1. We made an exhaustive list of Islamic banks in selected Asian countries.
2. Assuming that all credits provided by Islamic banks are allocated to private sector as, the main selection criteria of projects in Islamic banks are the productivity. So we aggregate different total of credits from bank balance sheets to get the overall credits to private sectors by Islamic banks for each country. Data source is Bankscope database compiled by IFIS (Islamic Finance Information Service) dataset.(Tajgardoon, Behname, Noormohamadi 2003)

The data set used covers Islamic countries over the period of 1990-2010. The countries contain: Bahrain, Iran, Malaysia, United Arab Emirates, Pakistan, Kuwait, Saudi Arabia, Qatar, Iraq, Oman, Turkey, and Yemen. The limitation of date and countries is for the lack of certain sufficient data.

EMPIRICAL RESULTS

The Table 2 shows the results of estimation of our equation. In the column 2.1 we introduce the main variables: FDI, HUM and BAN. The results show the effect of Islamic banking sector, human capital and foreign investment variables on economic growth are positive and also significant. This result shows that the Islamic banking increases economic growth because nowadays, goods and services transfer through the money and banking system and an efficient bank system accelerate economic growth. Tajgardoon, Behname and Noormohamadi (2012) with a Granger causality test have shown that the Islamic banking causes of economic growth in the home countries. On the other hand, in production function, foreign direct investment considers as capital. Human and physical capitals are the essential variables in production function which affect positively GDP. Foreign direct investment the same as domestic investment increase aggregate demand and aggregate demand augment real domestic output. A high human capital level shows that the workers adopt easily the new technology and this process accelerates economic growth. Heir, the coefficients correspond on the theory. Behname (2008, 2011) and Borensztein et al (1998) indicate these results are confirmed for the many countries.

We add GCF to the column 2.2. This equation shows that capital formation could increase economic growth. In this column, human capital is insignificant but other variables have the same sign that the first column. Fnag (2011) and Apergis and Payne (2011) have also shown that capital formation could rise economic growth.

In equation 2.3 the infrastructure was also add. The proxy variable for infrastructure is the fixed telephone line per 10000. For our example the infrastructure has not any effect on economic growth, but other variables are the same that in second column. In the most researches that infrastructure was considered the effect of this variable on GDP is positive because with a good infrastructure inputs and outputs would transfer very easily. In the third column this variable is positive. In the fourth column, capital formation was deleted and by this change, the result has been varied. In this column, the banking sector isn't significant but infrastructure increase economic growth. In column 2.5, we include INFR inflation rate, as a systematic risk, into the equation which has positive effect on economic growth. Increasing in price general level is a motivation for producer because they consider this augmentation as increasing in their profit. Behname (2011b) shows that inflation rate could increase national income.

TABLE 2: IMPACT OF FDI ON PER CAPITA GDP GROWTH

	2.1	2.2	2.3	2.4	2.5
Constant	5.13**	2.41*	2.43***	1.33	2.22
(2.12)	(1.89)	(2.99)	(1.09)	(1.22)	
BAN	0.14**	0.22**	0.21**	0.13	0.26**
	(2.11)	(2.09)	(2.13)	(1.12)	(2.23)
HUM	0.92*	0.37	0.89**	0.81**	0.43**
	(1.85)	(1.01)	(2.09)	(2.04)	(2.22)
FDI	0.101**	0.39**	0.21*	0.12**	0.25**
	(2.31)	(2.10)	(1.89)	(2.09)	(2.11)
GCF		0.14***	0.13**		0.15*
		(4.12)	(2.04)		(2.12)
INF			0.51	0.34**	0.43*
			(1.23)	(2.08)	(1.88)
INFR					0.09**
					(2.15)

Notes: t-values reported in parentheses; *** significant at 1% level; ** significant at 5% level;* significant at 10% level.

Table 3 indicates the estimation of equation for foreign direct investment. In general, we consider that the effects of economic growth and human capital on FDI are positive, and the results show this fact. But for banking sector only in the first and the last model is positive and significant and its effect is weak. Based on this table, economic growth, human capital, trade, capital formation and economic infrastructure have positive sign and mainly significant effect on attracting foreign capital, while economic risk, (inflation), leads to the decrease of foreign investment. Aitken & Harrison (1999) and De Mello (1997) show the same results.

TABLE 3: IMPACT OF GROWTH ON FDI INFLOW

	3.1	3.2	3.3	3.4	3.5
Constant	-2.43**	-4.19**	-3.22**	-2.11**	-2.05
	(-2.21)	(-2.01)	(-2.09)	(-2.14)	(-1.34)
GDP	0.03**	0.02**	0.06	0.03**	0.03**
	(2.22)	(2.13)	(1.12)	(2.41)	(2.22)
HUM	0.23**	0.33*	0.21**	0.23	0.32
	(2.31)	(1.88)	(2.13)	(1.41)	(2.09)
BAN	0.03**	0.65	-0.14	0.32	0.03**
	(2.21)	(1.11)	(-1.31)	(1.12)	(2.14)
EX		0.03*	0.03**	0.04**	0.06**
		(1.91)	(2.12)	(2.17)	(2.14)
GCF			0.32**	0.32**	0.05**
			(2.09)	(2.09)	(2.03)
INFR				-0.14**	-0.08**
				(-2.04)	(-2.11)
INF					0.31**
(2.16)					

Notes: t-values reported in parentheses; *** significant at 1% level; ** significant at 5% level;* significant at 10% level.

CONCLUSION

The aim of this paper is the survey of foreign direct investment (FDI) and Islamic banking effects on economic growth in the Islamic countries for the period 1990-2010. For avoid from spurious regression the unit root test was applied, and the results reveal that all the variables are stationary in level. The Hausman (1978) test is used to select the fixed effects or random effects models. This test shows that the fixed effects model is appropriate. We studied the effects of FDI and Islamic banking on economic growth, and the effect of GDP and Islamic banking on FDI. In each column, in order to compare the models we have included different variables. In general, the estimation shows that foreign direct investment could increase economic growth, this conclude corresponds on the theory that was developed by Fedderke and Romm (2006). Capital is the main variable in production function, marginal production of capital is positive that's mean augmentation of capital would increase real income. In this table we have also shown that Islamic banking can increase strongly economic growth. When Islamic banks develop their activities, the firms easily achieve the credit and they can extend their outputs. In this paper was cleared that human capital, trade and infrastructure increase economic growth.

The first estimation of our research reveals that economic growth and Islamic banks could attract foreign direct investment. A potential market is very important for foreign investors. The level of national income and its growth shows this market. A high level of educated labor force could increase productivity and efficiency in the firms. Therefore, Islamic countries could attract foreign capital by focus on these variables, but we should consider that Islamic banking effect on FDI attraction is weak.

For the second estimation we show the effective factors on economic growth, we could mention economic infrastructure, human capital and capital formation which increase the growth. Based on the obtained results, the Islamic countries should devote their most attention to economic infrastructure and capital formation, since it directly increases GDP and affects it indirectly through attracting FDI.

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THE EFFECT OF CAPITAL STRUCTURE ON PROFITABILITY: EVIDENCE FROM THE PETROCHEMICAL COMPANIES IN THE KINGDOM OF SAUDI ARABIA

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ABSTRACT

The study aims at exploring the relationship between the capital structure and the profitability (measured by ROI, ROE and NPR) of the petrochemical industry firms in the Kingdom of Saudi Arabia, and the direction of this relation for the targeted firms during the period 2008-2011. The researchers used the simple regression model to estimate the relationship between the independent variable (Debt Ratio) and the measures of the dependent variable (Profitability ratios), this was done by using the Cross Section – Time Series (Panel Data) since it is appropriate for the nature of data (group of firms for a multiple years). The results revealed that there's no significant relationship between capital structure and ROI and ROE, while it showed very week relationship with NPM. This means that the profitability performance of the petrochemical industry firms in KSA is not relevant to capital structure, and there're other factors that affect the profitability of these firms.

JEL CLASSIFICATION
G320

KEYWORDS
Capital Structure, Petrochemical Industries, Profitability ratios, Saudi Arabia.

1. INTRODUCTION

Profitability is the economical justification of the existence and sustainability of any business firm; it is also an important indicator to evaluate it. The overwhelming literature in finance agree that wealth maximization as represented in the market value of the stock is the main objective that the management should strive to achieve (Besley & Brigham, 2008, P13).Hence, the decisions of fund raising and capital allocation should be taken accordingly .

Diversification of funding between internal and external sources is considered one of the main financial decisions with a direct impact on the firms' performance (Zeitun and Tian, 2007), this is called the Financial Structure or Capital Structure, and it's represented by the debt ratio.

The capital structure affects the earnings of the firms; it also affects the risks related to liquidity or debit repayment, this affection belongs to the possibility of using from the benefits of financial leverage by trading on equity or benefiting from tax exemption. On the other hand, depending on debt increases the cost of debt service and the risk of the company.

It is well known that in a leverage regression, profits are negatively related to leverage. The literature (e.g., Myers, 1993; Fama and French, 2002) considers this to be a key rejection of the static trade-off theory.

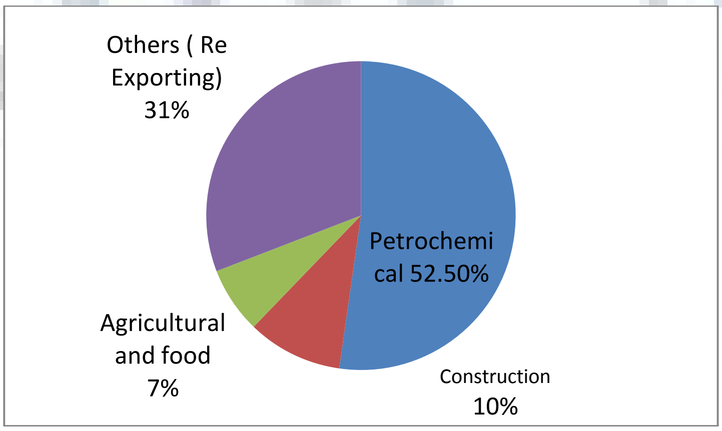
Capital structure has attracted intense debate and scholarly attention across industries in the corporate finance literature over the past decades. Nonetheless, in the context of the basic industries like the petrochemicals in the developing countries, the subject has received a limited research attention.

WHY PICs IN KSA?

The Kingdom of Saudi Arabia (KSA) occupies a strategic geographical location in the middle of the world, it plays a key role in the power industry as the first global oil producer. KSA comes in the 24th rank in the Gross national Production (GNP) worldwide (Arab Industrial Report 2009-2010, p 90). This has participated significantly in developing the petrochemical industries in this country.

The industrial sector in general and especially the petrochemical industry are considered the main levers for the GNP in this country. The Kingdom possesses 7% of the global petrochemical production and 70% of the production of the Gulf Cooperation Council (GCC) (Arab Industrial Report 2009-2010, pp 91-92). The petrochemical exports were 52% of the Saudi non-oil exports in 2008 (SAMA annual report, 2008).

STRUCTURE OF THE KSA NON OIL EXPORTS – 2008



The petrochemical industry companies play an important role in the Saudi bourse, it' has a portion of 34.63 % of the market capitalization as the 1st quarterly report of the Saudi financial market (TADAWUL) revealed in 2012. The value of the traded stocks of the industry was about 30% out of the total value of all the stocks in 2011.

The current study is devoted to show how the earning performance of the Petrochemical Industry Companies (PIC) will be affected by its capital structure. This will be done by studying the effect of debt ratio on the main profitability ratios, i.e. Return On Investment (ROI) [(1)], Return On Equity (ROE) and Net Profit Rate (NPR).

2. LITERATURE REVIEW

The current study reviewed a lot of recent studies that cover different industry sectors in different company sizes worldwide, the relationship between capital structure and profitability was found affected by this diversification, given the fact that different data methods of processing the data were used.

(Kebewar and Shah, 2012) One of the earliest and important studies about the relationship between capital structure and profitability is that done by Modigliani & Miller (1958). The study affirmed that, in treating of perfect markets; the capital structure doesn't have influence on the market value of the company, which will be settled by the composition of its assets.

(Niresh, 2012) The study aims to provide new empirical evidence on the impact of debt on corporate profitability. This impact can be explained by three essential theories: signaling theory, tax theory and the agency cost theory. Using panel data sample of 2240 French non listed companies of service sector during 1999-2006. By utilizing generalized method of moments (GMM) econometric technique on three measures of profitability ratio (PROF1, PROF2 and ROA), we show that debt ratio has no effect on corporate profitability, regardless the size of the company (VSEs, SMEs or LEs).

(Ferati, 2012) This study examined the impact of capital structure on profitability in Srilankan banks. The study covered 10 listed banks over the period of 2002 - 2009.

Regression analysis was carried out to test the impact of capital structure on profitability. Here , capital structure is the independent variable and profitability is the dependent variable., profitability is measured with the help of four ratios namely Net profit, Return on Capital Employed, Return on Equity and Net Interest Margin. Capital structure is measured through Debt/Equity ratio and Debt to total funds ratio.

The R^2 values were found to be significant for the impact of debt to total funds on net profit, debt/equity on net interest margin, and debt to total funds on net interest margin. But, no significant impact was found on the remaining dependent variables. Total debt has a major impact on net interest margin and net profit accounted for 77.3% and 50.5% respectively. The least significant impact was found on return on equity (R2 = 6%) by total debt. This reveals that remaining 94% is influenced by factors other than total debt. That means the other factors probably better predict the return on equity than total debt.

Derayat (2012) This study examines the influence of the capital structure of Macedonian companies regarding the profitability factor. The necessary data, which are used in this work are the financial reports provided by the 150 respective firms collected in the past ten years. The Ordinary Least Squares (OLS) method was employed in the estimation of a function relating the return on the equity (ROE) with the indexes of long and short-run debts, and also with the total of owner's equity. The results indicate that the return rates present a positive correlation with short-term debt and equity, and an inverse correlation with Long-term debt.

(Shubita and Alsawalhah, 2012) This study investigates the relationship between capital structure and profitability of accepted companies in Tehran stock exchange. In this study, the sample data collected from active companies in stock exchange between 2006 and 2010. According to the tests results, direct relationship between the variables explaining the type of capital structure was used in companies and return on assets ratio as an indicator for the company's profitability, has been confirmed. Moreover, the type of industry is significant in the presence or absence of the relationship between capital structure and profitability of companies. Therefore, implementing dummy variables technique and examining the model on each industry indicates that, the existence and extent of this relationship is different among different industries.

(Gill et al. 2011) This study seeks to extend Abor's (2005), and Gill, et al., (2011) findings regarding the effect of capital structure on profitability by examining the effect of capital structure on profitability of the industrial companies listed on Amman Stock Exchange during a six-year period (2004-2009). The problem statement to be analyzed in this study is: does capital structure affect the Industrial Jordanian companies? The study sample consists of 39 companies. Applying correlations and multiple regression analysis, the results significantly reveal negative relation between debt and profitability.

(San & Heng, 2011) This paper seeks to extend Abor's (2005) findings regarding the effect of capital structure on profitability by examining the effect of capital structure on profitability of the American service and manufacturing firms. A sample of 272 American firms listed on New York Stock Exchange for a period of 3 years from 2005 – 2007 was selected. The correlations and regression analyses were used to estimate the functions relating to profitability (measured by return on equity) with measures of capital structure. Empirical results show a positive relationship between i) short-term debt to total assets and profitability and ii) total debt to total assets and profitability in the service industry. The findings of this paper show a positive relationship between i) short-term debt to total assets and profitability, ii) long-term debt to total assets and profitability, and iii) total debt to total assets and profitability in the manufacturing industry.

(Birge &Xu, 2011) This paper investigates the relationship of capital structure and corporate performance of firm before and during crisis (2007). This study focuses on construction companies which are listed in Main Board of Bursa Malaysia from 2005 to 2008. The results show that there is a relationship between capital structure and corporate performance and there is no relationship between the variables investigated. The direction of the relationship between the variables of the study itself and the companies was different.

(Rafique, 2011) By studying the relationship between firm profitability, inventory volatility and capital structure, the researchers reviewed the traditional literature regarding the earning performance and the impact of capital structure on it. Empirical data, however, suggest that the relationship is not monotonic. They present an extension of a model of Xu and Birge (2004) that is consistent with these observations. The model assumes that firms make debt and production scale decisions that depend on fixed costs necessary to maintain operations, variable costs of production, and volatility in future demand forecasts. In regard to capital structure, the model predicts the convex relationship between profit margins and leverage, which was statistically significant.

(Nimalathasan and Brabete, 2010) This paper focuses on investigating the effect of the profitability of the firm and its financial leverage on the capital structure of the automobile sector companies in Pakistan.

By Estimating regression analysis and checking the relationship of the estimated model through Correlation Coefficient Test, it was found that the profitability of the firm and its financial leverage have an insignificant impact on the capital structure of the studied firms during the examined period. Hence, the study is unable to establish any significant relation between profitability and financial leverage effect on the capital structure of a firm.

(Murray, Vidhan, 2009) The study analyzes the capital structure and its impact on profit earning capacity during 5 financial years (2003 to 2007) of listed manufacturing companies in Sri Lanka. The results show that debt to equity ratio- (D/E) ratio - is positively and strongly associated to all profitability ratios-gross profit ratio (GPR) - operating profit ratio (OPR); and net profit ratio(NPR)] except return on capital employed (ROCE) and return on investment (ROI). Debt to assets (D/A) ratio is positively and strongly associated to OPR, NPR and ROCE. Similarly capital gearing (CG) ratio is also positively correlated to GPR and NPR.

(Zeitun, R. and Tian, 2007) According to this study, the literature has misinterpreted the evidence (which implies that profits are negatively related to leverage) as a result of the wide-spread use of familiar but empirically misleading leverage ratios. The study proved that a highly profitable firms typically issue debt and repurchase equity, while low profit firms typically reduce debt and issue equity. It also showed that firm- size matters. Large firms make more active use of debt, while small firms make more active use of equity. In a trade-off model, financing decisions depend on market conditions ('market timing') . Empirically, poor market conditions result in reduced use of external finance. The impact is particularly strong on small and low profit firms.

(Abdul Raheman, et al, 2007) The study investigated the effect of capital structure on corporate performance, the sample encapsulated 167 Jordanian companies during the period from 1989-2003. It showed that the capital structure have a significant negative impact on the performance measures, in both accounting and market performance measures. The ROE is the exception since it doesn't have any significant variable, the ROE, hence excluded from the analysis for that reason.

(Baum et al. 2006) Capital Structure refers to the various financing options of the assets by a firm. A business concern can go for different levels quality mixtures, debt and/or other financial facilities with equity having the emphasis on maximizing the firm's value. Capital Structure affects the liquidity and profitability of a firm. The researchers have tried to examine the effect of Capital Structure on the profitability of firms listed on Islamabad Stock Exchange. In this regard they have selected a sample of 94 non financial firms for a period of six years from 1999 – 2004. The data is collected from the financial statements (Annual Reports) of these 94 non financial firms. For analysis purpose, they have used Pearson's correlation, and regression analysis. Pooled ordinary least square model is used in the estimation of a function relating to the Net operating profitability with the independent variables including Debt Ratio, Long Term Debt to Liabilities, Equity to Liabilities and size of the Firm measured in terms of natural logarithm of sales. The results indicate that the capital structure of the non financial firms listed on Islamabad Stock Exchange has a significant effect on the profitability of these firms. If these firm want to increase their profitability, they will have to give due consideration to the financing mix, otherwise it may suffer from losses.

(Mesquita and Lara, (2003) The study focus is that there is strong effect of short term versus long term debt on profitability and accordingly the organization which prefers financing through long term debt has low profitability and alternatively . If a firm uses short term financing, it earns more profits. In this study they take data from 1988 to 2000 period and proved the hypothesis that the firms using short term financing are relatively more profitable than the firms using long term debt.

(Forsberg and Ghosh, 2006) The researchers have studied the relationship between capital structure and profitability of the Brazilian Firms. They are with the view that there is a difficult decision that whether company should use debt or equity and this decision become more difficult when a company is operating in an instable environment and this problem occur largely in Brazil. They have tried to examine the effects of debt or equity on profitability. Ordinary Least Square Method was used to examine the effect of short and long term financing on return on equity. They have concluded that in short run there is a positive relationship while in the long run there is inverse relationship between debt and profitability. On the other hand the market also interprets this as positive sign that a company is anticipating more returns so resultantly the price of the share goes up. Because if a firm need resources in short term than it tries to take loan and has no intention to raise equity due to the cost of raising equity which is greater than the debt. But due to high interest rate in Brazil in long run debt becomes more costly as compared to the equity. Booth, Aivazian, Demirguc-kunt and Maksimovic, (2001) highlighted that Capital Structure in Developing Countries has assessed the portability of capital structure theories across the countries with different structures of institutions. After analyzing the firms of 10 countries they reveal that the same variables are pertinent in making decisions of capital structure across the countries irrespective of the fact that the countries have different structure of institutions and development stages. However, there are country work-factors which create differences in the outcomes of the decisions of capital structures of the firms. They conclude that some modern financial management theories of capital structure are portable across the countries but most of the things are to be done at local levels which are quite different due to the structure and country factors like growth rate, inflation, and others.

(AL A'āgha, 2005) In this study, the researchers found that NYSE and AMEX firms have somewhat different capital structures. NYSE firms generally use 5% to 8% more financing debt in their capital structures than AMEX Firms.

NYSE firms were found to exhibit a strong inverse relationship between firm profitability and the amount on debt in the firm's capital structure. No relationship was found between profitability and capital structure for AMEX firms.

Comparison of these results to similar calculations found in Fosberg and Ghosh (2005) for NASDAQ firms shows that, like AMEX firms,NASDAQ firms use less debt in their capital structures than NYSE firms and exhibit no relationship between profitability and capital structure.

(Nikolas, 2002) The study is devoted to investigate the relationship between Leverage and its cost with the ROI .The study sample involved 15 companies in Palestine from 1999-2003. It revealed that there's a significant inverse relationship between the cost of debt and the ROI. It also found that there's no significant relationship between the financial leverage and ROI.

In an attempt to test the relationship between the profitability and capital structure, the study used the NPM as a dependent variable, were the Debt to Equity, firm size and concentration ratio as an independent variables. The study covered multiple sectors during 1995-1996. The study revealed a negative relationship between the profitability and capital structure.

We will benefit in the current study from outcomes of the past studies to investigate the reasons behind changes in returns of PICs in KSA and the role of debt structure in this change. We will find out if the results of these studies are similar for the PICs listed in the Saudi bourse or not. Taking into consideration the different tax regulations, trying to use it in explaining the results. In addition to the fact that the study covered the period of global financial crisis.

3. IMPORTANCE OF THE STUDY

The importance of the study stems up in the first place from the importance of the petrochemical industries sector in the Saudi economy. It will test the relationship between the capital structure and earning performance of the PICs during the period of 2008-2012, in order to know if the capital structure for these companies has any effects on its earnings performance.

The current study is one of the few studies that explore the relationship between capital structure and profitability in the Arab region [(2)], and it is considered the first study in Saudi Arabia.

Beside, the study of the relationship between capital structure and profitability represents a core issue in the finance theory in general. The researchers hope that understanding this relation will produce a solid base to support and direct the capital structure decisions made by companies included in the study in particular, and other industrial firms in the KSA in general.

This study gains an additional importance since it covers the period of global financial crises 2008-2011 and its effects on the exports of the PICs during this crisis.

4. STATEMENT OF THE PROBLEM

The study problem is to find out whether there is a relationship between the structure of financing and profitability of petrochemical companies in Saudi Arabia. If yes, what is the direction (positive correlation or inverse) and what is the size (i.e., the impact on profitability decisions of the financing structure), and whether this relationship - if any – is statistically significant or not .This will be done by studying the relationship between the Debt Ratio as an independent variable and the ROE, ROI, and NPR as dependent variables.

5. OBJECTIVES OF THE STUDY

The study intended to achieve the following objectives:

- To investigate if there's a relationship between the capital structure and profitability of the PICs in KSA during the study period.
- To explore the direction of the relationship between the capital structure and profitability of the PICs in KSA.
- To provide the decision makers in the petrochemical industry in particular and the industrial companies in general in KSA by reliable and accurate results to make their financial decisions based on these results.
- To shed light on the effects of capital structure decisions on the financial management policies in this core production sector in the Saudi economy.

6. HYPOTHESES

Hypothesis 1

H_0: There is no significant relationship between the capital structure and ROA.

Hypothesis 2

H_0: There is no significant relationship between the capital structure and ROI.

Hypothesis 3:

H_0: There is no significant relationship between the capital structure and NPR.

STUDY VARIABLES

Independent Variable: The capital structure, represented by debt ratio.

Dependent variable: The profitability, represented by the ROA, ROI and NPR.

TABLE 1: PROXY VARIABLES DEFINITION AND PREDICTED RELATIONSHIP

Proxy variable	Definition	Predicted Sign
Debt Ratio (3)	Total debt divided by total assets	+/-
Return On Investment	Net income divided by total assets	+/-
Return On Equity	Net income divided by equity	+/-
Net Profit Margin	Net income divided by sales	+/-

7. RESEARCH METHODOLOGY

We used the statistical package EViews as considered the appropriate program for the nature of the data used in the study. We used the simple regression model to estimate the relationship between the independent variable estimation (Debt Ratio) with the estimates of the dependent variable (Profitability Ratios) through three different models. The Cross Section – Time Series were used because of its appropriateness to the nature of the study's data, which have been taken from multiple companies through multiple periods. Accordingly, the estimation model will be as follows:

$$Y_{t,n} = c_t + \beta x_{t,n} + \varepsilon_{t,n}$$

We used Y as a representative of the dependent variable that takes one of the profitability measures (ROI, ROE, and NPR). On the right side; X denotes to the dependent variable (DR). The C is the constant of the equation, where β is the marginal slope of the dependent variable according to the change in the independent variable (DR). The time periods represented by the t (1-16), whereas n denotes to the number of companies (1-9). The **ε** is the estimation error of the model.

DATA DESCRIPTION

A sample represents 85% of the market value of the listed PICs in the Saudi capital market during the period 2008-2011•. The sample has been chosen according to the following criteria:

- The selected firm should have sales during the study period; i.e. it should be involved in the licensed economic activity and not depend on the other activities. This requirement is important as we noticed that some firms don't participate in the industry but generate income from other activities.
- The selected PIC should disclose its financial reports regularly.

Upon the above conditions, 5 Companies out of the 14 targeted companies were excluded. The excluded companies constitute 15% of the petrochemical industrial market value.

- The financial reporting of the selected PIC should be prepared according to the listed requirements of the Saudi stock market.
- No dealing –freezing should be imposed by the financial market authority on the selected company during the study period.

The following schedule summarizes ratio averages for the study variables during the study period.

TABLE 2: A QUARTERLY ACCUMULATED RATIO AVERAGE FOR THE PICS

Year	Quarter	DR	ROA	ROE	NPR
2008	Q1	*0.402*	*0.018*	*0.027*	*0.189*
	Q2	*0.409*	*0.024*	*0.036*	*0.217*
	Q3	*0.462*	*0.034*	*0.051*	*0.189*
	Q4	*0.482*	*0.006*	*0.001-*	*0.013-*
2009	Q1	*0.495*	*0.006*	*0.008*	*0.061*
	Q2	*0.502*	*0.007*	*0.008*	*0.1*
	Q3	*0.513*	*0.009*	*0.005*	*0.139*
	Q4	*0.52*	*0.009*	*0.012*	*0.11*
2010	Q1	*0.519*	*0.018*	*0.031*	*0.179*
	Q2	*0.403*	*0.019*	*0.035*	*0.226*
	Q3	*0.519*	*0.017*	*0.024*	*0.147*
	Q4	*0.497*	*0.022*	*0.034*	*0.171*
2011	Q1	*0.504*	*0.022*	*0.042*	*0.193*
	Q2	*0.497*	*0.022*	*0.032*	*1.499*
	Q3	*0.511*	*0.027*	*0.038*	*1.723*
	Q4	*0.487*	*0.021*	*0.03*	*1.448*

Table 2 represents the accumulated descriptive statistics for the study variables.

TABLE 3: DESCRIPTIVE STATISTICS

	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
DR	16	.4826545	.04152478	-1.286	.564
ROA	16	.0176012	.00824084	.030	.564
ROE	16	.0257630	.01507816	-.381	.564
NPR	16	.4110417	.57410635	1.761	.564
Valid N (list wise)	16				

• It should be noted that the first declaration of the financial statements for the listed companies in the Saudi stock market is started in 2008.

Data in relevance to this study were obtained from the quarterly bulletin for the financial statements published by the Saudi Stock Exchange (TADAWUL) for the PICs during the period 2008-2011. The total observations (periods) were 16 quarter observations for the nine selected companies. As mentioned in a previous footnote, there're no observations before 2008.

8. RESULTS AND DISCUSSIONS

We analyzed the relationship between study variables by calculating their correlation coefficient, in addition to finding the coefficient of determination (**R^2**) for each one of the three estimated equations. The **R^2** measures the model's ability in explaining the changes in the dependent variables that resulted from the changes in the independent variable.

Using the Panel EGLS in estimating the study model requires a comparison between two models of estimation:

1- Fixed Effect Model (FEM): which deals with the cross panel and time effects as an intercepts (constantans) symbolize the single differences (single firm), this means that the model permits the availability of a "single" constants that differ from one company to another.

2- Random Effect Model (REM): This model deals with the sectional effects as a random parameters not fixed ones, with a zero median and identified variance; added as a random components in the random error margin of the model.

The comparison between the two mentioned models is done by using the Houseman Test which tests the null hypothesis H_0 which entails that the random effects are consistent (there's no fixed independent variable for each company of the study sample) against the alternative hypothesis H_1which says that the random effects are inconsistent (there's a fixed independent variable for each company of the study sample)

The Housman Test with used χ^2 distribution and K degree of freedom is used. Table (3) shows the estimation of Houseman Test for the three equations. According to the results in the table; we accept the null hypothesis which says that the random effects are consistent with a total equals zero, which –in turn- means that there's no independent constant for each single company. This leads us to use the random effect model to estimate the three equations.

TABLE 4

Suggested Model	Probability	H test	
REM	1	0	Mod1: ROA=f (DR)
REM	1	0	Mod2: ROE=f (DR)
REM	1	0	Mod3: NPR=f (DR)

Table (4) shows the results of estimation the three equations

TABLE 5: RESULTS FOR THE ANALYSIS OF MODEL ESTIMATION

	Variable	Coefficient	Std .Error	t-Statistic	Prob .	R-squared	S.E. of regression	F-statistic	Prob(F-statistic(
ROA	C	0.023	0.007	3.46	0.0007***	0.005	0.017	0.732	0.394
	DR	0.0124-	0.015	0.831-	0.407				
ROE	C	0.0172-	0.0139	1.24	0.22	0.008	0.035	1.0832	0.3
	DR	0.0319	0.0315	1.011	0.0314**				
NPR	C	0.385	0.086	0.9552	0.3413	0.0676	0.216	10.3	0.0017***
	DR	0.607 -	0.195	3.118-	0.002***				

****Significant at 0.05 level. *** Significant at 0.01 level. *Significant at 0.10 level** C: Constant

8.1 HYPOTHESES TESTING

8.1.1 TESTING THE FIRST HYPOTHESIS

The current hypothesis is devoted to find if there's any significant relationship between the capital structure and the ROA. The results in table 4 lead to accept the null hypothesis since there's no significant relationship between the two variables.

The results unveil that the coefficient of determination R^2 is very low; it's about 0.005, which means that the capital structure for the Saudi PICs explains not more than 0.005 of the changes in its ROA.

On the other hand; the F test shows that the R^2 not significant, hence; the functional relationship between the two variables is not real.

The other statistical tests confirm the previous findings, the T test for the significance of the parameter of the estimation of ROA regression on the DR very low (0.831) compared with different schedule values with different significant levels, which indicates that this function is insignificant, where the constant of the estimation equation significant at the level less than 0.01 (0.0007).

The above analysis discloses that there are factors other than the capital structure play the essential role in affecting the ROA, which reassure the acceptance of the null hypotheses.

8.1.2 SECOND HYPOTHESIS

The purpose of this hypothesis is to find out if there's a significant relationship between the capital structure of the Saudi PICs and the ROE.

The value of R2 as it seen from table 4 is very low (0.008), which means that the changes in the capital structure explains not more than 0.008 of the changes in the ROE. The F test value is not significant with a value of 1.08, which confirms the insignificance of the R^2. The T value supports the other findings by a value of 1.01 that implies the relationship between the two variables is not real. The result of the T test shows also that the estimation parameter of the ROE variable is not significant.

Hence, depending on the diagnostic statistical applied tests; we can't reject the null hypothesis which says that there's no significant relationship between capital structure and ROE.

8.1.3 THIRD HYPOTHESIS

The current hypothesis examines the availability of significant relationship between the capital structure and the NPR of the companies in the study sample.

The statistics in table 4 disclose about low R^2 with a value equals 0.07; it means that the changes in the capital structure of the Saudi PICs explain only 0.07 of the changes in the NPM of these companies. The value of the F statistic equals 10.3 with a significance level less than 0.01, this point out that the relationship between the two variables is true. The T test reveals that the estimator NPM is significant at the significance level of 0.01.

The above mentioned results confirm that the capital structure of the firms in the sample explains the NPM with a significant inverse relationship between the two variables. The results validates that an increase in the capital structure (measured by DR) by 0.01 will lead to a decrease in the NPM by 0.009 with a 0.99 probability.

In spite of the low value of R2 ; which reveals a very week relationship between DR and NPM, the strength of the statistical significance that prove the real functional relationship between the two variables lead us to reject the null hypothesis and accept the other one which states that there's a significant relationship between capital structure and NPM.

9. FINDINGS

As demonstrated by the hypotheses testing; there's no significant relationship between the capital structure and each of the ROA and the ROE, the relationship between the capital structure and NPM very week also. These findings confirm that the profitability performance of the Saudi PICs is not affected by its capital structure, there're other variables (beyond the scope of this study) that have the key effect on the PICs profitability.

The findings of the previous studies do not produce single trend regarding the relationship between capital structure and profitability (Birge**&** Xu 2011) and (Rafique, 2011). We find as reported by (Murray, 2009), that variables like firm size, the industry and the country play a crucial role in this differentiation in addition to the measures and time scope used in each one of these studies. Hence, the results of the study conform to some previous studies and contradict with others. It agrees in its main findings with (M&M, 1958) study about the absence of significant relationship between the debt and profits in case of tax absence, this is relevant to the situation in KSA, especially when considering the fact that the income tax effect is not materialistic as the situation in the other countries. The study findings support also the results of other studies that there's no significant relationship between the financial leverage and ROI (Aagha, 2005) .

On the other hand, the study reveals the opposite to what other studies reached in regard to the relationship between the capital structure and profitability measured by ROA and ROE (Heng & San, 2011) , (Zeitun, R. and Tian, 2007) and (Nimalathasan and Brabete, 2010), which proved strong and significant relationship between debt ratio and profitability. A comparison study between the debt ratio and profitability in the NYSE and AMEX proved a strong negative relationship in the NYSE listed firms (Fosberg and Ghosh, 2006). The same study finds that no such relationship in the AMEX listed firms does exist, this agrees with the result of a previous study which concluded the same results for the NYSE companies (Nikolas, 2002), these findings agree with the current study's results.

10. RECOMMENDATIONS

- The management of the petrochemical industry firms should search for another strategies and financing policies instead of capital structure policy to improve their profitability.
- The Saudi capital market should be more developed and diversified to offer more financing options for the PIC firms in particular and other companies to manage their liabilities more efficiently.

11. CONCLUSION

In this study, we investigate the relationship between capital structure and the profitability of the petrochemical industry firms in the Kingdom of Saudi Arabia, and the direction of this relation for the targeted firms during the period 2008-2011.

We hypothesized that firms' profitability**)** measured by ROI, ROE and NPR **(**have a significant relationship with the capital structure (Measured by Debt Ratio).

We used the simple regression model to estimate the relationship between the independent variable (Debt Ratio) and the measures of the dependent variable (Profitability ratios), this was done by using the Cross Section – Time Series (Panel Data) since it is appropriate for the nature of data (group of firms for a multiple years The results revealed that there's no significant relationship between capital structure and ROI and ROE, while it showed very week relationship with NPM. This means that the profitability performance of the petrochemical industry firms in KSA is not relevant to capital structure, and there're other factors that affect the profitability of these firms.

12. LIMITATIONS

This study is limited to the sample of a petrochemical industry firms in Saudi Arabia. Beside, the period covered in the study limited for four years because the earliest time for publishing the public accounting information by the Saudi capital Market started in 2008.

13. FUTURE RESEARCH

Future research should investigate generalizations of the findings beyond the companies in the study, the research still open for studying the capital structure decisions for other kinds of companies in Saudi Arabia and other countries on a comparison basis.

NOTES

1. We assumed that all the assets are invested, hence; the calculated ROI will equal Net Income divided by Total Assets.
2. Zeitun & Tian, 2007.
3. The Debt Ratio has been used to represent the capital structure, that conformed to many previous studies like (Murray, Vidhan, 2009, P 24), (De Jong et al, 2008, pp 1954-1969.

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ERA OF KNOWLEDGE MANAGEMENT IN INDUSTRY AND INFORMATION RESEARCH WORLD

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ABSTRACT

Knowledge Management is among one of the buzzwords prevailing in the management circles. It is seen as a tool which can create a strategic impact due to ever changing market place, where only certainty is uncertainty, corporate success come from consistently creating, disseminating and using new knowledge. Globalization, transformation of the enterprise, emergence of digital firm, and transformation of industrial economies are four powerful worldwide changes which have altered the business environment. Most of the countries initiating the changes in governments policy linked to global factors are bringing about increased pressures to strategically manage knowledge effectively. The development of IT solutions is seen as enabling effective knowledge management. In our daily life, we deal with huge amount of data and information. Data and information is not knowledge until we know how to dig the value out of it. This is the reason we need knowledge management. Significant knowledge management initiatives are already underway due to government's policies in various sectors. We look at a range of knowledge management technologies and their existing or planned use in industry. The IT however merely underpins the knowledge management philosophy, which must be incorporated into processes, strategies and organizational culture for successful adoption. Success of knowledge management lies in the role played by the organization, the developers and the users themselves. This paper makes a study about Knowledge Management in practice at various Industrial sectors, the foundations for the best practices in knowledge management, investigates the degree of awareness, implementation of KM principles and practices in information technology companies and tries to identify the critical success factors of Knowledge Management.

KEYWORDS
Knowledge management, information research world.

INTRODUCTION

Knowledge Management has been in existence in our society ever since the discovery of language. Human beings learnt how to communicate and knowledge transfer took place from father to son, teacher to pupil, from educated to the uneducated through various means as written form, songs and dances or by folklore. As long as society was not widespread, these different tools and techniques served its purpose of facilitating the transfer of knowledge.

Broadbent (1997) defines KM as 'a form of expertise management which draws out tacit knowledge, making it accessible for specific purposes to improve the performance of organization; about how the organization's 'know-how' should be structured, organized, located and utilized to provide the most effective action at that point in time'.

Knowledge management is the process through which organizations generate value from their intellectual and knowledge-based assets. Most often, generating value from such assets involves sharing them among employees, departments and even with other companies in an effort to devise best practices.

The concept of knowledge management is to ensure that reinvention of the wheel does not take place, to ensure that we can build on what we learn from others and in the organizational context to ensure that the response time to adapt to environmental changes is reduced. In a highly competitive world where every unit of time is crucial and where every decision is strategic, it becomes imperative that an organizational repository of knowledge is generated and stored in an accessible place. That could be better than having a centralized database in a user friendly form.

THE HISTORY OF KNOWLEDGE MANAGEMENT

1. In1970's, A number of management theorists have contributed to the evolution of knowledge management, Peter Drucker: information and knowledge as organizational resources, Peter Senge: "learning organization", Leonard-Barton: well-known case study of "Chaparral Steel ", a company having knowledge management strategy.
2. In 1980's**,** Knowledge (and its expression in professional competence) as a competitive asset was apparent .Managing knowledge that relied on work done in artificial intelligence and expert systems. Knowledge management-related articles began appearing in journals and books.
3. In 1990's until now**,** a number of management consulting firms had begun in-house knowledge management programs. Knowledge management was introduced in the popular press, the most widely read work to date is Ikujiro Nonaka's and Hirotaka Takeuchi's *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation* (1995).The International Knowledge Management Network went online in 1994.Knowledge management has become big business for such major international consulting firms as Ernst & Young, Arthur Andersen, and Booz-Allen & Hamilton

OBJECTIVE OF KNOWLEDGE MANAGEMENT

The objective of knowledge management is to capture tacit knowledge of different stakeholders of the organization as customers, shareholders, employees, suppliers etc. and make it explicit so that other employees can take advantage of it. Such sharing of information will enable improved and quicker decision making and benefit the organization.

IMPORTANCE OF KNOWLEDGE MANAGEMENT

Much has been written in recent years about the importance of knowledge management as a basis of competitive success. Knowledge is seen as a dynamic resource, valuable only when it is used. When organizations routinely take the time and make the effort to review what they know, knowledge becomes an asset in support of purposeful action. The concept of knowledge as a decisive factor affecting an organization's ability to gain competitive advantage has been steadily gaining prominence in the present global era of the last few years. It has been recognized as a valuable resource, which will behave organizations to 'develop a mechanism for tapping into the collective intelligence and skills of employees in order to create a greater organizational knowledge base'. In the present scenario of rapid change and technological advancement the focus has to be on knowledge management which is often explicitly oriented to matters of competitive advantage and commercial effectiveness. KM complements and enhances other organizational initiatives such as total quality management, business process re-engineering and organizational learning, providing a new and urgent focus to sustain competitive position.

Based on actual experiences of the leading global KM case studies, the components for KM can be broadly categorized into three classes - People, Processes, and Technology. While all three are critical to build a learning organization and get business results from KM, a majority of organizations worldwide implementing KM have found it relatively easier to put technology and processes in place, whereas the "people" component has posed greater challenges.

The following diagram reflects the main technologies that currently support knowledge management systems.

In the next several years ad-hoc software will develop into comprehensive, knowledge aware enterprise management systems. KM and E-learning will converge into knowledge collaboration portals that will efficiently transfer knowledge in an interdisciplinary and cross functional environment. Information systems will evolve into artificial intelligence systems that use intelligent agents to customize and filter relevant information. New methods and tools will be developed for KM driven E-intelligence and innovation.

Knowledge management caters to the critical issues of organizational adaptation, survival and competence in the face of increasingly discontinuous environmental change. Essentially, it embodies organizational processes that seek the synergistic combination of the data- and information-processing capacity of information technologies, and the creative and innovative capacity of human beings. This is a strategic view of knowledge management that considers the synergy between technological and behavioral issues as necessary for survival in 'wicked environments'. The need for synergy of technological and human capabilities is based on the distinction between the 'old world of businesses and the 'new world of businesses.

Within this view, the 'old world of business' is characterized by predictable environments in which the focus is on prediction and optimization-based efficiencies. This is the world of competence based on 'information' as the strategic asset and the emphasis is on controlling the behavior of organizational agents toward fulfillment of pre-specified organizational goals and objectives. Information and control systems are used in this world for achieving the alignment of the organizational actors with pre-defined 'best practices'. The assumption is that such 'best practices' retain their effectiveness over time.

In contrast, the 'new world of business' is characterized by high levels of uncertainty and an inability to predict the future. Use of the information and control systems and compliance with pre-defined goals, objectives and best practices may not necessarily achieve long-term organizational competence. This is the world which challenges the assumptions 146 A. Singh and E. Sultana underlying the 'accepted way of doing things'. This world needs the capability to understand the problems afresh given the changing environmental conditions. The focus is not only on finding the right answers but on finding the right questions. This world is contrasted from the 'old world' by its emphasis on 'doing the right thing' rather than 'doing things right'.

The relevance of knowledge management is unquestionable for companies because what worked yesterday may or may not work tomorrow. This is the only tool that helps an organization to gain insight and understanding from its own experience. It includes the systematic process of finding, selecting, organizing, distilling and presenting information in a way that improves an employee's comprehension in a specific area of interest.

Typically, there are six knowledge assets in an organisation (Marr, 2003), namely:

1. Stakeholder relationships: includes licensing agreements; partnering agreements, contracts and distribution agreements.
2. Human resources: skills, competence, commitment, motivation and loyalty of employees.
3. Physical infrastructure: office layout and information and communication technology such as databases, e-mail and intranets.
4. Culture: organizational values, employee networking and management philosophy.
5. Practices and routines: formal or informal process manuals with rules and procedures and tacit rules, often refers to "the way things are done around here".
6. Intellectual Property: patents, copyrights, trademarks, brands, registered design and trade secrets.

Knowledge management processes maximize the value of knowledge assets through collaboration, discussions, and knowledge sharing. It also gives value to people's contribution through awards and recognitions. Process includes generation, codification (making tacit knowledge explicit in the form of databases, rules and procedures), application, storing, mapping, sharing and transfer. Together these processes can be used to manage and grow an organization's intellectual capital.

Most often knowledge lies within an organization implicitly, out of sight, undervalued and underused. Often, it leaves the building when the employees walk out of the company along with them. Managing the flow of knowledge around an organization is a challenge. The Knowledge management process normally face six challenges at each stage of the process flow (Shadbolt & O'Hara, 2003), and failing to meet any of these challenges can derail an organization's ability to use its knowledge assets to its best advantage.

The six challenges are as follows:

a) Knowledge acquisition
b) Knowledge Modelling
c) Knowledge Retrieval:
d) Knowledge Reuse
e) Knowledge Publishing
f) Maintenance

KNOWLEDGE MANAGEMENT AT INDUSTRY AND INFORMATION RESEARCH SECTORS IN INDIA

According to a recent IDC report, knowledge management is in a state of high growth, especially among the business and legal services industries. As the performance metrics of early adopters are documenting the substantial benefits of knowledge management, more organizations are recognizing the value of leveraging organizational knowledge. As a result, knowledge management consulting services and technologies are in high demand, and knowledge management software is rapidly evolving.

Activities related to these objectives include: creating knowledge sharing networks that facilitate a corporate knowledge culture, developing knowledge leaders, optimizing intellectual capital by producing knowledge management solutions such as codification strategies and knowledge bases, and estimating revenue and efficiency gains resulting from knowledge management in terms of return on investment.

India has witnessed Knowledge Management(KM) in practice by some companies. **Goodlass Nerolac**, paint-maker, embraced Knowledge Management in March 2003 because a need was felt to capture knowledge from purchase patterns of customers and dealer insights. Along with money paid for the product, customers also provide a lot of information as their perception of the product and similar substitute products. The strategic challenge lies in designing an interface which will permit easy trapping of customer information.

Know Net – the knowledge management portal of **Larson & Toubro** (a construction company) was set up to solve problems occurring at project sites. It uses KM to roll out real world construction projects at lower costs. Each employee in the organization has accumulated experience over the years and has unknowingly used it for problem solving or creating strategies. The strategic challenge lies in getting people to know 'what they know' and then share it with others, make it articulate and explicit.

Infosys Technologies (software producer) uses its KM system to capture and template permanently the learnings from projects because software professionals tend to be mobile (Goswami, 2004).Infosys has conceived, developed and deployed internally an elaborate architecture for KM, that aims to take the company to a 'Learn Once, Use Anywhere' paradigm. In mid 1999 a formal initiative for implementing KM was adopted and the vision was to 'enable every action by the power of knowledge, leverage knowledge for innovation, empower every employee by the knowledge of every other employee, and to be a globally respected knowledge leader'. The challenge is to create direct people-to-people sharing mechanism. (Kochikar, 2001)

KM awareness is higher in IT companies. 87.9% of IT companies are aware about Knowledge Management. 65.1 % from Pharma & Chemical, 78.4 % from Banking and Insurance, 66.7 % from Cement & Engineering and 70.9 % from other industry are aware about knowledge management.

CRITICAL SUCCESS FACTORS

The Critical Success Factors to be considered as the components in the Knowledge management can be categorized into four levels:

- 'User friendly systems', 'attitude of employees', 'willingness of employees to contribute'- "Cooperation" which is expected both from the system developers and the users.
- 'Peer recognition', 'attractiveness of the site' and 'need for reliable information'. This group maybe labeled as "Motivation Level".
- 'Top management's involvement', 'management's pressure' and 'recognition from superior for contributing to site'. -"Top management support".
- 'Work culture' and 'Monetary incentive'. It is observed that monetary incentive shows a negative correlation, indicating that monetary incentive is not a prominent factor. This group maybe labeled as "Work culture".

CONCLUSION

Organizations are realizing that intellectual capital or corporate knowledge is a valuable asset that can be managed as effectively as physical assets in order to improve performance. The focus of knowledge management is connecting people, processes and technology for the purpose of leveraging corporate knowledge. The database professionals of today are the Knowledge Managers of the future, and they will play an integral role in making these connections possible.

In today's technology world, the role of librarians or information professionals is deviating from traditional libraries' librarian role to virtual or digital libraries' Software Librarians, Cyberarians, Configuration Librarian or Librarian-Knowledge Management. Information Professionals are becoming Webmaster and Intranet Coordinators, combining technical expertise with information management ability. Knowledge Management is an organisational approach that is not easily implemented. On one hand, knowledge-sharing activities depend on the voluntary participation of employees. Therefore, management should be sensitive to the knowledge activities that are already going on within the company and seek mean to support them. On the other hand, management needs to implement some organisational change in order to change the corporate culture. Employees can have all sorts of reasons for not joining in and employees who see benefit in KM have a hard time changing the corporate culture accordingly. Some objectives of workers can seem quite practical like, 'I don't have time for that, I need to meet my deadline'. Others could even be outright selfish, as they shield off their knowledge from potential competitors. A knowledge sharing culture can only found futile ground if top management supports it, showing benefits, incentives and rewards to those who do. Therefore KM cannot be just another project on the side; it requires structural change in the policy of the company. KM requires a holistic and multidisciplinary approach to management processes and an understanding of the dimensions of knowledge work. KM should be the evolution of good management practices sensibly and purposively applied. KM presents a major shift in focus regarding the development and use of knowledge

and information in increasing the effectiveness of any organisation. It is true that knowledge capture of all tasks is possible, but one has to see the return of investment (ROI) point of view. It is very important to set the objectives for the system that one need to create. Based on the business goals, one can prioritize and identify critical information that can change organizational performance. The priorities might change based on changed business goals over time. The system has to be designed to cater to these changes. Therefore, it is

important to think hard and plan for the long term, with short and long term objectives in mind. Instead of going directly to the search engine, one needs to look at the system in a holistic manner. For any KMS, the business objectives need to be set to ensure clarity of direction, else one can get lost in a forest of information.

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AN APPROACH INTO COMMERCE EDUCATION AFTER GLOBALIZATION-CHALLENGES AND OPPORTUNITIES

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ABSTRACT

The concept of commerce education is not a novel concept. 19th century can be mark out as the foundation of commerce education. The teaching of skill based courses of 'typing' and 'book keeping' were the starting steps in this education. Today at the time of corporatization the stand for giving birth to efficient manpower that is required in the corporate sector is on the shoulder of this education. After seeing the importance of this type of education and to improve this, there is need to deeply acquaint with education in commerce. In this paper we concentrated on the thought of Commerce Education and the recent problematic issues in commerce education. Further, an attempt has been made to enumerate certain suggestions to improve the quality in commerce education system.

KEYWORDS
Commerce Education, Higher Education, Electronic Learning.

INTRODUCTION
Education is the mean which permits people to move up in the world, seek better jobs and ultimately succeed in their lives. The Time has moved out when physical labor was considered for performance measurement of a country. Now at the time of globalised economy and high degree of competition among countries, the educational level of its workforce decides what type of the success of a nation has. However the education in India has historically been a constant great effort, due to both its large population and lack of resources. This trend is still persisting in the twenty-first century. Despite the significant efforts the country has placed in to move forward from their educational struggle still one-fourth of its population remains illiterate. So the prime requirement is to provide education. Then for the purpose to participate in the global economy, technological training and experience are necessary to be concerned in education. One can see the difference in practical skills or using the knowledge in the students getting education through new technology. The upshot of Commerce Education till now has revealed that it has the potential to achieve this challenging task of educating millions and create as well as maintain the academic standards significantly in a competitive world of today. No doubt commerce education can perform this purpose but this is facing some leakages that are putting this stream of education in darkness. Because the time has changed and we have entered in modernized era that demands involvement of technology in education. So here needs arise to identify these problems and to change accordingly to achieve this general goal. Therefore, this paper highlights the grounds of commerce education to highlight the weaknesses present in commerce education at current scenario. Moreover, this specifies certain measures to promote quality in commerce education system.

COMMERCE EDUCATION AT PRESENT
It is commonly agreed that 'holistic development' of the individual should be achieved through education. Further, such advance should be in accord with the society and the nature. The question arises whether commerce education is fulfilling this or not. Business/ Commerce Education is that part of education which develops the required knowledge, skills and attitudes for the successful handling of trade, commerce and industry. Till years, commerce education is business education. But, in tune with the needs of the business and society, independent professions have emerged in the form of chartered accountant, cost and works accountant, company secretary and business administrator (M.B.A.). Thus, the cream of commerce has gone and it remained now as an academic discipline giving general and liberal education. the nature and scope of commerce education has changed with an boost in commercial activities and expansion of banking, insurance, transportation and other related services,. From a vocational bias in the initial years, the focus changed to providing liberal business education. Some experts even gave different objectives for different stages or levels of education. But time requires Commerce Education should be a three-fold process of imparting knowledge, developing skills, and inculcating proper attitudes and values towards life and society in general. It must enable the individual to develop the activity and skill to earn and carry on reasonable standard of living and it must also enable him to develop his creative faculty to the utmost so that intellectually, morally, physically and spiritually he is in a position to enrich his personality. In the globalization time, international business has become a crucial part. Then ICT or use of technology can be a better option in the hand of economy and it can be connected to education in commerce to enhance the quality of this education.

HOW TECHNOLOGY IS IMPORTANT IN EDUCATION/ COMMERCE EDUCATION
Now at present time, to insert to education and to provide knowledge at all levels, technology is playing great role. Infect, adding up technology with education, has become crucial in social science education. The role of technology in the field of education is four-fold: it is included as a part of the curriculum, as an instructional delivery system, as a means of aiding instructions and also as a tool to enhance the entire learning process. Thanks to technology because of which education has gone from passive and reactive to interactive and aggressive.

Education is essential in corporate and academic settings and in time of worldwide dealing, it is necessary to connect education with the use of technology. In the earlier, education or training is just used to facilitate workers do things differently than they did before. In the latter; education is as the mechanism towards creating curiosity in the minds of students. It is clear that most developed and middle-income countries have made significant investments in ICT in education in recent years. They did it because they realized the value of it in education. In contrast, the level of ICT in education investment in low-income countries typically remains small. The challenges to be addressed in order to bridge this gap include they must be affordable to almost countries. Through ICT, in this field lots of stages can be expressed more effectively than earlier, so it is in demand to provide Commerce education. Business knowledge, stock market, banking, insurance and many more are in connectivity of technology, so need to provide education with using technology is essential to prepare the efficient man force

COMMERCE EDUCATION PROBLEMS

Ever after, we have traveled a long way and Indian economy is not just new but has become very mature and as of present, it has become an international player. This is because of liberalization and globalization policies and a shift from planned economy to market oriented economy etc. The above changes calls for a professional move forward, which can be brought about by professionally run Commerce and Management institutions offering commerce and management education. Commerce education is a living discipline and is totally different from other disciplines. Commerce learns all those human activities which are economic activities. Economic activities may be professions, employment and business. Commerce gives the knowledge of well-earnings with good business. The improvement in the business is directly related to the urge in people to give the best to the world. Profit earning with consumer satisfaction are the true goals of business today. "As the economy becomes more industrialized and society becomes more complex, the knowledge and skills required to deal with the situations also change. So there is need to redefine the requirements in commerce for better utilization of economic activities. Hence, for enabling students to acquire the desired capabilities, contents of courses and their combinations need to be revised, diversified and made more flexible".

WEAK SPOT IN COMMERCE EDUCATION

- The **requirements of the business** have changed and problem of commerce education is that it is still an academic discipline that is giving general and liberal education. The need of independent professions have emerged in the form of chartered accountant, cost and works accountant, company secretary and business administrator (M.B.A.).
- Another thing is that Commerce education is a living discipline directly connected to society and the aspirations of country demand for sound development in education with the **continuously changing** that is taking place now a days. There must employ new routes to tune-up with the changes. But, what has been going in the name of Commerce education? In the process of catering to everybody, we are not able to provide to the needs of any body.
- Its objective should not be just to take out technocrats and managers for the industry but also to **train the people** to handle the problems with ease and comfort.
- Another problem is that in **secondary level** no clear idea about this subject is provided. They come to know about it after taking part in this subject. This becomes a factor of non awareness.
- Very **new terms** has come to commerce i.e. E-Banking, E-Commerce, and E-Financing. But in theory, no deep understanding is provided, whereas it demands for practical understanding on these to the students. So the education of commerce now become wide and it needs proper training.
- Another is in **syllabus content** of this subject that covers no practical knowledge. Also no job guarantees as it is difficult to find job in the same stream by only getting education.
- A thing that is becoming the reason for its non popularity is that no syllabus out of commerce becomes the part competitive exams. .
- In many States like Gujarat Commerce graduates are not eligible for teacher training courses such as B.Ed courses, whereas mostly arts and science students get preference.
- Commerce as a subject is **losing demand** as this education does not give clear solution of business problems, whereas high risk is attached with business. Now there is Craze for Medicine, Engineering, Management and IT courses**.**
- **No preference** for commerce graduate either in employment or in admissions to professional courses like C.A, CWA, CS, M.B.A. etc. So the commerce graduate people cannot get advantage of that knowledge
- Poor students or economically backward students **cannot afford** the extra fees for computer classes, tuitions, or like this. So it demands the means of additional costs and efforts.
- One of the foremost problems is **shortage of commerce teachers**. There is High student low teacher ratio continue. There are adhoc teachers who have no job satisfaction that may be reason for the performance of teachers and ultimately the performance of students.
- One **problem is in research in commerce** due to non availability of data in case of empirical secondary data based research, where data is required from institutions out of their websites. They don't disclose data that is needed for research.
- **Inadequate teaching aids** like commerce lab, CTV-Video films. It is seen in many commerce colleges that are not good in infrastructure.
- Time has changed. Requirements have changed. But still there are **untrained and ill-equipped teachers**.
- In the ICT and globalization time, it is still more content oriented rather than skill and practice oriented.
- Even the **content** (syllabus) of many subjects in commerce is **not up-to-date** with latest scenario. So many a time commerce graduates are found lacking communication and decision-making skills.
- There is **shortage of practical exposure** both to the teacher and teaching methods in commerce. Perhaps commerce may be the only practical subject which is theoretically taught without practical exposure.
- Nowadays, the outcome of lots of colleges and universities is only the degree holders and majority of them **lacks knowledge**. It is quite evident that if a student lacks proper knowledge, problem lies in the curriculum and the quality of teaching
- The under graduate level commerce is facing innumerable challenges for the survival which face competitions with BBA programmes in particular and other UG professional programmes in general that are if costly then job oriented, if not job guaranteed the atleast they are on less cost. Therefore the content and focus of traditional B.Com programme has to be changed and modified to make it more practical and professional.

SUGGESTIONS FOR IMPROVEMENT IN COMMERCE EDUCATION

In India everybody is out to abuse and knock down the systems. Nobody thinks of improving the system. This was the quotation of Dr. APJ Abdul Kalam who said "Ask what we can do for India and do what has to be done to make India what America and other western countries are today". So need to follow this. Higher Education is basically recognized as a service due to the fact that this sector has a huge potential of customer in the form of students worldwide. People get employment through their education and knowledge and for social welfare at this time prime requirement is new technology based workforce. So this can be start with the education system of the nation. Here are some suggestions to improve the commerce education system. As like:

- **Appropriate Education policies: Policies for education** should be framed after scrutinizing the difference between Modern system and Traditional System.
- **Focus on improving the performance of teachers:** must focus on improving the performance of teachers as they are the role model for students.
- **Require to cutback in time and cost:** that engage in providing education to commerce students. This can be hold back by using the latest as well as suitable technology to reach the learners situated at the remotest corners of country at the shortest time in minimum cost.
- **Updated and required Curriculum:** As there is liberal and traditional education in commerce in India. The requirements of the students and needs of the society target groups must be considered while designing the Subject and curriculum. Hence, it is suggested to upgrade, modernize and diversify the structure and curriculum of liberal commerce education in all colleges and universities across Indian states.
- **Training for Personality Development:** As we are living in the age of multinational companies, so huge attention has to be paid towards personality development of our students that could diminish complications for them as job seekers. While re-designing the commerce curriculum, efforts should be made to make personality development training as a regular part of the curriculum. It must be in Commerce and Management education to provide an all round development of the personalities, so that they can manage the affairs of the organization more efficiently and effectively.
- **Supported by Efficient Operations:** The keys required in terms of research innovations, quality assurance, dedicated network for efficient delivery, development of resource material and systems up gradation must be supported to education system efficiently.

- **Regular Standard Workshops:** Workshops should be organized regularly and frequently to train the students properly and giving realistic knowledge. Workshop activities must be evaluated properly. The government should organize orientation programmes/workshops periodically to impart knowledge to the teachers and also on the subject matter of system and procedure, rules and regulations and the duties of all the teachers.
- **Need to boost acceptable knowledge in teaching staff:** A teacher plays a very important role in making education effective and successful. He/She should be enriched in relevant current knowledge in the subject areas. There is need to change teacher's mindset and apart from the books, different practical problems of the real business world should bring to the class room. Committed teachers with changed mindset will definitely be able to bring about desired changes. We have to take on ourselves in line with the requirement of changing environment. There is a tremendous need for quality education to equip the population with skills to handle competitive situations.
- **Get rid of Corruption:** For save the society and country from knowledge less future it is required to combat corruption, that is running in each of the step involved in education, whether for educational resource allocation, policy framework and distribution of responsibilities between different stakeholders.
- **Facilitate to work out on Societal Problems:** There are many social issues that can be solved out by commerce education, like the problem of poverty which is the reason for the destruction of the poor. Commerce by studying the causes of poverty and suggesting method of their removal can serve more to mankind. To make the commerce education an assistance a true business and economy there is need to develop information management skills through commerce education to execute tasks, to solve problems.
- **Raise sheet of Admission:** One of the prime problems is the lack of sheets in commerce education when they take admission students have to take in others subjects due to shortage of sheets. So sheets may be improved to give more popularity to commerce education.
- **Practical** knowledge of **management suggestions** to small scale companies by the students by making it the part in course. So that before going to corporate world they will be able to take decisions in different situations. Like project can be given for this.

OPPORTUNITIES FOR COMMERCE EDUCATION

As we have entered into twenty first century where, everything is going to be corporatized whether education, public news, politics etc. And commerce education is the education which is meant for corporate world. So, Commerce stream may be a first-rate choice for future as there are many courses in commerce that gives you a good career break, like CA, ICWA, CS, CFA, MBA etc. for students interested in accounting, investment and management. More importantly, most of these courses can be done along with your degree, means, you can register with the respective institutes and clear the foundation courses and entrance exams, so that after graduation one can clear them quickly. Therefore, this education can do what the time is calling for.

According to Pandya**, P. (2012)** Opportunities that can avail through this are: Commerce education have bright future if it follow

1. Academic Oriented Courses for giving liberal commerce education, for developing quality of mind, logical thinking, initiative, attitude to life and a general understanding of business.
2. Vocational/Self Employment Oriented Courses such as taxation, management accounting, financial analysis, cost accounting.
3. Job Oriented Courses such as computer accounting, salesmanship, advertising, secretarial practice etc for small jobs.
4. Management Oriented Courses: In India, there are many small and tiny industrial units, particularly in the rural areas which need management orientation and a fair dose of management culture. We should strive to create a new class for search of MANAGERS for them with complete practical base just as engineering and medicine. They may be even 5 year integrated courses with commerce laboratory/workshop.
5. Build rapport with trade, Commerce and Industry and establish University Industry Hub
6. Bring out the industry needs and requirements.

CONCLUSION

In the era of global world today, to achieve the economic development of the country and to meet the growing needs of the society, there is greater demand for sound development of people that can be achieve by commerce education in Indian Universities. However, today Commerce education is in front of numerous problems. These problems have a direct bearing on the course objectives, course content and course conduct. These issues need serious attention and close scrutiny. Time has come to readdress the commerce education and bring innovative changes into its fold. This is the time of MNCs and globalization, so it demands to keep pace with the changing business environment. This can accomplish with the help of latest technology to make every student capable for requirements. Knowledge must be improved time by time of teachers and visiting faculty simultaneously. Government should give sufficient funds for improvements of the Visiting teachers or Adhoc teachers because they have no job satisfaction .

It is sky-scraping time to re-orient and re-design the commerce education in such a way that it will be pertinent for today and tomorrow. Therefore, need for soul searching for an objective appraisal which will provide the basis for evolving a new strategy for giving a better deal to commerce education in the years to come. It is well said that if a doctor is corrupt only a patient is mistreated, if a politician is corrupt, possession is corrupt but if the teacher and education is corrupt, the whole nation is at risk. The scenario in India is at the same way, where the education system is badly corrupt. Hence an effective education system is must come into force to change the country and make able to face the world.

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A STUDY ON STRESS LEVEL OF EMPLOYEES OF INFORMATION TECHNOLOGY COMPANIES IN CHENNAI, TAMILNADU

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ABSTRACT

Stress is the unconscious preparation to fight or flee a person experiences when faced with any demand. Stress is also a part of day to day living of every individual. The reason for the stress differs from person to person. A high level of stress can be a serious threat to a personality trait of the individual and can cause psychological and social problems. Management of stress is being regarded as one of the most important ingredient of a successful organization. Some of these efforts have sort to limit the amount of stress employees' experience. Most are directed at improving employees' efficiency and coping ability. The main objective of the study is to know the stress level of the employees' and to analyze the stress management techniques. Simple random sampling method has been employed. The study is based on the sample size of 300 respondents. The chi square test reveals that there is no significant relationship between gender, age and stress.

KEYWORDS
Information technology, pressure, productivity, psychological, stress.

INTRODUCTION

Job stress is a chronic disease caused by condition in the workplace that negatively affect an individual's performance and or overall well- beings of his body and mind. One or more of a host of physical and mental illness manifest jobs stress. In some cases a psychiatrist consultation is usually required to validate the reason and degree of work related stress.

Stress is a condition of strain on one's emotions, thought processes, and physical condition, when it is excessive, it can threaten one's ability to cope with the environment. Stress is the general term applied to the pressures people feel in life. As a result of these work pressure, employees develop various symptoms of stress that can harm their job performance.

Stress also leads to physical disorders, because the internal body system changes to try to cope with stress. Some physical disorders are short-range. Stress can be either temporary or long range depending mostly on how long its causes continue and how strong the employees recovery powers. When stress is sustained for a long period of time the body is prevented from rebuilding its ability to cope with stress. However, if stress is temporary, most people can recover rather quickly.

DEFINITION OF STRESS

According to Mikhail.A, Stress refers to a psychological state that results when certain features of an individual's environment challenge that person, creating an actual or perceived imbalance between demand and capability to adjust that, results in a non-specific response.

WAYS TO MANAGE STRESS

There are many healthy ways to manage and cope with stress, but they all require change. They can either change the situation or change your reaction when deciding which option to choose, it's helpful to think of the four A's avoid, alter, adapt, and accept. Since everyone has a unique response to stress, there is no "one size fits all" solution to managing it. No single method works for everyone or in every situation, so experiment with different techniques and strategies. Focus on what makes you feel calm and in control.

High level of stress affects the individuals directly and through then, their families and organizations are also affected. Therefore, efforts should be to make to overcome the negative consequences of high stress. Stress management is required when an individual is unable to cope with the demanding environment. This inability generates anxiety and produces defensive behavior and stress symptoms. Therefore, the actions are required for developing adoptive behavior so as to overcome the consequences of stress. Such actions may be taken at individual level as well as at organizational level.

SYMPTOMS OF STRESS

The symptoms may be classified in to physical, emotional and behavioral symptoms .Physical symptoms are allergies, back pain, chest pain, fatigue, sleeping problems etc. Emotional symptoms are anger, anxiety, loneliness, depression, nervousness etc. Behavioral symptoms are neglecting appearance, being late to work, difficulty in concentrating etc.

WAYS TO GET RID OF STRESS

Some of the new ways to overcome stress are
- First key is to laugh. Laughter releases endorphins and endorphin relieves stress.
- Second key is friend. List out your stressors and ask your friend to do the same. Now exchange the list among them and try to get more suggestions and solutions.
- Third thing is self-turning up. Practice yourself to wake up and get ready, not for work, but for your day on the drive to work, listen to music, humor, instead of attending office calls over the phone. Remember that the opposite of stress is relaxation.

ABOUT INFORMATION TECHNOLOGY (IT)

Information Technology is the study, design, development, implantation, support or management of computer-based information system. IT deals with the use of electronic computers and computer software to convert, store, protect, process, transmit and securely retrieve information. IT performs a variety of duties, installing applications, designing complex computer network and information data bases. It may include data management, networking, engineering computer hardware, data base and software design management and administration of entire systems. Information Technology is a growing, wide spread, multitasking field required for the development of all other sectors. The major software companies functioning in Chennai city are Tata Consultancy Services (TCS), INFOSYS, HCL, CTS, Wipro, L&T, Mahindra Satyam, etc... More than 2, 00,000 employees in various categories are working in these companies.

LITERATURE REVIEW

Walter B Cannon was the medical psychologist who originally discovered stress and called it "the emergency response" or "the militaristic response", arguing that it was rooted in "the fighting emotions". According to Cannon, stress resulted when an external environment demand upset the person's natural steady-state balance referred to as "homeostasis". He called the stress response the fight- or flight response. Cannon believed the body was designed with natural defense mechanisms to keep it in homeostasis.

According to **Richard Lazarus**, "stress is a situation that someone regards as threatening and as possibly exceeding his or her resources". Lazarus pointed out, that the stress evoked by an event depends on how people interpret the event and what they can do about it. For example, pregnancy may be much more stressful for a 16 year old unmarried schoolgirl than it is for a 25 year old married woman.

Lazarus saw stress as a result of a person-environment interaction, and he emphasized the person's cognitive appraisal in classifying persons or events as stressful or not. Individual differ in their appraisal of events and people. What is stressful for one person may not be stressful for another. Perception and cognitive appraisal are important processes in determining what is stressful, and a person's organizational position can shape such perception.

Tharakan analyzed the relationship between occupational stress and job satisfaction has been found to be significantly associated with professional women and non-professional women. It is observed that professional working women experience greater work related stress than non-professional working women, because the expectations of technocrats where much higher than non-technocrats.

IMPORTANCE OF THE STUDY

Stress makes the employees to worry about the works. It reduces the productivity, motivation and morale. This study is important to find out the work pressure of the employees at workplace and to take proper decision in stress management and to take or suggest solutions. This study is also try to probe in to various pressures like work load, supervisor's partiality, recognition, benefit promotion, transfer and so on. Also to provide an understanding of human behavior in organizations and groups with various organizational set up.

OBJECTIVES OF THE STUDY

(i) To find the causes and symptoms of stress.
(ii) To establish stress management mechanism for employees.
(iii) To know their level of stress among the employees due to work pressure.
(iv) To analyze the stress management techniques and how they are useful to predict the future performance of the employees.

SOURCES OF DATA

Data have been collected from both primary and secondary sources .The main thrust of the study is to understand the employee's opinion towards stress and its impact of their work. Primary data had been collected from 300 employees of different IT companies in Chennai city. Primary data has been collected with the help of questionnaire. Secondary source of data collected through books, research journals and website.

TOOLS USED FOR THE STUDY

In order to analyze the data collected the researcher used percent analysis, and chi square test. Chi square test was used to test the significant relationship among male and female regarding their Job stress, work pressure and the measure to reduce the job stress.

ANALYSIS OF DATA

In the present study the perception of the respondents was collected through appropriate questionnaire. The collected perceptions are tabulated and analyzed. Some of the important analyses are shown below

TABLE 1: AGE AND GENDER WISE CLASSIFICATION

Sl.No	Age	Male	Female	Total
1	20-25	24	16	40
2	25-35	86	48	134
3	35-45	48	32	80
4	Above 45	26	20	46
Total		184	116	300

SOURCE: Primary Data

The above table shows that majority of the respondents are male members and 39 percent of the respondents were female. It reveals that when comparing to females, male members are largely employed in IT companies.

This Table also indicates that out of the total 184 male respondents, 86 respondents belong to 25-35 age categories. This shows that young age people are mostly employed in IT companies and they are working over a large period of time.

TABLE 2: WORK EXPERIENCE

Sl.No	Experience	No of respondent	% of respondents
1	Less than 5 years	64	21
2	6-10 years	134	45
3	Above 11 years	102	34
Total		300	100

SOURCE: Primary Data

Majority (45%) of the respondents having 6-10 years of experience in their field (table 2), at the same time 34 percent of the respondents having more than 11 years of experience. It reveals that the job turn over in IT companies more. This is due to the work pressure and higher responsibility of the employees, when they became senior.

TABLE 3: FACTORS OF STRESS

Sl.No	Factors	No of respondents	% of respondents
1	Work place	108	36
2	Work hours	120	40
3	Organizational policies	54	18
4	Personal factors	18	6
Total		300	100

SOURCE: Primary Data

Table 3 shows that 40 percent of the employees said that the main factor creating stress is work hours, at the same time 36 percent of the respondents feels work place (distance from home) is the another factor creating stress and remaining said that the stress is due to organizational policies and personal factors. It indicates that due to more hours of work the employees are stressed high. It also reveals that the employees would like to work the standard working hours (8 hours).

TABLE 4: EFFECT OF STRESS

Effect of stress	No. of respondents	% of respondents
Lack of confidence	66	22
Misunderstanding with others	138	46
Excessive working	24	08
Decline in performance	72	21
Total	300	100

SOURCE: Primary Data

Due to stress at work space place 46 percent of the employees are yet misunderstanding with others employees and at the same time 22 and 21 percent of the employees said that it will affect their self-confidence and their performance in work respectively (table 4). This indicates that employees stress will affect the efficiency and effectiveness of work.

TABLE 5: TREATMENT OF STRESS

Sl.No	Treatment	No of respondents	% of respondents
1	High sensitivity	36	12%
2	Seriously	102	34%
3	Casually	120	40%
4	Ignore all	42	14%
Total		300	100

SOURCE: Primary Data

Table 5 shows that how the management treat stress. Majority (40%) of the respondents said that the management is treating the stress casually and 34 percent of the employees said that the management is taking serious effort for reducing the stress level of the employees.

CHI-SQUARE TEST

To test the relationship between gender and treatment of stress Pearson chi-square test is used. The calculated value of chi-square is 1.062, degrees of freedom is 2. Table value is 5.997 .Table value of chi-square is more than calculated value. Hence null hypothesis is accepted. From this it is concluded that there is no relationship between gender and stress. Also to test the relationship between age and emotional reaction of stress, chi-square test is used. The test result [calculated value 2.5414, degrees of freedom 3, and table value 7.81] reveals that there is no significant relationship between age and emotional reaction of stress.

POLICY IMPLICATIONS

After careful analysis, the researcher has suggested some of the policy implications that may be applied to manage the stress level of the employees. In order to reduce the stress some management development programs may be conducted at regular intervals to all levels of employees. Also adopt preventive approaches like improving knowledge and skill techniques, team building games, creativity games etc. The employees were advised to follow certain strategies like physical exercise, behavioral self-control social support, meditation or yoga. The management also provides the facilities like free counseling and medical checkup, reading room with comic and knowledge books, music and visiting entertainment places.

CONCLUSION

Most of the employees in IT companies get stress due to work place, working hours, organizational policies, promotional policies, favoritism, work load disproportionate to salary and personal factors. Employee's personal health and family environment are most important factors for the quality of work and stress free environment. The stress management practices encompass the various development activities of the employees.

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INNOVATIVE FINANCIAL PRODUCTS: A STUDY OF CHALLENGES AND OPPORTUNITIES AT UDAIPUR, INDIA

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ABSTRACT

Financial sector in India is one of the booming sectors of the economy and is growing at a very speedy rate. This sector in India was liberalized in 1992. The opening up of the sector for private players has led to rapid growth of the sector. This paper analyze innovative financial product at Udaipur city in particular. The paper also discusses about the performance and the perception of investors about innovative financial products at Udaipur. The present exploratory study was conducted with an objective to analyze the condition of innovative financial products and to study the popularity of traditional and innovative financial products, also an attempt to study the opportunities and challenges for financial products in Udaipur. The paper is completely a conceptual one whose basic foundation comes from various secondary sources like research articles in Journal, published and unpublished scholarly papers, and books, various international and local journals. The analysis part of the paper is based on the statistical data provided by investors. The financial; sector of India witnessed a marvellous growth but this growth remains significant for innovative traditional financial products but not in case of innovative financial products and traditional products are still better are some of the major findings of study.

KEYWORDS
Innovative financial Products, Liberalization, Economy, Financial Sector, Investors.

1. INTRODUCTION
INNOVATION OF FINANCIAL PRODUCTS IN INDIA
The process of "financial innovation" includes changes in financial instrument, institutions, practices and markets. This process should include information sharing with other authorities, including those in other nations, in order to benefit from the experiences in other markets and regions. Financial awareness and financial demands of residents in urban and rural areas are becoming stronger and stronger. They are not satisfied with traditional savings and simple investment forms but require that banks offer various financial products for them to choice and diversified investment products and investment patterns to satisfy their demands for investment. It is the existence of sound financial institutions that is necessary for the appropriate supply of financial resources to take place. It is the job of the central bank and other regulatory institutions to ensure the existence of such an overall financial environment.

Financial innovation involves development of new financial services and products. These new products and services need to be more easily accessible. So, financial firms have to innovate to broaden access to their services. Greater financial inclusion is a must. The spread of micro finance is one method by which financial inclusion is being sought to be achieved.

Innovative financial product refers to a range of non-traditional mechanisms to raise additional funds for development aid through "innovative" projects such as micro-contributions, taxes, public-private partnerships and market-based financial transactions. Variety of financial products like mutual funds, insurance, shares, debentures, derivative instruments, etc. are available in India. However, the reach of these products is very limited and the features of many of these products are very basic in nature. Further development and innovation in these products would be faster if they are accessed by all classes of investors in urban as well as rural areas. The thrust lies mainly on the development of new financial products to deepen the improvements in the product distribution itself. The responsibility of ensuring these improvements vests with all the stakeholders in the financial services industry.

2. REVIEW OF LITERATURE
According to **Nitin Gopal Gupta (2010)** financial products is an investment choice, of course, the most important indicator of risk and return.

According to **Sanjeev Sinha**, ET Bereau (14 Sep, 2008)" The market is the witnessing the introduction of any array of financial products revolving around women, her home and her family than before.

According to **Asker (2009)"**Financial products are generally involve every type of products where consumer is putting his money and getting some products which involve the complexities of risk, return, volatility etc.

According to **Dr. Sasidharan & Alex K. Methews** published. Mc Graw Hill (2008) "Financial services industry is the emerging sector in the domestic as well as world economy. The introduction of new financial products brought with them complex dealing procedures and inherent risk.

According to **Melissa Kellett** (2009)" Financial products is an investment choice, of course, the most important indicator of risk and return. In the most cases, the banks in order to successfully sell the financial products will be highlighted on the income.

According to **Prof. Vikas Anand** (2006) "Growth in financial services (comprising banking, insurance, real estate and business services), .Growth in financial services is being bolstered by the opportunities of demography, emerging market and ever more innovative products and services.

According to **Shared gaiwed** (2011) "Financial services contribute a lot to India's economy in this way. They help in increasing the gross domestic products.

3. SIGNIFICANCE OF THE STUDY
The study is basically intended to analyze the condition of innovative financial products with regard to Udaipur financial market.

The study has been conducted to review the innovative financial products after establishments of regulatory authorities and to find out the growth and popularity of the financial products. Financial sector has shown a phenomenal growth after its liberalization and it has increased after the private sectors entry. Financial sector in India is the most trusted sector and has insured Indians savings to protect them from the uncertaintities and good returns with safety. Financial sector is working in all the facets of human life. The study basically talks about the innovative and traditional financial products and its impact on the investment pattern of investors. The Financial industry is one of the fastest growing industries in the country and offers unlimited growth potential. Hence the researcher has taken up the present study to analysis the present condition of innovative financial products and perception of investors of these products.

4. RESEARCH METHODOLOGY
RESEARCH OBJECTIVES
1. To study the concept of innovative financial products in India

To have an in depth study of the challenges and opportunities of innovative financial products at Udaipur.

- Type of research: Exploratory
- Sample plan:-
  - Sample size: 50

- o Sample area: Udaipur
- o Sample unit: Individual investor
- o Sampling technique: Convenience Sampling
- Type of data used:
- o Primary source: Questionnaire
- o Secondary data: Internet, financial magazines and newspaper articles, text books, etc.
- Research instrument:- Structured questionnaire
- Data analysis tool**:-** Simple tables and graphs

HYPOTHESIS

H - Investors are less aware about the new financial products than traditional products.
H - Investors are more aware about the new financial products than traditional products.
H_c - Innovative financial products are better than traditional financial products.
H_d - Traditional financial products are better than new financial products.

5. FINANCIAL PRODUCTS IN INDIA

5.1 INNOVATIVE FINANCIAL PRODUCTS IN INDIA

Preference share: Preferred stock, also called preferred shares, preference shares, or simply preferred, is a special equity security that has properties of both equity and a debt instrument and is generally considered a hybrid instrument.

Bonds:-A **bond** is a debt security, in which the authorized issuer owes the holders a debt and, depending on the terms of the bond, is obliged to pay interest (the coupon) to use and/or to repay the principal at a later date, termed maturity.

Debenture:- A debenture is a document that either creates a debt or acknowledges it, and it is a debt without collateral. In corporate finance, the term is used for a medium- to long-term debt instrument used by large companies to borrow money.

Mutual Funds:-A **mutual fund** is a type of professionally-managed type collective investment scheme that pools money from many investors

Insurance:-Insurance is a form of risk management primarily used to hedge against the risk of a contingent, uncertain loss. Insurance is defined as the equitable transfer of the risk of a loss, from one entity to another, in exchange for payment.

Derivative Financial Market: - the financial market for derivatives, financial instruments like futures or options, which are derived from other form of assets.

Warrants:-A warrant is a security that entitles the holder to buy the underlying stock of the issuing company at a fixed exercise price until the expiry date. Warrants and options are similar in that the two contractual financial instruments allow the holder special rights to buy securities.

Future and Option:-The National Stock Exchange of India Limited (NSE) commenced trading in derivatives with the launch of index futures on June 12, 2000. The futures contracts are based on the popular benchmark Index.

Deep Discounts Bonds:-A bond that sells at a significant discount from par value is called deep discount bond. A bond which is selling at a discount from par value and has a coupon rate significantly less than the prevailing rates of fixed-income securities with a similar risk profile is called discount bond.

Zero-coupon bond:-zero-coupon bond (also called a discount bond or deep discount bond) is a bond bought at a price lower than its face value, with the face value repaid at the time of maturity It does not make periodic interest payments, or have so-called "coupons,"

Strip bonds:-Zero coupon bonds have duration equal to the bond's time to maturity, which makes them sensitive to any changes in the interest rates.

5.2 TRADITIONAL FINANCIAL PRODUCT IN INDIA

Shares: These represent ownership of a company. While shares are initially issued by corporations to finance their business needs, they are subsequently bought and sold by individuals in the share market. They are associated with high risk and high returns.

Bonds: These are issued by companies to finance their business operations and by governments to fund budget expenses like infrastructure and social programs. Bonds have a fixed interest rate, making the risk associated with them lower than that with shares.

Treasury Bills: These are instruments issued by the government for financing its short term needs. They are issued at a discount to the face value. The profit earned by the investor is the difference between the face or maturity value and the price at which the Treasury Bill was issued.

Options: Options are rights to buy and sell shares. An option holder does not actually purchase shares. Instead, he purchases the rights on the shares.

Mutual Funds: These are professionally managed financial instruments that involve the diversification of investment into a number of financial products, such as shares, bonds and government securities.

Certificate of Deposit: Certificates of deposit (or CDs) are issued by banks, thrift institutions and credit unions. They usually have a fixed term and fixed interest rate.

Annuities: These are contracts between individual investors and insurance companies, where investors agree to pay an allocated amount of premium and at the end of a pre-determined fixed term, the insurer will guarantee a series of payments to the insured party.

6. ROLE OF FINANCIAL SECTOR REFORMS IN PROMOTING INNOVATION AND GROWTH

The key issue for innovation and growth in financial sector development is how well the financial system is able to finance new ideas, new products and new entrepreneurs. In a repressed financial system, sans adequate risk management systems and limited depth of financial markets, banks are typically happy to fund incumbents, and exhibit little interest in funding new businesses and new ideas. As financial systems develop, larger corporate can go to the market directly and disintermediation takes place. So, banks have fewer incumbents to finance and so it can be expected that they would be pushed increasingly into financing more and more new projects, new entrepreneurs and new ideas.

Financial sector reforms have covered almost all aspects of banking and the capital market. The decontrol and expansion of capital markets should have made the access to market intermediated financial resources easier for well established, credit rated large incumbents. Reforms in the banking system have been aimed to bring in greater efficiency by introducing new competition through the new private sector banks and increased operational autonomy to public sector banks. In the government securities market, the reform measures have been aimed at better price discovery of interest rates by auctioning government securities, and developing the infrastructure for efficient trading. In the forex market likewise, there has been a gradual movement towards a market-based exchange rate regime coupled with the introduction of newer products and players. Side-by side, conscious steps have been undertaken towards building up of the institutional architecture in terms of markets, technological and legal infrastructure.

7. THE ROLE OF MONETARY POLICY IN INNOVATIVE FINANCIAL PRODUCTS

The best contribution that monetary policy can make for fostering innovation and growth is to provide an environment of low inflation, low inflation expectations, along with confidence in the maintenance of financial stability. Entrepreneurs take considerable risk as it is: on top of that if we add macro-economic risks in terms of higher inflation, high inflation volatility and higher interest rates, then the risk perception can be such that entrepreneurship, innovation and investment get effectively constrained. That will inevitably result in lower investment rates and hence lower economic growth. Therefore, to keep the momentum of high growth, it is extremely important to recognise that the best contribution that monetary policy can make is indeed to ensure that inflation and inflation expectations are well anchored.

The menu of macroeconomic policies for financial and real economic stability has thus expanded in recent years to multiple objectives and significant trade-offs. Preventive or prudential macroeconomic and financial policies, which aim to avoid the excess accumulation of public and private sector debts during periods of upward cycle, have become a part of the standard policy prescription.

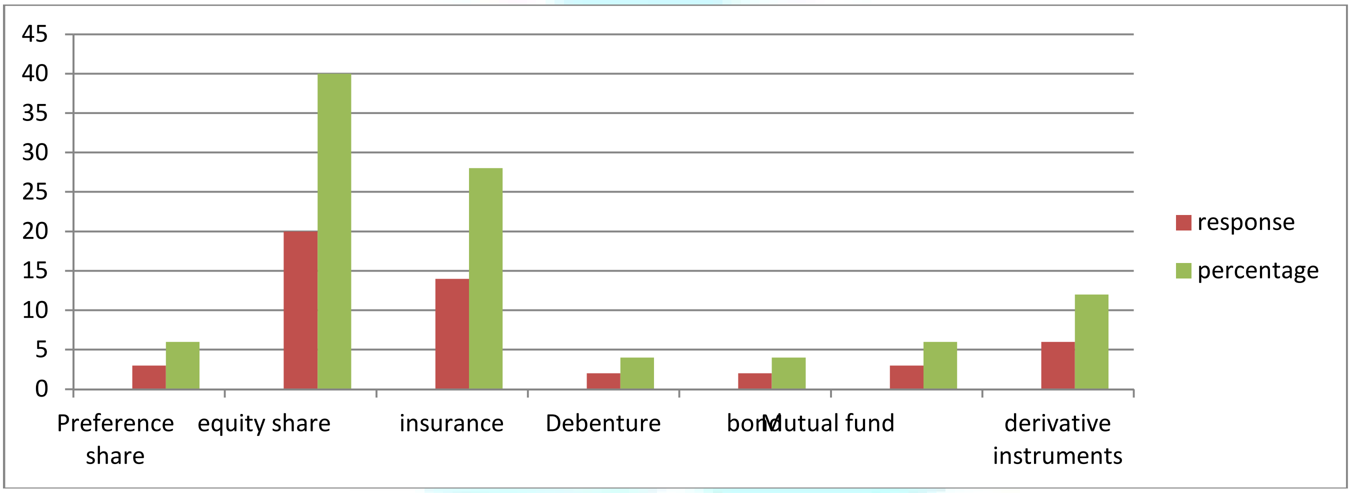
While India has been maintaining one of the highest growth rates among countries for quite some time now, the growth dynamics has dramatically shifted in the last three to four years and the economy is poised to break from a high growth rate of around 8 percent to an intermediate growth rate regime of well above 6 percent. Despite high levels of internal resource generation and access to external borrowings, credit demand across sectors also had picked up quite substantially pushing the rate of investment to new heights. The increasing consumer and business confidence have been attracting foreign investment flows resulting in easy liquidity conditions in the financial system.

8. DATA ANALYSIS & DISCUSSION

TABLE NO. 8.1: TICK THE FOLLOWING OPTION OF FINANCIAL PRODUCTS OF WHICH YOU ARE AWARE

Option	Response	Percentage
Preference share	3	6
equity share	20	40
Insurance	14	28
Debenture	2	4
Bond	2	4
Mutual fund	3	6
derivative instruments	6	12

GRAPH NO. 8.1



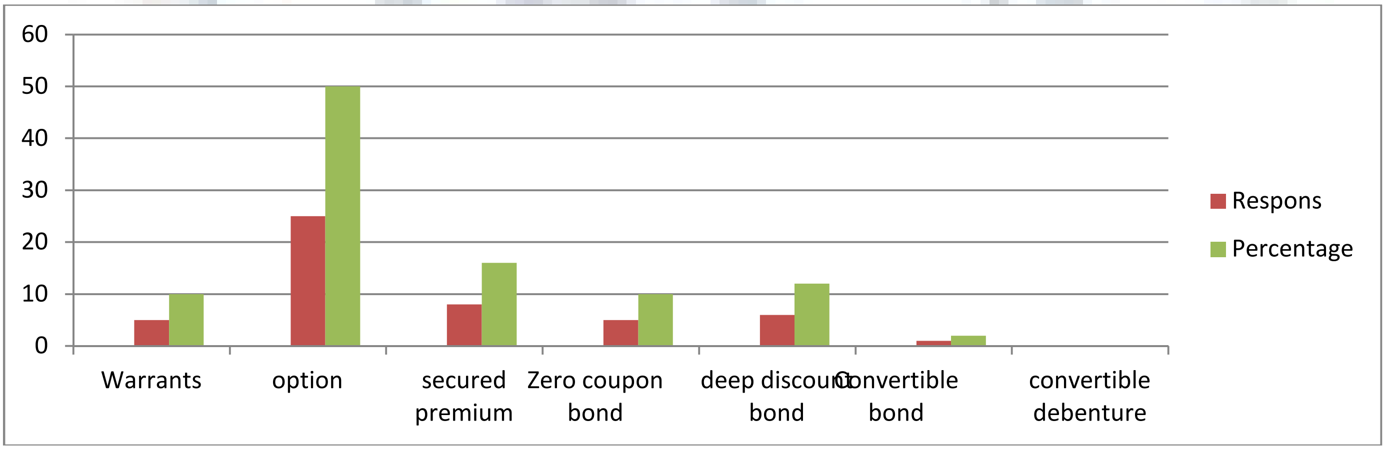
INTERPRETATION

The diagram clearly shows that the equity share and insurance are most aware of all the products by the investor in Udaipur city equity share accumulated 40% and insurance 28%, these two are highly acceptable by the investors. It interpret the fact that debenture & bonds are least aware to the investor.

TABLE NO. 8.2: TICK OF THE FOLLOWING OPTION OF NEW INNOVATIVE FINANCIAL PRODUCTS OF WHICH YOU HEARD ABOUT

Option	Response	Percentage
Warrants	5	10
option	25	50
secured premium	8	16
Zero coupon bond	5	10
deep discount bond	6	12
Convertible bond	1	2
convertible debenture	0	0

GRAPH NO. 8.2: NEW INNOVATIVE FINANCIAL PRODUCTS



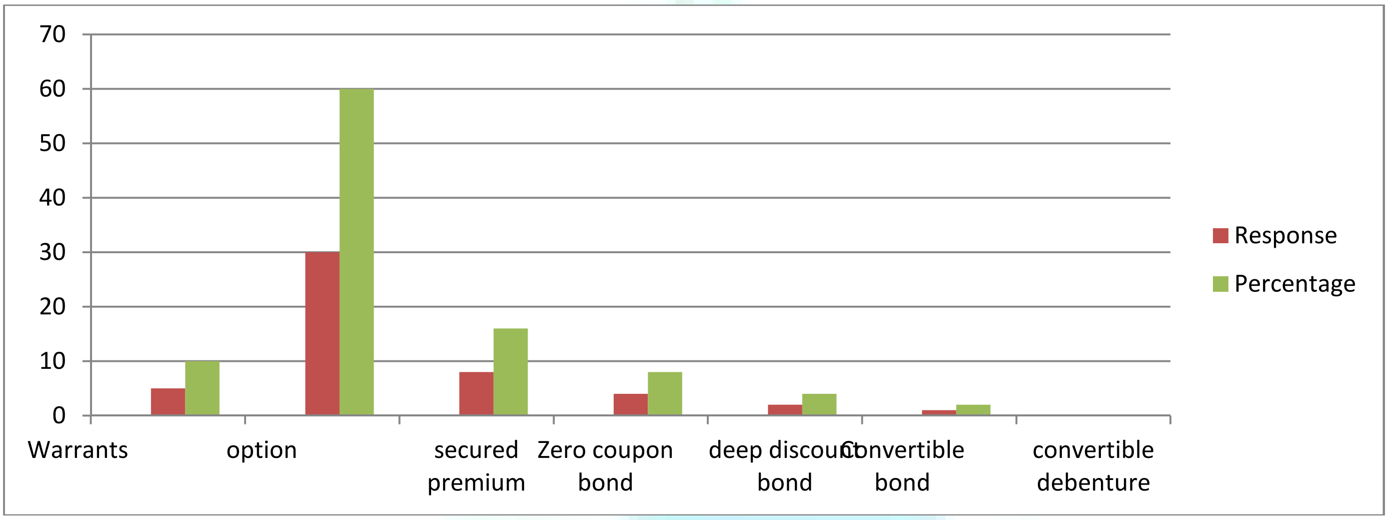
INTERPRETATION

The diagram clearly shows that option (50%) is highly acceptable by the investor rather than convertible bonds and convertible debenture (2% & 0%) respectively.

TABLE 8.3: WHICH OF THE FOLLOWING OPTION AMONG THESE NEW INNOVATIVE FINANCIAL PRODUCTS YOU HAVE INVESTED

Option	Response	Percentage
Warrants	5	10
option	30	60
secured premium	8	16
Zero coupon bond	4	8
deep discount bond	2	4
Convertible bond	1	2
convertible debenture	0	0

GRAPH NO. 8.3



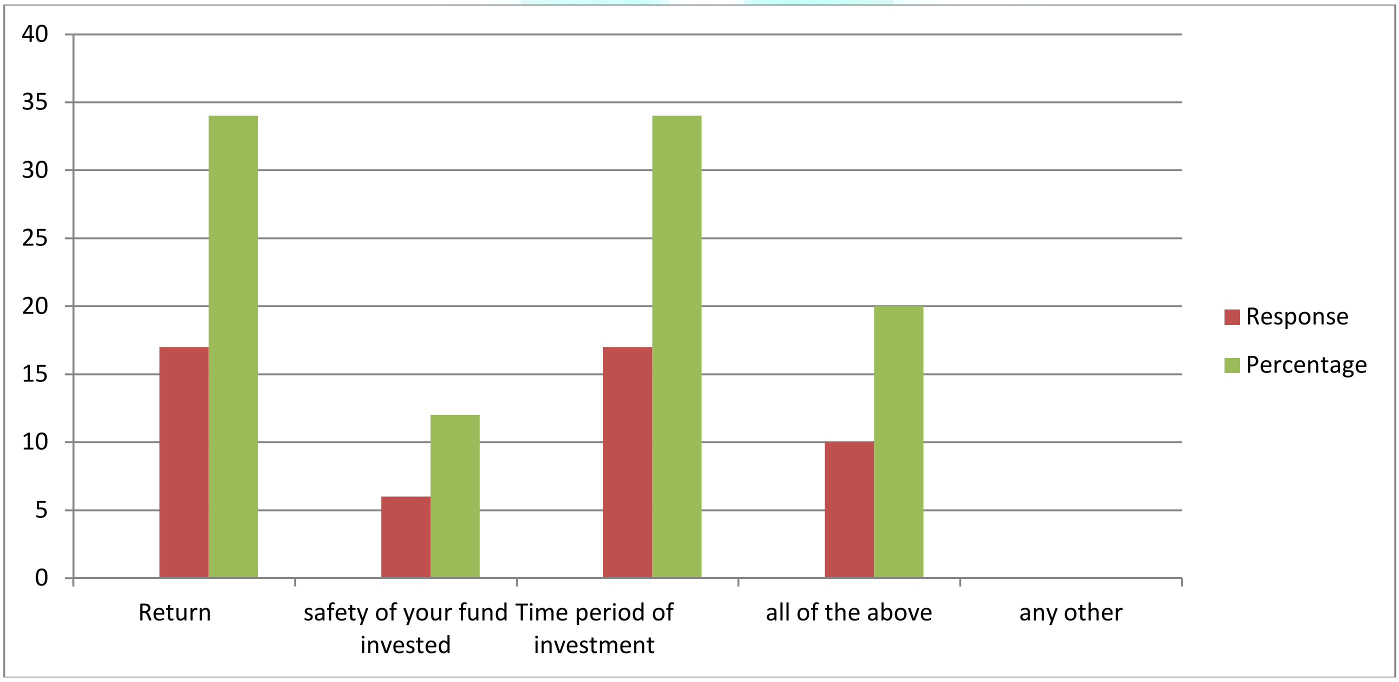
INTERPRETATION

The diagram clearly shows that the investor want to invest more in option (60%) than any other financial products like convertible bonds and convertible debenture(2% &0%).

TABLE 8.4: WHAT JUDGMENTAL FACTOR WILL YOU TAKE INTO CONSIDERATION WHILE?

Option	Response	Percentage
Return	17	34
Safety of your fund invested	6	12
Time period of investment	17	34
All of the above	10	20
Any other	0	0

GRAPH NO. 8.4: JUDGMENTAL FACTOR INVESTING IN THESE NEW INNOVATIVE FINANCIAL PRODUCTS



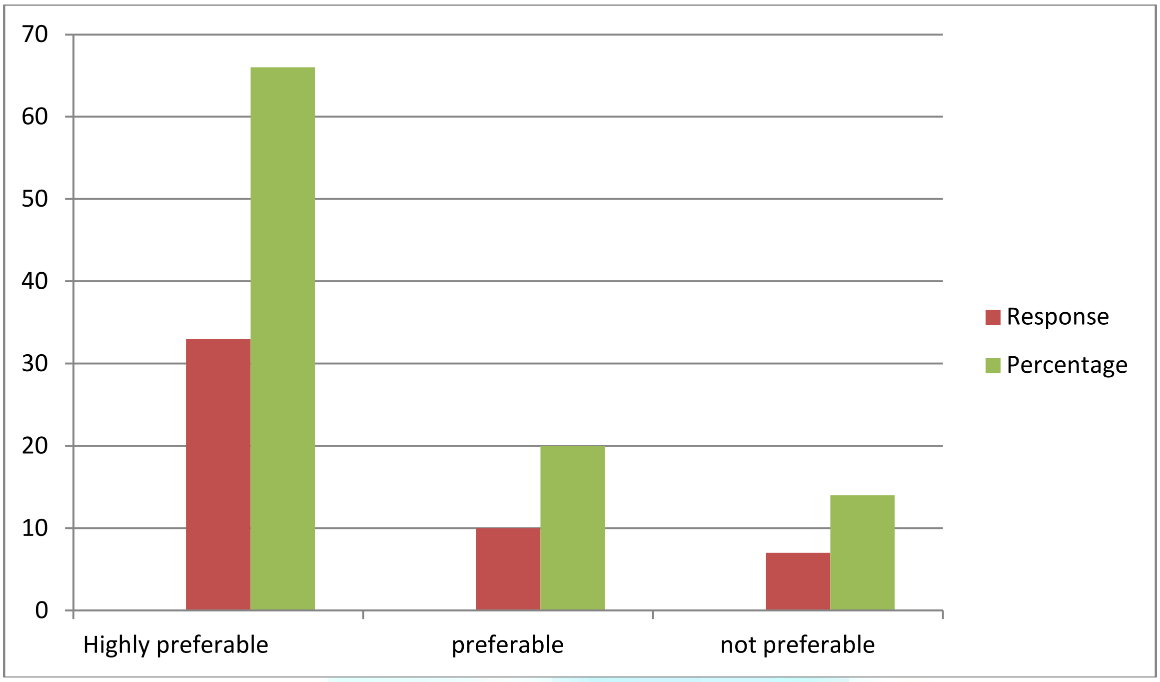
INTERPRETATION

The diagram clearly shows that the entire above judgemental factor are considered by the investor in Udaipur city it take 20%. it interpret the fact that return, safety , time period & any other are important judgemental factor.

TABLE NO. 8.5: WILL YOU PREFER TO INVEST IN THESE INNOVATIVE FINANCIAL PRODUCTS IN ORDER TO

Option	Response	Percentage
Highly preferable	33	66
Preferable	10	20
not preferable	7	14

GRAPH NO. 8.5: INVEST IN THESE INNOVATIVE FINANCIAL



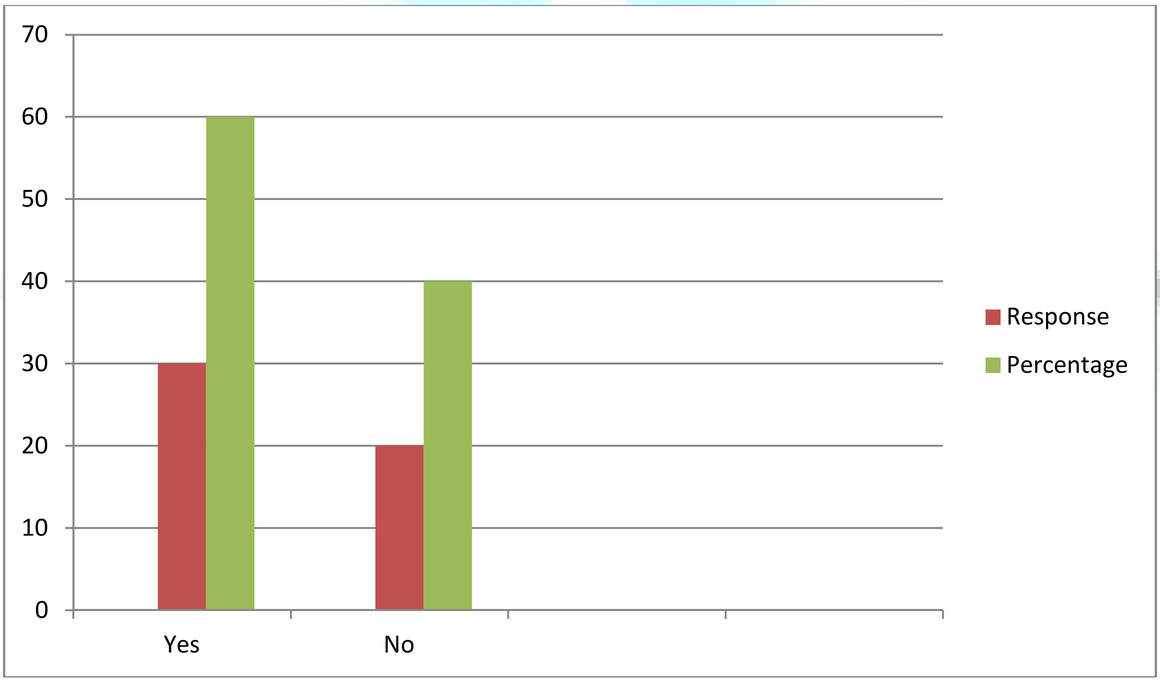
Interpretation

The diagram clearly shows that the most of the investor are highly preferable to invest in these innovative financial products

TABLE 8.6: ACCORDING TO YOU, ARE INNOVATIVE FINANCIAL PRODUCTS BETTER THAN THE TRADITIONAL ONES?

Option	Response	Percentage
Yes	**30**	**60**
No	**20**	**40**

GRAPH NO. -8.6: FINANCIAL PRODUCTS BETTER THAN THE TRADITIONAL ONES



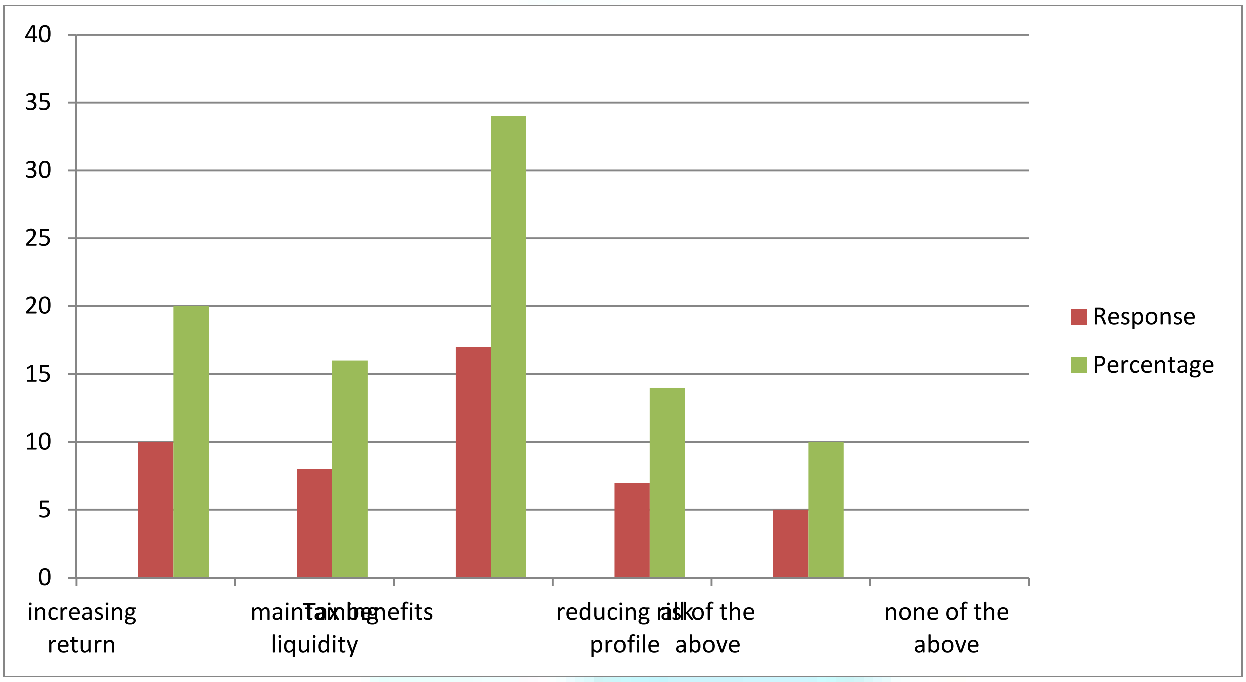
Interpretation

The diagram clearly shows that the innovative financial products are better than traditional ones by greater percentage in yes (60%) and no (40%).

TABLE 8.7: ACCORDING TO YOU WHAT ARE THE ADVANTAGES FOR MAKING INVESTMENT IN THESE INNOVATIVE PRODUCTS

Option	Response	Percentage
increasing return	10	20
maintaining liquidity	8	16
Tax benefits	17	34
reducing risk profile	7	14
all of the above	5	10
none of the above	0	0

GRAPH NO 8.7: THE ADVANTAGES FOR MAKING INVESTMENT IN THESE INNOVATIVE PRODUCTS



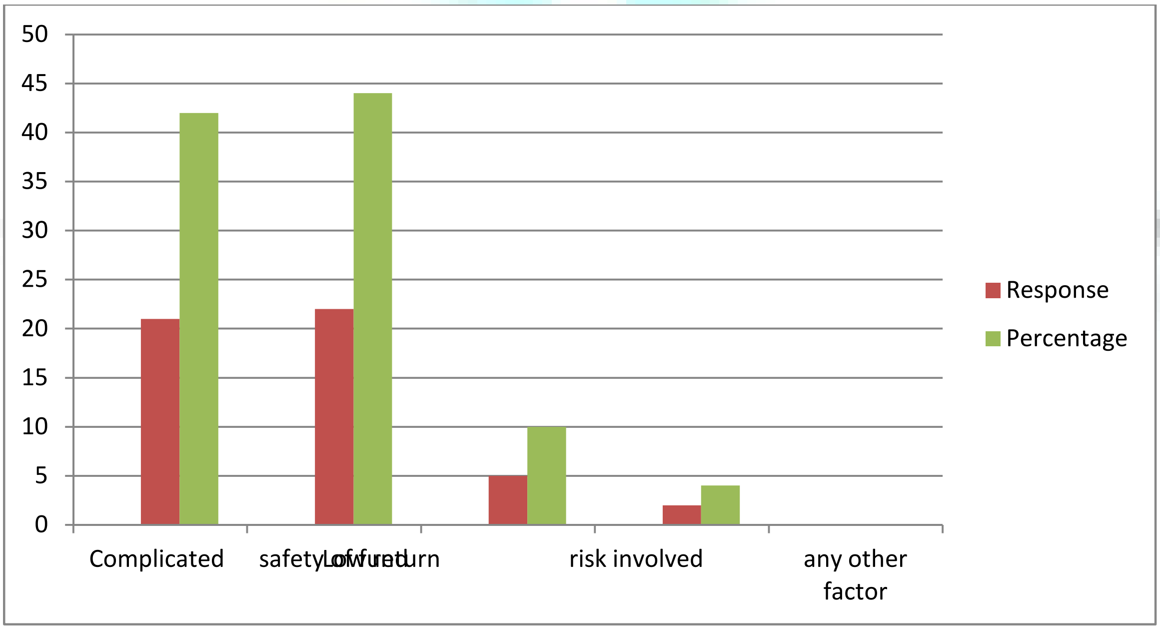
Interpretation

The diagram clearly shows that tax benefits & increasing return are advantages to the investor in Udaipur city. It accumulates 34% while reduce risk is 20%.

TABLE 8.8: ACCORDING TO YOU WHAT FACTOR COULD APPEAR AS LIMITATION WHICH COULD PREVENT INVESTOR FORM IN THE INNOVATIVE PRODUCT?

Option	Response	Percentage
Complicated (to understand)	21	42
safety of fund	22	44
Low return	5	10
risk involved	2	4
any other factor	0	0

GRAPH NO. - 8.8: LIMITATION IN THE INNOVATIVE PRODUCT



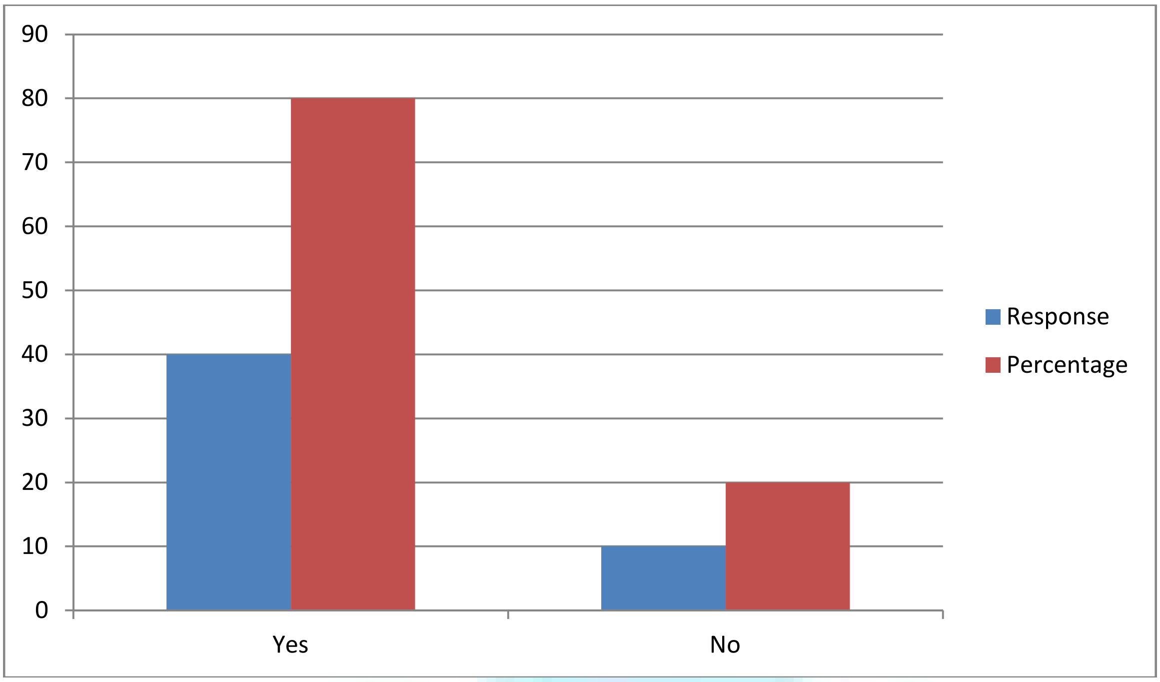
Interpretation

The diagram clearly shows that safety of funds & complication are most fear able to the investor in Udaipur city. It accumulates 44% and 42%, these are two disadvantageous of the investor.

TABLE 8.9: WHILE INVESTING IN THESE INNOVATIVE FINANCIAL PRODUCTS SO YOU KEEP IN MIND THE SAME FACTOR (MATURITY PERIOD, RISK PROFILE & RETURN) AS YOU DO WHILE INVESTING IN TRADITIONAL FINANCIAL PRODUCTS

Option	Response	Percentage
Yes	40	80
No	10	20

GRAPH NO. 8.9: INVESTING IN INNOVATIVE FINANCIAL PRODUCTS



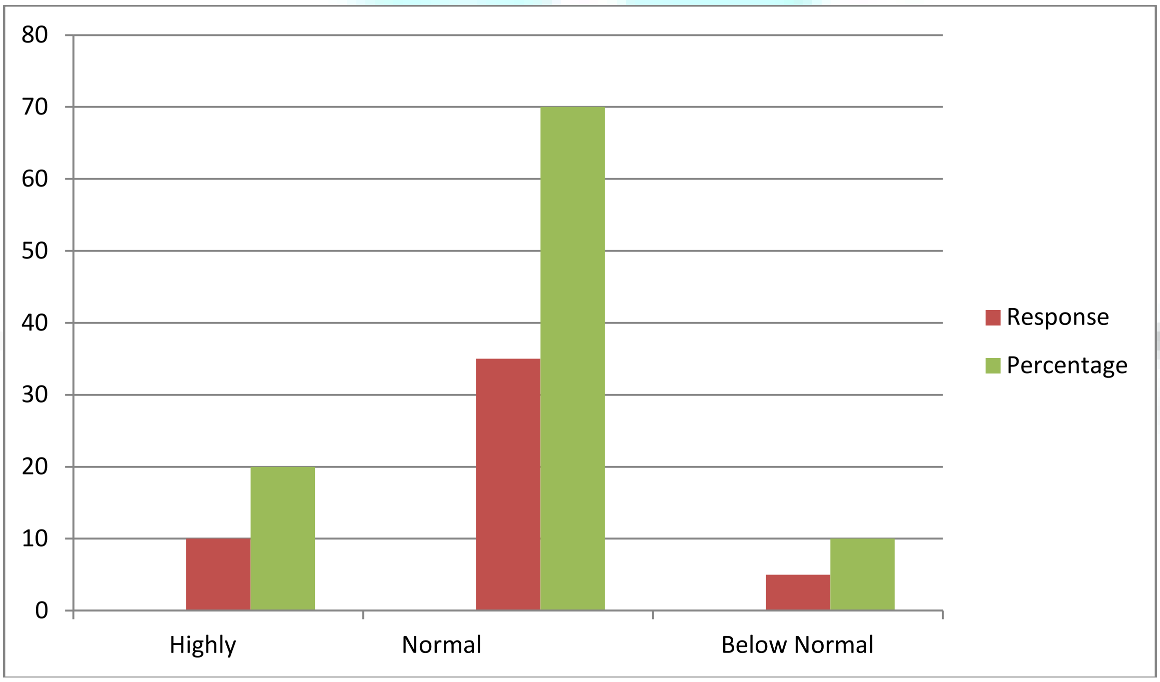
Interpretation

The diagram shows clearly that investor will defiantly carry fear part s it more complicated than traditional products it accumulates that 80% investor will not invest in the new innovative product.

TABLE 8.10: ACCORDING TO YOUR BELIEF, INVESTMENT IN THESE INNOVATIVE FINANCIAL PRODUCTS IS ON WHAT LEVEL OF INCOME

Option	Response	Percentage
Highly	10	20
Normal	35	70
Below Normal	5	10

GRAPH NO.8.10: INVESTMENT IN THESE INNOVATIVE FINANCIAL PRODUCTS IS ON WHAT LEVEL OF INCOME



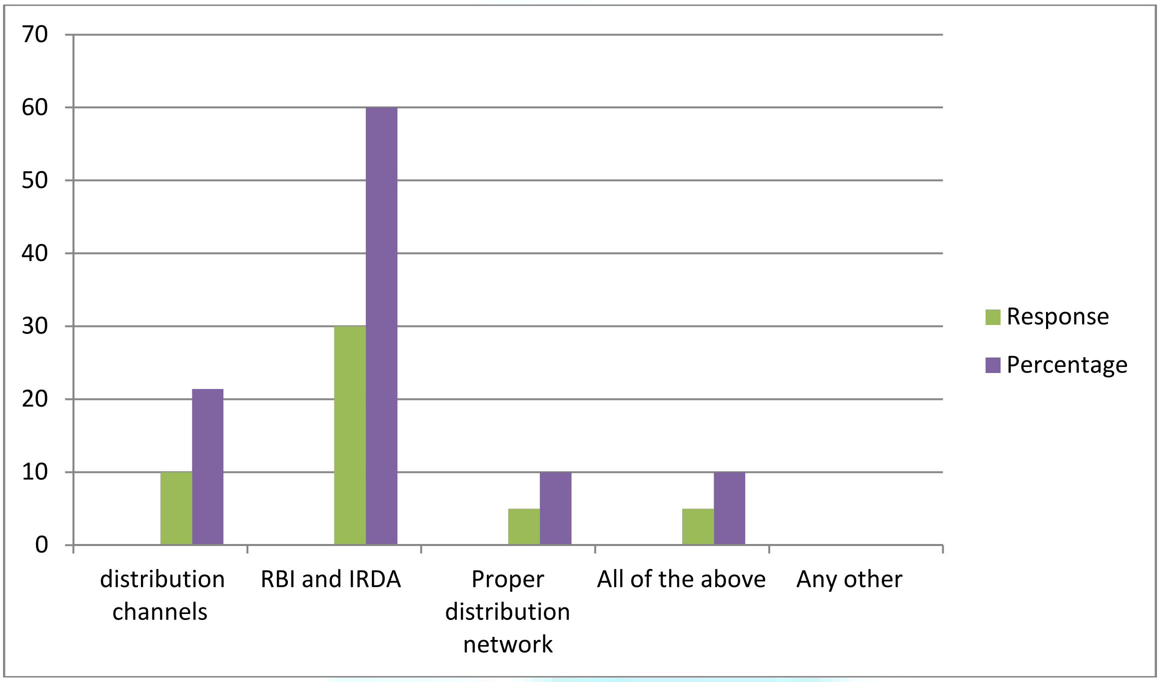
Interpretation

The diagram clearly shows that investor is the one of the option that person with normal income level can easily make investment in the financial products which interpret the investor at 70%.

TABLE 8.11: ACCORDING TO YOUR OPINION WHAT MEASURE SHOULD BE ADOPTED IN ORDER TO MAKE THE INVESTOR FAMILIARIZE WITH THESE INNOVATIVE FINANCIAL INSTRUMENTS?

Option	Response	Percentage
Explore new distribution channels	10	20
Regulation like RBI and IRDA should take step to promote financial literacy	30	60
Proper distribution network	5	10
All of the above	5	10
Any other	0	0

GRAPH 8.11: MEASURE SHOULD BE ADOPTED IN ORDER TO MAKE THE INVESTOR



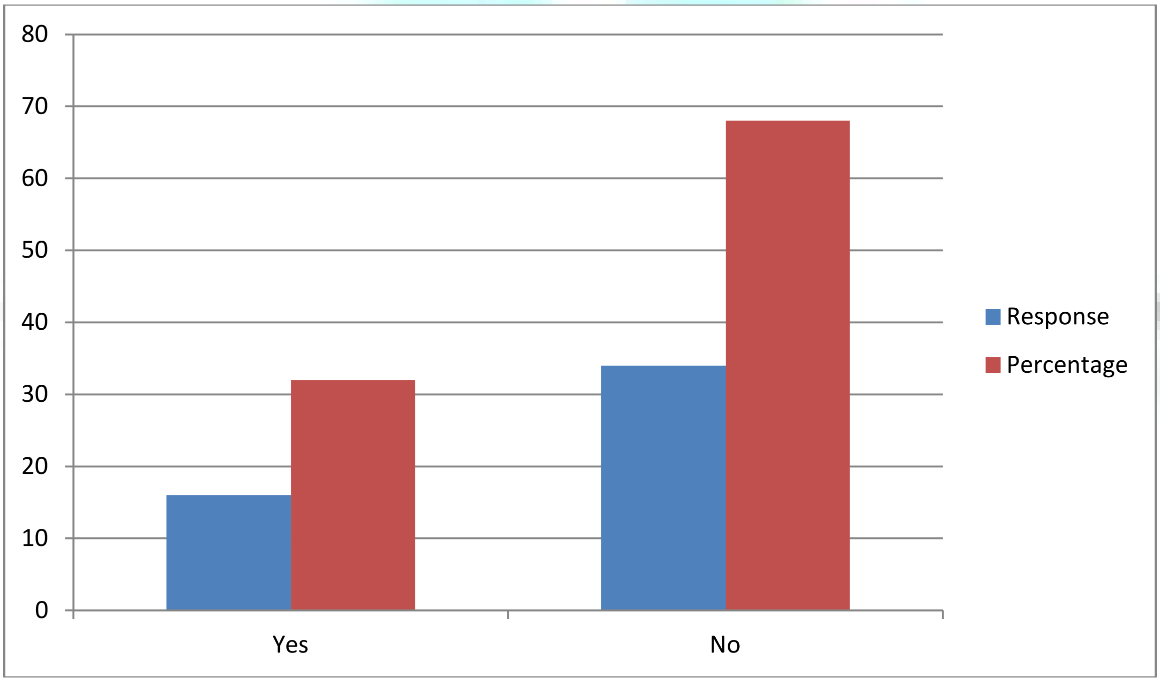
Interpretation

The diagram clearly shows that RBI & IRDA should take most of the opinion for the measure in the financial instrument which interprets 60.

TABLE 8.12: WILL YOU TAKE A CHANCE OF LEAVING THE TRADITIONAL FINANCIAL PRODUCTS AND INVEST IN ANY NEW INNOVATIVE FINANCIAL PRODUCT

Option	Response	Percentage
Yes	16	32
No	34	68

GRAPH NO. - 8.12: LEAVING THE TRADITIONAL FINANCIAL PRODUCTS AND INVEST IN ANY NEW INNOVATIVE FINANCIAL PRODUCT



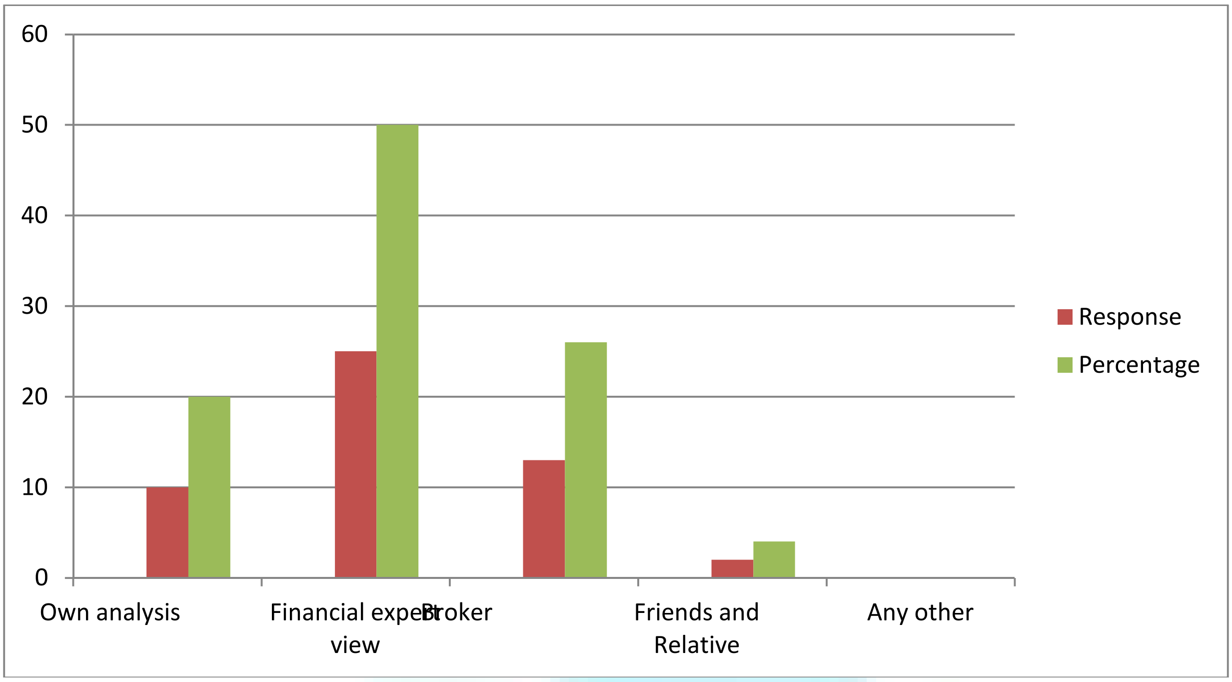
Interpretation

The diagram clearly shows that investor would invest in the traditional products rather than new innovative financial products which interpret 68% as they are complicated to understand and risky too.

TABLE 8.13: WHAT IS THE SOURCE OF THE INFORMATION FOR MAKING INVESTMENT IN THE FINANCIAL PRODUCT?

Option	Response	Percentage
Own analysis	10	20
Financial expert view	25	50
Broker	13	26
Friends and Relative	2	4
Any other	0	0

TABLE NO. 8.13: SOURCE OF THE INFORMATION FOR MAKING INVESTMENT IN THE FINANCIAL PRODUCT



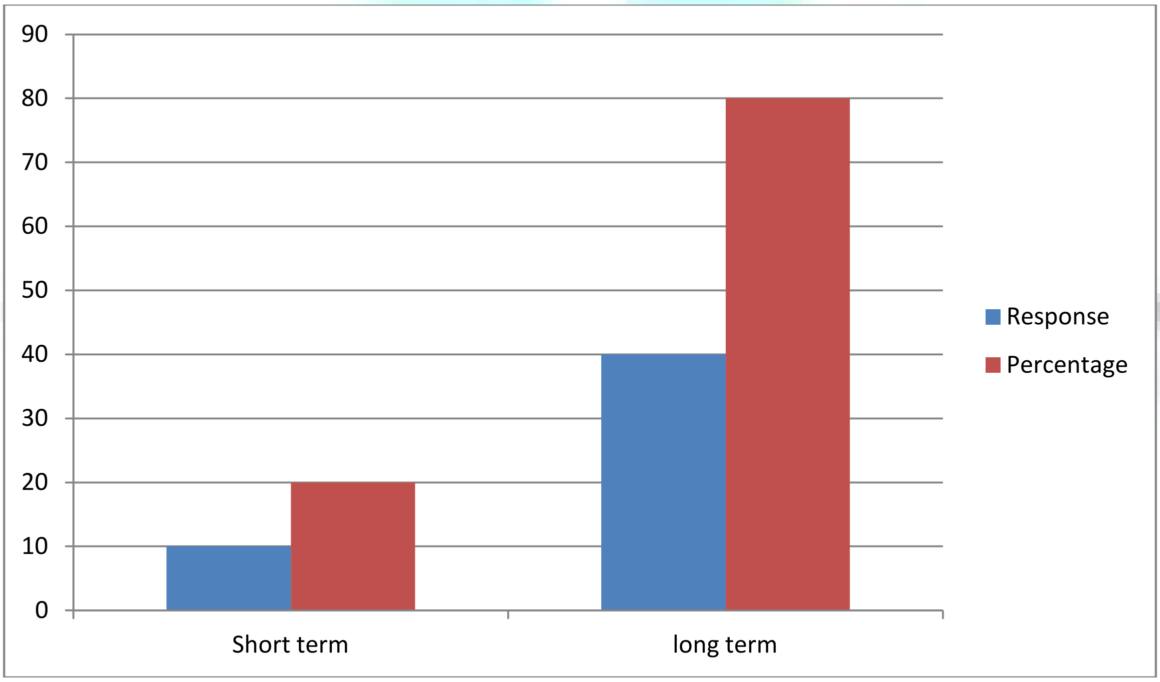
Interpretation

The diagram clearly shows that brokers are the main source of investment for the investor which interprets at 26% & also financial expert at 50% & also they acquired 20% for own analysis.

TABLE 8.14: IN TERMS OF PERIOD OF INVESTMENT IN YOUR VIEW INVESTMENT IN WHICH PRODUCTS PROVIDES YOU THE BETTER RETURN

Option	Response	Percentage
Short term	10	20
\long term	40	80

GRAPH NO. 8.14: PERIOD OF INVESTMENT



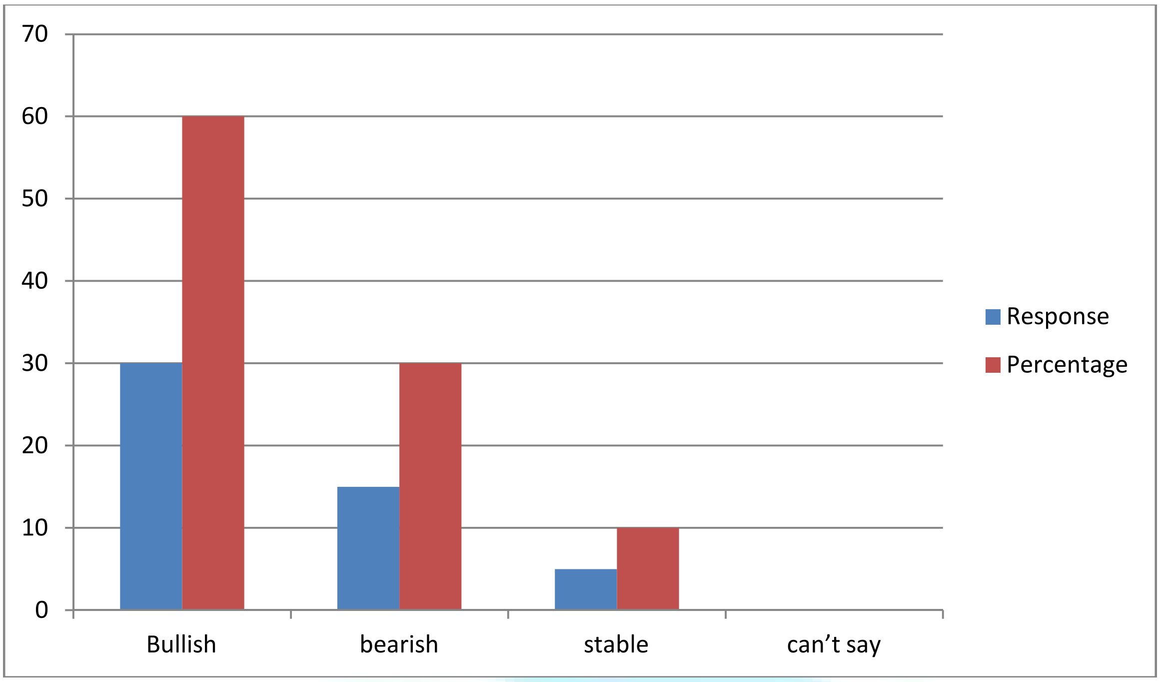
Interpretation

The diagram clearly shows that long term investment is more preferable by the investor. It interpret 80% will invest in long term product rather than short term product.

TABLE 8.15: ACCORDING TO YOUR OPINION WHAT WILL BE THE FUTURISTIC VIEW OF THESE INNOVATIVE FINANCIAL PRODUCTS

Option	Response	Percentage
Bullish	30	60
Bearish	15	30
Stable	5	10
can't say	0	0

GRAPH NO. 8.15: FUTURE OF FINANCIAL PRODUCTS



Interpretation

The diagram clearly shows that futuristic scenario of the product will be bullish rather than stable & bearish as the investment is day by increasing is day by increasing in the mind of investor which interprets 60%.

9. FINDINGS

- It is observed that equity share , insurance , mutual funds (traditional products) are mostly aware financial products and invested by the investor but warrants , option , zero coupon bonds(new innovative financial products) are less aware products and invested less as they are complicated require time to understand the features.
- It is found that option is highly acceptable by the investors among all innovative financial products. Almost half of the total samples have said for its acceptability.
- Most of the investors were interested to invest in option.
- Most of the investor while investing in innovative financial products primarily focuses on the investment period and return and safety factors.
- It is observed that financial products are highly preferable to investors to diversify their portfolio and most of the investor presumes that traditional financial products are better than the new innovative financial products.
- It is seen that investors take out the advantage of financial products mostly in the mean of tax benefits and also expecting better returns.
- Investors said that new innovative financial products are more complicated to understand as they are developed through method.
- It is found that investors have the same parameters for judgement for traditional and innovative financial products.
- Most of the investors wanted to invest in long term products which are less risk more return.
- In order to make the investor familiarize with these innovative financial instruments regulations by various regulatory authorities and distribution channels were ranked high.
- It is found that investor takes into consideration broker, technical and own analysis while making investment in the financial products.
- Most of the investors think that RBI & IRDA should take measures to develop the concept of making familiarized with the financial products to the investor.
- It is also found that most of the investor estimates that futuristic market will be bullish i.e. upward rising.

HYPOTHESIS ANALYSIS

The following hypothesis are proved-

H_a	Investors are less aware about the new financial products than traditional products.
H_c	Innovative financial products are better than traditional financial products.

10. CONCLUSION

Investor in Udaipur city needs to be more secure by making investment in the less risky product which provides considerable return. Investors are less aware about the new financial product which can provide more benefits with the less investment like the option market. To make well known to the investor about the new innovative product RBI &IRDA should follow standard measure to make product more familiarize.

Many investor are increasingly managing their portfolio for getting higher return also they make themselves secure from the uncertainty which may arise. Most of the investor at the time recession did not leave there portfolio as they expect it will provide financial market will improve. Most of the investor reveals that market will be bullish in the year to come as they estimate according to the market functioning in the current scenario. It is found that option is highly acceptable by the investors in innovative financial product.

It is observed that share , insurance , mutual funds (traditional products) are mostly aware and invested by the investor but warrants , option , zero coupon bonds(new innovative financial products) are less aware and invested as they are complicated require time to understand the features. Many Investors take out the advantage in the mean of tax benefits the most and also to increasing return and New products are more complicated as they are developed through method.

Many investors would like to invest in the long term products which are less risk more return. Many investor take into consideration broker, technical and own analysis for making investment in the products. Most of the investor estimates that futuristic market will be bullish i.e. upward rising. Despite the accelerated industrial growth experienced this decade from recent economic reforms, most major investors around the globe do not yet see India as an ideal country for foreign investment. The competition for global capital will only get tougher in the years to come, and unless the political, judicial and economic environments are right, India will lag behind many other emerging nations. More importantly, the rising expectations of the middle-class, widening income and wealth inequalities between the haves and have-nots, require efficient initiatives from Government and corporate to attract and accommodate the funds available.

Variety of financial products like mutual funds, insurance, shares, debentures, derivative instruments, etc. are available in India. However, the reach of these products is very limited and the features of many of these products are very basic in nature. Further development and innovation in these products would be faster if they are accessed by all classes of investors in urban as well as rural areas. The thrust lies mainly on the development of new financial products to deepen the improvements in the product distribution itself. The responsibility of ensuring these improvements vests with all the stakeholders in the financial services industry.

11. SUGGESTIONS

Innovation involves risk. If risk is to be financed effectively, it is essential for financial institutions to improve their risk management systems in their entirety. First is the need to develop appropriate risk assessment systems. Introduction of credit information bureaus should help greatly in the future. Second is the development of risk mitigation systems. Third, appropriate risk allocation mechanisms have to be developed, so that risk is adequately distributed from the point of view of the financial institutions. As financial systems become more market oriented and as price discovery of interest rates becomes more efficient, financial institutions find better and better ways of managing and allocating risk. Effective development of financial systems to finance innovation takes a good deal of time.

- Companies should provide training from the banks & brokers to the investors.
- Companies should established regulations by SEBI.
- Companies should conduct work shop for investor to increase their knowledge.
- Companies should provide views of expert analysis to investors.
- Companies should provide knowledge of innovative financial products to investors to make them aware.

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FINANCIAL MEASURES USING Z- SCORES WITH SPECIAL REFERENCE TO BAJAJ AUTO LIMITED

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ABSTRACT

Financial statements through light on financial position of the business. Management is interested in knowing financial status of the firm .Ratio analysis is the most powerful tool which helps to spot out financial weaknesses of the firm .It helps them to take corrective actions .The future plans of the firm should be laid down in view of the information reported in these statements. This paper focus on financial measures using Altman z- scores with reference to Bajaj Auto Limited the Altman z-score is a measure of a company's health and likelihood of bankruptcy. Several key ratios such as Working capital to total assets, Sales to total assets, Reciprocal of debt-equity ratio, Earnings before interest and taxes to total assets ,Retained earnings to total assets are used in the formulation of an Altman Z-Score Value. Altman Z-Score calculation is used to estimate the probability of business bankruptcy of a company. The Altman Z-Score is a quantitative balance-sheet method of determining a company's financial health.

KEYWORDS

Bankruptcy, Coefficients, Financial Condition, Financial statements, Financial health, Z-score.

INTRODUCTION

Financial statements provides some extremely useful information to the extent that the balance sheet mirrors the financial position on a particular date in terms of structure of assets, liabilities and owner's equity and Retained earnings so on. Users of financial statements can get further insight about financial strengths and weaknesses of the firm if they properly analyze information reported in these statements. Management should be particularly interested in knowing financial strengths of the firm to make their best use and to be able to spot out financial weaknesses of the firm to take suitable corrective actions. The future plans of the firm should be laid down in view of the firm's financial strengths and weaknesses. Thus, financial analysis is the starting point for making plans, before using any sophisticated forecasting and planning procedures. Financial analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationships between the items of the balance sheet and the profit and loss account. Financial analysis can be undertaken by the management of the firm or by parties outside the firm like owners, creditors, investors and others. The focus of financial analysis is on key figures in the financial statements and the significant relationship that exists between them. The analysis of financial statements is a process of evaluating the relationship between components parts of financial statements to obtain a better understanding of the firm's position and performance. .

Ratio analysis is a widely –used tool of financial analysis. It can be used to compare the risk and return relationships of firms of different sizes. It is defined as the systematic use of ratio to interpret the financial statements. The term ratio refers to the numerical or quantitative relationship between two items or variables. The relationship between two accounting figures, expressed mathematically, is known as financial ratio. Ratios help to summarize large quantities of financial data and to make qualitative judgment about the firm's financial performance. The ***Altman Z-Score*** is a measure of a company's health and **likelihood of bankruptcy**. The ***Altman Z-Score*** is a measure of a company's health and **likelihood of bankruptcy**. Several key ratios are used in the formulation of an Altman Z-Score Value. The Z-Score model is the 1960's brainchild of Professor Edward Altman of NYU. Several key ratios such as Working capital to total assets, Sales to total assets, Reciprocal of debt-equity ratio, Earnings before interest and taxes to total assets ,Retained earnings to total assets are used in the formulation of an Altman Z-Score Value.

RESEARCH METHODOLOGY

The entire study is based on secondary data, procured and extracted from the financial statements of Bajaj auto limited covering a period of five years from 2009-2013. For the purpose of analyzing the financial performance of the selected company, two kinds of tools have been used. They are statistical tools and financial ratios. The statistical tools used in this study are: Arithmetic Mean and Correlation have been used extensively. Various kinds of ratios have been used as the financial tools for the purpose of analysis. They are Profitability, Liquidity, Leverage, and turnover ratios.

FINANCIAL TOOLS

- RATIO ANALYSIS

Working capital to total assets
Retained earnings to total assets
Earnings before interest and taxes to total assets
Reciprocal of debt-equity ratio
Sales to total assets

'Z'- SCORE INGREDIENTS

1)**X_1 (WORKING CAPITAL /TOTAL ASSETS)**

This ratio measures the liquidity position of company .The difference between current assets and current liabilities excluding short term borrowing is called working capital. It measures the firm's potential reservoir of funds for the given period.

2)**X2(RETAINED EARNINGS/ TOTAL ASSETS)**

It indicates the amount reinvested out of profits, which reflects the extent of company's profit for further expansion. The firms with retained earnings to total assets have financed their assets with the help of retained earnings and have not utilized as much debt. It highlights use of internal funds rather than external high risk capital.

3) X_3(EARNINGS BEFORE INTEREST AND TAXES / TOTAL ASSETS)

This shows profitability in terms of earning power of the company and total assets of the company.

4)X_4(DEBT/EQUITY)

The relationship between borrowed funds and owner's capital is a measure of long term financial solvency of a firm. This relationship is shown in debt – equity ratio. This ratio reflects claims of creditors and shareholders against the assets of the firm.

5)X_5(SALES /TOTAL ASSETS)

This is a standard turnover measure. This ratio shows the firm's ability in generating sales from all financial resources committed to total assets. It indicates sales with company's total assets and measure of management's ability to deal with competitive conditions.

ALTMAN GUIDELINES FOR HEALTHY ZONE

Altman guidelines for healthy zone help to judge financial health of Bajaj auto company during study period 2009-2013.
For Public Companies, the Model is calculated as follows: **Z = 1.2*X1 + 1.4*X2 + 3.3*X3 + 0.6*X4 + 1.0*X5**.

TABLE 1: ALTMAN GUIDELINES

SITUATION	Z-SCORE	ZONES	REMARKS
1	Below 1.8	Not healthy and more risk of Catastrophe	This score clearly indicates failure which probably occur within period of 2 years
2	BETWEEN 1.8 and 2.7	Not healthy	Good chance of the company going bankrupt within 2 years of operations from the date of financial figures given
3	BETWEEN 2.7 and 2.99	On Alert	This zone is an area where one should 'Exercise Caution'
4	ABOVE 3.0	Safe	The company is considered 'Safe' based on the financial figures only

THE INTERPRETATION OF ALTMAN Z-SCORE

Z-SCORE ABOVE 3.0 –The company is considered 'Safe' based on the financial figures only.
Z-SCORE BETWEEN 2.7 and 2.99 – 'On Alert'. This zone is an area where one should 'Exercise Caution'.
Z-SCORE BETWEEN 1.8 and 2.7 – Good chance of the company going bankrupt within 2 years of operations from the date of financial figures given.
Z-SCORE BELOW 1.80- Probability of Financial Catastrophe is Very High.
If the Altman Z-Score is close to or below 3, then it would be as well to do some serious due diligence on the company in question before even considering investing.

ANALYSIS AND INTREPRETATION

WORKING CAPITAL TO TOTAL ASSETS RATIO (X_1)OF BAJAJ AUTO LIMITED

Working capital to Total assets= WORKING CAPITAL /TOTAL ASSETS

TABLE 2: WORKING CAPITAL TO TOTAL ASSETS RATIO (X_1)OF BAJAJ AUTO LIMITED

Year	**Working capital(Rs in crores)**	**Total assets(Rs crores)**	**Ratio(in times)**
2009	-218.43	3408.15	0.06409
2010	-1300.06	4078.34	0.31877
2011	-1133.8	5154.96	0.21994
2012	-229.65	6204.81	0.03701
2013	-544.17	8163.71	0.06666
Average			0.141294

INTERPRETATION

Working capital of Bajaj auto limited shows negative as their current liabilities are more than current assets. During 2009-2010 ratio was increased (0.06409 to0.31877) because of increase in total assets. During 2010-2011(0.31877 to 0.21994)and 2011-2012(0.21994- 0.03701)ratio was decreased in spite of increase in total assets But in the year 2013 ratio has increased slightly(0.03701 to 0.06666)from when compared to previous year(2012) because of increase in total assets. The correlation between working capital to total assets is positive

RETAINED EARNINGS TO TOTAL ASSETS RATIO(X_2) OF BAJAJ AUTO LIMITED

Retained earnings to Total assets ratio= Retained earnings/ total assets

TABLE 3: RETAINED EARNINGS TO TOTAL ASSETS RATIO(X_2) OF BAJAJ AUTO LIMITED

Year	Retained earnings(Rs in crores)	Total assets(Rs in crores)	Ratio(in times)
2009	1668.11	3408.15	0.489447
2010	2572.25	4078.34	0.63071
2011	4517.85	5154.96	0.876408
2012	5792.35	6204.81	0.933526
2013	7775.93	8163.71	0.9525
Average			0.7765182

INTERPRETATION

Retained earnings of Bajaj auto limited has increased from year to year during study period (from 0.489447 to 0.9525 during 2013) Total assets also has increased every year. During study period Retained earnings to Total assets ratio increased year after year due to increase in retained earnings and total assets The correlation between Retained earnings to total assets is positive.

EARNINGS BEFORE INTEREST AND TAXES TO TOTAL ASSETS(X_3) OF BAJAJ AUTO LIMITED

Earnings before interest and taxes to total assets=EBIT/TOTAL ASSETS

TABLE 4: EARNINGS BEFORE INTEREST AND TAXES TO TOTAL ASSETS(X_3) OF BAJAJ AUTO LIMITED

Year	EBIT(Rs in crores)	Total assets(Rs in crores)	Ratio(in times)
2009	1089.87	3408.15	0.319783
2010	2,542.71	4078.34	0.623467
2011	4,433.44	5154.96	0.860034
2012	4,149.57	6204.81	0.668767
2013	4,430.74	8163.71	0.542736
Average			0.602957

INTERPRETATION

During 2009-2010 EBIT and total assets both were increased. Even ratio also from 0.319783 increased to 0.623467. In 2010-2011 also same trend continued(0.623467 to 0.860034).In spite of continues increase for first 2 years ,during 2011-2012(0.860034 to 0.668767) 2012-2013(0.668767 to 0.542736)showed decrease in the ratio in spite of increase in total assets . The correlation between Earnings before interest and taxes to total assets is positive.

DEBT-EQUITY RATIO(X4) OF BAJAJ AUTO LIMITED

DEBT-EQUITY RATIO= DEBT/EQUITY

TABLE 5: DEBT-EQUITY RATIO(X4) OF BAJAJ AUTO LIMITED

Year	VALUE OF EQUITY(Rs in crores)	TOTAL DEBT(Rs in crores)	Ratio(in times)
2009	144.68	2833.5	0.051061
2010	144.68	3394.51	0.042622
2011	289.37	2814.44	0.102816
2012	289.37	2342.16	0.123548
2013	289.37	2866.41	0.100952
Average			0.0842

INTERPRETATION

Equity of the company has increased from year 2010 to 2011.Even debt also increased from2009 to 2010,But later years reduced and slightly increased in the year 2013.Ratio of Bajaj auto limited has reduced from 2009 to 2010(0.051061 to 0.042622).Next two years ratio has increased(2011-0.102816,2012-0.123548)But during 2012-2013 ratio reduced(0.123548 to 0.100952) due to increase in debt with no corresponding increase in Equity.

The correlation between is Debt-Equity is negative.

SALES TO TOTAL ASSETS (X_5) OF BAJAJ AUTO LIMITED

Sales to Total assets ratio= Sales /Total assets

TABLE 6: SALES TO TOTAL ASSETS (X_5) OF BAJAJ AUTO LIMITED

Year	SALES(Rs in crores)	Total assets(Rs in crores)	Ratio(in times)
2009	9,310.24	3408.15	2.731758
2010	12,420.95	4078.34	3.04559
2011	17,386.51	5154.96	3.372773
2012	20,475.74	6204.81	3.299979
2013	19,997.25	8163.71	2.44953
Average			2.979926

INTERPRETATION

Sales of the company has increased year after year from 2009 till 2012.but during 2012-2013 sales has decreased. Total assets of the company increased during the study period. Ratio of the company has increased during 2009-2011 (2.731758 to 3.372773) Next 2 years it has reduced (3.299979 to2.44953) the correlation between Sales to Total assets is positive

TABLE 7: 'Z' SCORE INGREDIENTS

INGREDIENTS	FINANCIAL RATIOS	2009	2010	2011	2012	2013	MEAN	R
X_1	working capital /total assets	0.06409	0.31877	0.21994	0.03701	0.06666	0.141294	0.197398
X_2	Retained earnings /Total assets	0.489447	0.63071	0.876408	0.933526	0.9525	0.7765182	0.992306
X_3	EBIT / Total assets	0.319783	0.623467	0.860034	0.668767	0.542736	0.602957	0.805967
X_4	Debt/Equity	0.051061	0.042622	0.102816	0.123548	0.100952	0.0842	-0.6458
X_5	Sales /Total assets	2.731758	3.04559	3.372773	3.299979	2.44953	2.979926	0.883439

INTERPRETATION

The correlation between "z" score ingredients is satisfactory at all fourX_1, X_2, X_3, x_5 except one **X4.** It indicates that the relationship between these are cooperating each other except in case of x_4. There is a positive correlation between various ingredients except X_4which shows negative correlation.

TABLE 8: BAJAJ AUTO LIMITED 'Z' SCORE USING WEIGHTED FACTORS

INGREDIENTS	FINANCIAL RATIOS	2009	2010	2011	2012	2013	Mean
X_1	working capital /total assets	0.07691	0.38252	0.26393	0.04441	0.07999	0.1695528
X_2	Retained earnings /Total assets	0.685226	0.882994	1.226971	1.306936	1.3335	1.0871255
X_3	EBIT / Total assets	1.055284	2.057441	2.838112	2.206931	1.791029	1.9897594
X_4	Debt/Equity	0.030637	0.025573	0.06169	0.074129	0.060571	0.0505199
X_5	Sales /Total assets	2.731758	3.04559	3.372773	3.299979	2.44953	2.979926
Z-score		4.5798112	6.394122	7.763474	6.932387	5.714622	

Z-SCORE VALUE

INTERPRETATION

To determine the financial health of the Bajaj Auto limited, Researcher used Z score model which provides road map to judge financial soundness of the business. The table shows Z score value of the company .As per Altman guidelines, the Z score value of the Bajaj Auto limited was calculated. Z-SCORE above 3.0 –The company is considered 'Safe' based on the financial figures for the study period between 2009-2013 as z score is above 3.0.Average z score value during study period was 6.2768

FINDINGS

- Working capital of Bajaj auto limited showed negative as their current liabilities are more than current assets during study period between 2009-2012. But total assets of the company have increased from year to year.
- Retained earnings and Total assets of the company have also increased from year after year. Ratios (0.685226, 0.882994, 1.226971, 1.306936, and 1.3335) also have increased continuously during 2009-2012.
- Equity has increased but some fluctuations were observed in total debt of the company. average ratio during the period was 0.602957
- Sales have increased tremendously except during 2013.Ratio also increased except lost year(2.731758, 3.04559, 3.372773, 3.299979, 2.44953)

SUGGESTIONS

- ❖ The company has to maintain standard current ratio (2:1) to overcome problem of negative working capital and for effective utilization of funds.
- ❖ The company should allot some quota to the working capital requirements.

- It should try to reduce debt funds which is quiet risky and can concentrate on own funds.

CONCLUSION

Altman Z-Score calculation is helpful to estimate the probability of business bankruptcy of a company. In determining a company's financial health, Bajaj Auto limited can be considered as "Safe" company which clearly indicates that has a low probability of bankruptcy as Altman Z-Score is greater than 3.0.This Z score help the company to judge financial soundness of the company

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CONSUMER BEHAVIOUR TOWARDS REFRIGERATOR IN MYSORE CITY

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ABSTRACT

Consumer Behavior means buying behavior of ultimate consumers. Those consumers who buy for personal use. The buying behavior of the consumer depends upon the awareness of the product, taste and preference of the brand. In the Indian market the double income families spending more money not only meet their financial demand but also to live with comfort. As result consumers are purchasing household durables are necessities rather than luxury. With increase of family income consumer more spending on household appliances like pressure cooker, television, washing machine, refrigerators, mixer, wet grinders, vacuum cleaner to name a few. The data for the research is collected 150 respondents in Mysore city. The convenience sampling method was deployed to collect the necessary information. The data were collected on the socio economic factors consists of age, Gender, Marital status, Nature of Family, Educational qualification, occupation, Income level and size of the family.

KEYWORDS

Consumer Behavior, Household Appliances, Mysore city.

INTRODUCTION

Generally purchase television for entertainment later consumers purchase refrigerator to home. The second order of buying a household appliance is refrigerator. Refrigerator is a value item with technical content. There are more number of manufactures are promoting the refrigerators products to market. Today buyers purchasing refrigerators based on the size, color, quality, price, brand image, deign, model of the brand available. Therefore manufacturers are promoting using different strategies to build brand image and goodwill.

The length of the product life cycle is short in household appliances like television, refrigerator, washing machine etc due to technology. The improve of technology increase the expectations of the customers and more number of alternatives in the market. The dealers' loyalty plays a major role to selling refrigerators products and added value to the products. Most of the manufactures are diversified their products to meet the all classes of the customers. People are smarter spending financially towards household appliances and more demanding for fewer prices.

People found more uses to purchase refrigerator products begin with preserving food items, vegetables and other things. Nowadays refrigerators are available for different purposes and preserve different things. The usage of refrigerator varies from domestic usage and business. Hence refrigerators are necessary for all sectors of users but buying behavior of consumers differs from place to place and people to people.

This study helps to ascertain the factors influencing the buying behavior of a consumer. Some of the factors which are taken into consideration are brand name, delivery, size, and price, and color, utility and sales service. These factors are taken because each of them are combined with others influences the buying decision of the consumer.

STATEMENT OF THE PROBLEM

Consumer households have exhibit significant sales growth. Categories like Flat panel TVs, Microwave ovens, Air Conditioners and Refrigerators are likely to post strong growth. Urban market is likely to be driven by new technology/innovative products, lifestyle products and replacement demand such as LED TVs, Laptops, and Split ACs. Etc. Rural markets are likely to outpace growth in the urban markets led by increasing penetration across categories such as Refrigerators and Washing machines. Growth is mainly contributed by first time buyers of products unlike replacement demand in urban markets. Entry of private labels in rural market may fuel competition.

This study is focus on consumers who have the choice between a well known refrigerator brand and an unknown brand will often choose the well known brand. However the phenomenon that consumer tends to choose basing on brand awareness declines from purchase to purchase. If consumers are not familiar with any of the brands available, they will try to choose the high quality brand with well known available brand. In other words, the customer should be able to identify a firm's product in the retail stores or be able to recall its brand whenever he or she thinks of refrigerator brand. Hence this study on consumer behavior towards refrigerators among the people in Mysore city was undertaken.

OBJECTIVES OF THE STUDY

The following are major objectives of the study:

1. To examine the brand awareness of consumers in Mysore city.
2. To examine the brand preferences of the consumers in the Mysore city.
3. To improve the awareness of the brands as well as brand preferences in Mysore city.

RESEARCH METHODOLOGY

The primary data have been collected by the researcher by the way of using a structured interview. The researcher has adopted simple random sampling method to collect necessary data for this particular study. The secondary data have been collected from various books and periodicals, news papers, and related dissertations.

PRIMARY DATA

Primary data were collected by interviewing the respondents using the interview schedule in the city of Mysore.

SECONDARY DATA

Secondary data concerned with household appliances about the refrigerator was collected from secondary sources like company records and magazines.

TOOLS OF ANALYSIS

Researcher has adopted only percentages analysis to analyze the collected information in the Mysore city.

SOCIO ECONOMIC FACTORS AND BRAND PREFERENCES

Socio economic factors consist of age, gender, marital status, nature of family, educational qualification, occupation, Income level and size of the family.

AGE OF SAMPLE CONSUMERS

Age is considered as an important factor for the study. Services availed of by sample consumers differ according to their age. Table 1 shows the age wise distribution of the sample of the sample consumer.

TABLE 1: TABLE SHOWING AGE WISE CLASSIFICATION OF SAMPLE RESPONDENTS

Sl.No	Age	No. of Respondents	Percentage (%)
1	Below 20	3	2
2	20-30	47	32
3	30-40	68	45
4	40-50	23	15
5	Above 50 years	9	6
	Total	150	100

Source: Primary Data

Table. 1 indicates the age wise classification of the sample respondents. Out of 150 sample respondents 3 respondents (2%) belong to the category of below 20 and 47 sample respondents (32%) are falls in between 20-30 category, 68 respondents (45%) are falls in between 30-40 category and 23 sample respondents (15%) are between 40-50 category. Only 9 respondents (6%) have come under age group of above 50. It is concluded that majority of the respondents are in category of 30 to 40 and 20-30.

GENDER OF SAMPLE CONSUMERS

Gender plays a significant role to satisfy their life expectations. Male and female gender influencing the purchasing of refrigerator product. Table 2 indicates the gender wise classification of the sample consumers.

TABLE 2: TABLE SHOWING GENDER WISE CLASSIFICATION OF SAMPLE RESPONDENTS

Sl. No	Gender	No. of Respondents	Percentage (%)
1	Male	67	45
2	Female	83	55
	Total	150	100

Source: Primary Data

Out of 150 sample respondents 67 respondents (45%) are male and 83 respondents (55%) are female. It is concluded that majority of the sample respondents are female.

MARITAL STATUS OF SAMPLE CONSUMERS

Usage of unmarried woman/man is entirely different from that of a married couple. Therefore marital status is one of the factors which may influence them.

TABLE 3: TABLE SHOWING THE CLASSIFICATION OF SAMPLE RESPONDENTS ACCORDING TO THEIR MARITAL STATUS

Sl. No	Marital Status	No. of Respondents	Percentage (%)
1	Married	112	75
2	Unmarried	38	25
	Total	150	100

Source: Primary Data

Table. 3 shows that 112 sample respondents (75%) are married and rest of 38 sample respondents (25%) are unmarried. We can conclude that majority of the sample respondents are married.

NATURE OF THE FAMILY OF SAMPLE CONSUMERS

Families are divided into joint and nuclear family. Generally joint family is more popular in villages. Whereas the semi-urban, and urban mass are nuclear families. Number of family influence the decision making process.

TABLE 4: TABLE SHOWS THE NATURE OF THE FAMILY OF SAMPLE RESPONDENTS

Sl. No	Age	No. of Respondents	Percentage (%)
1	Joint Family	106	70
2	Nuclear family	44	30
	Total	150	100

Source: Primary Data

Table. 4 shows that out of 150 families 106 families (70%) were joint family and the remaining 44 families (30%) were nuclear family. It is conclude that most of the families were nuclear family.

EDUCATIONAL QUALIFICATION OF SAMPLE CONSUMERS

Literacy level and level of education attainment provides the facilities availed of by companies. The use of services varies because of different education background. The profile of sample customer's in terms of educational qualification shows in table 5.

TABLE 5: TABLE SHOWING EDUCATION QUALIFICATION WISE CLASSIFICATION OF SAMPLE RESPONDENTS

Sl. No	Educational Qualification	No. of Respondents	Percentage (%)
1	School Level	48	32
2	College level	102	68
	Total	150	100

Source: Primary Data

From the Table. 5 out of 150 sample respondents, 48 sample respondents (32%) are studied up to school level, and the training 102 sample respondents (68%) are educated college level. It is conclude that most of the respondents are educated college level.

OCCUPATION OF SAMPLE CONSUMERS

Consumer purchase behavior influenced based on their occupation. People who are well placed or employed enjoy better position in the society. Table 6 in which the respondents are grouped according to their occupation.

TABLE 6: TABLE SHOWING OCCUPATION WISE CLASSIFICATION OF SAMPLE RESPONDENTS

Sl. No	Occupation	No. of Respondents	Percentage (%)
1	Business men	29	19
2	Employed in Govt. Organization	38	25
3	Professional	40	27
4	Employed in private organization	43	29
	Total	150	100

Source: Primary Data

Table. 7 shows that, Out of 150 sample respondents 29 sample respondents(19%) are businessman. 38 sample respondents (25%) are government employees, 40 sample respondents (27%) are professional and the remaining 43 sample respondents (29%) are private employees. Therefore, it is conclude that the most of the respondents are private employees.

INCOME LEVEL OF THE OF SAMPLE CONSUMERS

The buying decision process depends upon the consumer income, his personal background, his education, and factors like the employment of the family women. The purchase pattern of the refrigerator is changing. Middle income group also it is necessary household appliance. It is evident from the following table 7 that refrigerator owned by different income groups.

TABLE 7: TABLE SHOWING INCOME WISE CLASSIFICATION OF SAMPLE RESPONDENTS

Sl. No	Income Level	No. of Respondents	Percentage (%)
1	Below 10000	42	28
2	10000-20000	58	37
3	20000-30000	38	27
4	Above 30000	12	8
	Total	150	100

Source: Primary Data

Table. 7 indicate that income wise classification of sample respondents. Out of 150 sample respondents 42 sample respondents (28%) are belong to the category of below Rs. 10000. Again 58 respondents (37%) fall in between Rs. 10000-20000 category and 38 sample respondents (27%) belong to the category of Rs. 20000-300000. Only 12 respondents (8%) have come under the income group of above 30000. It is concluded that the majority of the sample respondents have monthly income between Rs. 10000-20000.

SIZE OF THE FAMILY OF SAMPLE CONSUMERS

Family is a major decision making unit and decision making process depends upon the income of the family and size of the family. Small families and large families decisions changes for their day to day expenses. Table 8 indicates the size of the family of sample consumers.

TABLE 8: TABLE SHOWING SIZE OF THE FAMILY OF SAMPLE RESPONDENTS

Sl. No	Members In Family	No. of Respondents	Percentage (%)
1	Less Than 5	90	60
2	Between 5-7	48	32
3	Above 7	12	8
	Total	150	100

Source: Primary Data

Table. 8 shows that 90 sample respondents (60%) have less than 5 members in their family, 48 respondents (32%) have in between 5-7 categories. And rest of the 12 have (8%) above 7 members. Therefore it is concluded that the majority of the respondents have less than 5 members in their family.

BRAND PREFERENCE

There are more numbers of brands are introduced from one year to next year in the refrigerator. Consumers prefer particular brand of refrigerator than a lot of brand available from the competitors'. The main objective of the study is to find out the brand preference of the respondents and relate to different factors influencing their brand preference.

TABLE 9: TABLE SHOWING BRAND WISE CLASSIFICATION OF SAMPLE RESPONDENTS

Sl. No.	Brand	No of respondents	Percentage
1	LG	33	22
2	WHIRLPOOL	36	24
3	VIDEOCON	24	16
4	GODREJ	26	18
5	KELVINATOR	16	11
6	VOLTAS	07	4
7	BPL	06	4
8	ALLWYN	02	1
	TOTAL	150	100

Source: Primary Data

From Table 9. It is inferred that 33 respondents (22%) are using LG, 36 respondents (24%) are using WHIRLPOOL, 24 respondents (16%) are using Videocon, and 26 respondents (18%) are using GODREJ, 16 respondents using KELVINATOR, 7 respondents using VOLTAS, 6 respondents using BPL. It is concluded that the most of the respondents are using WHIRLPOOL Brand.

CAPACITY OF REFRIGERATOR

The capacity of the refrigerators varies from companies to companies due to competition. There are various refrigerator brands are available in the market. To know the capacity of the refrigerators from the respondents.

TABLE 10: TABLE SHOWING CAPACITY OF REFRIGERATOR

Sl. No	Capacity	No. of Respondents	Percentage (%)
1	Below 100 liter	15	10
2	165-230 liter	122	81
3	230-320 liter	13	9
4	Above 320 liter	-	-
	Total	150	100

Source: Primary Data

Table. 10 clearly show that 165-230 liter capacity refrigerators were preferred by many respondents (81%) i.e. 122 have preferred this size and the rest of the respondents (10%) prefer below 100 liter and 13 respondents (9%) prefer 230-320 liters. It is conclude that the majority of the respondents prefer 165-230 liter capacity.

REASON FOR PURCHASE

There are different reasons to purchase the refrigerators. Table 11 indicates the reason for purchasing of refrigerators.

TABLE 11: TABLE SHOWING BASIS OF REASON FOR PURCHASE

Sl. No	Reason	No. of Respondents	Percentage (%)
1	Preserving food	112	75
2	For cold water & Ice Cubes	26	17
3	Business	12	8
4	Others	0	0
	Total	150	100

Source: Primary Data

Table. 11 shows that reason for purchasing refrigerator. Out of 150 respondents, 112 respondents (75%) are purchasing refrigerator for preserving foods, 26 respondents (17%) for cold water and ice cubes and remaining 12 respondents (8%) for business purpose.

PERIOD OF REFRIGERATOR

The refrigerators brands are available with more features and benefits and how they replace after period of usage in the Mysore city? The duration of refrigerator usage changes from the brand previously purchased and new brand emerged to the market. This section gives the period of using refrigerator.

TABLE 12: TABLE SHOWING PERIOD FOR USING REFRIGERATOR

Sl. No	Period	No. of Respondents	Percentage (%)
1	Below 3 years	58	38
2	3-5 years	44	30
3	5-10 years	44	30
4	Above 10 years	04	2
	Total	150	100

Source: Primary Data

Table. 12, it is inferred that 58 respondents (38%) are using for below 3 years, 44 respondents (30%) are using 3-5 years, and 44 respondents (30%) using 5-10 years and the remaining respondents are using refrigerator for above 10 years. Therefore it is concluded that reason that the most of the respondents are using refrigerator for 3-5 years.

MODE OF PURCHASE

The purchase pattern of refrigerator is increase due to easy loan schemes and offering loan facilities from the financial companies .Cash and credit facilities are major modes of to purchase refrigerators.

TABLE 13: TABLE SHOWING CLASSIFICATION ACCORDING TO MODE OF PURCHASE

Sl. No	Mode of Purchase	No. of Respondents	Percentage (%)
1	Cash	118	79
2	Credit	32	21
	Total	150	100

Source: Primary Data

Table. 13 shows that classification according to the mode of purchasing refrigerator. It is found that 118 sample respondents (79%) purchase by cash and 32 sample respondents (21%) purchase by credit. Majority of the customers were found purchase their preferred brand by cash.

SEASON FOR PURCHASE

Consumers are waiting for special occasion to purchase their preferred refrigerator brand. Manufacturing finding important occasions like New year, Diwali etc., in the context, though it is not any way a cultural aspect presentation of budget in parliament has become an important event. Now-a- days the companies have started offers like pre budget purchase packages.

TABLE 14: TABLE SHOWING SEASON WISE CLASSIFICATION OF SAMPLE RESPONDENTS

Sl. No	Season	No. of Respondents	Percentage (%)
1	New Year	36	25
2	Diwali	58	38
3	Pongal	18	12
4	Whenever you need	38	25
	Total	150	100

Source: Primary Data

Table. 14 explains that, 36 sample respondents (25%) are purchasing during new year, 58 respondents (38%)are purchasing during Diwali, 18 respondents (12%) prefer Pongal, and 38 respondents (25%) are purchasing whenever their need. It is conclude that the majority of the respondents prefer Diawali season for buying refrigerator.

BRAND CHOICE OF REFRIGERATOR

The lot of factors that influence in the preference of refrigerator brand, like off season sale, guarantee, after sales service, foreign company products and additional facilities viz., PUF system or Defrost system which factors influence them more to go for a particular brand.

TABLE 15: TABLE SHOWING FACTORS THAT INDUCES TO BUY SPECIFIC BRAND

Sl. No	Category	No. of Respondents	Percentage (%)
1	Off season sale	52	35
2	Guarantee	66	44
3	After sales service	18	12
4	Foreign Company	14	9
	Total	150	100

Source: Primary Data

Table. 16 shows that the factors attracting the customers. Out of 150 sample respondents, 52 respondents (35%) prefer off season sale, 66 respondents (44%) prefer guarantee, 18 respondents (12%) prefer after sales service and 14 respondents (9%) prefer foreign company. It can be concluded that buyer behavior towards refrigerator are mostly influenced by guarantee.

FACTORS INFLUENCING CUSTOMERS

The purchase decisions will be influenced by various factors. Such as quality, price, brand image, advertisement are the critical attributes for the consumers. This is presented in Table..16.

TABLE 16: TABLE SHOWING FACTORS INFLUENCING THE CUSTOMERS

Sl. No	Category	No. of Respondents	Percentage (%)
1	Color and Quality	46	31
2	Price	24	16
3	Brand name	68	45
4	Advertisement	12	8
	Total	150	100

Source: Primary Data

Table. 16 show that influencing factors of the customer. Out of 150 sample respondents, 46 respondents (31%) are attracted by color and quality of the refrigerator, 68 respondents (45%) are attracted by brand name, and remaining 12 respondents (8%) are attracted by advertisement. It is concluded that most of the respondents are attracted by brand name of the refrigerator.

COLOUR OF THE REFRIGERATOR

Color of the refrigerator influence the buyers preference and catch the attention of the customers. Manufacturers introduce various color of refrigerator to influence the customers. The Table 17 gives the consumers attracted by different colors.

TABLE 17: TABLE SHOWING COLOR PREFERENCE

Sl. No	Color	No. of Respondents	Percentage (%)
1	BLUE	48	31
2	RED	40	27
3	WHITE	32	22
4	OTHER	30	20
	Total	150	100

Source: Primary Data

From the Table. 17, it is found that 48 sample customers (31%) prefer BLUE, 40 respondents (27%) prefer RED, 32 respondents (22%) prefer WHITE color, and 30 respondents (20%) preferred other color of the refrigerator. Majority of the respondents prefer BLUE color of refrigerator.

BASIS OF DESIGN

In the beginning the refrigerator was introduced there were only single door design. But now –a-days companies are introducing refrigerators with double door system. The Table 18 shows the above factors.

TABLE 18: TABLE SHOWING CLASSIFICATION ON THE BASIS OF DESIGN

Sl. No	Design	No. of Respondents	Percentage (%)
1	Single door	104	70
2	Double door	46	30
	Total	150	100

Source: Primary Data

Table. 18 shows that the classification on the basis of design of the refrigerator. Out of 150 sample respondents, 104 respondents (70%) are using single door model and the remaining 46 respondents (30%) are using double door model refrigerator. It is found that the most of the respondents prefer single door only.

GUARANTEE OF THE REFRIGERATOR

TABLE 19: TABLE SHOWING GUARANTEE NEED FOR REFRIGERATOR

Sl. No	Category	No. of Respondents	Percentage (%)
1	2 years	06	4
2	3 years	76	51
3	4 years	45	30
4	Above 4 years	23	15
	Total	150	100

Source: Primary Data

Table. 19, It indicates that 6 respondents (4%) are wanted guarantee for 2 years. 76 respondents (51%) are need guarantee for 3 years. 45 respondents (30%) are need guarantee for 4 years. and 23 respondents (15%) are wanted guarantee for above 4 years. Majority of the respondents need guarantee for 3 years.

IMPORTANT FEATURES IN REFRIGERATORS

There are number of features in refrigerators in the preference of brand choice. Main features like cooling performance, Noise level, power consumption, and other.

TABLE 20: TABLE SHOWING MAIN FEATURES IN REFRIGERATOR

Sl. No	Features	No. of Respondents	Percentage (%)
1	Cooling performance	64	42
2	Less noise level	48	32
3	Less power consumption	26	18
4	Others	12	8
	Total	150	100

Source: Primary Data

Table. 20 reveals that, out of 150 sample respondents, 64 respondents (42%) are require cooling performance, 48 respondents (32%) are prefer low noise level, 26 respondents (18%) prefer low power consumption and remaining 12 respondents (8%) required other features. Most of the respondents are satisfied with cooling performance of the refrigerator.

SUMMARY OF FINDINGS

1. Majority of them are under the age group 30-40 and most of the respondents are female.
2. Most of the respondents are as nuclear families.
3. Most of the respondents is concerned about their about educational qualification they are graduates.
4. Majority of the respondents are employed in private organization.
5. In the income group, majority of the respondents are belongs to Rs.10000-20,000 followed by below Rs.10000.
6. Majority of the respondents are belonging to medium size family.
7. Whirlpool is the most preferred brand among the various brands of refrigerator.
8. Majority of the customers preferred 165-230 liters capacity refrigerator as compared with other size of the refrigerators.
9. Preserving food is the major purpose of respondents purchase refrigerator.

10. Majority of the respondents using the duration of 3-5 years.
11. Mode of cash preferred by majority of the respondents to purchase refrigerator.
12. Offering during special season like Diwali, pongal, New Year, most of the respondents prefer Diwali season for buying refrigerator.
13. Brand name plays a significantly attract to purchase refrigerator.
14. Majority of the customers prefer blue colors available under various brands of refrigerators.
15. Most of the customers hold only single door refrigerator.
16. Most of the respondents need guarantee for three years and cooling performance and low noise level is important features of refrigerator.

SUGGESTIONS

1. Most of the respondents are not happy with after sales services provided by the companies and not satisfied with regarding receiving and handling customer complaints.
2. Customers are unhappy with delay of solving the respondents' complaints.
3. Reducing unnecessary sound from the compressor is the major suggestion from the respondents.
4. Medium color is the most prefer color than light or dark color.
5. Companies' emphasis on free services of the refrigerator.
6. Supplying stand for refrigerator are not providing from the manufacturers, which is required for safety of the refrigerator.
7. Consumers prefer less power consumption to use refrigerator either consumer or business use.

CONCLUSION

The study reveals that main criteria to purchase to refrigerator is quality and after sales services. Less consumption of electricity is major suggestions from the respondents. Dealers' loyalty more influence on the purchase of refrigerator product in retail outlet. Competition results more design, model and color of the refrigerators influence the buying behavior of the consumers. Consumers want reasonable assurance regarding the technical perfection of the product and after sales service.

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THE STUDY OF FACTORS RELATED TO VOCATIONAL WEAR IN MUNICIPALITY'S EMPLOYEES

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ABSTRACT

The aim of this research is to examine the factors related to vocational wear of municipality's employees. The statistical method used in this research is descriptive – survey based. In this research the statistical population is municipality's employees. Sampling in this research has been down randomly in which determination of statistical sample volume has been done through Kukeran formula. Since the statistical population contains 1500 persons, the sample volume obtained from Kukeran formula is 276 persons. In this study in order to gather data, realized questionnaire is used which consists of 30 questions which are evaluated according to desired aims ,based on 5-level Likert spectrum ,from very high to very low. In order to provide a reliable questionnaire Muslech standard questionnaire has been utilized. Statistical methods have been done in two parts based on descriptive statistics , which contains tables and descriptive charts in format of frequency tables and frequency percentages as well as average statistics and standard deviation, and inferential statistics containing single variable T tests and ANOVA and correlation coefficient and for data analysis, SPSS has been used. The data result in significant level of 0/5 signifies that there is a relation between different vocational levels, executive responsibilities, work record and vocational wear.

KEYWORDS

Municipality's Employee, Sampling, SPSS, Statistical Population, Vocational Wear.

INTRODUCTION

Modern human being is compelled to suffer from some limitations and pressures in the course of compatibility with his sociological and vocational environment. One of these numerous pressures in workplace leads to employee's vocational wear. Vocational wear is used when speaking about fatigues caused by existing pressures in workplace, the work per se and as well as symptoms and states of stamina atrophy, frustration and withdrawal in employees. In recent years vocational wear phenomenon has attracted the attention of many researchers and involved people in human resource productivity .The exact amount of vocational wear is not clear .Nevertheless it damages human resource and workforce extensively.

It is now near 20 years which vocational wear word is used in psychology literature and now vocational wear is recognized as an important sociological and personal problem [1]. In fact people relations to their works and the problems which lead to dissatisfaction as a result of that, have been considered important phenomena during these years. The usage of vocational wear term has emerged in the USA since the 1970s, especially among those who have been engaged with human service affairs. However for the first time in the Qerner story (1981) one case of vocational wear has been shown in which psychological problems and frustration of an architect's job caused him to resort to the jungles of South Africa [2].

Vocational wear was initially an uncommon concept and there weren't much standard definitions and illustrious opinions about what it is and what can be said about it for several years, but at later times different definitions and concepts have been offered about vocational wear by some eminent researchers and investigator[1] ,about vocational wear , writes: vocational wear is a corporeal ,emotional and mental fatigue which is produced out of direct and longstanding confrontation of people with situations which are emotionally exhausting[3]. States vocational wear as an inefficient adaption with tension [4]. Describes this phenomenon as the lack of progressing spirituality, energy, personal objectives and as the results of hard vocational conditions[5]. States that depression (reactionary) is mostly accompanied with sin, while vocational depression is accompanied with rage. Moreover, vocational wear is at least initially related to vocation and specified situation, not the overarching situation.

This paper proceeds as follows. In the next section, the background study is described. Section 3 describes related works in this field, etc.

REVIEW OF THE LITERATURE

Rafiee (1383) in an investigation entitled as "examination of the amount of vocational wear and its relation to counteracting methods utilized by employed nurses in burning accidents hospitals in Tehran" found that nurses who used high responsibility method had high-level of vocational wear and the nurses who made use of excessive problem resolving method had vocational wear in a low level. Aziznezhad ,Parvin and SeyyedJavadHoseini (1383) in a research entitled as "vocational wear and its causes in clinic nurses working in the Babol medical sciences university's associated hospitals" say : with respect to recognition of vocational wear causes in this study, managers should provide the conditions such as increase in salary, decrease in work hours, entertaining programs arrangement, holding group work in sessions, forming sport classes and holding workshop about the mental tensions coping methods ,so that the mental pressures of nurses could be diminished. Shadok and colleagues (2009) in an examination titled :"the association of factors with vocational wear among the workers of residential buildings for mentally retarded people , 174 persons (127 female and 47 male) from 12 governmental organizations and 4 private organizations" is unanimous. The results of this research show that there isn't significant difference between wear grades and work hours, employment status, age and mental retardation degree of interviewees. Hasani (1381) in a research titled "examination on the amount of vocational wear of female mathematics and art teachers of common high schools of Tehran" is unanimous. In his studies he indicated that there is no significant difference between vocational wear of mathematics and art teachers in three dimensions of vocational wear with respect to its relation to educational field with taught field, furthermore there was no significant difference concerning work record, district of teaching and distance of workplace.

As indicated in the sources, Langster and Ellen, for the first time in 2002, did a research on burnout status, and in which factors such as family income and even the issue of how to deal with burnout were also examined. The overall results of the study indicated that men gained significantly higher scores on personality change than women. In this study, the quality of life in men is lower than women's and that men showed higher burnout. Men had used less coping techniques than women did. Women were much more likely to spend more energy on their friendship and the value of the friendship. In men, burnout is caused by the two factors of tension and offspring [3]. In 2004, several studies were conducted in this area. In early 2004,Aziznejad and Hosseini's research studied the causes of the problem in pediatric hospitals. The results were interesting in that they indicated a correlation between age, job experience, and job burnout. The main cause of staff's job burnout was the lack of sufficient pays, benefits, and social support. As we know, human resources are the social capital of every organization. In the same year[7]., Maslach and well did research on the burnout among foreign workers in the US organizations indicating that the Canadian workers, despite being more familiar with the climate and culture of America, were more prone to burnout because of their French language, compared with English-speaking European workers. This research has led organizations to pay more attention to the role of language education of their human resources [2]. In late 2004, Bradski and Dessler studied the factor of burnout among men and women. The results of this study indicated that, due to the many problems and the various contradictions in their lives, women were more at risk of burnout than men were, hence this being in absolute contradiction with Allen and Langster's research in 2002. The scientists concluded that the relationship between gender and burnout cannot be generalized to the entire population, such as making the assertion that men experience more burnout than women or the vice versa[4]. In 2008, Mr. Hassani studied a number of factors, about which he had done already research, on the burnout in teachers in Tehran. Some of the results indicated that factors such as job experience, teaching area, and distance from work to home do not have a significant correlation with burnout [9]. In 2009, an interesting study was conducted by Shadokandwell which highlighted the role of religion. According to their research, religious people showed a significantly lower burnout than did the non-religious ones. They also concluded that marital status had a strong correlation with different aspects of burnout. The subjects who had been separated from their spouses or had lost them showed the highest level of burnout. Also, there was no significant difference in burnout, work hours, job experience, age, and degree of mental disability of the clients [8].

RESEARCH HYPOTHESIS

- There is a relation between different vocational statuses and wear in municipality's employees.
- There is a relation between executive responsibility of employees and vocational wear in municipality's employees.
- There is a relation between vocational variables (work record, employment status, work hours, workplace and …) and vocational wear in the municipality's employees.

RESEARCH METHODS

In this kind of research, researcher tries to report the facts without any intervention or cultural inference and takes objective results from the case [11]. The survey method has been utilized from among different descriptive methods with respect to the topic of this research which is about vocational wear and its important factors on municipality's employees. In this method the characteristics of people haven't been considered in details and it deals with general statistics. This method is a mean to obtain information about people attitude. Data gathering method used in this research is questionnaire in a way that we try to gather existing information about the topic of research initially and then base our description and analysis upon them and following that test them through a questionnaire which contains 30 questions. Achieved stability from total questionnaires is 937/7 which is really appropriate. Interviewing method is also used for initial data gathering and SPSS software has been used for statistical data analysis. In this examination, municipality's employees who are 1500 persons constitute our statistical population. To estimate the sample volume, we need to determine the below cases:

P= the proportion of the population which has a specific property

T= the standard confidence level value 95%

D= amount of error which is usually 0.05

Now with respect to that *n* or the sample volume through the main formula can be obtained, number of the research samples based on the above formula has been 276 people.

INFERENTIAL STATISTICS

For the hypotheses analysis in this chapter, statistical method t, ANOVA, correlation coefficient etc. has been used. The sample under study contains 276 people. There is a relation between different job statuses and vocational wear in municipality's employees (Table1).

TABLE 1: DIFFERENT JOB STATUSES AND VOCATIONAL WEAR IN MUNICIPALITY'S EMPLOYEES

Test result	p-value	Degree of freedom	Test statistic(f)
Test hypothesis refutation	*0/003*	*3*	*1/3*

The comparison of p-value with significant level of 0.05 confirms that null hypothesis (there is no relation between different job statuses and vocational wear in municipality's employees) should be refuted; so research hypothesis is confirmed and that means there is a relation between different job status and vocational wear in municipality's employees. There is a relation between executive responsibility and vocational wear in municipality's employees (Table2)

TABLE 2: EXECUTIVE RESPONSIBILITY AND VOCATIONAL WEAR IN MUNICIPALITY'S EMPLOYEES

p-value	Significant level	Pearson correlation coefficient
0/000	*0/05*	*0/82*

The comparison of p-value with significant level of 0.05 confirms that null hypothesis (there is no relation between executive responsibility and vocational wear in municipality's employees) should be refuted; so research hypothesis is confirmed and that means there is a relation between executive responsibility and vocational wear in municipality's employees. The correlation coefficient of 0.82 shows that there is a sensible correlation between two variables of executive responsibility and vocational wear .

Third hypothesis: there is a relation between vocational variables (work record, employment status and …) with vocational wear in municipality's employees. There is a relation between employment status and vocational wear in municipality's employees (Table3).

TABLE 3: EMPLOYMENT STATUS AND VOCATIONAL WEAR IN MUNICIPALITY'S EMPLOYEES

Test result	p-value	Degree of freedom	Test statistic(f)
Null hypothesis acceptance	*0/6*	*2*	*0/5*

The comparison of p-value with significant level of 0.05 confirms that null hypothesis (there isn't any relation between employment status and vocational wear among municipality's employees) should be accepted. So research hypothesis is refuted and that means there is no relation between employment status and vocational wear. There is a relation between (Table4).

TABLE 4: WORK RECORD AND VOCATIONAL WEAR IN MUNICIPALITY'S EMPLOYEES

Test result	p-value	Degree of freedom	Test statistic(f)
Null hypothesis acceptance	*0/036*	*3*	*21/06*

The comparison of p-value with significant level of 0.05 confirms that null hypothesis (there is no relation between work record and vocational level in municipality's employees) should be refuted; so research hypothesis is confirmed and that means there is a relation between work record and vocational wear in municipality's employees.

DISCUSSION

- **A DISCUSSION ABOUT THE FIRST HYPOTHESIS:**

First hypothesis: there is a relation between different job statuses and vocational wear in municipality's employees. To analyze this hypothesis, ANOVA has been used. The comparison of obtained p-value which is equal to 0.003 with the significant level of 0.05 shows the refutation of test hypothesis .So research hypothesis is confirmed and that means there is a relation between different job statuses and vocational wear between municipality's employees.

- **A DISCUSSION ABOUT THE SECOND HYPOTHESIS:**

Second hypothesis: there is a relation between executive responsibility and vocational wear between municipality's employees.

For analysis of this hypothesis, correlation coefficient has been utilized. The comparison of obtained value (p-value =0.000) with the significant level of 0.05 shows refutation of hypothesis. So research hypothesis is confirmed and that means there is a relation between executive responsibility and vocational wear between municipality's employees. The correlation coefficient of 0.82 shows that there is a sensible correlation between two variables of executive responsibility and vocational wear .

- **DISCUSSION ABOUT THE THIRD HYPOTHESIS:**

The third hypothesis: there is a relation between vocational variables (work record, employment status and …) and vocational wear in municipality's employees.

- There is a relation between employment status and vocational wear between municipality's employees. To analyze this hypothesis, we use ANOVA test. The comparison of p-value which is 0.6 with the significant level of 0.05 shows the confirmation of test hypothesis; so the research hypothesis is refuted and that means there is no relation between employment status and vocational wear in municipality's employees.
- There is a relation between work record and vocational wear between municipality's employees.

For analysis of this hypothesis, ANOVA test has been used. The comparison of p-value (0.03) with the significant level of 0.05 indicates refutation of test hypothesis; so the research hypothesis is confirmed, i.e. there is a relation between work record and vocational wear in municipality's employees.

CONCLUSION

Vocational wear is one the important complications of each organization. Ignoring many factors in the companies can lead to this problem. ignoring Some of these factors in the municipality such as motivation and interest, favorability of the organization, considering family problems and trying to remove them, paying due attention to financial issues such as auspicious payment and condition, observing equity in the payments and some more can lead to the foresaid problem. If in each organization the process of recruitment would be based on scientific and connoisseurs methods the motivation and intimacy in the organization grow. Appropriate divisions of responsibility and authority and reduce stress Proper training and human resource development are among the factors The infrastructure for recovery and the dynamics of their organization is to raise And to reduce the risk of burnout in the organization. Whatever the organization's human resource management in the organization gait to become more efficient and seriousness Vocational wear is not exist but less attention to personnel of any organization It follows Irreparable problems and the Vocational wear also among them.

SUGGESTIONS

Vocational stress, vocational satisfaction and solutions for increasing commitment are the variables which their impact on the employees could be examined.
Holding seasonal or annual courses with the aim of getting familiarized with stress skills and prevention of vocational depression . Holding sessions and seminars about increase in vocational flexibility in case of difficulties

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UTILIZING INTERNET AS ON-LINE SALES TOOL FOR EMPOWERMENT OF BUSINESS EDUCATION GRADUATES IN NIGERIA

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ABSTRACT
This review focused on utilizing internet as on-line sales tool for empowerment of business education graduates in Nigeria. It revealed that the Internet has the capacity to offer employment opportunities for business education graduates. The integrated marketing communication objectives which business education graduates need to put in place before creating their Web sites and doing the real business was revealed. Furthermore, the potentials of the Internet as on-line sales tool were discussed. Similarly, the pitfalls of using the Internet for business were highlighted. The Internet makes itself a readily indispensable communications and sales tool for today's marketers and therefore, an efficient sales tool with the capacity to provide jobs for users. It was recommended that business education graduates should pursue the creation of communication and sales objectives for the effective utilization of the internet.

KEYWORDS
Utilizing Internet, On-line Sales, Empowerment, Business Education Graduates.

INTRODUCTION
Business education graduates are among the growing unemployed youth in Nigeria. Existing evidence from developing countries suggests that unemployment rate of youths in Africa of which Nigeria is one, stands at 25 per cent (AfDB, OECD, UNDP, and UNECA, 2012). Similarly, Ahiauzu (2010) stated that unemployment of labor occurs in the economy if there are people who are capable of working and who are qualified by age, law, custom and other factors to work, but who cannot find employment. Business education graduates are included among these unemployed who are presumably trained and now possess the skills and competencies required to adapt to real life situations including the performance of basic business jobs. This is so because business education according to Umoru (2013) is a course structured through its offerings to inculcate into business education students, traits of resourcefulness, endurance and innovation. That these graduates roam the streets in search of non-existing jobs is an indictment of the nation's education process. This should not be the case. The current trend in the world of work is the dominance of new global economy driven by technological change and globalization necessitating continual business education and training for relevant work skills and self-reliance. This is important because Nigeria is striving for sustainable development through her deliberate policy shifts such as the transformation agenda targeted at citizen engagement in wealth creation. Though, it could be argued that no nation has the capacity to fully engage all citizens that are qualified and ready for work, it must be realized that work, whether paid or self-employed, is a fundamental necessity for human existence and progress. In fact, alternative form of employment has become imperative in Nigeria as period of waiting for government and private sector to provide all the needed employment is over. With the high unemployment rate being witnessed in Nigeria today, graduates of business education by their training owes it as a duty to respond by empowering themselves through self-employment..

Empowerment was described by Narayan (2002) as the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control and hold accountable institutions that affect their lives. Similarly, Wikiinvest (2013) described empowerment as an attitudinal, structural and cultural, process whereby people gain ability, authority, and agency to make decision and implement change in their own lives and the lives of other people.

The Internet is capable of empowering business education graduates for self employment thereby helping them sustain their families and at the same time contribute to the development of the economy. Advancement in technology has revolutionized the way business is conducted all over the world. The world is now a global village where physical boundaries have fallen and interaction between people become unrestricted. The Internet often called the NET is an integrated workstation where people, businesses and organizations log-on to enhance interaction that is both verbal and visual. The Internet is a collection of networks into a larger Wide Area Network (WAN).

According to Belch and Belch (2007), the Internet is a worldwide means of exchanging information and communication through a series of interconnected computers. Similarly, Eze (1999) defined the Internet as a conglomerate of thousands of computer networks utilizing a common set of technical protocols to create a worldwide communication medium. This facility is now accessible to anyone with a computer and a modem. While the most popular component of the Internet is the World Wide Web (WWW), there are other features such as E-mail, Usenet, Telnet, file transfer protocol (FTP) or hyper-text transfer protocol (HTTP), client server, Gopher and Wide Area Information Server (WAIS). For business education graduates and other marketers, it is the Web that has developed into a commercial component that enhances internet utility. The Internet makes itself a readily indispensable communications and sales tools for today's marketers. The website is the place where information is made available to the users of the Internet.

POTENTIALS OF INTERNET AS ON-LINE SALES TOOL
Business education graduates and marketers intending to market on the internet must have defined communications objectives that will help in achieving this purpose. When this is done, then they will be able to use the Internet as a direct response medium that will enable them purchase and sell products through e-commerce. The communications objectives marketers and marketing organizations would want to achieve are diverse. While the main objective of communication remains dissemination of valuable information for informed decision, it is now possible to create fancier graphics audio, and animation to arrest attention and influence choice in sales online. According to Belch and Belch (2007), the communications objectives of organizations may fall into one or more of the following perspectives:

INFORMATION DISSEMINATION

One of the primary objectives of using the web is to provide in-depth information about a company's product and services. Having a website has become a necessity for marketers as more and more buyers expect that a company will have a site to provide full detail about its offerings. Such details as specifications, costs, delivery modes and dates, etc are given by consumer companies to their customers who are expected to visit the website for a possible follow up action.

CREATION OF AWARENESS

Advertising on the web can be useful in creating awareness of an organization as well as its specific product and service offerings. Companies whose budgets are lean now rely on the Internet to create awareness beyond what can be achieved through the traditional media that are even prohibitive. In the same vein, international business is now possible through the use of the web.

GATHERING RESEARCH INFORMATION

Marketers can use the web to gain audience profile information. It can be used to research the market place and to gather competitive information. Even though information maybe gathered without the knowledge of other users which can be disturbing, other general but valuable and positive information are available to aid business.

CREATING AN IMAGE

Many websites are designed to reflect the image a company wants to portray. Images that can be found in the Internet are by far more exquisite and organized than any kind of bill-board or motion advertisement. Marketers should aim at branding and image-creating strategies which can be posted on the Internet.

STIMULATING TRIAL

Marketing organizations can offer electronic coupons in an attempt to stimulate trial of their products. Through frequency of advertisements on the Web, marketers encourage visits to their sites. The case of trying a site by clicking on a link is attractive to time-starved users and could be a formidable technique of selling.

IMPROVING CUSTOMER SERVICE

By providing information, answering inquiries and offering an opportunity to registered complaints, many companies can find websites useful for improving customer service and building relationship. Some high-technology companies can use their websites to present information that previously was in instruction manuals.

INCREASED DISTRIBUTION

While some companies can use their sites to promote e-commerce, that is, sales through the Internet, others may use them to distribute coupons and samples. Through affiliations, a relationship among websites in which companies cross-promote one another's products and each is credited for sales that accrue through its site, companies may increase their exposure base as well as distributing products.

E-COMMERCE

As already noted, e-commerce is the direct selling of goods and services. The Internet offers marketers the opportunity to mail directly to customers in both the consumer market and the business-to-business market. Many organizations have set up networks on line where potential workers go directly to gather information. The system directs them to the nearest participating dealer.

In order to tap into e-commerce, business education graduates should set up their companies and post them in their Web sites. Marketing organizations with well-defined communications objectives as discussed above can utilize the internet to make sales. Any organization that wishes to make sales must have the greatest impact on consumers. Companies and organizations wishing to promote their products and services must consider the Internets as the most appropriate medium. The Internet both supports advertising and relies on advertising for its own success. According to Hamman-Greenwalt (1999) in 1999 alone over $4 billion was spent by advertisers on the Internet to promote and sell its products. At the same time, internet news (1999) reported that Internet companies have been a boom to traditional media, spending over 1$ billion in these media, to promote their sites. A report by Cheng (2009) that on the January 2009 Super bowl broadcast, 50 percent of advertisements were for "dot-com" companies that paid as much as $2million per spot to promote themselves indicates the enormous potentials of the internet to marketers.

The most common form of advertising on the Web is banner advertisements, sponsorships, pop-ups, interstitials, links and push technologies. The banner is an advertisement on a web page that may be "hot-linked" to the advertiser's site and used to create an awareness, recognition or for direct marketing objectives. Initially, banner advertisements constituted major part of advertisements on the NET but its effectiveness have been questionable. However, Kranhold (1999) stated that banner advertisements do have an impact, and this finding may lead to increased use of this method of advertising in the future.

Sponsorships mean payment by a company to sponsor a section of a site. A more involving type of sponsorship is the content sponsorship where the company not only pays for name association but also participates in providing the content itself. Pop-ups are advertisement but smaller than a full screen. Interstitials are advertisements that appear on the screen while awaiting a site content to download. Link is an electronic connection between two websites, while push-technologies allow a company to "push" a message to the consumer through the Internet rather than waiting for them to find it.

Sales promotion on the internet has become the most frequently used methods of encouraging repeat visits. This is because sites offer everything from free e-mail to instant message to telephone services. Coupon delivery in the Internet is another rapidly growing use of sales promotion. According to Belch and Belch (2007), Excite and e-centives.com (a provider of sales promotions for Internet applications) have entered a marketing alliance that gives Excite users access to an online composting system very similar to that in the real world. They explained that at www.coolsavings.com, marketers can access the site directly to update their promotion offers and to promote various products and services. D'Antoni (1999) reported that consumer's awareness of online coupons is nearly 80 percent. The study also revealed that 30 percent of the web users continue to increase. A report by Parker (2010) that Sebstakes.com has taken its online sweepstakes and promotions to Japan, the United Kingdom, Ireland, Australia, and New Zealand, is an evidence that companies with integrated marketing combinations can effectively incorporate its sales promotion strategies into the web.

Personal selling on the internet has been criticized by those in business-to-business market as having the propensity to take away job opportunities. But websites can be used to enhance and support the selling effort. The Web is a primary source of information for consumer and business-to-business markets. Thus visitors to the Web gain information about a company's products and services and they become valuable source of leads that sale persons can follow up. Trial demonstrations and samples offered online is an opportunity for customers to decide whether such offerings meet their needs. If they do, they may request a personal sales call and in this way, cost and time savings are gained.

In marketing, public relations are important and influences sales volume of a given organization. The Internet is a useful medium for conducting public relations activities. Information provided in the Internet about the company, its philanthropic activities, staff welfare activities, etc relate to public relations. These activities are posted in the Internet in exiting manners that enhance the image of the companies involved. Business education graduates whose companies use this public relations method are ensured of increased business volumes.

Marketing organizations that utilize the internet stand to benefit in a number of ways. The Internet has the ability to target specific groups or individuals as those interested in products or services provided will visit the site. In consumer market, customers can use personalization, i.e., personalizing their sites to request for specific information. The interactive capabilities of the net make it possible to carry on one-to-one marketing with increased success. This is achieved through providing message designed to appeal to a specific audience. According to Singer (2002) since the internet is interactive, it provides strong potential for increasing customer involvement and satisfaction and almost immediate feedback for buyers and sellers. The availability of the internet is an information source where customers visit the search engines that provide a plethora of information on any topic. The Internet is creative. Creatively designed sites enhance company image and positions the organization in the consumer's mind. The speed with which information can be obtained in the internet is an advantage for users.

PROBLEM OF UTILIZING THE INTERNET

The internet is a potentially effective medium for marketers but there are some pitfalls which users need to know. One of the greatest problems posed by the Internet probably is the lack of validity and reliability of the research numbers generated. A quick review of forecasts and evidence profiles provide a great deal of variance. Brekke (2009) referred to the heavily cited Internet research company and the numbers it provides as "scary". Menn (2010) similarly stressed concerns over the fact that most sites' figures are not audited, which may lead to rampant cheating in respect to the numbers reported. Sometimes, to download information from the Net takes a long time. When there are many visitors, the time spent to download increases and some sites may actually be inaccessible. The likelihood for some advertisements not being noticed is there as the proliferation of advertisements continues. This can be irritating.

The Web has the potential to deceive and sometimes deprave. While children may be subtle target, the Web is capable of collecting data without the knowledge of the visitor or their permission. There is also the rumor of credit card theft and immoral posting of nude ladies, etc in the Internet.

The cost of doing business in the Internet is daily increasing. While it is easy to establish a site, to have a "world-class" site and maintain it is costly. It is higher than that done in traditional media. While the Internet numbers are growing, its reach is still far behind. According to Cox (2009), statistics show that only a small percentage of sites on the Internet are captured by search engines and the top 50 sites listed account for 95 per cent of the sites visited.

CONCLUSION

The emergence of the Internet as an information technology has reshaped the conduct of business all over the world. Business education graduates are presented with the Internet technology that makes it easy to put in place an effective integrated marketing communications strategy. When this objective is achieved, the Internet becomes an efficient sales tool that they can employ to realize their goals of increased sales volume and not only gain well paid employment but also employ others thereby reducing unemployment in Nigeria. . The gains of the Internet are numerous among which are target marketing, message tailoring, information access, creativity and speed of doing business.

RECOMMENDATIONS

1. Business education graduates should look beyond disseminations of information and pursue the creation of communications and sales objectives which is needed for the effective utilization of the Internet so as to create big businesses for themselves.
2. Business education graduates should pursue a more purposeful use of Internet as a direct-response medium of purchasing and selling products.
3. Marketers should use personalization to request the kinds of specific information they are most interested in obtaining.
4. They should effectively maintain their websites. Images, advertisements, banners, etc., should be changed or updated to fit into the trend of business being transacted.
5. A more cohesive and integrated advertisement of products and services should be adopted by showing how consumers stand to benefit.
6. Business graduates should be careful not to rely totally on research numbers reported on the NET without verification as such reports may lack validity and reliability.

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CONSUMERS' ATTITUDES TOWARDS THE DAIRY PRODUCT IN THE ETHIOPIAN MARKET: CASE OF ADDIS ABABA

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ABSTRACT

The study was conducted to investigate the consumers' attitudes towards the dairy product. The objectives of the study was to, examine the awareness level of consumers about the benefits of dairy product, identify the factors that affects the consumption of milk, identify the consumption level of milk and examine the purchasing decision making process of milk. The sample size for this research is 242 between the age group of 16-30 at Addis Ababa area. The researcher employs the three components of attitude, namely Cognition (awareness), Affection (feeling), and Behavior (action), in order to measure the consumers attitude towards the Dairy product particularly milk. The questionnaire was designed to include all of the three components of attitude. Results provide the detailed analysis of the finding. Accordingly the mean difference and crosstab analysis were employed. Moreover the chi squire test, and mean comparison of variables were also presented. The researcher employs different data collection tools. Based on the findings of the study the researcher provides the conclusion and recommendation.

KEYWORDS
Advertisement, Consumer Attitude, Consumer Awareness, Consumer Behaviour.

1.0 INTRODUCTION

Historically the modern dairy production in Ethiopia was started in the early 1950s following the receipts of the first batch of dairy cattle form United Nations Reliefs and Rehabilitation Administration (UNRRA) and it passes through three phases of dairy development policies called Imperial Regime (1960-1974), the Socialist Dergue Regime (1974-1991) and the current phase from 1991 to the date (Mohamed et al, 2004). The demand for dairy productsa depends on many factors like consumers' attitudes, preference, consumer income, population size, price of the dairy products, price of substitute products and other related factors (Feleke and Geda, 2001).

According to Feleke and Geda (2001), the majority of the people in Ethiopia consume dairy products in either of the following forms, as fresh milk or in fermented or sourced form. Further, they estimated that 68 percent of the total milk produce is used for human consumption in the form of fresh milk, butter, cheese, and yogurt while the rest is given to calves and wasted in the process. According to Mohamed et al, (2004), out of the total milk production in Ethiopia, 40 percent is allocated for butter whereas only 9 percent is allocated for cheese.

The dairy marketing system can be classified in to three types on the basis of mode of production (traditional vs. modern) and marketing of imported products. These are;

- The traditional dairy marketing system,
- The modern dairy marketing system, and
- The dairy imports marketing system (Mohamed et al, 2004).

The consumption of milk in Ethiopia was very low. The annual consumption of milk per person was 19 to 20 litters in 1993/1994 and it further reduced to 17 litters in 1998 (Gebrewold et al, 1998, and ILRI, 2000). Apart from the aforementioned contributions of dairy product to the society, Ethiopia has low consumption rate of milk and milk products (Zewdu and peacock, 2003). The annual per capita milk consumption was 19-20 litters in 1993-94 which is even much less than the African milk consumption average (37 L per year per individual) and it was further reduced to 16 litters in 1998 (Gebrewold et.al, 1998, ILRI, 2000 and Zewdu and Peacock, 2003).

Ethiopia experiences high infant and child mortality rate due to malnutrition. Out of the total mortality children less than five year old mortality rate 48% was due to malnutrition (Zewdu and Peacock, 2003). Therefore, the low consumption rate of dairy may be one of the contributing factors for the high infant and child mortality rate. The consumption of milk in Ethiopia was very low. The annual consumption of milk per person was 19 to 20 litters in 1993/1994 and it further reduced to 17 litters in 1998 (Gebrewold et al, 1998, and ILRI, 2000). However there is no much specific research work conducted on consumers' attitudes towards the consumption of dairy product in the Ethiopian context. In this scenario of the consumption it is very important and inevitable to identify and analyze the consumers' attitudes and purchase patterns of dairy products in the Ethiopian context in general and Addis Ababa in specific. Therefore the researcher has focused to study of consumers' attitudes towards dairy product.

Based on these problems, the researcher has developed the following research questions:

1.1 RESEARCH QUESTIONS

Under this section there are lists of questions to be answered at the end of the study.

- Are consumers aware of the nutritional value available in dairy products?
- Why is the consumption rate of dairy product in Ethiopia low?
- What factors hinder the society from consuming milk and milk products?
- How are consumers processing information about milk and milk related products?
- How are consumers making buying decision of milk and milk products?

1.2 DESCRIPTION OF THE STUDY AREA

Since many of the dairy product processors are located in and around Addis Ababa, they distribute almost all of their produces to the Addis Ababa market. As a result the researcher is interested to conduct the study on dairy consumers located in Addis Ababa. Addis Ababa is the capital city of Ethiopia (which is located in the eastern part of Africa). The population of the city was about 2.8 million in the 2007 (census, 2007). The people are composed of low, middle and high income earning societies.

2.0 METHODOLOGY

2.1 MEASUREMENTS AND UNIT OF ANALYSIS

The measurement adopted for this study to identify the consumer's attitudes is the same the measurement proposed by George H. Brown and DuBois (1994). The Measurement of consumer knowledge will be more of psychological process. The measurement will employ the aided and unaided recall of the brand with consumer's full description of reason of selecting the brand. There are different brands of milk distributed in Addis Ababa. The customers will be assessed regarding their knowledge of various milk brand's through aided (providing alternatives to select) and unaided recall (letting them to write the alternatives). The cognitive element will help to identify the type and sources of information which would deliver to the customer. The affective element would be very challenging to investigate. Here the researcher employed proximity variable called action of the customer to measure the affective variable of individuals. Because it would be challenging to understand how the customer would process information. Finally the behavior of the customer regarding the milk is measured.

The study incorporated both the consumer and non-consumer of dairy product found between 16 and 30 age limit because, the researcher was interested to identify why these individuals are consuming and not consuming the dairy product. Then the researcher gains a capability to identify, the type of attitude that the consumer have about the dairy products and factors that force individuals to consume and not to consume it. The samples were taken from four higher educational institutions namely, Addis Ababa University College of Commerce, Ethiopian Civil Service College, St. Marry University College and Unity University.

2.2 SAMPLING TECHNIQUE AND DATA COLLECTION

The study was conducted using both the probability and non probability sampling technique. The **simple random** sampling was used to identify the respondents from the selected educational institutions and **convenience** technique was used to identify from which institutions the samples shall be selected. All of the individuals who were in the cafeteria were identified to fill the questionnaire. The probability sampling was selected to minimize the biasness of the study. The non probability technique was also used to maintain an equal distribution among respondents under different age group.

2.3 SAMPLE SIZE DETERMINATION

Determining sample size is a very important issue because samples that are too large may waste time, resource and money, while samples that are too small may lead to inaccurate results. According to Cooper and Schindler, (2006) the formula for calculating the sample size is as the follows:

(+,-) 0.05=desired interval range with in which the population proportion is expected (subjective decision)

1.96(z) =95 percent confidence level for estimating the interval within which the population proportion is expected (subjective decision)

E=0.045=standard error for the proportion (subjective decision).

PQ=measure of sample dispersion (used here as an estimate of the population dispersion).

$$n=\frac{Z^2*p*q}{e^2} \quad \frac{\{1.96*0.5*0.5\}}{0.045^2} = \mathbf{242}$$

n= the desired sample size=242

2.4 SOURCE OF DATA

The researcher used both primary as well as secondary sources of data. The primary data was collected through the survey questionnaire. The questionnaire was filled by selected individuals who were identified through simple random sampling. Except for the employees of the dairy processing companies, customers were filling the questionnaire only. The researcher had aimed to interview employees of dairy enterprises' however; the enterprises were not cooperative to hold the interview. Secondary data was gathered from different articles, books, and company and institutional publication to develop and gain an understanding about the consequences of dairy product and other related information. Mainly the secondary data were analyzed to prepare related literature in order to understand the theoretical framework of attitude formation and consumers' attitudes towards dairy products.

2.5 DATA ANALYSIS AND INTERPRETATIONS

Following the completion of the data collection, the data were coded and entered in to Statistical Package for Social Science (SPSS) computer program for analysis because it saves the time and effort exerted by the researcher and provides accurate and reliable data. Data were analyzed using different quantitative and qualitative statistical procedures and methods.

Descriptive statistical tools were used to analyze the quantitative data namely, Crosstab Regression, and Mean difference. The important statistical measures that were used to summarize and categorize the research data were means, percentages, frequencies, and standard deviations. Descriptive tools were supplemented by qualitative analytical methods (mainly for those data acquired through open ended questions and interviews/qualitative methods) like interpretation and explanation of various opinions, views and concepts; and summarizing, categorizing, and presentation of these in convenient forms.

3.0 RESULTS

3.1 DISCUSSION

Milk is an important food for all groups of the human being. The finding of the study supports this idea. The mean Consumption of milk of female (1.25) is almost near to the mean consumption of milk of male (1.26). The mean difference of milk consumption between male and female is equal to zero at 95% significance rate. Therefore there is no difference on the consumption of milk between male and female. In other word both male and female likes to consume milk equally. More over the correlation result shows that there is a negative relationship between consumption and gender of the respondents particularly maleness. This indicates that as the researcher includes one additional male respondent to the sample the probability of the respondents to say yes would deteriorate by 0.071 rates. Most individuals were found consuming one glasses of milk per day. However, the mean difference of the number of glasses of milk consumed between male and female is high. This indicates that there is a significance difference on the number of glasses of milk consumed between male and female per day. Analysis shows that the highest numbers of respondents were aware of the benefits of milk to the human being. The mean comparison test of this variable shows that, the mean awareness levels of male is almost equal to the mean awareness levels of female. The majority of consumers were found to rank milk as their first choice over the substitute products. The mean difference for the ranking of milk by the different gender groups shows that, females are more interested to consume milk than male consumers. However, the mean difference of the two gender groups of milk choice is not significant. The consumers were asked to rate their consumption level of milk. Accordingly the highest number of respondents recognized themselves as a medium consumer of milk. The mean comparison result of this variable shows that, there is no significance difference on the consumption level of milk between male and female respondents. This infers that male and female respondents have an equal distribution over the alternatives given under this particular variable.

Data depicts that children are the most recommended part of the people to consume milk than others. Accordingly the mean difference of this particular variable shows that there is a deviation between male and female respondents. Most of the female respondents feel that it would be appropriate to provide milk for children. However lesser number of male groups of respondents is supporting this idea.

The majority number of the respondents recognized their mothers as a decision maker for the purchase of milk. The mean comparison result of this particular variable shows as if there is a small difference between male and female respondents. More number of females recognizes their mother as a purchase decision maker for purchase of milk.

The highest number of respondents was more interested to keep on consuming milk afterwards. The mean difference of the respondents for this particular question is found to be 0.112. This infers, those female respondents are more interested to keep on consuming milk afterwards than male respondents. As a result females found to be the major consumer of milk than males in the future. Unlike the other marketing mix elements, the price of milk is recognized as very expensive. The mean difference of this variable shows that female respondents are seems to be more sensitive to the price of milk. Because relatively speaking female respondents take the highest share of the response which recognize the price of milk as an expensive one.

3.2 CONSUMPTION OF MILK BY RELIGION

Here the consumption level of each religion groups would be analyzed. Accordingly, the crosstab result of the consumption level by different religion group shows that, respondents from other religion (atheists) are found to be 100% consumers of milk whereas, orthodox is said to be the least consumer of milk. This is may be due to the longer fasting day of Orthodox respondents. It shows that Protestants are 83% consumers of milk which is followed by Muslim respondents that accounts 80%.The literature encourages an individual to take three glasses of milk per day. Taking it as a bench mark there are small number of respondents who took three glasses of milk per day from each religion group. Result shows that 8% of protestant respondents are taking three glasses of milk per day whereas 7.3% and 3.8% of Orthodox and Muslim respondents are taking three glasses of milk per day respectively.

Result shows that the highest number of respondents was select milk as their first choice compared to its substitute products. It shows that respondents from other Religion (Pagan) group prefer milk as their first choice. 60% of Muslim respondents prefer milk over the substitute products. Orthodox Christians are less sensitive to consume milk as their first choice.

When we look at the response rate of individuals in each religion group, the lion share of this response is given by protestant respondents followed by Orthodox Christian and Muslims respectively. The price of milk is found to be very expensive as it was recognized by all the religious group respondents. The frequency distribution strengthens this idea. This section will tell us the price of milk in the eyes of each religious group. The majority numbers of Muslim respondents recognize the prices of milk as expensive. This figure is followed by orthodox respondents.

3.3 MILK CONSUMPTION BY AGE GROUP

Though, the largest numbers of respondents are between 20 and 23, the highest numbers of consumers of milk are found to be the age group between 28 and 30. 96% of the respondents between age group 28 and 30 are consumers of milk. This figure is followed by 76% of the respondents are consumers of milk is between 24 and 27 age group. This shows that as the age of individual increase the consumption level of milk also increases. The numbers of glasses of milk consumed by the different age group also vary from one to another. The highest numbers of glasses of milk is consumed by the age group between 24 and 30. 23.6% of these respondents consume three glasses of milk per day. And 64.3% of these respondents consume two glasses of milk per day. However the largest number of respondents between age group 16 and 23 consume one glasses of milk per day. This depicts that the number of glasses of milk consumed will increase as the age of the individual increases.

The largest number of respondents presented that they dislike milk. This figure best describes the interest of respondents found between 16 and 23 age groups. However the majority of the respondents who falls between 24 and 30 age groups are affected by the price and availability problems of milk. This shows that the majority of age groups above 24 are more sensitive to the price of milk. Almost the majority numbers of consumers are aware of the different benefits that milk has to the human being. 94% of the respondents between age group 16 and 19 are more aware of the benefits of milk followed by the age group between 28 and 30. The majority numbers of respondents rank milk as their first choice against its substitutes. Contrary to the respondents between 16 and 23 age group, the figure best describes the interests of respondents who fall between 24 and 30 age group. The age group between 16 and 23 are also more interested to consume milk than substitute products. However the numbers of respondents in the latter age group are less.

3.4 CONSUMPTION LEVEL OF MILK BY INCOME

There is a positive relationship between income of the respondents' mother and the consumption level of milk by individuals. Table 1 show that the coefficient of the income of the respondents is positive 0.1. This depicts that the change in the income variable will have a positive change in the consumption level of individuals. More over there is a negative relationship between the educational levels of mothers' and the glasses of milk consumed & whether they are a consumer or not. The educational level of mothers of respondents has nothing to do with the consumption of milk.

TABLE 1: COEFFICIENTS FOR THE INCOME OF MOTHERS' AND CONSUMPTION LEVEL OF RESPONDENTS

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.463	.613		7.286	.000
	How many glasses of milk do you consume per day	.200	.246	.104	.814	.419

a. Dependent Variable: An income of the Respondents' Mother

The highest numbers of respondents prefer the pasteurized milk than raw type of milk. Table 2 shows that the majority number of respondents prefers to consume pasteurized milk. If we look at the respondents whose mothers' income is zero, the individuals prefer to consume pasteurized milk. Generally the number of respondents preferring pasteurized milk is large in number.

TABLE 2: THE TYPE OF MILK PREFERRED

Count					
		What type of milk you are consuming			Total
		Raw milk	Pasteurized milk	Other	
An income of the Respondents'' Mother	500-1000	3	6	1	10
	1001-1500	2	9	0	11
	1501-2000	1	3	0	4
	2001-2500	1	2	0	3
	2501-3000	2	1	0	3
	>3000	3	7	0	10
	<500	1	4	0	5
	No income	4	18	1	23
Total		17	50	2	69

3.5 THE CONSUMPTION OF MILK BY MARITAL STATUS

Consumption of milk varies between married and unmarried respondents. It depicts that the mean difference of married respondents is different from unmarried individuals. According to the finding married respondents are more interested to consume milk than unmarried respondents. The reason behind this finding might be, married individuals feel responsible to their dependants than to themselves. However with regard to the number of glasses of milk consumed, married respondents were found to consume more than one glasses of milk per day. The frequency distribution result depicts that many of the individuals do not like milk. Moreover these consumers are also affected by the expensiveness price of milk. Unmarried respondents are found to be victims of these factors. The mean difference of the variable also shows that there is a strong difference between married and unmarried respondents on the factors that affect the consumption rate of milk

Most of the respondents are more interested to keep on consuming milk. It shows that about 80% of the respondents will keep on consuming milk products. The mean difference of the two respondent groups is not significant. This infers that both groups of respondents are more interested to consume milk throughout their life.

4.0 CONCLUSION

According to the analysis of the study the majority numbers of the respondents were found to be the consumer of milk and milk products. This indicates that there is not a problem with regard to the consumption habit of milk in Ethiopia. In other word, the majority population of Ethiopia wants to consume milk and milk products. However, there are insignificant numbers of consumers who don't like milk. Yet these consumers would like to consume ice-cream which is the produce of milk. The consumption of milk is not limited to a particular gender group. Both female and male consumers have equal preference for the consumption of milk. However the female consumers are found to be more interested to consume milk than male consumers. In terms of the number of glasses of milk consumed the largest number of the population found to consume one glasses of milk per day. However, milk advertisements by Land O'lakes Ethiopia, recommends three glasses of milk per day. A significant numbers of respondents were suggesting children to drink milk more. This shows that the people in Ethiopia accepted milk as the food for children. The awareness level of the population about milk is good. According to the findings of this study the majority numbers of respondents are well aware of the benefits of milk. the majority numbers of respondents blame the company for the low consumption rate of milk in Ethiopia. According to these people, the price of milk in Ethiopia is very high.

With regard to the responses given by different religious groups, the people from other (nonbeliever) religion groups are found to be the heavy consumer of milk. The Protestants are the second to consume milk heavily. Orthodox respondents are found to be the least consumer of milk. Here the Muslim populations of Ethiopia are found to be the third majority whose followers are more aware of the benefit of milk to the human being. In addition to that, the populations from the different religious groups recognize that the price of milk is expensive. In other word, the price of milk in Ethiopia is said to be expensive.

The age in which the person is found affects his/her consumption level, preference, awareness and attitudes towards milk. Accordingly the majority numbers of persons between the age group 28 and 30 are found to be the major consumers of milk. The second rank of consumption rate of milk is held by the consumers found between age group 24 and 27. The awareness level of the individuals about the importance of milk varies among persons found in different age groups. The majority number of peoples found in the age group between 16 and 19 are more aware of the different benefits of milk. However, the peoples found between age group 28 and 30 are less aware of the importance of milk to the human being. Therefore, the consumers found between the age group 24 and 30 are consuming milk without or being less informed about its importance.

The purchasing power of an individual is mostly determined by using his/her income level. Likewise the consumption level of milk would also be affected by the income level of individuals or the income level of their parents. According to the findings of the study, there is a direct relationship between the mothers' income of respondents and the consumption level of milk. The majority number of persons, whose mothers' income is high, found to consume frequently. However, the occupation of the parents has nothing to do with the consumption levels of milk. Mothers are the decision maker to purchase milk for the family. The result of the study shows that the majority numbers of the persons are getting milk through their mother. Therefore the main responsibility to purchase the milk is given to the mothers.

The marital status of the individual will also have an impact on the consumption levels of milk. Accordingly married individuals are said to be more interested to consume milk than unmarried individuals. This shows that married individuals are capable of buying milk at any time they want to consume it. Both married and unmarried individuals are more interested to keep on consuming milk afterwards. The type of milk preferred by various persons would also vary based on the situation within which the individual is living. The majority population of Ethiopia is more interested to consume pasteurized milk than raw milk. This shows that the consumers are more aware of the difference between the two types of milk (pasteurized and raw milk).

Generally, apart from the different factors that hinder the consumer from the consumption of milk, the consumers have a favorable attitude towards dairy product.

5.0 RECOMMENDATIONS

These recommendations are used to solve the problems identified as the beginning of this study. The recommendations are presented as follows.

Educating the Customer: It was indicated in the frequency distribution table the majority number of the population are consumers of milk. This depicts that there is a potential market for milk. The problem of the society is not consumption related problem rather the number of glasses of milk consumed by each individual is very low. In order to fine-tune the interests of consumers towards milk, the companies need to enhance the awareness levels of consumers about milk. As a result milk processing enterprises are required to involve in corporate social responsibility activities. For example, if these enterprises establish schools, then the companies will get educated society.

Creating Awareness about the benefits of milk: Though the majority of the persons are aware of the benefits of milk, their knowledge is found to be traditional. The respondents themselves strengthen the sentence. In the recommendation part of the questionnaire the majority number of persons indicated the need for further awareness creation.

Improving the quality of milk: Many persons in the questionnaire wrote about poor quality (interns of the defects appeared on the milk) of milk in Addis Ababa and recommend improving the quality of milk. Quality of milk is difficult to be identified because the nutrition content of the milk cannot be seen using the humans naked eye. But traditionally the customers can identify whether the milk is adulterated or not using the test, thickness and color of the milk. As a result the quality level of milk can be improved by adopting different manufacturing process like, establishing quality control department, use of latest technology, and so on.

Improve the supply of milk: There are a limited number of milk processing companies in Ethiopia. The production level of these companies is very low. The population size of Addis Ababa was 2.8 million in 2007 (Census 2007). The milk processing companies are not capable of supplying milk to the entire population of Addis Ababa. Therefore the production capacity of the enterprises needs to be improved. This can be achieved by educating and motivating the rural youth to become entrepreneurs in this diary sector. Further, the combined need to redesign the procurement strategies from different rural places.

Stretching the product line length: Milk processing enterprises in Ethiopia are engaged in the production of milk, cheese, yogurt, and ice-cream. During the fasting season for both Orthodox and Muslim religious groups, the companies reduce their daily production rate of milk and take the surplus for the production of butter. These firms are not producing flavored and fasting milk. As a result milk processing companies need to produce milk which will be consumed at the fasting season. Moreover flavored milk should also be produced to those groups of consumers who don't like it because of test.

Advertisement: Currently the advertisement work is doing by the Non Governmental Organizations called Land O'Lakes Ethiopia together with USAID. Milk processing companies are not seen doing advertisements by their own. Therefore the milk processing enterprises need to engage in the awareness creation type of milk advertisement (i.e. the message of the advertisement need to be informative). There is also a need to identify specific media tools to tap the young generation of Ethiopia to the awareness levels as well as create desire to consume more milk.

Reduce the price of milk: the price of milk is found to be expensive. Many of the individuals were mentioning the price of milk as one of the factor that hinders them not to consume milk. Therefore the enterprises need to reduce the prices of milk by adopting different managerial mechanisms like different strategies relating to procurement and processing.

Prepare the Milk in different forms: most mothers are using the powder milk to their children . However, none of the milk processing companies are producing milk in that form. Powder milk has a good demand in the Addis Ababa market because of the ease of preparation. Therefore, the milk processing companies are required to produce powder milk. Apart from this the company needs to focus on developing the milk and milk products in different flavor, tastes, colors and packed forms.

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IMPLEMENTATION OF ABC IN BANGLADESH: REQUIRED PREREQUISITES AND THEIR AVAILABILITY

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ABSTRACT

Customised product designs and prominence on product quality asking for implementation of computerised manufacturing operations; Transforming product demands led by rapid technological changes; Accelerated production and delivery of products leading to reduction in inventory levels; Continuous improvement in manufacturing processes all these are culminating in increased competition and forcing today's companies to reassure and rebuild their cost management system. Activity Based Costing, being one of the decisive methods of cost control, needs to confirm existence of few technical, organisational, behavioural, contextual and cultural factors. When the required factors and their existence are studied in Bangladeshi companies' perspective, it can be concluded that most of these companies have still not experienced a dense implementation of ABC and the major factors that lack are those belonging to organisational, behavioural and contextual factors.

KEYWORDS

Activity Based Costing, Existing Prerequisites for ABC Implementation.

INTRODUCTION

In the modern days of cut throat competition, any business organisation has to pay attention towards their cost of production. Computation of cost on scientific basis and thereafter cost control and cost reduction has become of paramount importance. In recent times some major new challenges emerged in cost and management accounting. Companies rediscovered the critical role that manufacturing plays in creating a competitive advantage for their organisations. among those are emphasis on quality control by continuous improvement in manufacturing process and product design, reduction in inventory levels and production lead time, introduction of computer controlled manufacturing operations and so forth. In the new environment, many companies found that their traditional cost accounting measures were inhibiting the introduction of innovative manufacturing processes and technologies. Today's management accounting systems must be designed to support the drive for manufacturing excellence through cost effectiveness, quality control, increases in productivity and shifting to just-in-time system. In today's business environment, characterised by highly-competitive global markets and complex operating systems, designing costing systems that provide accurate and useful information to help management in making strategic and accurate decision for its organisation is a key success factor for all types of organisations. To support manager's decisions, accountants go beyond simply determining the cost of products and services; they develop cost management systems. A cost management system is a collection of tools and techniques that identifies how management's decisions affect costs. Cost management system provides cost information for strategic management decisions and cost information for operational control. During the past decade cost accounting has come under vigorous attack on the grounds that traditional approaches to allocating costs are fraught with considerable arbitrariness and contain substantial errors which can lead to misguided decisions dealing with such matters as pricing, outsourcing, capacity planning, and profitability analysis for various product lines and other segments of business activity. Traditional costing systems work well with simple production and operating systems. Bur as companies grow and their operations become more complex, they often need to refine their traditional costing systems to maintain the accuracy of product or service costs. For achieving high level of cost accuracy and cost and operational control in such a complex environment requires a more detailed cost accounting system. Activity-based costing (ABC) system is that elaborate costing system we are talking about here. ABC system provides highly accurate product costs that a company can use for calculated decisions. There are some more of the benefits of ABC, which should be enough to make the companies in Bangladesh to embrace ABC system over the traditional ones, which are to identify various activities in the production process and further identify the value adding activities and thus help managers to identify the cause-effect relationships between activities and product costs, to distribute overheads on the basis of activities, to focus on high cost activities, to identify the opportunities for improvement and reduction of costs and last but not the least to eliminate non value adding activities. Despite these aggressive benefits of ABC system, except for some large and multi-national companies in Bangladesh, most of the local small companies are still pursuing traditional cost systems for their product costs. This paper tries to pin down the factors which are the apparent reasons as to why most of the companies in Bangladesh are still in favour of the traditional costing systems.

AIM OF THE STUDY

The objectives of this qualitative research paper follow:

- To acknowledge the factors that made ABC implementation successful in developed countries worldwide.
- To substantiate prevalence of the factors in Bangladesh.
- To learn about the currently applied overhead allocation methods by the business organisations of Bangladesh and also to get an insight of the future of ABC in Bangladesh.

IMPORTANCE OF THE STUDY

It needs not to be overemphasised that how crucial management of cost is for organisations residing in today's business world. Activity Based Costing , one of the most effective cost management tools; Pre- requirements of ABC implementation and their presence; Fields that needs to be improved for better implementation of ABC all these have become important matters to be studied. This write up can help the practitioners as well as the readers to evaluate the aforementioned factors with respect to Bangladesh.

PREREQUISITES LEADING TO SUCCESSFUL ABC IMPLEMENTATION

Grounded on the contingency theory, researchers often argue that the degree of success of ABC implementation can be traced to the different circumstantial factors faced by every organisation or every country. Thus success rates vary among firms and among countries. Many researchers therefore found this as an important area, result of which is the various studies on ABC implementation success. Some of the notable ones are the examination of various influencing factors by that of Anderson, Shield, McGowan, Klammer, Krumwiede and Anderson and Young.

TECHNICAL FACTORS

The ancient researches on prerequisites of successful implementation of Activity Based Costing (ABC) were based on few technical factors such as identification of activities, selection of cost drivers and accumulation of cost data. Two of those researches were conducted by Cooper (1991) and Morrow and Connelly (1994).

Further studies, carried out by various researchers, put more emphasis on other organisational, behavioural and contextual factors based on the idea that those factors have more influence on ABC success than that of technical factors.

ORGANIASATIONAL AND BEHAVIOURAL FACTORS

According to an empirical study conducted by Michael D. Shields (1995), there were few variables found to effect the implementation of ABC naming top management support for the ABC implementation, ABC's link to company goals and strategies, its link to performance evaluation, compensation and training, non-accounting ownership, adequate resources and clarity of ABC objectives.

Innes et al (1995 & 2000) surveyed the UK firms to find which behavioural and organisational factors have the most influential impact on ABC implementation and found out that it was the top management of the firms who influenced ABC success significantly.

A research finding by Norris (1997) states that there is a stronger association between ABC success and behavioural and organisational variables than that with technical variables. There is another study by Cooper (1992 findings of which was in line with the findings of Norris.

McGowan and Klammer (1997) conducted a survey of 53 employees from 4 targeted sites in the U.S. to examine whether employees' satisfaction levels are associated with ABC implementation. It was designed to find the correlation of employees' satisfaction in successful implementation of ABC to various variables such as top management support, the degree of involvement in the ABC implementation process, objectives clearly stated and objectives shared, training, linkage of the implementation to performance evaluation system, adequate resources, and information quality. The survey result was such that the employees' satisfaction with ABC implementation was positively related with clarity of objectives and quality of ABC information.

In South Africa, in the year 2000, Sartorius, C. Eitzen, and P. Kamala investigated the effect of organisational factors on the success of ABC implementation. The identified factors called top management, adequate resources, coherence with organisational goals and strategy. They found top management support and resources as the most influential organisational factors impacting the ABC success.

A case study carried by Lana and Fei (2007) in China was to examine some key success factors pertinent to ABC implementation in China where the findings showed that top management support, organisational structure and high proportion of dedicated professionals were the significant factors in determining ABC success implementation.

In line with the view of Shield, Colin et al. (2007) in their research on manufacturing and service firms in the UK concluded that top management support, non-accounting ownership, adequate training were the crucial factors that determined ABC success in any organisation.

A case study by Majid et al. (2008) was aimed to find out the problems faced by a Malaysian company during ABC implementation. He found that the factors determining ABC success were top management support, suitable ABC software, and understandability and participation of employees in the ABC implementation stage.

CONTEXTUAL FACTORS

ABC and success of its implementation was researched on based on few circumstances that form the background for implementing an idea. These circumstances are regarded as contextual factors of an organisation in terms of which implementation of ABC can be fully assessed.

One of the most known research findings was of Anderson (1995) who conducted a case study from 1986 to 1993 on General Motors and investigated the impact of organisational variables and contextual variables on four different stages of ABC implementation where the stages are Initiation, Adoption, Adaptation and Acceptance. He found that organisational and contextual factors affect these stages differently. For instance, organisational factors, such as top management support and training for the ABC system affect various stages of ABC significantly, while contextual variables, such as competition, relevance to managers' decisions and compatibility with existing systems produce different degree of impact on different stages of ABC.

A research carried out by Gosselin (1997) on 161 Canadian manufacturing companies examined the effects of strategies and organisational structure on adoption and implementation of Activity-based costing. The research findings showed that a proper strategy and manager decision can effect significantly the adoption and successful implementation of ABC.

In a research finding of Krumwiede (1998), few U.S manufacturing firms were surveyed to find out how contextual as well as organisational factors, such as the size of firms, top management support, training or ownership affect implementation of ABC. He found that the contextual factors, such as usefulness of cost information, IT existence, less task uncertainty and large organisations were more related to ABC adoption than that of the organisational factors such as top management support, implementation training etc. However, according to him organisational factors are more useful in implementation of ABC.

Another study by Anderson and Young (1999) where the study was based on the relationship between organisational and contextual variables, such as organisational structures, nature of tasks, management support, information technology and ABC success, it was confirmed that the organisational factors (top management support and adequacy resources) are more important during the ABC implementation stage.

In another study conducted by Khalid (2003) on 100 largest firms in Saudi Arabia, ABC adoption was found to be positively related to diversity of products. Some other factors also came out as influencing factors in Malaysia under a study by Ruhanita et al. (2006) such as cost distortion, decision usefulness, information technology and other organisational factors.

CULTURE

Apart from the above factors, there were some studies conducted based on culture. Some concentrated on national culture and others on corporate culture.

Brewer (1998) examined the relationship between national culture and Activity-Based Costing system. In the study, Hofstede's work was applied at plants in Malaysia and the USA. The result was such that the level of ABC success in Malaysia was higher than that of U.S due to high-power-distance and collectivist cultures in Malaysia.

In addition, another study result showed that one accounting technique can be successfully adopted in one country does not mean it also can be successful in another country (Supitcha, 2001).

Thus, it is necessary to examine whether ABC could be successfully implemented and which factors influence ABC success in Asian context, particularly in Bangladesh, the study area.

DO THE PREREQUISITES EXIST IN BANGLADESH?

Being a developing country, Bangladesh has started implementing modern cost accounting tools and techniques only recently. A few studies have been conducted from 21st century in Bangladesh regarding the adoption and usage of cost accounting tools and almost all of them indicated that ABC has been of little use since then.

TECHNICAL FACTORS

To carry out ABC, it is necessary that cost drivers are established for different cost pools. A cost driver is any activity or event or measure that causes or drives a cost to be incurred or being allocated. Identification of proper cost driver or activity measure is thus seemed to be a factor which is important but has little impact on the success rate of such a project like ABC. Any project like ABC, to be successful, needs to have a distinguished cost centre for a particular process or practice to be carried out properly. It can be said on the basis of learning from previous studies that not all but in many manufacturing companies in Bangladesh there is no dedicated cost centre to define variable and fixed cost properly and to pull off a plan like ABC (Shil and Pramanik, 2012). However, technical factors are generally not perceived to be main hindrance to the success of ABC in Bangladesh.

ORGANISATIONAL AND BEHAVIOURAL FACTORS

There are some factors covered by the studies put earlier in the report which are found and examined in the context of Bangladesh to identify their effects on the success rate of ABC implementation in Bangladesh. Top management support from all is the primary concern for ABC implementation in Bangladesh. Top management's support by all means can drive the success of ABC system far enough single handedly. Top management should invest considerable financial resources to purchase ABC software and hardware, provide training for employees at adoption and implementation stage of ABC. Successful ABC system should possess adequate resources like manpower, capital, operational employees' participation, involvement in ABC implementation. Companies in Bangladesh face lack of top management support (Hasan and Akter, 2010) in connection with the awareness of detailed information about the features, advantages, possibilities and consequences of ABC system. The employees of Bangladeshi companies have only heard of the name ABC system but they are ignorant of the characteristics of this operation and they face lack of experience with this approach (Shil and Pramanik, 2012). Moreover the complexity of the operational system of ABC plays a vital role in the negligence and resistance from ABC being executed in Bangladesh. The employees here are more prone to the old techniques which they are more comfortable with than with the new ones. There is also lack of top management support in case of sufficient employee training (Hasan and Akter, 2010) and involvement in the process of ABC system which is considered as an obstacle in the path of ABC implementation as well. Although resource like manpower has not been a problem in ABC adoption and execution in Bangladesh (Hasan and Akter, 2010), but lack of proper guidance, knowledge and training made them unskilled for aforesaid purpose. Also the initial set-up cost of ABC system makes it nearly impossible for the local small companies to take on the process replaced by the old one. Another problem which the companies in Bangladesh usually encounter with is the costly software friendly for the ABC system. Besides, the elderly employees of many companies are not well learned as to how to use the tools and software (Shil and Pramanik, 2012) However, ABC's link to organisational goals and strategies in large and establishment of clear ABC objective are not measured as problem for adoption and operation of ABC system in Bangladesh (Hasan and Akter, 2010). That can be said because the companies which took this system instead of the traditional ones do not find these two factors as problematic for ABC implementation. Though the clarity of ABC objective is served by the management who adopted ABC but the adequacy and quality of ABC information, lack of employee involvement, training and employee resistance to change still happen to impede employee satisfaction and performance evaluation, two important behavioural factors linked to successful ABC accomplishment.

CONTEXTUAL FACTORS

In Bangladesh the problem most common in people is that they do not pay much attention to the contemporary change that takes place globally. The same canon applies in case of ABC adoption and implementation too. The employees who are accustomed to applying old techniques and practices are likely to be reluctant to use the new ones (Hasan and Akter, 2010). Probably this is the reason why 'compatibility with existing system' is the noticeable contextual factor hampering execution of ABC system in most of the companies in Bangladesh. The other factors for instance organisational structure and size of firms turn out to be substantial factors in respect of acceptance of ABC system in Bangladesh. Small sized firms in Bangladesh are seemingly happy with their existing costing system; first of all they are familiar with the traditional costing system and second of all they cannot implement the costly system even if they want to because they do not have enough money to yet initiate the system. On top of that the small firms in Bangladesh still prefer to work manually and thus they do not possess sufficient expertise necessary for ABC system. For these above mentioned reasons most local companies in Bangladesh do not opt for ABC system nevertheless most of the multi-national companies with heterogeneous products operating in Bangladesh have chosen ABC system.

CULTURE

From the learning by now, it goes without saying that culture within the organisation is gradually developed by the personnel working inside the organisation for long. So the characteristics and nature of the employees working in an organisation create the culture of that organisation. They can take or abandon any process or plan according to their open-mindedness towards that particular process. Hence it can be said employee resistance to change in organisational culture can be a problem for adoption and implementation of ABC system in Bangladesh. Developing countries generally tend to avoid any upcoming uncertainty or ambiguity. They are always hesitant to any innovation. This type of uncertainty-avoidance culture also prevails in Bangladesh that perhaps counters innovation and implementation of a huge project like ABC system in most of the companies in Bangladesh. If the employees come to know that ABC information is linked to their performance evaluation and accordingly to their compensation they become more cautious about their situation and purposefully hinder the implementation of ABC system in the organisation.

CONCLUSION

Companies adopt cost accounting systems that are consistent with their management philosophies, company strategies and technologies. Changes in philosophies and technologies often make it necessary for changes in cost accounting systems. Almost all small local companies still use traditional costing systems that are simpler in operating and less expensive to pursue than the costly and more complex ABC system. Nonetheless a considerable amount of large and multi-national companies operating in Bangladesh are deploying ABC system to support strategic decision making, accurate cost calculation and operational and cost control as well. There are still some problems which are playing as obstacles in the path of ABC system being implemented. Apparently the major problems, from all in the context of Bangladesh, are top management support, lack of sufficient training and knowledge of personnel, huge initiation cost of ABC system and to some extent employee apprehensions about innovation and resistance to any change. To keep pace with the competitive world and new technologies the companies in Bangladesh, mostly medium sized, should come forward with open arms to adopt and execute ABC system. Great quality costing information, awareness about their benefits and possibilities, installation of new and improved technologies and training and development of employees will certainly be of great help in this regard.

SCOPE FOR FURTHER RESEARCH

The appraisal of this study suggests that Culture, one of the prerequisites for ABC implementation, is to be specifically studied with respect to the business organisations of Bangladesh which can be used as an indicator of the future of ABC in Bangladesh. Also there might be a scope for studying the existence of pre-required factors for ABC implementation within a particular business organisation.

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WIDENING REGIONAL ECONOMIC DISPARITIES IN INDIA

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ABSTRACT

In view of a few economists the main objectives of economic policy is the balanced regional economic growth of all the states prevailing in a country. It has been observed from the data that during the period from 1980-81 to 2011-12 there was rapid economic growth in Indian economy but it was not equal in all states. As a result, economic disparity increased among all states. It has also been observed from the data that economic disparity among various states rapidly increased in the post-reform period. For this analysis data on per-capita NSDP at current prices of different states for the financial year from 1980-81 to 2011-12 are used. We calculate CV for the said period and see that the value of CV decreases in the pre-reform period but the value of CV increases in the post-reform period. This implies that regional economic disparity increases in the post-reform period. The accelerated economic growth since the early 1980's with increased participation by the private sector appears to have aggravated regional disparities. The ongoing economic reforms since 1991 with stabilization and deregulation policies as their prime instruments and a very significant role for the private sector seem to have further aggravated the inter-state disparities. If the existing trends in differential rate of socio-economic development continue, regional disparities in India are bound to accentuate. Therefore it is imperative that the present trends are arrested and preferably be reversed. This will require efforts on the part of the concerned state governments and the centre.

KEYWORDS

Economic disparities, balanced economic growth.

WIDENING REGIONAL ECONOMIC DISPARITIES IN INDIA

In view of a few economists the main objectives of economic policy is the rapid balanced economic growth of all the states / regions prevailing in a country. It indicates that there must be equal expansion and progress of economic activity; and increase in per-capita income of all states/regions. But Indian regional economic disparity is a matter of serious concern over the years. In spite of centralized planning there remained a serious problem of regional economic disparity in India. It has been observed from the data that during the period from 1980-81 to 2011-12 there was rapid economic growth in Indian economy but it was not equal in all states / regions. As a result, economic disparity / inequality increased among all states. It has also been observed from the data that economic disparity among various states rapidly increased in the post reform period. In the pre reform period this type of regional economic disparity was more or less stable even it decreased by small margin. Hence liberalization, privatization and globalization policy adopted by the government has created a major economic disparity among the states / regions and regional economic disparity increases at an increasing rate.

Data on per-capita net state domestic product (NSDP) at current prices in different states for the period from 1980-81 to 2011-12 are presented in Table-1. From this data we can make a comparative study of the increase in per-capita NSDP in different states during the said period. In this analysis we also use co-efficient of variation of the per-capita NSDP of different financial year which is shown in Table-2.

The increase in the value of co-efficient of variation implies increase in regional economic disparity and vice-versa. The period 1980-81 to 2011-12 has been selected because the period from 1980-81 to 1990-91 is the pre-reform period and there was active participation of the government in the economic activity of the country; and the period from 1990-91 to 2011-12 is the post-reform period when the government had been adopted various reform in its economic policy which is known as liberalization, privatization and globalization. From this discussion we can see whether the liberalization has created a smooth running of balanced regional development or the smooth running of regional economic disparity.

TABLE 1: PER-CAPITA NET STATE DOMESTIC PRODUCT AT CURRENT PRICES (Rs.)

Sl. No.	State/Union Territory	1980-81	1985-86	1990-91	1995-96	2000-01	2005-06	2011-12
1	Andhra Pradesh	1467	2296	4816	10018	16373	28539	71480
2	Arunachal Pradesh	1522	3403	5231	11035	14587	28054	62213
3	Assam	1329	2612	4432	7001	10198	18396	33633
4	Bihar	1022	1601	2966	3041	5108	8223	23435
5	Jharkhand	-	-	-	6890	10294	18326	35652
6	Goa	3206	4660	8952	22207	45105	84720	192652
7	Gujarat	2089	3221	6343	13665	19228	37780	86668
8	Haryana	2437	4004	7721	14244	23742	42309	108859
9	Himachal Pradesh	1820	2644	5243	10607	18920	36949	74899
10	Jammu & Kashmir	2152	2874	4624	7783	12399	23240	42220
11	Karnataka	1644	2495	4975	10217	18041	31239	68374
12	Kerala	1835	2398	5110	11469	19463	36276	83725
13	Madhya Pradesh	1609	2085	4798	7796	10803	16631	38669
14	Chhattisgarh	-	-	-	7479	10985	20117	46573
15	Maharashtra	2492	3826	7612	16152	23726	41965	101314
16	Manipur	1396	2322	3912	6875	12823	20395	32284
17	Meghalaya	1538	2250	4944	8282	13114	26284	52971
18	Mizoram	1399	2658	4856	10953	17826	26698	54689
19	Nagaland	1607	2591	5893	11057	16903	33792	56638
20	Orissa	1352	2175	3166	6806	8547	18846	46150
21	Punjab	2629	4578	8177	15471	25048	36199	74606
22	Rajasthan	1424	1978	4883	8467	11986	20275	47506
23	Sikkim	1545	3023	5213	8905	15550	30252	121440
24	Tamilnadu	1666	2620	5541	11866	19889	35243	84496
25	Tripura	1645	2025	4240	6828	14348	26668	50750
26	Uttarpradesh	1402	1922	3937	6299	9721	14221	30052
27	Uttaranchal	-	-	-	-	15482	29441	82193
28	West Bengal	1925	2893	5072	9041	16072	24720	54830
29	Andaman & Nicobar Islands	2 613	3985	9729	18604	25177	44754	93075
30	Chandigarh	-	-	-	26734	44397	84993	140073
31	Delhi	4145	6545	11373	22364	38864	72208	175812
32	Pondicherry	3201	4580	7657	12276	31358	67205	95759

Source: Directorate of Economics Statistics of respective State Governments, and for All-India- Central Statistical Organisation (Data from 2005 to 2011-12 at 2004-05 prices)

TABLE 2: A.M., S.D. AND COEFFICIENT OF VARIATION OF THE PER CAPITA NSDP

Year	1980-81	1985-86	1990-91	1995-96	2000-01	2005-06	2011-12
AM(Rs.)	1907.33	3009.4	5764.9	11304	18627.4	33904.94	73865
Standard Deviation(Rs.)	708.13	1100.2	1996.6	5326.4	9698.92	18953.39	40285
Coefficient of Variation	37.13	36.56	34.63	47.12	52.07	55.9	55.92

Coefficient of Variation= (SD /AM)*100

From Table -2 we see that the average per capita NSDP has increased at a higher rate from the financial year 1980-81 to 2011-12 e.g. In 1980-81 it was Rs. 1907.33 and in the 5th year (1985-86) it increased by 57.78% amounting to Rs. 3009.4. In 1990-91 it increased by 91.56% amounting to Rs. 5764.90. Similarly in 1995-96 it became Rs. 11304(96.09% increase) in 2000-01 it became Rs. 18627.40 (64.78% increase) and in 2005-06 it became Rs. 33904.94 (82.02% increase) and in 2011-12 it became Rs. 73865(117.85% increase). From these data it has been observed that the average per capita NSDP increased during the said period. (This increase in per capita NSDP is not at all scientific as it is calculated on the basis of current prices).

In the financial year 1980-81 only 9 states had higher per capita NSDP than the national average; in 1985-86 it increased to 10 in 1990-91 to 9, in 1995-96 to 11, in2000-01 to 12 , in 2005-06 to11 and in 2011-12 to 14. If we consider those states are rich states having higher per capita NSDP than the national average and the poor states having per capita NSDP below the average then we can say that the success of liberalized economic policy have made the rich richer.

From the above discussion we conclude that the economic disparity in different states has increased at an increasing rate in the post reform period. This type of unbalanced growth in different states is shown with the help of the coefficient of variation of the per capita NSDP of different states at current prices (Table-2). During the aforesaid period we see that between 1980-81 to 1990-91 the value of the CV of per capita NSDP decreases. e.g. in 1980-81 it is 37.13, in1985-86 - 36.56 and in 1990-91-34.63. This implies that regional economic disparity decreases. On the other hand in the next period (1990-91 to 2011-12) the value of the CV of per capita NSDP increases at an increasing rate. e.g. in 1990-91 it is 34.63, in 1995-96-47.12, in 2000-01-52.07 , in 2005-06-55.90 and in 2011-12 -55.92. This implies that regional economic disparity increases at an increasing rate in the post reform period.

We can also see through other indicators that regional economic disparity exist in Indian economy.

ECONOMIC INDICATORS

TABLE3 :STATE-WISE CREDIT -DEPOSIT RATIO (C-D)

Sl. No.	State/Union Territory	1980-81	1985-86	1990-91	1995-96	2000-01	2005-06	2010-11
1	Andhra Pradesh	71.5	78.3	87.1	73	64.2	74.8	105.14
2	Arunachal Pradesh	6.2	21.5	20.1	12.4	15.7	22	25.12
3	Assam	40.6	53.3	55.5	38.7	32	35.3	36.96
4	Bihar	41.8	41.7	40	32.5	22.5	27.7	28.61
5	Jharkhand						29.6	34.44
6	Gujarat	51.8	54.7	61.3	46.6	49	46.5	65.28
7	Haryana	66.1	67.6	61.2	45.5	42.4	51.4	63.03
8	Himachal Pradesh	28.6	44	38.6	26	23.8	36.3	41.4
9	Jammu & Kashmir	31.5	42.8	31.8	28.6	33.5	46.7	46.88
10	Karnataka	77.8	86.7	91	65.8	63.3	73.8	76.93
11	Kerala	67.5	68.5	64	44.8	41.5	54.6	56.92
12	Madhya Pradesh	52	62.6	68.6	49.6	49.1	43.6	59.8
13	Chhattisgarh						43.6	52.75
14	Maharashtra	79.2	90.8	79.7	69.5	86.4	94.9	81.3
15	Manipur	25.1	70.5	69.9	58.2	37.4	42.4	40.57
16	Meghalaya	14.1	26.5	24.6	17	16.3	43.6	24.99
17	Mizoram	6	22.8	34.2	16.5	23.3	47.8	47.5
18	Nagaland	23.7	39.6	42.6	37.8	15.3	22.9	29.83
19	Orissa	61.1	92.8	81.3	54.5	41.5	61.8	53.16
20	Punjab	38.6	44.6	45.5	41.4	39.4	50.1	71.11
21	Rajasthan	65.9	70.5	62.2	47.7	46.7	68.7	88.21
22	Tamilnadu	88	98.6	99.4	86.7	88.6	101.2	112.65
23	Tripura	51.3	72.9	72.2	47.5	25.7	28.6	29.15
24	Uttarpradesh	43.5	49.2	47	35.1	28.2	37.9	42.57
25	Uttaranchal						24.3	33.8
26	West Bengal	60.9	51.9	54.9	53.9	45.5	52.3	61.33
	AM	47.51	58.8	57.94	44.75	40.5	48.55	54.21
	SD	23.4	22.19	21.56	18.57	20.17	20.58	23.88
	CV	49.25	37.73	37.21	41.5	49.8	42.39	44.05

Source: Statistical Tables Relating to Banks in India, Reserve Bank of India

In the financial year 1980-81 only 12 states had higher C-D ratio than the national average; in 1985-86 only 11, in 1990-91 only 11, in 1995-96 only 13, in2000-01 only 11 , in 2005-06 only10 and in 2010-11 only 11 states had higher C-D ratio than the national average. The inter-state and regional disparities are obvious from the data. Credit-Deposit ratio measures the discrepancy in credit creation vis-à-vis deposit mobilization. It has been observed from the data that more or less the same states having higher C-D ratio over the years. The value of CV in Table 3 shows that there exist disparities among the Indian states.

TABLE 4: PERCENTAGE OF POPULATION BELOW POVERTY LINE

Sl. No.	State/Union Territory	1982-83	1993-94	1999-2000	2004-05
1	Andhra Pradesh	28.91	22.19	15.77	15.8
2	Arunachal Pradesh	40.88	39.35	33.47	17.6
3	Assam	40.47	40.86	36.09	19.7
4	Bihar	62.22	54.96	42.6	41.4
5	Jharkhand				40.3
6	Goa	18.9	14.92	4.4	13.8
7	Gujarat	32.79	24.21	14.07	16.8
8	Haryana	21.37	25.05	8.74	14
9	Himachal Pradesh	16.4	28.44	7.63	10
10	Jammu & Kashmir	24.24	25.17	3.48	5.4
11	Karnataka	38.24	33.16	20.04	25
12	Kerala	40.42	25.43	12.72	15
13	Madhya Pradesh	49.78	42.52	37.43	38.3
14	Chhattisgarh				40.9
15	Maharashtra	43.44	36.86	25.02	30.7
16	Manipur	37.02	33.78	28.54	17.3
17	Meghalaya	38.81	37.92	33.87	18.5
18	Mizoram	36	25.66	19.47	12.6
19	Nagaland	39.25	37.92	32.67	19
20	Orissa	65.29	48.56	47.15	46.4
21	Punjab	16.18	11.77	6.16	8.4
22	Rajasthan	34.46	27.41	15.28	22.1
23	Sikkim	39.71	41.43	36.55	20.1
24	Tamilnadu	51.66	35.03	21.12	22.5
25	Tripura	40.03	39.01	34.44	18.9
26	Uttarpradesh	47.07	40.85	31.15	32.8
27	Uttaranchal				39.6
28	West Bengal	54.85	35.66	27.02	24.7
29	Andaman & Nicobar Islands	52.13	34.47	20.99	22.6
30	Chandigarh	23.79	11.35	5.75	7.1
31	Delhi	26.22	14.69	8.23	14.7
32	Pondicherry	50.06	37.4	21.67	22.4
AM		38.3	31.93	22.47	22.33
SD		16.86	10.71	12.52	10.98
CV		44.02	33.54	55.71	49.17

Source: Planning Commission & NSSO Data

The sharp decline in the percentage of population below the poverty line in the forward states after 1983, especially after 1993-94 is remarkable. From Table-4 it has also been observed that there was a steep fall in the share of poor in the country during nineties. This implies that the main beneficiaries have been the fast growing states in the forward group. Even though the absolute number of poor in all the states have come down between 1993-94 and 2004-05 there exists considerable level of disparity among the Indian states (as the value of CV shows in Table-4).

In the wake of economic reforms initiated in 1991, the role of private investment has acquired a special significance in the context of economic development of various states. Indeed, there has been an element of competition among states for attracting private investment, both domestic and foreign. There also exist disparity among the states regarding the financial assistance by the all India financial institutions, and state financial corporation; number of nationalized bank branches, cumulative number of SSI Units, per-capita development and non-development expenditure etc.

DEMOGRAPHIC INDICATORS

A few demographic characteristics of different states are presented in Table-5

TABLE-5: DEMOGRAPHIC CHARACTERISTICS OF INDIAN STATES/UNION TERRITORIES

.		Sex Ratio(females per 1000)				Density (per Sq. km.)			
Sl.No.	State/Union Territory	1981	1991	2001	2011	1981	1991	2001	2011
1	Andhra Pradesh	975	972	978	993	195	241	275	308
2	Arunachal Pradesh	862	859	901	938	8	10	13	17
3	Assam	910	923	932	958	230	284	340	397
4	Bihar	948	907	921	918	402	497	880	1102
5	Goa	975	967	960	973	272	316	363	394
6	Gujarat	942	934	921	919	174	210	258	308
7	Haryana	870	865	861	879	292	369	477	573
8	Himachal Pradesh	973	976	970	972	77	92	109	123
9	Jammu & Kashmir	892	896	900	889	59	76	99	124
10	Karnataka	963	960	964	973	194	234	275	319
11	Kerala	1032	1036	1058	1084	655	747	819	859
12	Madhya Pradesh	921	912	920	931	118	149	196	236
13	Maharashtra	937	934	922	929	204	256	314	365
14	Manipur	971	958	978	992	64	82	107	122
15	Meghalaya	954	955	975	989	60	78	103	132
16	Mizoram	919	921	938	976	23	33	42	52
17	Nagaland	863	886	909	931	47	73	120	119
18	Orissa	981	971	972	979	169	202	236	269
19	Punjab	879	882	874	895	333	401	482	550
20	Rajasthan	919	910	922	928	100	128	165	201
21	Sikkim	835	878	875	890	45	57	76	86
22	Tamilnadu	977	974	986	996	372	428	478	555
23	Tripura	946	945	950	960	196	262	304	350
24	Uttarpradesh	882	876	898	912	377	471	689	828
25	West Bengal	911	917	934	950	615	766	904	1029
26	Andaman & Nicobar Islands	760	818	846	876	23	34	43	46
27	Chandigarh	769	790	773	818	3961	5620	7902	9252
28	Delhi	808	827	821	868	4194	6319	9224	11297
29	Pondicherry	985	979	1001	1037	1229	1605	2029	2598
	INDIA	934	927	933	943	216	267	324	382
SD		-	-	-		1003.16	1473.03	2128.09	2598.44
AM						506.48	691.03	942.14	1124.52
CV		-	-	-		198.06	213.16	225.3	231.07

Source: Census of India 1981,1991, 2001,2011

The state-wise sex ratio is perhaps the most revealing index of gender disparities among the states. All India sex ratios are 934, 927,933 and 943 in 1981, 1991, 2001 and 2011 respectively. The data on sex ratio of females per 1000 males is the reflection of the neglect of women's health due to relatively lower economic and social value assigned to women.

In 1981 only 16 states, in 1991 only 14 states, in 2001 only 15 states and in 2011 only 14 having sex ratio above national average. Kerala is the only state in the country which has a sex ratio favourable to women during the above four census period and Pondicherry is the only union territory having sex ratio favourable to women in 2001 and 2011.The international experience indicates that as a society develops economically the sex-ratio turns more favourable to women. In India, however, this does not appear to hold good. Thus from the above data we can say that the disparities in sex ratio in different states during the said period is the reflection of widening regional disparity.

The density of population in different states is also an indicator of development of a society. State wise data on population density of different states are given in Table-4 for four census periods. The all India population densities (No. of persons per Sq. km). Are 216, 267, 324 and 382 in 1981, 1991, 2001 and 2011 respectively. During the said period 11 or 12 states having population density higher than national average. The data in Table-4 shows that disparity exists in different states. Coefficient of variation calculated from the data on population density shows that disparity increases from 1981 to 2011.

CONCLUSION

The data presented in the earlier sections and the analysis so far clearly establish that there are considerable disparities in socio-economic development across the Indian states. The accelerated economic growth since the early 1980's with increased participation by the private sector appears to have aggravated regional disparities. The ongoing economic reforms since 1991 with stabilization and deregulations policies as their prime instruments and a very significant role for the private sector seem to have further aggravated the inter-state disparities.

To conclude if the existing trends in differential rate of socio-economic development continue, regional disparities in India are bound to accentuate. Therefore it is imperative that the present trends are arrested and preferably reversed. This will require efforts on the part of the concerned state governments and the centre. The centre's helping hand in the form of focused investment, especially in social sectors and key infrastructural sectors will facilitate the task of the concerned states. Meaningful decentralization of decision making and financial powers with appropriate accountability at all levels will facilitate faster socio-economic development of the backward regions.

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MODELLING A STACKELBERG GAME IN A TWO STAGE SUPPLY CHAIN UNDER RETURN POLICY CONTRACTS: SOLVING A DECISION PROBLEM FOR A CAPACITY CONSTRAINED MANUFACTURER

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ABSTRACT

A manufacturer facing a capacity constraint is not able to supply an order quantity exceeding its production capacity. In case of sale of products involving return policy contracts between the upstream player and the downstream player, the manufacturer needs to critically determine the contract parameters so that the profit earned by him is maximized and at the same time the order placed by the retailer does not violate his capacity constraint. The current paper assumes a two stage supply chain consisting of a manufacturer and a retailer where the manufacturer acts as a stackelberg leader. It models a dynamic game played between a manufacturer and a retailer under information symmetry. The manufacturer faces capacity constraint and the supply chain faces demand uncertainty. The model assumes domination of power of the manufacturer over the retailer. The model is built with respect to two different return policy contracts viz.: buyback contract, quantity flexibility contract. The paper also provides an algorithm to solve the optimization model proposed.

KEYWORDS

Buyback contract, Dynamic game, Quantity flexibility contract, Two stage supply chain.

INTRODUCTION

Supply chain contract has created its own space in the research world related to management science. Supply chain contracts not only play a vital role in terms of creating supply chain coordination among different stakeholders of the supply chain but also proper analysis of its impact on supply chain performances gives a strategic direction for writer of the contract. For the purpose of coordination and improvement of the overall supply chain performance contract is being introduced. Some of the important supply chain contracts include return policies to shift a portion of risk emerging out of the demand uncertainty from the retailer (downstream player) to the manufacturer (upstream player). This encourages the retailer to place more order improving the overall profitability of the supply chain. In case of buyback Contract the manufacturer takes back all the unsold units from the retailer at a buy back rate. In quantity flexibility contract a portion of the unsold units are returned with full credit. In case of quantity flexibility contract a portion is returned with full credit and rest of the unsold units are returned at a buyback rate.

LITERATURE REVIEW

The research work done by Arrow et al. (1951), dealing with the newsvendor problem is considered as a pioneering research which opened up the horizon for classical news vendor problem. Silver et al. (1998) studied an extensive literature review dealing with wide range of variety of classical newsvendor problem. Various researchers dealt with one echelon system involving one decision maker but later on researchers move on to dealing with two echelon and even three echelon supply chain system (consisting of manufacturer, supplier and retailer) related to newsvendor model. Pasternack (1985) was first to introduce the concept of buy back contract which was proved to be a coordinating supply chain contract. He discussed the contract in context of a Newsvendor problem. He proposed a model where unit credit was allotted to the news vendor for each unsold item. Moreover, Cachon and Lariviere (2005) proved that revenue sharing contracts and buy back contracts are equivalent in case the retail price is given although the above two contracts are not equivalent in case of a price setting news vendor. Anupindi and Bassok (1999) discussed the buyback contract in a one supplier two retailer scenario where the supplier subsidizes the retailer for the holding cost of the inventory making the situation analogous to a buy back contract.

Quantity flexibility contracts have come up as a combating mechanism to certain supply chain inefficiencies (Lee et al. 1997) and its variety of uses have been discussed in the literature. Tsay (1999) discussed supply chain coordination with respect to quantity flexibility contract. Backup agreement contracts are contracts which were studied by Pasternak (1985) and Eppen and Iyer (1997) and Barnes-Schuster et al. (1998). The focus of the study done by Eppen and Iyer (1997) was not coordination but retailer's order quantity decision. Tsay and Lovejoy (1999) analysed a quantity flexibility contract with respect to multiple demand periods, multiple lead times and many locations and demand forecast updates. In these multi period models, it has been analysed and showed that quantity flexibility contracts decrease order of variability and thus decrease bullwhip effect. Bassok and Anupindi (2008) did an in-depth analysis of these contracts for a single stage system with more general assumptions than that compared to Tsay and Lovejoy (1999). Emmons and Gilbert (1998) studied a two stage supply chain consisting n suppliers and one retailer with respect to supplier's decision problem where the supplier has to decide the wholesale price and the credit rate for the unsold items to maximize his profit. Emmons and Gilbert (1998) demonstrated buy-back contracts with a price-setting newsvendor. Lau and Lau (1999) analysed the supplier's decision problem where the retail price was exogenously given and the retail market faced a demand uncertainty. They examined the impact of demand uncertainty on the supplier's and retailer's decision. Researchers had dealt with a news vendor problem with respect to a power structure assuming that the supplier is a leader and the retailer is a follower. El-Ansary and Stern (1972) stated that the ability of influencing the decision variables of the other channel member channel member may be termed as power. Jun et al. (2006) analysed a retailer dominated supply chain and determined the Nash equilibrium for the system. Fangmiao (2007) discussed a game involving supplier-buyer interaction in a retail industry. Lian and Deshmukh (2009) studied a class of supply contracts where a buyer receives discounts in case he commits to purchases in advance. The discount is time dependent. Wang and Zipkin (2009) with respect to buyback Contract analysed how behavior of individual member of a supply chain can affect the performance of supply chain by means of excess channel stuffing. Chen et al. (2010) with respect to risk and profit Sharing Contract formulated a two-stage optimization problem. They proposed a three-parameter risk and profit sharing contract that coordinates the supply chain. Halati and He (2010) analysed price only, fixed incentive based Contract. They examined the application of quantity based fixed incentives in a two stage supply chain to coordinate inventory decisions. However, the above papers do not provide a model to analyse the decision problem of the manufacturer in case of a buyback contract and a quantity flexibility contract when there is a capacity constraint and impact of the demand distributions on supply chain performance.

RESEARCH GAP

Based on the literature review it seems that there exists very little research which deals with a dynamic game in a two stage supply chain in a manufacturer dominated scenario with respect to different return policies (buy back contract, quantity flexibility contract) where the manufacturer faces a capacity constraint. Also to the best of our knowledge no model is provided to understand and analyse the impact of change in demand distribution or the change in the parameters of the distribution upon the decision variables and the overall profitability of the supply chain.

OBJECTIVES

The current paper attempts to model a dynamic game played in a two echelon supply chain system consisting of a manufacturer and a retailer under demand uncertainty. The model takes into consideration a particular power structure of the supply chain and assumes it to be manufacturer dominated. The model also incorporates any capacity constraint faced by the manufacturer or any sales target he wants to achieve and at the same time he should be able to deliver the entire order placed by the retailer. To satisfy all the aforenoted objectives the manufacturer needs to design the contract by suitably choosing the contract parameters. The model developed in the current paper guides the manufacturer to determine its contract parameters to achieve its objectives and at the same time maximizing his profit.

The paper also aims to arrive at a Nash equilibrium of the game and will also suggest a procedure based on the consideration of risk profit allocation to determine the optimal solution to the manufacturer if more than one Nash equilibrium exist.

ASSUMPTIONS OF THE MODEL

The supply chain taken in the current discussion is a two stage or two echelon supply chain consisting of a manufacturer and a retailer. There is a perfect sharing of information i.e. there is perfect information sharing between the upstream and downstream player of the supply chain. So there exists information symmetry. The product is a single period product and the study is limited to a single selling period. The product faces a stochastic demand i.e. demand uncertainty. Both the manufacturer and the retailer are rational and they are both risk-neutral. The supply chain faces demand uncertainty and the retailer needs to decide the order quantity before it faces the real demand. The model in current discussion depicts a stackelberg game to be played between the manufacturer and the retailer. The stackelberg game is known as a dynamic game where both the players involved in the game are having complete information sharing with each other. In the stackelberg game there is a leader and a follower. The leader proposes its tactics or plays his move first. Since the leader is rational, he is also aware of the fact that the follower is also rational and his own decision or move can affect the follower's move. It is also assumed that the retail price is exogenously given (which is a rational assumption under the consideration that retail price is determined by market).

NOTATIONS USED IN THE MODEL

w: Wholesale price per unit
c: Manufacturer's production cost per unit.
p: Retail price per unit
q: No of units ordered
b: The buyback rate at which the manufacturer buys back the unsold units from the retailer.
α: The fraction such that the manufacturer gives full credit to the retailer up to αq no of unsold units.
X: Demand of the product
X: Random variable for stochastic demand
f: Probability Density Function (Pdf) corresponding to the demand distribution
F: Cumulative distribution function (Cdf) corresponding to the demand distribution.
π_m: Expected Profit earned by the manufacturer
π_r: Expected Profit earned by the retailer
π_t: Expected Profit earned by the entire supply chain. $\pi_t = \pi_m + \pi_r$
The model assumes no goodwill cost or lost sales cost associated with both the manufacturer and the retailer.

MODEL

BUY BACK CONTRACT

The retailer's expected profit

$$\pi_r(q) = pE[\min(q,x)] - wq + bE[(q-x)^+]$$

$$= (p-b)\int_0^q xf(x)dx + (b-p)qF(q) + (p-w)q \qquad (1)$$

The manufacturer's expected profit

$$\pi_m(w,b,q) = (w-c)q - bE[(q-x)^+]$$

$$= (w-c)q - bqF(q) + b\int_0^q xf(x)dx \qquad (2)$$

$$\frac{d\pi_r}{dq} = (b-p)F(q) + p - w$$

$$\frac{d\pi_r}{dq} = 0 \Rightarrow F(q) = \frac{p-w}{p-b} \qquad (3)$$

i.e. $q^* = F^{-1}\left(\frac{p-w}{p-b}\right)$ [Assuming that F is invertible]

$$\frac{d^2\pi_r}{dq^2} = -(p-b)f(q) < 0$$

This proves that π_r is a concave function in q and hence the first order condition gives rise to the optimality condition for the expected profit maximization of the retailer. If the manufacturer has a capacity constraint $\bar{q}$, then the optimization problem for the manufacturer becomes:

Maximize:

$\pi_m(w,b,q)$

Subject to:

$F(q) = \frac{p-w}{p-b}$

$c<b<w<p$,

$q \le \bar{q}$

QUANTITY FLEXIBILITY CONTRACT

The retailer's expected profit

$$\pi_r(q) = pE[\min(q,x)] - wq + wE[\min((q-x)^+, \alpha q)]$$

$$= (p-w)\int_0^q xf(x)dx + \int_0^{q(1-\alpha)} xf(x)dx + (p-w)q[1-F(q)] - wq(1-\alpha)F[q(1-\alpha)] \quad (4)$$

The manufacturer's expected profit

$$\pi_m(w,\alpha,q) = (w-c)q - wE[\min((q-x)^+, \alpha q)]$$

$$= (w-c)q + wq[(1-\alpha)F\{q(1-\alpha)\} - F(q)] + w\int_{q(1-\alpha)}^{q} xf(x)dx \quad (5)$$

$$\frac{d\pi_r}{dq} = (p-w)[1-F(q)] - w(1-\alpha)F[q(1-\alpha)]$$

$$\frac{d\pi_r}{dq} = 0 \Rightarrow (p-w)[1-F(q)] - w(1-\alpha)F[q(1-\alpha)] = 0 \quad (6)$$

$$\frac{d^2\pi_r}{dq^2} = -(p-w)f(q) - w(1-\alpha)^2 f[q(1-\alpha)] < 0$$

This proves that π_r is a concave function in q and hence the first order condition gives rise to the optimality condition for the expected profit maximization of the retailer. If the manufacturer has a capacity constraint $\bar{q}$, then the optimization problem for the manufacturer becomes:

Maximize:

$\pi_m(w,\alpha,q)$

Subject To:

$(p-w)[1-F(q)] - w(1-\alpha)F[q(1-\alpha)] = 0$

$c<w<p$,

$\alpha<1$,

$q \le \bar{q}$

AN ALGORITHM TO SOLVE ONE OF THE AFORESTATED OPTIMIZATION PROBLEMS

We propose to solve one of the aforestated optimization problems using the following algorithm. The rest can be solved following a similar approach. The problem we take is:

Maximize:

$\pi_m(w,\alpha,q)$

Subject To:

$(p-w)[1-F(q)] - w(1-\alpha)F[q(1-\alpha)] = 0$

$c<w<p$,

$\alpha<1$,

$q \le \bar{q}$

$c=c_0$ and $p=p_0$ are exogenously given.

STEP 1: Define $w_i = c_0 + i\delta_w$, $\alpha_j = j\delta_\alpha$, $q_k = k$

STEP 2: Determine the values of

$i=\bar{i}, j=\bar{j}, k=\bar{k}$

Such that

$w_{\bar{i}} = p_0, \alpha_{\bar{j}} = 1, q_{\bar{k}} = \bar{q}$

STEP 3: Create a nesting loop structure having three layers. in the outer most loop, in the middle loop and in the inner loop we vary i,j,k with an initial value 1,increment 1 and looping conditions being

$i<\bar{i}, j<\bar{j}, k\le\bar{k}$

respectively.

STEP 4: Within the inner most loop for each triplet of values of (i, j, k) check if

$\mathrm{mod}((p_0 - w_i)[1-F(q_k)] - w(1-\alpha_j)F[q_k(1-\alpha)]) < \varepsilon$

(Where ϵ is suitably chosen small positive no depending upon the tolerance level).

If the condition is true then calculate the value of

$\pi_m(w_i,\alpha_j,q_k)$

and store the values of

(w_i,α_j,q_k) and $\pi_m(w_i,\alpha_j,q_k)$

STEP 5: Show as output

(w_i,α_j,q_k) and $\pi_m(w_i,\alpha_j,q_k)$

Arranged in a decreasing order of the values $\pi_m(w_i , \alpha_j , q_k)$

(w_i , α_j) corresponding to the greatest value of π_m is the optimal solution to the manufacturer's decision problem.

IMPLEMENTATION OF THE MODEL (AN EXAMPLE)

Let the production cost per unit, buyback rate, wholesale price, retail price be 70 $, 100$, 170$ and 250$ respectively. Let the demand of the product X follows an uniform distribution with a lower limit of 500 and upper limit of 700 i.e.

$X \sim U[500,700]$

$\therefore F(x) = \frac{x-500}{200}$

In case of Buyback contract, The optimal order quantity by the retailer is given by

$F(q) = \frac{p-w}{p-b}$,

Therefore, in this case the optimal order quantity q^* is given by,

$$q^* = 500 + 200F(q^*),$$

Which means, that optimal order quantity q^* = 607 units

When, the manufacturer has tio decide both the buyback rate and the wholesale pice the problem becomes

Maximize:

$$\pi_m(w,b,q)$$

Subject to:

$$F(q) = \frac{250-w}{250-b}$$

70<b<w<250,

$$q \le \bar{q}$$

This problem can be solved by searching the appropriate values of b and w since the decision variables are bounded.

Let $\bar{q}$ = 580 and w=170. The manufacturer has to decide appropriate buyback rate so that his profit is maximized and the order quantity placed by the retailer does not exceed 640 units.

TABLE 1: VALUES OF DIFFERENT BUYBACK RATES, OPTIMAL ORDER QUANTITY AND EXPECTED PROFIT OF THE MANUFACTURER

Buyback Rate	Optimal Order Quantity	Expected Left over Inventory	Expected Sales	Expected Manufacturer's Profit
80	594.12	17.72	576.40	57994.46
85	596.97	18.81	578.16	58098.44
90	600.00	20.00	580.00	58200.00
95	603.23	21.31	581.91	58298.02
100	606.67	22.76	583.91	58391.11
105	610.34	24.35	585.99	58477.53
110	614.29	26.12	588.16	58555.10
115	618.52	28.09	590.43	58621.12
120	623.08	30.30	592.78	58672.19
125	628.00	32.77	595.23	58704.00
126	629.03	33.30	595.73	58707.60
127	630.08	33.84	596.24	58710.16
128	631.15	34.40	596.75	58711.64
129	632.23	34.97	597.26	58711.97
130	633.33	35.56	597.78	58711.11
131	634.45	36.16	598.30	58708.99
132	635.59	36.77	598.82	58705.54
133	636.75	37.40	599.35	58700.71
134	637.93	38.05	599.88	58694.41
135	639.13	38.71	600.42	58686.58

From Table 1 it is evident that the desired buyback rate for the manufacturer will be 129 assuming that buyback rate can only be an integer value.

IMPLICATIONS/ CONTRIBUTIONS OF THE MODEL

The model suggested in the current paper has the following implications/ contributions

1. The optimization model guides the manufacturer to optimize his profit considering its production constraint. He can decide the wholesale price and other contract parameters in a strategic manner to optimize the profit as well as meet the capacity constraint.
2. The manufacturer can suitably design the contract parameters to optimize the profit as well as meet his sales target.
3. The model is able to determine the Nash equilibrium given the demand distribution. Anybody having all the relevant information can obtain the strategy of both the players at Nash Equilibrium.
4. The model helps us analyzing how the optimal strategy is being affected by the demand distributions or helps us to understand the impact of change in the distribution parameters on the optimal strategy.
5. Solving the model supply chain efficiency (the ratio of the total supply chain profit to the optimal supply chain profit) at the Nash equilibrium can be found out. We may also find how this efficiency is being affected by different demand distributions and the parameters of the distributions.
6. The model can help to obtain the risk profit allocation , coefficient of variation of the manufacturer and the retailer at the optimal solution and thus helps the manufacturer to design the contract parameters resulting in most desirable risk profit allocation.

LIMITATIONS OF THE STUDY

The current study explores the issues with respect to a two stage supply chain Involving one manufacturer and a single retailer based on the assumptions that the model described is a single period model. Hence the first limitation of the study is it does not consider a multi period horizon. The model assumes the retail price p to exogenously given which may not be the case always. The model is limited to a two stage supply chain consisting of a single manufacturer and a single retailer which is a simplified version of the real supply chain.

FUTURE SCOPE

Future scope includes designing an option or hedging instrument to hedge the risk faced by the upstream player and the downstream player. Future study can be done regarding the pricing of such instruments.

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JOB SATISFACTION IN BANKING: A COMPARATIVE STUDY BETWEEN PUBLIC AND PRIVATE SECTOR BANKS IN DEHRADUN, UTTARAKHAND

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ABSTRACT

A satisfied and hard working employee is the backbone of any organization, including banks. Banking sector play a prominent role in India's industrialization and economic development. Workforce of any bank is responsible to a large extent for its productivity and profitability. Job satisfaction is the level of contentment a person feels regarding his or her job. This feeling is based on an individual's perception of satisfaction. There is a direct link between employee job satisfaction and financial results. The more satisfied employees are the more motivated and committed they will be to your organization's success. In this Research paper we have tried to make a comparison of Job satisfaction between Public and Private sector banks and tried to find out the basic reasons of dissatisfaction in job.

KEYWORDS

Employees, Job Satisfaction, Private Banks, Public Banks.

INTRODUCTION

Hsiu-Chin et al. (2005, fourth quarter) findings were consistent with results of a study in Taiwan on Nurse Faculty job satisfaction and their perceptions of nursing deans' and directors' leadership styles. Findings revealed that Taiwanese Nurse Faculty is moderately satisfied with their jobs and that they preferred that their dean use a transformational type of leadership.

Ambrose et al. (2005) conducted a qualitative study to investigate faculty satisfaction and retention. The study focused on the faculty of a private university over a period of 2 years. Findings suggested sources of satisfaction or dissatisfaction clustered into areas such as salaries, collegiality, mentoring, and the reappointment, promotion, and tenure process of departmental heads.

Job satisfaction is simply defined as the affective orientation that an employee has towards his or her work (Price, 2001). In other words, it is an affective reaction to a job that results from the comparison of perceived outcomes with those that are desired (Kam, 1998). Shortly, job satisfaction describes the feelings, attitudes or preferences of individuals regarding work (Chen, 2008).

Satisfiers relate to the content of the work such as "achievement, recognition for achievement, interesting work, increased responsibility, growth, and advancement. Herzberg (1974, p18)." Dissatisfies are related to how employees are treated and include such items as "company policy and administration practices, supervision, interpersonal relationships, working conditions, salary, status, and security. Herzberg (1974, p 18).

RESEARCH PROBLEM

To identify the level of satisfaction of employees in public and private banks of Dehradun.

OBJECTIVES OF THE STUDY

1. To identify the satisfaction level of employees in public and private sector banks of Dehradun.
2. To identify the factors influencing job satisfaction of employees in public and private sector banks in Dehradun.

RESEARCH METHODOLOGY

"Research methodology is a way to systematically solve the research problem." It is a structured enquiry that utilizes acceptable scientific methodology to solve problems and create new knowledge that is generally applicable. Scientific methods consist of systematic observation, classification and interpretation of data.

The researcher will use both descriptive and analytical type of research design for research study. The main objective of using the descriptive research is to describe the state of affairs, as it exists in present. It mainly involves survey and fact finding enquiries of different kinds.

The researcher also used analytical research design to analyze the existing facts from the data collected from the employees. Following method will be adopted step by step in order to complete the study:

1. Developing of Research Tools
2. Field Testing of the Research Tools
3. Data Collection

a. Primary Data Collection through conducting personal interviews on structured questionnaire on sample basis.

b. Secondary Data by studying various documents and protocols related to HR Management viz. RBI guidelines and Circulars, Bank HR Management Protocols etc.

4. Data Analysis with generation of appropriate table and graphs.
5. Conclusion.

RESEARCH INSTRUMENT

A structured questionnaire is used as the research instrument for the study.

QUESTIONNAIRE DESIGN

The questionnaire framed for the research study is a structured questionnaire in which all the questions are predetermined before conducting the survey. The form of question is of both closed and open type.

The scales used to evaluate questions are:

- Ordinal Likert 5 point scale (Highly Satisfied, Satisfied, Neutral, Dissatisfied, Highly Dissatisfied)

POPULATION

The population selected for this particular study is employees of public & private sector banks in Dehradun.

SAMPLING

The sampling population of this research includes 70 employees of public & private sector banks.35 employees from public sector banks and 35 from private sector banks. This research followed the random sampling method representative population. The population belongs to an age group of 25-60.

DATA ANALYSIS AND INTERPRETATION

TABLE 1: SALARY

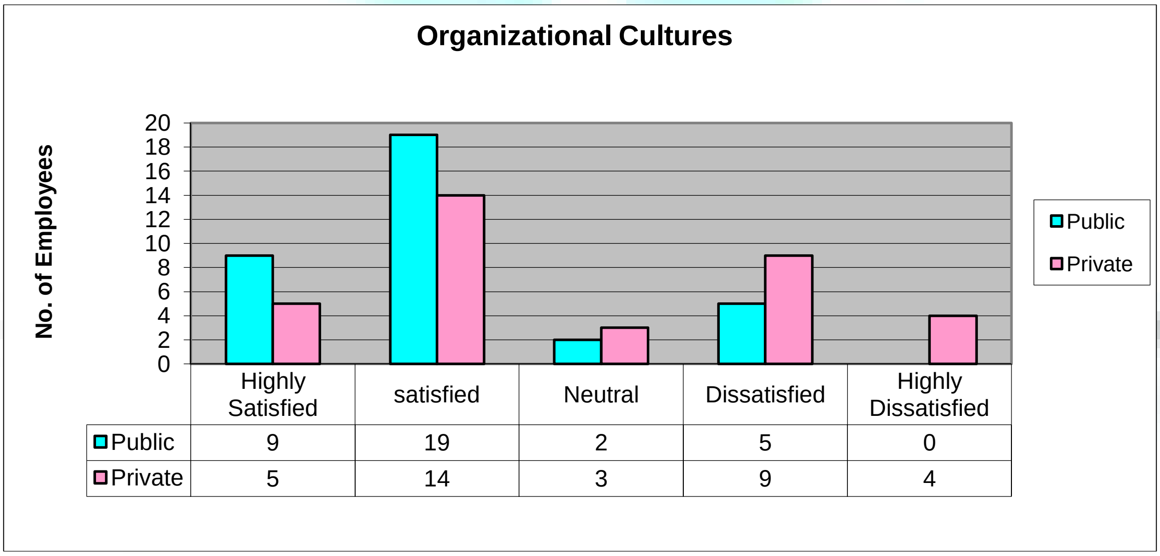
5 Point Scale	Public Banks	Private Banks
Highly Satisfied	10	8
Satisfied	17	12
Neutral	5	3
Dissatisfied	2	9
Highly Dissatisfied	0	3

INTERPRETATION

Employees of public sector banks are most satisfied in term of salary compared to private sector banks employees. Public sector employees get salary on time. They get reward or compensation according with their responsibilities.

TABLE 2: ORGANIZATIONAL CULTURES

5 Point Scale	Public Banks	Private Banks
Highly Satisfied	9	5
Satisfied	19	14
Neutral	2	3
Dissatisfied	5	9
Highly Dissatisfied	0	4

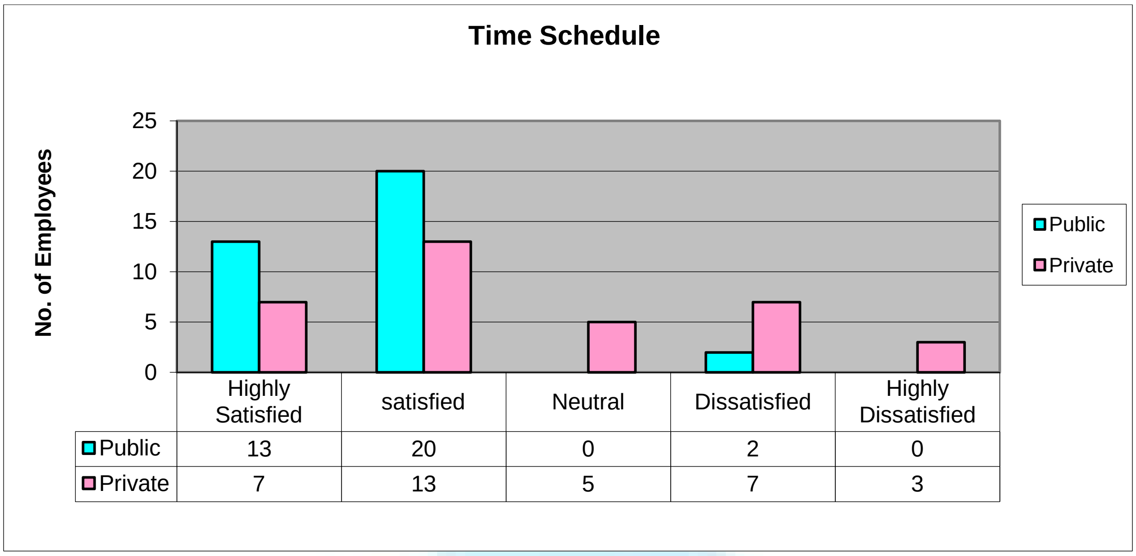


INTERPRETATION

Organizational culture is found higher among public sector bank employees compared to private sector bank employees. Public sector employees are satisfied with their immediate bosses and there are no conflicts between the boss and employees. Private sector employees are facing difficulties in maintaining healthy relationship with their bosses.

TABLE 3: TIME SCHEDULE

5 Point Scale	Public Banks	Private Banks
Highly Satisfied	13	7
Satisfied	20	13
Neutral	0	5
Dissatisfied	2	7
Highly Dissatisfied	0	3

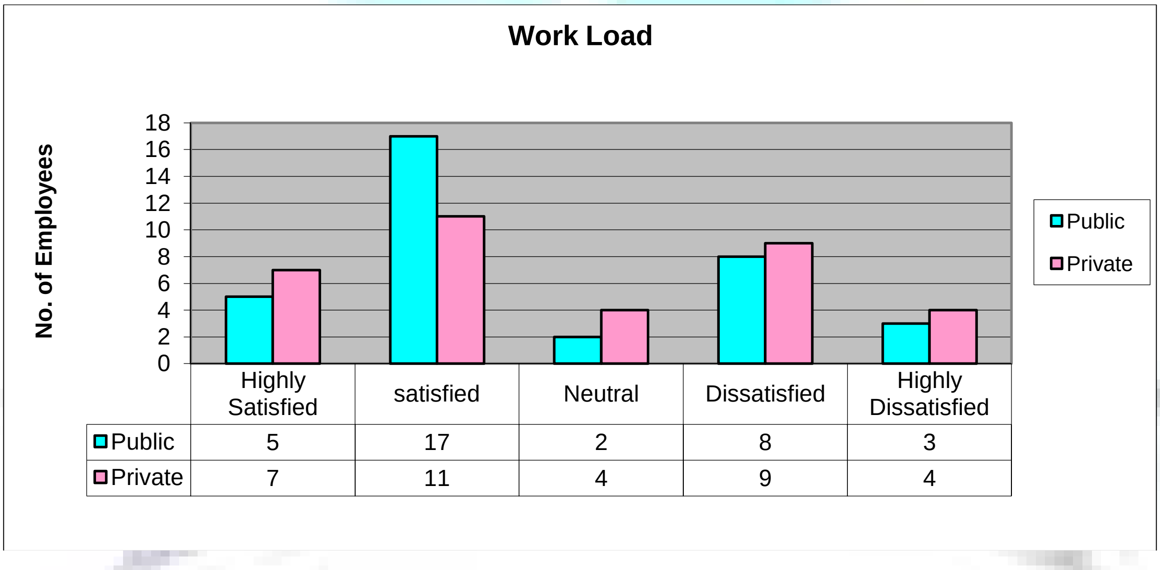


INTERPRETATION

Employees of public sector banks are more comfortable with time schedule of their job. In private sector banks employees has to do work for long hours.

TABLE 4: WORK LOAD

5 Point Scale	Public Banks	Private Banks
Highly Satisfied	5	7
Satisfied	17	11
Neutral	2	4
Dissatisfied	8	9
Highly Dissatisfied	3	4

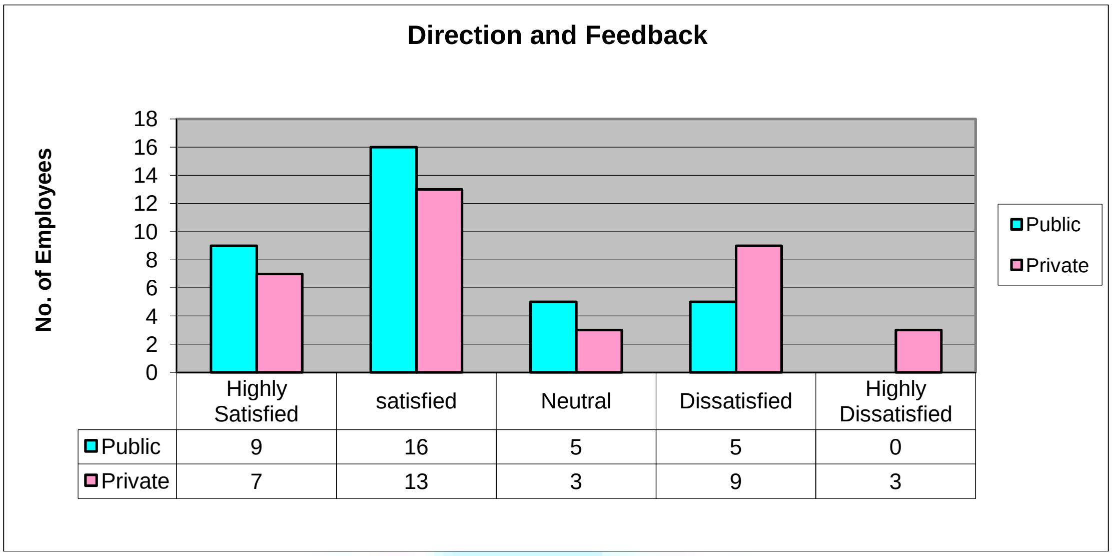


INTERPRETATION

Workload is considered to be quiet fair in public sector banks compared to that of private sector banks, as the schedule of their work is fair.

TABLE 5: DIRECTION AND FEEDBACK

5 Point Scale	Public Banks	Private Banks
Highly Satisfied	5	7
Satisfied	17	11
Neutral	2	4
Dissatisfied	8	9
Highly Dissatisfied	3	4

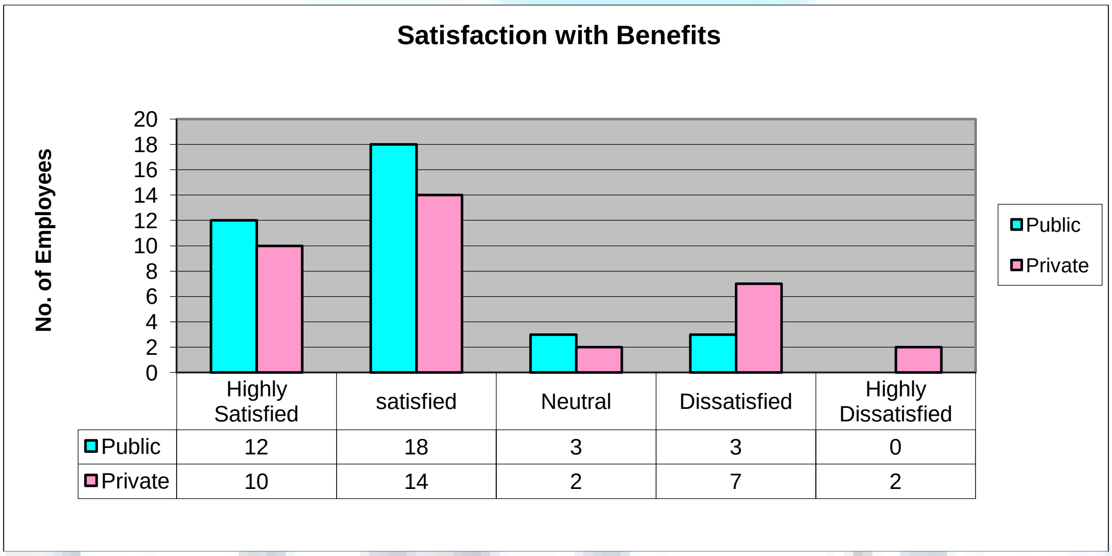


INTERPRETATION

Employees of private sector banks are dissatisfied from their direction and feedback system. Some of them are disagreeing at direction system and other at feedback system. Public sector employees get direction and feedback on time from their superiors for their performances. Hence public sector employees are more satisfied than private sector employees.

TABLE 6: SATISFACTION WITH BENEFITS

5 Point Scale	Public Banks	Private Banks
Highly Satisfied	12	10
Satisfied	18	14
Neutral	3	2
Dissatisfied	3	7
Highly Dissatisfied	0	2

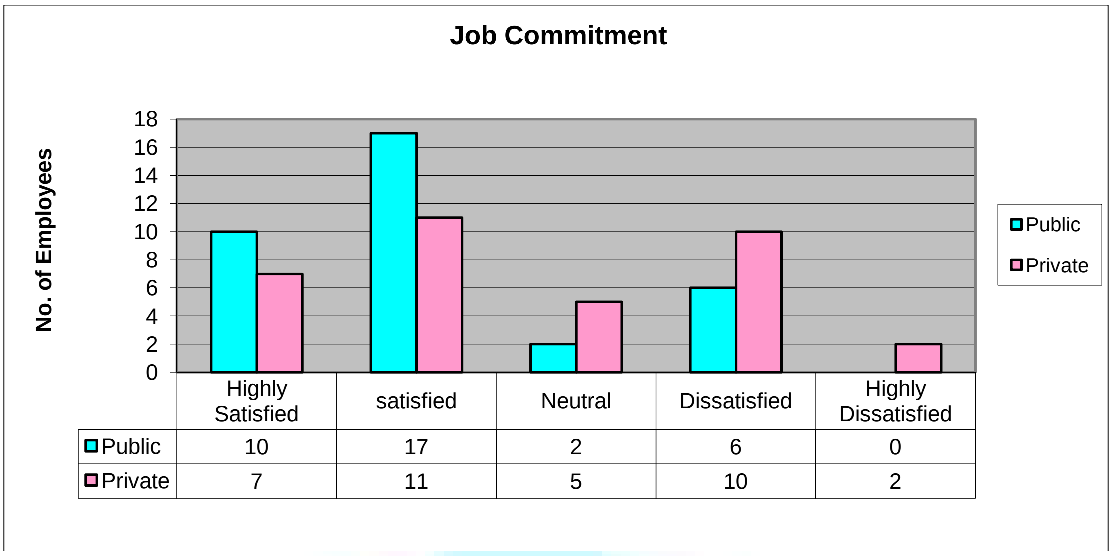


INTERPRETATION

Employees of private sector banks are dissatisfied because their company provides the benefits they need but not providing benefits their family needs. Public sector employees are happy with benefits (e.g. Loans, Bonus, etc.) providing by banks. Hence public sector employees are more satisfied than private sector employees.

TABLE 7: JOB COMMITMENT

5 Point Scale	Public Banks	Private Banks
Highly Satisfied	10	7
Satisfied	17	11
Neutral	2	5
Dissatisfied	6	10
Highly Dissatisfied	0	2



INTERPRETATION

Public sector banks employees are more committed to their job compared to private sector banks employees in terms of following variables: salary, organizational culture, time schedule, overtime reward, benefits.

TABLE 8: GENERAL WORKING CONDITIONS

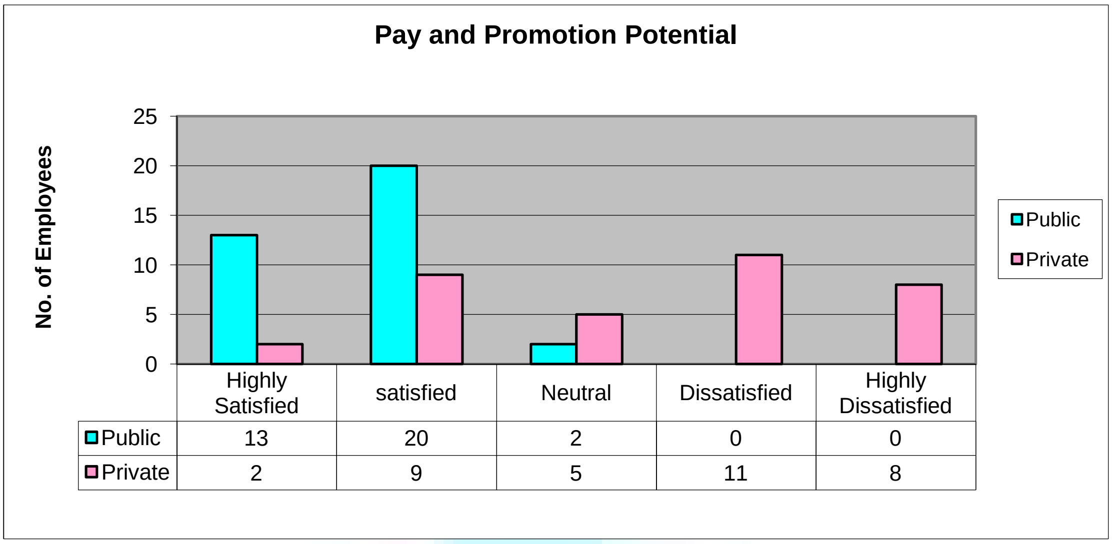
5 Point Scale	Public Banks	Private Banks
Highly Satisfied	9	6
Satisfied	16	13
Neutral	5	4
Dissatisfied	5	9
Highly Dissatisfied	0	3

INTERPRETATION

Satisfaction level of employees from general working conditions is almost equal but private sector employees are dissatisfied due to less flexibility of work. Employees of private sector are not happy with general working conditions of their organization. Sometimes they have to work for long hours. Hence public sector employees are more satisfied than private sector employees.

TABLE 9: PAY AND PROMOTION POTENTIAL

5 Point Scale	Public Banks	Private Banks
Highly Satisfied	13	2
Satisfied	20	9
Neutral	2	5
Dissatisfied	0	11
Highly Dissatisfied	0	8

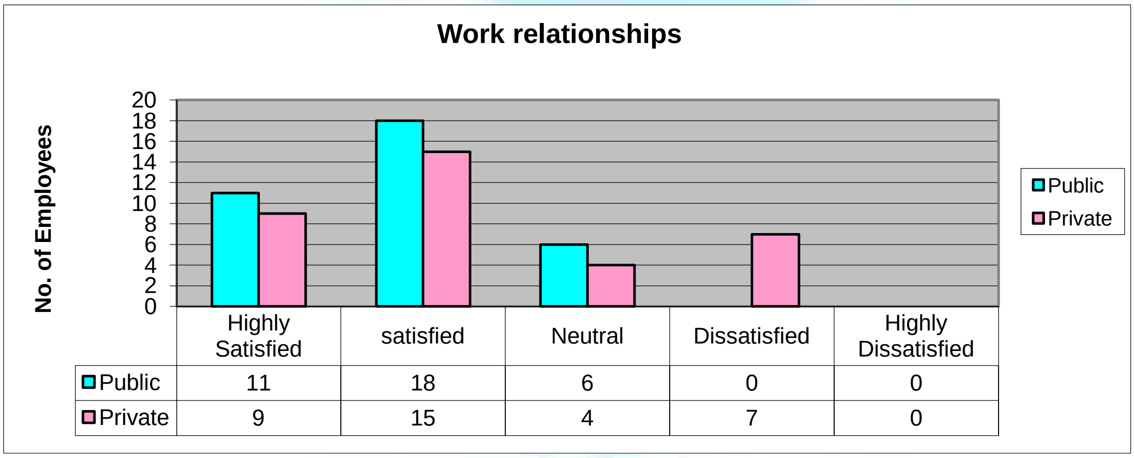


INTERPRETATION

Most of the employees of private sector are dissatisfied. Major cause of dissatisfaction is not having job security. Employees of public sector banks are highly satisfied with job security in their jobs. Thus, public sector employees are happy and satisfied due to job security even having less salary.

TABLE 10: WORK RELATIONSHIPS

5 Point Scale	Public Banks	Private Banks
Highly Satisfied	11	9
Satisfied	18	15
Neutral	6	4
Dissatisfied	0	7
Highly Dissatisfied	0	0



INTERPRETATION

51% employees in public sector and 43% employees in private sector are satisfied with their work relationships with superiors. Satisfaction is due to good relationships with their coworkers.

CONCLUSION

Employees of Public Banks are much more satisfied than private bank employees. Job security is one of the most important factors of job satisfaction. Secure job environment enhances the degree of job satisfaction. Most important cause of dissatisfaction in private employees is of job security.

Public banks provide many benefits to their employees. Employees in public banks get salary on time. In public banks employees have good relations with their bosses but in private bank employees facing difficulties in maintaining healthy relationships with their peers and bosses.

Job commitment is higher in public sector banks as compared to private sector banks. Working conditions are better in public banks than private banks. For the success of banking, it is very important to manage human resource effectively and to find whether its employees are satisfied or not.

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PERFORMANCE APPRAISAL SYSTEM FOR SALES FORCE IN FASTENER INDUSTRY: STUDY OF LPS ROHTAK

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ABSTRACT

Today fastener industry growing very speedily Performance appraisal continues to be a subject of interest and importance to human resource specialists. For decades, performance appraisal has received considerable attention in the literature, from both researchers and practitioners alike. Many authors (Bernardin & Klatt, 1985; Hall, Posner, & Hardner, 1989; Maroney & Buckley, 1992; Thomas & Bretz, 1994) maintain that there is a considerable gap between theory and practice, and that human resource specialists are not making full use of the psychometric tools available. To support their claim, these authors cite surveys of practitioners concerning current performance appraisal methods and use. Fasteners come in wide range of shapes and sizes depending upon end use and application. The largest consumer is the automobile sector accounting for over 50 percent of HT fasteners. Fastener can be classified broadly into two categories depending on their tensile strength; mild steels (MS) fastener and high tensile (HT) fasteners. Mild steel fastener are used across a broad spectrum mostly in general applications they are produced by the SSI and unorganized sector using lathes and ridings.

KEYWORDS

Feasibility of the system, Participation, Fastener.

INTRODUCTION

Put simply anything which joins together two things is a fastener, a broad and collective terms for nuts and bolts and screws, which keeps separate assemblies of any engineering system togher in a predetermined position. Festering is one of the joining methods, the other notable ones being welding and riveting. While the latter form permanent joints, fastener can be undone when required mostly for repairs and reconditioning. Fastener can be classified broadly into two categories depending on their tensile strength; mild steels (MS) fastener and high tensile (HT) fasteners. Mild steel fastener are used across a broad spectrum mostly in general applications they are produced by the SSI and unorganized sector using lathes and ridings.On the other hand HT fasteners, which are relatively technology intensive, are manufacturing by a few units in the organized sector via the cold heading process. HT fasteners can be classifies into standard (available of the shelf) and specialized (made to a specific design).Fasteners have two types of head, hexagonal and socket heads. Socket head screws are mainly used for industrial application in textite, machine tool, pumps etc. and also in erectin transmission towers. The hexagonal is predominantly used in automobiles and in general engineering. Specialized faster are for specific applications and aregenerally tailor made. Manufacturers of specialized fasteners have to follow prescribed design to make a fasteners. Fasteners come in wide range of shapes and sizes depending upon end use and application. The largest consumer is the automobile sector accounting for over 50 percent of HT fasteners. Sundasam Fasteners Industry is a leader in automative fasteners; while Precision Fasteners Limited leads in industrial fasteners. Though margins are higher in industrial fasteners. While SFL has recently entered the industrial segment, PFL is now entering the auto segment.

REVIEW OF LITERATURE

Performance appraisal continues to be a subject of interest and importance to human resource specialists. For decades, performance appraisal has received considerable attention in the literature, from both researchers and practitioners alike. Many authors (Bernardin & Klatt, 1985; Hall, Posner, & Hardner, 1989; Maroney & Buckley, 1992; Thomas & Bretz, 1994) maintain that there is a considerable gap between theory and practice, and that human resource specialists are not making full use of the psychometric tools available. To support their claim, these authors cite surveys of practitioners concerning current performance appraisal methods and use.

Nearly three and half decades ago, Taylor and Zawacki (1976) published the first of two articles that documented trends in performance appraisal usage among U.S. organizations. When comparing the results of two surveys taken five years apart, the authors noted a remarkable shift away from what they called collaborative approaches (e.g., MBO, BARS) and toward the more traditional performance appraisal techniques (graphic rating scales). Taylor and Zawacki (1984) hypothesized that managers, responding to the legal constraints prevalent in the 1980s, preferred techniques that were defensible in court. Accordingly, managers tended to be more satisfied with the objective traditional approaches, whereas their subordinates seemed to prefer the developmental collaborative methods.

OBJECTIVES OF RESEARCH

The first step of any Research process is to set the objectives. Objective is basically the basic motive behind undertaking any research. Objective is directly linked to the desired results. Following were the objectives of research:

1. To judge the feasibility of the system.
2. To trace out the sales force's participation in the system.

RESEARCH METHODOLOGY

In common parlance, research is the systematic gathering, recording and analyzing of data about related problems." Research Methodology is a way to systematically solve the research problem. Research methodology constitute of research method. For this project the steps which are taken are as follows:

RESEARCH DESIGN

Descriptive and exploratory research is selected for this study. Descriptive research enables to determine the answer to various questions formulated with prior knowledge of the situation or the problems under study. The nature of this research report is both Descriptive & Exploratory. The study will be conducted through the use of Questionnaire method & Opinion survey method. A structured schedule will be designed covering various aspect of performance appraisal system and its linkage with employees productivity and will be distributed to the sample selected randomly from the various employees working in some selected ceramic manufacturing organization in India.

FORMULATION OF HYPOTHESIS

Following assumption have been made to for proposed study

H1: There is no significant difference in the strategies for Managing performance appraisal for Competitive Advantage across various Fastener industries.

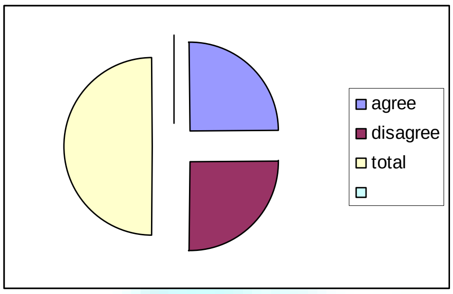
H2: there is no relationship between factors of performance appraisal and employees performance.

DATA ANALYSIS: RESULTS AND INTERPRETATIONS

FEASIBILITY OF SALES APPRAISAL SYSTEM

1. DOES THE APPRAISAL SYSTEM HELPS IN OPTIMUM UTILIZATION OF SALES FORCE?

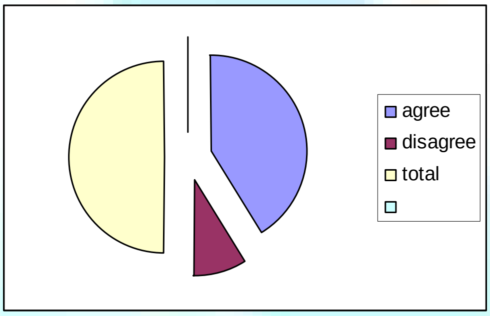
Agree	45
Disagree	45
Total	90



Above pie diagram represents the choice of sales force for the above question which clearly indicates that 50 percent of the people agree and 50 percent of them disagree over the optimum utilization of sales force in current system.

2. DOES THE PRESENT APPRAISAL SYSTEM GIVES ANY CHANCE FOR CONTROLLING THE CORRECTING THE WORKING OF SALES FORCE?

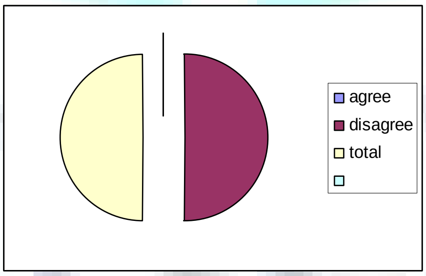
Agree	74
Disagree	16
Total	90



On the basis of response of the individuals. Thirty seven agree and eight disagree which shows that 85 percent of the work force feels that the current system is quite effective in controlling and correcting the working of sales force.

3.DOES THE PRESENT APPRAISAL SYSTEM GIVES ANY CHANCE TO KNOW WHETHER FACILITIES ARE SUFFICIENT FOR SALES PERSONNEL TO WORK EFFICIENTLY AND EFFECTIVELY?

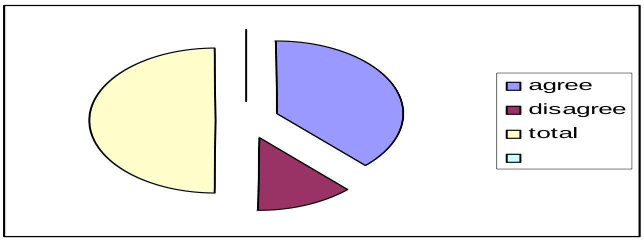
Agree	0
Disagree	90
Total	90



100 percent of the sales force strongly disagrees on this question. They feel that the present appraisal system is totally ineffective in knowing whether facilities are sufficient for them for working efficiently and effectively. Same has been depicted in the above diagram.

4. DOES THE SYSTEM GIVES ANY CHANCE TO KNOW THE HIDDEN POTENTIAL OF THE SALES FORCE ?

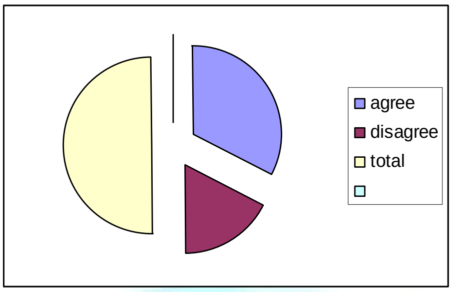
Agree	68
Disagree	22
Total	90



75 percent of the total sales force gave affirmative reply regarding the system ability etc. to give them a chance to know their hidden potential whereas 25 percent said a firm no.

5. DOES THE APPRAISAL SYSTEM HELPS IN HANDLING THE GRIEVANCES OF SALES FORCE ?

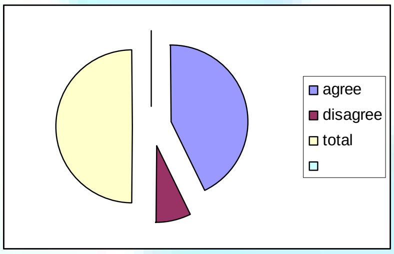
Agree	58
Disagree	31
Total	90



The above diagram shows that nearly 65 percent work force feels that present system handles their grievances whereas rest don't agree on this point.

6. IS THERE ANY SUPPORT SYSTEM ADOPTED FOR THE SALES FORCE WHO ARE NOT ABLE TO MEET THE SET STANDARDS.

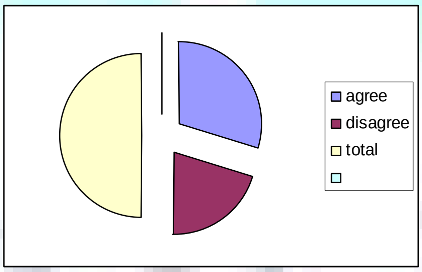
Agree	77
Disagree	13
Total	90



Out of 90 individuals 77 agreed and 13 disagreed on above question. Therefore a total of 85 percent individuals felt that there are sufficient support systems for the sales force who are not able to meet the standard.

7. DOES THE PRESENT APPRAISAL SYSTEM MOTIVATES YOU IN FUTURE ?

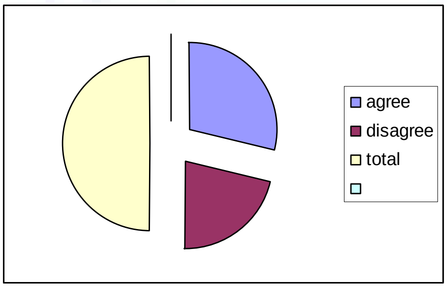
Agree	54
Disagree	36
Total	90



The above pie chart shows that 60 percent of the work force felt motivated due to present appraisal system and the rest 40 percent negated this fact.

8. DOES THE PRESENT SYSTEM HELPS IN ACCOMPLISHING CORPORATE OBJECTIVES?

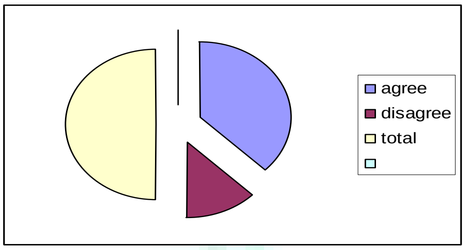
Agree	52
Disagree	38
Total	90



Nearly 58 percent of the work force felt that present appraisal system helps in accomplishing the company's objectives whereas the rest 42 percent disagreed on the aspect.

9.DO YOU FEEL THAT SOME IMPORTANT FACTORS ARE NOT CONSIDERED AT THE TIME OF APPRAISAL?

Agree	67
Disagree	23
Total	90

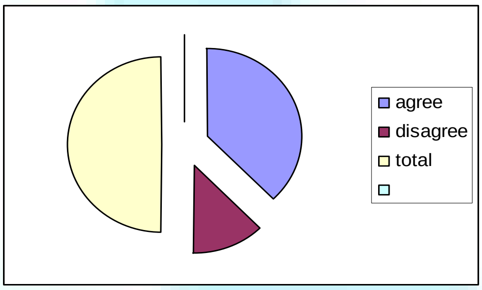


Only 25 percent of the work force felt that some more important factors should be included in the present system whereas rest 75 percent the present system constitutes all important factors at the time of appraisal.

B. PARTICIPATION OF SALES PERSONNEL IN SALES APPRAISAL SYSTEM

1. IS ANY PARTICIPATION GIVEN TO THE SALES FORCE AT THE TIME OF SETTING UP A NEW SYSTEM OR UPDATING THE OLD SYSTEM?

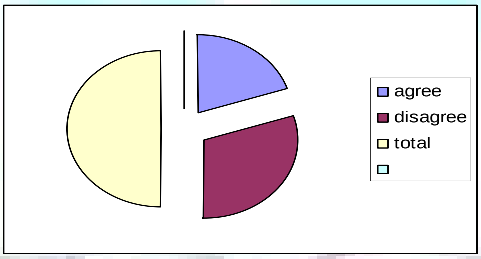
Agree	68
Disagree	22
Total	90



76 percent of the sales force felt that due participation is given to them at the time of setting up of new system or updating the old one whereas 24 said that they are not given a chance to do so.

2. DOES THE SYSTEM GIVES ANY CHANCE TO THE SALES FORCE FOR COMPLAINING ABOUT OR SUGGESTING ANY CHANGE IN PRESENT SYSTEM?

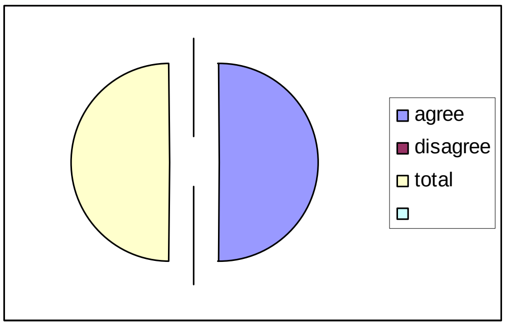
Agree	36
Disagree	54
Total	90



Nearly 40 percent of the sales force feels that they are paid an attention when they complain or suggest a change in system whereas 60 percent of them feel that they are not given any chance for a suggestion of a change in the present appraisal system.

3. WHETHER ANY CHANCE SHOULD BE GIVEN TO THE SALES FORCE TO EVALUATE THEMSELVES?

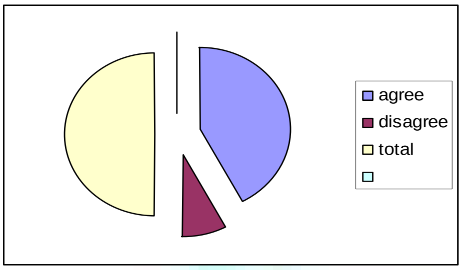
Agree	90
Disagree	0
Total	90



100 percent of the sales force recommended this point and stressed the need for a chance to be given to all individuals for self evaluation.

4. IS ANY PARTICIPATION GIVEN TO THE SALES FORCE AT THE TIME OF SETTING THE STANDARD OF PERFORMANCE?

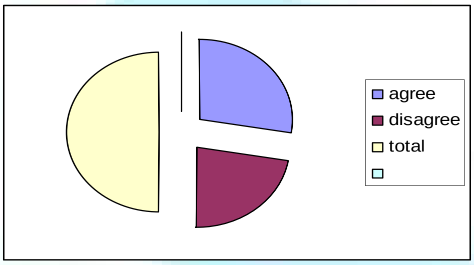
Agree	76
Disagree	14
Total	90



Nearly 85 percent of the sales force feels that they are given a chance to participate while standards of performance are set for them whereas 15 percent feel the other way out.

5. IS ANY OPPORTUNITY GIVEN TO THE SALES FORCE TO KNOW THEIR STRENGTHS AND WEAKNESSES?

Agree	50
Disagree	40
Total	90



55 percent of the sales force agreed that ample opportunities are provided to them for knowing their strengths and weaknesses whereas the rest of 45 percent of the sales force does not agree to this point.

FINDINGS

The study revealed that the present appraisal system is a mere evaluation of actual performance of the sales force and acts as a control measure if performance is not upto the mark. The system effectively controls and corrects the working of the sales force through proper support systems developed for the said purpose.Proper training is provided to the work force from time to time as per the requirement and there is also a well developed incentive system.The system aims at tracing out the hidden potential of the sales force and thus helping in the optimum utilization of the sales force. Since there are all possible efforts put in the system for tracing their potential, controlling and supporting their efforts and providing appropriate incentives, the work force feels motivated and hence the system helps in successfully accomplishing organizational objectives.Though, the system lacks in evaluating the working condition, no efforts are made to find out whether the facilities are sufficient for the sales force to work effectively and efficiently. Grievances of sales force are not handled properly and t here are a lot many factors that are not paid any attention at the time of appraisal.

As far as participation of the sales force in the system is concerned, the system is at a good footing. The existing sales force is always consulted while setting up of new system or updating the older one and their comments are given due consideration. Their complaints and suggestions are invited to improve and up date the present system. Every opportunity is given to the sales force to know their own strength and weaknesses and as per this analysis the standards are established in consultation with the sales force keeping in mind their sales territory, consumer profile and their individual selling problems. Besides everything in terms of participation being O.K. there is a need of a chance to be given to the sales force to evaluate themselves.

SUGGESTIONS

1. The should be timely evaluation of the existing facilities of work environment so that we can get a clear picture of existing facilities of whether they are sufficient for effective and efficient working of the sales force.
2. As per the changing trends/modern trend concerning the techniques to improve and enhance the sales adequate training viz. Art of negotiation etc. should be provided for a better turnover the organization.

CONCLUSION

This signifies that the system is most of the times free from biasness. Most of the total employees were satisfied with the last appraisal done by their seniors while much of the total previous appraisal in deserving cases. While customeropinion was the most favoured method of appraisal, the employees were least interested in being personally observed by the seniors. Overall the system is adopting more or less a 360 degree approach though there is a need to give due recognition to a few factors with all above effects the system is no doubt helping in improving the working of the department and the sales force turnover reduces as well. Though the appraisal poses some threat to the present position of the personnel (but that is a part of controlling their working), there is a need to make the appraisal system more transparent. The basis of setting up of the standard are to be clearly defined and the methods of measurement and evaluation of 11

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IMPACT OF GLOBAL RECESSION ON INDIAN FINANCIAL MARKET

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DELHI

ABSTRACT

Almost everybody today seems to be discussing about the US Recessionary trend and its impact on emerging countries, more particularly India Economists, Industrialists and the common man on the streets seem to have been horrified by the very thought of recession in India and that too due to US. Decreasing industrial production, inflation, decreasing job opportunities, cost cutting, reducing purchasing power parity, et al are the aspects discussed among them through every possible mode like articles, talks & walks and places like washrooms, canteens, etc. In this paper we will be looking on these important points: The main reason of crisis in India is Globalization. The Indian banking system has had no direct exposure to the sub-prime mortgage assets or to the failed institutions. Our banks continue to remain safe and healthy. India's recent growth has been driven predominantly by domestic consumption and domestic investment. The contagion of the crisis has spread to India through all the channels –the financial channel, the real channel, and importantly, as happens in all financial crises, the confidence channel. The failure of Lehman Brothers in mid-September was followed in quick succession by several other large financial institutions coming under severe stress. This made financial markets around the world uncertain and unsettled. This contagion, spread to emerging economies, and to India too. There is evidence of economic activity slowing down. Real GDP growth has moderated in the first half of 2008/09 and the projected GDP for 2010 is 7.7%. For the first time in seven years, exports have declined in absolute terms for three months in a row during October-December 2008. The index of industrial production has shown negative growth for two recent months and investment demand is decelerating. All these factors suggest that growth moderation may be steeper and more extended than earlier projected. In addressing the fall out of the crisis, India has several advantages like Headline Inflation. The decline in global crude prices and naphtha prices will reduce the size of subsidies to oil and fertilizer companies, opening up fiscal space for infrastructure spending.

KEYWORDS
Global recession, impact on Indian markets, lessons learnt, recovery trends, monetary and fiscal implication, response to crisis.

INTRODUCTION
Alan Greenspan called it a “once in a century credit tsunami”, born of a collapse deep inside the US housing sector. Instability has surged from sector to sector, first from housing into banking and other financial markets, and then on into other parts of the real economy. The expansion of 2002-2007 began with a bang-the bursting of the US tech-stock bubble in 2000-2001, which had a substantial wealth effect on American households. To minimize the duration and depth of the resulting recession, the Federal Reserve aggressively eased monetary policy by reducing the Fed Fund rate by 27 times between January 2001 and 2003, with the funds rate falling from 6.5% to 1.0% over the period. This expansionary monetary policy averted a deeper recession by stimulating boom in the housing market, which soon turned into a housing bubble.

Contrary to the 'decoupling theory', emerging economies too have been hit by the crisis. The decoupling theory, which was rationally fashionable even as late as a year ago, held that even if advanced economies went into a downturn, emerging economies will remain untouched because of their substantial foreign exchange reserves, improved policy framework, strong corporate balance sheets and relatively healthy banking sector. In a rapidly globalizing world, the 'decoupling theory' was never very influential. Given the evidence of the last couple of years – capital flow reversals, sharp widening of spreads on sovereign and corporate debt and sudden currency depreciations - the 'decoupling theory' stands totally invalidated. Reinforcing the notion that in a globalized world no country can be an island, growth prospects of emerging economies have been diluted by the cascading financial crisis with, of course, considerable variation across countries.

The Indian economy looked relatively insulated from the global financial crisis that started in August 2007 when the ‘sub-prime mortgage’ crisis first surfaced in the US. In fact, the RBI was raising interest rates until July 2008 with the view to cooling the growth rate and hold inflationary pressures. However, as the financial meltdown, morphed in to a global economic downturn with the collapse of Lehman Brothers on 23 September 2008, the impact on the Indian economy was almost immediate. Credit flows suddenly dried-up and, overnight, money market interest rate spiked to above 20 percent and remained high for the next month. Many economists alleged that the ‘Great Recession’ of 2008-2009 was the worst global recession since the 1930s.

RESEARCH OBJECTIVE
This paper is an attempt to look into the impact of Global Recession on Indian Financial market and the Lessons learnt from it.

RESEARCH METHODOLOGY
Secondary Data

IMPACT ON INDIAN FINANCIAL MARKET
The fiscal year 2009-10 began as a difficult one. There was a significant slowdown in the growth rate in the second half of 2008-09, following the financial crisis that began in the industrialized nations in 2007 and spread to the real economy across the world. The growth rate of the gross domestic product (GDP) in 2008-09 was 6.7 per cent, with growth in the last two quarters hovering around 6 per cent. There was apprehension that this trend would persist for some time, as the full impact of the economic slowdown in the developed world worked through the system. It was also a year of calculation for the policymakers, who had taken a calculated risk in providing substantial fiscal expansion to counter the negative fallout of the global slowdown. Inevitably, India’s fiscal deficit increased from the end of 2007-08, reaching 6.8 per cent (budget estimate, BE) of GDP in 2009-10. A delayed and subnormal monsoon added to the overall uncertainty. The continued recession in the developed world, for the better part of 2009-10, meant a sluggish export recovery and a slowdown in financial flows into the economy.

However, over the span of the year, the Indian economy posted a remarkable recovery, in terms of overall growth figures and in terms of certain fundamentals, which justify optimism for the economy in the medium to long term. The extent of impact has been restricted due to several reasons such as-

- Indian financial sector particularly our banks had no direct exposure to tainted assets and it’s off- balance sheet activities have been limited. The credit derivative market is in nascent stage and there are restrictions on investments by residents in such products issued abroad.
- India’s comfortable foreign exchange reserves provide confidence in our ability to manage our balance of payments notwithstanding lower export demand and dampened capital flows.
- India's recent growth has been driven predominantly by domestic consumption and domestic investment. External demand, as measured by merchandize exports, accounts for less than 15 per cent of our GDP.

- Accordingly, in India, while encouraging foreign investment flows, especially direct investment inflows, a more cautious, nuanced approach has been adopted concerning debt flows. Debt flows in the form of external commercial borrowings are subject to ceilings and some end-use restrictions, portfolio investment in government securities and corporate bonds are also subject to macro ceilings, which are modulated from time to time taking into account developing macroeconomic and monetary conditions. Thus, prudential policies have attempted to prevent excessive recourse to foreign borrowings and dollarisation of the economy.

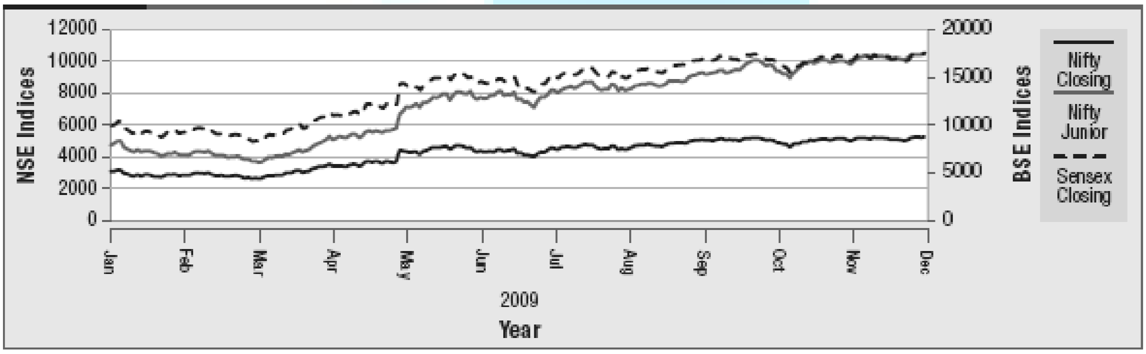
Despite these mitigating factors, India too had to weather the negative impact of the crisis mainly because of the increasing integration of the Indian economy and its financial markets with rest of the world. If we take a measure of globalization, as the ratio of total external transactions (gross current account flows plus gross capital flows) to GDP, this ratio has more than doubled from 46.8 per cent in 1997-98 to 117.4 per cent in 2007-08. The contagion of the crisis had spread to India through the financial channel, the real channel, and importantly, confidence channel. Because of the global liquidity squeeze, Indian banks and corporates found their overseas financing drying up, forcing corporates to shift their credit demand to the domestic banking sector. In addition, the forex market came under pressure because of reversal of capital flows as part of the global deleveraging process. As regards the real channel, the transmission of the global cues to the domestic economy had been quite straight forward – through the slump in demand for exports. The United States, European Union and the Middle East, which account for three quarters of India's goods and services trade, are in a corresponding down turn. Beyond the financial and real channels of transmission as above, the crisis also spread through the confidence channel. In sharp, contrast to global financial markets, which went into a crisis of confidence, Indian financial markets continued to function in an orderly manner. Nevertheless, the tightened global liquidity situation in the period immediately following the Lehman Brothers failure in mid-September 2008, coming as it did on top of a turn in the credit cycle, increased the risk aversion of the financial system and made Indian banks cautious about lending.

I. SECONDARY MARKET

The stock market of India has witnessed a radical transformation in last decade or so owing to the judicious policy measures implemented through the financial sector reforms of nineties. The adoption of international quality trading and settlement mechanisms and reduction of transactions costs have made the investors, domestic and foreign, more optimistic which in turn evidenced a considerable growth in market volume and liquidity. The market features a developed regulatory framework, a modern market infrastructure, removal of barriers to the international equity investment, better allocation and mobilization of resources and increased transparency. Despite this transformation, Indian stock market has recently shown greater volatility due to global financial crisis. It was the combined effect of the reversal of portfolio equity flows and the reduced availability of international capital both debt any equity that led to the bearish influence on stock market.

However, the Indian equity markets, which had declined sharply during 2008, reflecting the volatility in international financial markets and foreign institutional investment outflows, began the year 2009 on a subdued note. The market remained range bound during April-March 2009 but exhibited signs of recovery from April 2009. With the revival of foreign institutional investors' (FIIs) interest in emerging market economies including India, the equity markets gained strength during May-July 2009. There was a fresh spell of bullish sentiment in September 2009, with the Bombay Stock Exchange (BSE) Sensex recording a high of 17,126.84 during the month and then crossing 18000 for the first time in 25 months on 7 April 2010. Now, the stock market of India has returned to its previous growth track in spite of a greater degree of volatility.

FIGURE 1: MOVEMENT OF INDICES OF NSE AND BSE



SOURCE: Economic Survey, 2009-2010, Government of India

II. PRIMARY MARKET

The primary market is mainly used by issuers for raising fresh capital from the investors by making initial public offers or rights issues or offers for sale of equity or debt.

Though, resource mobilization from the primary market through equity investments was sluggish in 2009 both in terms of number of issues and amount raised through public rights issues and follow-on public offerings, there was an increase in debt market activity and private placements. The total number of initial public offerings (IPO's) declined to 20 in 2009 from 37 in 2008. The total amount mobilized through equity issues in 2009 was lower at Rs 23,098 crore as compared to Rs 49,485 crore raised in 2008. The amount raised through IPO has however, increased slightly in 2009 to Rs 19,296 crore from Rs 18,393 crore in 2008.

TABLE 1: RESOURCE MOBILIZATION THROUGH THE PRIMARY MARKET (RS. CRORE)

Mode	Calendar Year			
	2006	2007	2008	2009(P)
1. Debt	389	594	0	3,500
2. Equity	32,672	58,722	49,485	23,098
of which, IPOs	24,779	33,912	18,393	19,296
Number of IPOs	75	100	37	20
Mean IPO size	330	339	497	965
3. Private Placement	1,17,407	1,84,855	1,55,743	2,38,226
4. Euro Issues (ADR/GDR)	11,301	33,136	6,271	15,266
Total (1 to 4)	1,61,769	2,77,307	2,11,499	2,80,090

SOURCE: SEBI and RBI (For Euro issues) and Economic Survey 2009-10. P-Provisional

III. FOREX MARKET

Foreign exchange reserves are an important component of the Balance of payment and an essential element in the analysis of an economy's external position. India's foreign exchange reserves comprise of foreign currency assets (FCA), gold, special drawing rights (SDRs) and reserve position in the International Monetary Fund (IMF). The level of foreign exchange reserves is largely the outcome of the RBI's intervention in the foreign exchange market to smoothen exchange rate volatility and valuation changes due to movement of the US dollar against other major currencies of the world. Foreign exchange reserves are accumulated when there is absorption of the excess foreign exchange flows by the RBI through intervention in the foreign exchange market, aid receipts, interest receipts, and funding from the International Bank for Reconstruction and Development (IBRD), Asian Development Bank (ADB), International Development Association (IDA), etc. Beginning from a low level of US$ 5.8 billion at end-March 1991, foreign exchange reserves increased progressively to US$ 25.2 billion by end-March 1995, US$ 38.0 billion by end-March 2000, US$ 113.0 billion by end-March 2004 and US$ 199.2 billion by end-March 2007. They reached their peak at US$ 314.6 billion in end-May 2008. The reserves declined thereafter to US$ 252.0 billion at the end of March 2009. The decline in reserves in 2008-09 was because of the fallout of the global crisis and strengthening of the US dollar vis-à-vis other international currencies and the fact that our reserves are measured in dollar terms. During 2009-10, the level of foreign exchange reserves increased from US$ 252.0 billion at the end of March 2009 to US$ 283.5 billion at the end of December 2009, mainly because of valuation gain as the US dollar depreciated against most of the other major international currencies in 2009. In fiscal 2008-09, the widening of the Current Account Deficit coupled with net capital outflows resulted in the drawdown of foreign exchange reserves of US$ 20.1 billion (excluding valuation) as against an accretion of US$ 92.2 billion in 2007-08. In fiscal 2008-09, the rupee depreciated against major international currencies, except the pound sterling, due to deceleration in capital flows and widened trade deficit. The annual average exchange rate of the rupee in 2008-09 was Rs 45.99 per US dollar, Rs 64.98 per euro and Rs 46.22 per 100 yen, indicating depreciation by 12.5 per cent, 12.2 per cent and 23.5 per cent respectively over the annual average exchange rate during 2007-08. However, annual average exchange rate of the rupee per pound sterling of 78.29 in 2008-09 indicated appreciation by 3.2 per cent over 2007-08. In fiscal 2009-10, the rupee has strengthened against the US dollar on the back of significant turnaround in FII inflows, continued inflows under FDI and NRI deposits, better macroeconomic performance of the Indian economy and weakening of the US dollar in international markets.

TABLE 2: SUMMARY OF CHANGES IN FOREIGN EXCHANGE RESERVE (US$ Billion)

Sl. No.	Year	Foreign exchange reserves at the end of financial year (end March)	Total Increase / decrease in reserves
1	2004-05	141.5	+ 28.6
2	2005-06	151.6	+ 10.1
3	2006-07	199.1	+ 47.5
4	2007-08	309.7	+ 110.6
5	2008-09	252.0	- 57.7
6	2009-2010 (upto Dec. 2009)	283.5	+31.5

SOURCE: RBI and Economic survey 2009-10

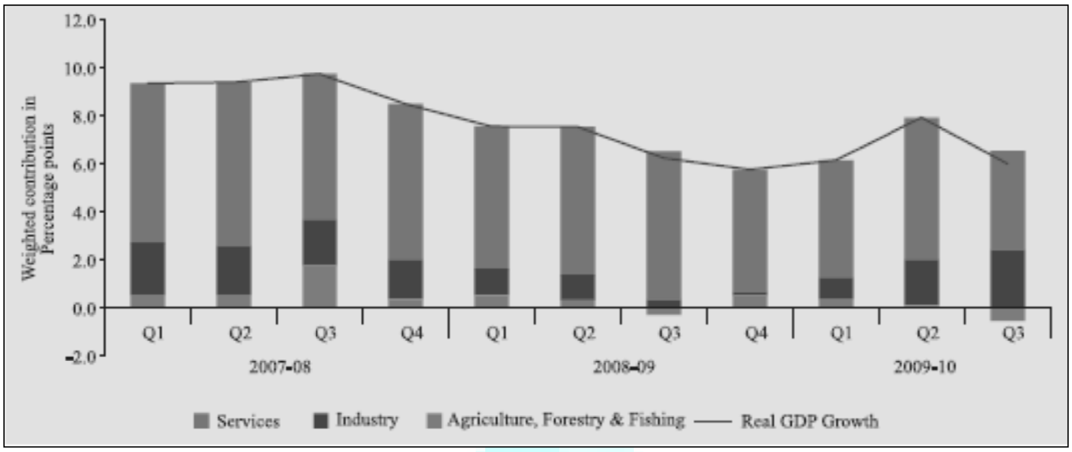
IV. BANKING SECTOR

The Indian banking sector was not completely insulated from the effects of the slowdown in the economy in 2008-09. The consolidated balance sheets of Scheduled Commercial Banks (SCBs) expanded by 21.2% in end-March 2009 as compared to 25% in the previous year. While the balance sheets of Public Sector Banks maintained their growth momentum, private-sector and foreign banks registered a deceleration in growth. Overall, the incremental credit–deposit (C-D) ratio declined sharply reflecting the slowdown in credit growth. Apart from cyclical factors, which led to slowdown after a period of high credit growth, the deceleration was accentuated this year because of the overall slowdown in the economy in the aftermath of the global financial turmoil. As the Indian banking sector was not completely insulated from the effects of the slowdown, the growth rates of income as well as expenditure of the SCBs slowed down, leading to deceleration in growth of net profits. Indian banks recovered a higher amount from Non Performing Assets (NPAs) during 2008-09 as compared to the previous year, pointing towards efforts for improvement in the asset quality of banks. Though some slippage was to be expected in the current global context, it has been moderate as compared to the problems faced by banks all over the world.

V. SLOWING GDP

In the past 5 years, the economy has grown at an average rate of 8-9 per cent. Services, which contribute more than half of GDP, have grown fastest along with manufacturing which has also done well. However, this impressive run of GDP ended in the first quarter of 2008. According to the revised estimates released by the CSO (May 29, 2009) for the overall growth of GDP at factor cost at constant prices in 2008-09 was 6.7 per cent as against the 7 per cent projection in the midyear review of the Economy presented in the Parliament on December 23, 2008. The slowdown in growth of GDP was more clearly visible from the growth rates over successive quarters of 2008- 09. In the first two quarters of 2008-09, the growth in GDP was 7.6 and 7.5 respectively, which fell to 5.8 per cent in the fourth quarters of 2008-09. The last quarter was an added deterioration in manufacturing due to the deepening impact of the global crisis and a slowdown in domestic demand. However, as anticipated in the Economic Survey 2008-09, the economy exhibited a sharp 'V'-shaped recovery within a span of a few months of the stimulus measures, both fiscal and monetary, working through the system. The turnaround in the growth momentum was established with the (Q2) 2009-10 estimates, when the economy recorded a GDP growth of 7.9 per cent as against 7.5 per cent in the corresponding quarter of 2008-09.

FIGURE2: SECTORAL CONTRIBUTIONS TO GROWTH

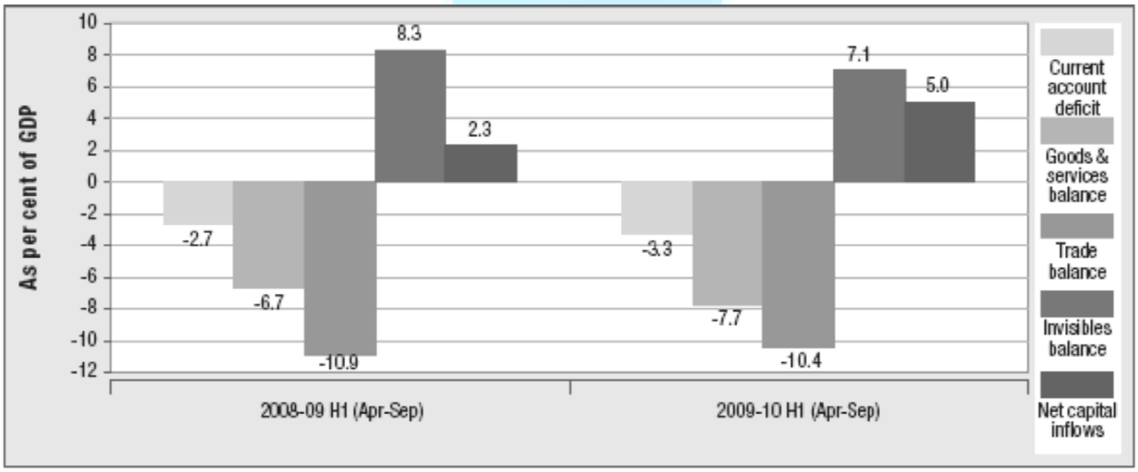


SOURCE: RBI

VI. STRAIN ON BALANCE OF PAYMENTS

India's BOP exhibited considerable resilience during fiscal 2008-09 despite one of the severest external shocks. The current account balance [(-) 2.4 per cent of GDP in 2008-09 vis-à-vis (–) 1.3 per cent in 2007-08] remained well within the sustainable limits and there was limited use of foreign exchange reserves, despite massive decline in net capital flows to US$ 7.2 billion in 2008-09 as against US$ 106.6 billion in 2007-08. As per the latest BOP data for fiscal 2009-10, exports and imports showed substantial decline during April-September (H1) of 2009-10 vis-à-vis the corresponding period in 2008-09. There has been improvement in the BOP scenario during H1 of 2009-10 over H1 of 2008-09, reflected in higher net capital inflows and lower trade deficit. However, the invisible surplus declined and current account deficit widened vis-à-vis the corresponding period last year.

FIGURE 3: CURRENT ACCOUNT DEFICIT, GOODS AND SERVICES BALANCE, TRADE BALANCE, INVISIBLES BALANCE AND NET CAPITAL INFLOWS AS A PERCENTAGE OF GDP



SOURCE: Economic Survey 2009-10

VII. UNEMPLOYMENT

Employment opportunities in the current financial year were affected by the global financial crisis and economic slowdown in India. A sample survey conducted by the Labour Bureau, Ministry of Labour and Employment to measure the Effect of Economic Slowdown on Employment in India (July-September 2009). Survey included eight sectors, namely textiles, leather, metals, automobiles, gems & jewellery, transport, IT/BPO and handloom/power loom. It was observed that employment declined by 4.91 lakh during the October-December 2008 quarter, increased by 2.76 lakh during January-March 2009, again declined by 1.31 lakh during April-June 2009; and then increased by 4.97 lakh during the July-September 2009 quarter. Thus, even based on this small sample, estimated employment in the selected sectors has experienced a net addition of 1.51 lakh during the last one-year period from October 2008 to September 2009.

RESPONSE TO THE CRISIS

Fiscal 2009-10 has witnessed a global recovery after a crisis of severe worldwide proportions. The risks of double-dip recession however remain, with need for caution in dealing with high public debt and unwinding of fiscal and monetary stimuli. The Indian economy also saw a turnaround, registering 7 per cent growth during H1 (April –September 2009) of 2009-10, after touching a low of 5.8 per cent in the third and fourth quarters of 2008-09. The balance-payments (BOP) situation improved on the back of a surge in capital flows and rise in foreign exchange reserves, which was accompanied by rupee appreciation.

I. FISCAL RESPONSE

The fiscal expansion undertaken by the Central Government as a part of the policy response to counter the impact of the global economic slowdown in 2008-09 continued in fiscal 2009-10.

- The expansion took the form of tax relief, to boost demand and increased expenditure on public projects to create employment and public assets. The net result was an increase in fiscal deficit from 2.6 per cent in 2007-08 to 5.9 per cent of the revised GDP (new series) in 2008-09 and 6.5 per cent in the budget estimates for 2009-10.
- As part of the fiscal stimulus, the Government enhanced the borrowing limits of the State Governments by relaxing the targets by 100 basis points. As a proportion of the GDP, the Plan expenditure at 5.3 per cent of the GDP in 2009-10(BE) was the highest in recent years. Non-Plan expenditure grew by 19.4 per cent and 14.8 per cent respectively in 2008-09 and 2009-10 (BE).
- The approach of the Government was to increase the disposable income in the hands of the people by expanding public expenditure on programmes like the National Rural Employment Guarantee Act (NREGA) and on rural infrastructure.
- Fiscal 2009-10 saw the strengthening of several public initiatives and programmes with a view to cushioning the impact of the global slowdown on the more vulnerable segments of the population in the country.

- The continuation of the path of fiscal prudence complemented the recovery process in the near term and laid the foundation for reviving the growth momentum in the long term.
- The initiatives have been taken to control fiscal deficit through institutional reform measures like the intention to move towards a nutrient- based subsidy regime in fertilizers; encouraging people's participation in public sector undertakings (PSUs) through disinvestment; and bringing about structural changes in direct taxes through the draft Direct Taxes Code and moving towards a harmonized goods and services tax (GST).
- As part of fiscal stimulus package to revive demand, it was excise that bore the brunt of tax cuts and the effect of economic slowdown was evident in the consumption than on income. Exemption from service tax provided to inter-State or intra-State transportation of passengers in a vehicle bearing "contract carriage permit", with specified conditions.
- Exemption from service tax leviable under "banking and other financial services" or under "foreign exchange broking services" provided to inter-bank purchase and sale Services provided in relation to transport of goods by rail exempted from service tax.

II. MONETARY RESPONSE

The monetary response in India since October 2009 has been calibrate to India's specific macro economic policy in the wake of the global economic crisis, the reserve bank pursued an accommodative monetary policy beginning in March 2008. This policy instilled confidence in market participants, mitigated the adverse impact of the global financial crisis on the economy and ensured that the economy started recovering ahead most other economies.

The stance of monetary policy against this of background was intended to anchor inflation expectations, while being prepared to respond appropriately, swiftly and effectively to further inflationary pressures. Actively manage liquidity to ensure that the growth in demand for credit by both the private and the public sectors in a non-disruptive way. Maintain an interest regime consistent with price, output and financial stability.

The monetary policy specifies the following measures:

- The repo rate(the rate at which RBI lends to banks) has been raised by 25 basis points from 5.0% to 5.25%
- The reverse repo has been increased by 25 basis points from 3.5% to 3.75%
- The cash reserve ratio (CRR) of scheduled banks has been by 25 basis points from 5.75% to 6.0%.

OUTLOOK FOR INDIA: CONCLUDING OBSERVATIONS

- India has by-and-large been spared of global financial contagion due to the sub-prime turmoil since India's growth process has been largely domestic demand driven and its reliance on foreign savings has remained around 1.5 per cent in recent period along with a very comfortable level of forex reserves.
- The credit derivatives market is in an embryonic stage; there are restrictions on investments by residents in such products issued abroad; and regulatory guidelines on securitization do not permit immediate profit recognition.
- Financial stability in India has been achieved through perseverance of prudential policies, which prevent institutions from excessive risk taking, and financial markets from becoming extremely volatile and turbulent.
- In spite of being one of the least affected by the global crisis, risks such as double-digit recession with high unemployment rate, growing fiscal deficit and high public debt - GDP ratios in advanced economies remain, which can have direct implications for the Indian economy, with increasing integration with the rest of the world.
- The recent global financial turmoil raised many issues about governance of financial intermediaries and awareness of investors. Investor awareness is a prerequisite for investor protection. In fact, investor protection and education are two sides of the same coin. A simultaneous and coordinated effort on both fronts would help investors take well-informed financial decisions besides protecting their interests and ensuring orderly conditions in markets. Greater effort therefore is needed for investor education and promoting investors' protection.
- There are some deep changes that have taken place in India, which suggest that the economy's fundamentals are strong. First, the rates of savings and investment have reached levels that even ten years ago would have been dismissed as a self-delusion for India. On this important dimension, India is now completely a part of the world's fast growing economies. In 2008-09, gross domestic savings as a percentage of GDP were 32.5 per cent and gross domestic capital formation 34.9 per cent.
- There has been a revival in investment and private consumption demand, though the recovery is yet to attain the pre-2008 momentum. Indian exports also have recorded impressive growth in November and December 2009 and early indications of the January 2010 data on exports are encouraging. Further, infrastructure services, including railway transport, power, telecommunications and, more recently but to a lesser extent, civil aviation, have shown a remarkable turnaround since the second quarter of 2009-10.
- In an analysis of 63 companies of the list of BSE 500 that announced their results for the last quarter of 2009-2010 by April 24, 2010, the year on year aggregate profit growth was a healthy 26%, with the corresponding revenue growth of 50%. The total profits of the 63 companies rose from Rs. 15156 crore in the quarter ended March 2009 to Rs. 19,099 crore in the latest quarter.
- Therefore, a reasonable forecast for the year 2010-11 is that the economy will improve its GDP growth by around 1 percentage point from that witnessed in 2009-10. Thus, allowing for factors beyond the reach of domestic policymakers, such as the performance of the monsoon and rate of recovery of the global economy, the Indian GDP is expected to grow around 8.5 +/- 0.25 per cent, with a full recovery, breaching the 9 per cent mark in 2011-12. If, in addition to this, there are improvements in infrastructure, both urban and rural, and reform in governance and administration, which cuts down bureaucratic transactions costs that slow down enterprise in India and breed corruption, it is entirely possible for India to move into the profound domain of double-digit growth and even attempt to get into the mantle of the fastest-growing economy in the world within the next four years.

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IMPACT OF PRIVATIZATION ON INDIAN BANKING SECTOR IN THE GLOBALIZATION ERA

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ABSTRACT
Privatization has become a popular measure for solving the organizational problems of governments by reducing the role of the state and encouraging the growth of the private sector enterprises. However, privatization takes a number of forms and has been approached in various ways during the move away from government control to other forms of owner¬ship in developing countries. Privatization has leaded the corporate world into the new world of dynamic competition with the search of new resources, global markets, expanded global networking. The consequences of privatization have focused onto the fields of economics, international relations, management and sociology. The scope of the privatization aspect is different for different fields of business and different sectors. Specially the financial sector and banking sector. The economy of the nation is focused on the financial and banking sector. In this paper an attempt has been made to identify the general sentiments, a revolutionary approach towards privatization and future challenges for the Indian banking industry. This article is divided in three parts. First part includes the introduction and literature review. The second part discusses the Indian banking scenario and challenges face by Indian banking industry. Third part concludes that urgent emphasis is required on the Indian banking product and marketing strategies in order to get sustainable competitive edge over the intense competition from national and global banks.

KEYWORDS
Privatization, Banking Industry, Performance, India.

INTRODUCTION
Privatization is the process of transferring ownership of a business, enterprise, agency, public service or public property from the public sector (a government) to the private sector, either to a business that operates for a profit or to a non-profit organization. Privatization is both a challenge and an opportunity for Indian banks to gain strength in the domestic market and increase presence in the global market. On the basis of various parameters, paper finds that there is a fast penetration of foreign banks in India and public sector banks, particularly SBI is intensively entering in foreign countries, same is the case of ICICI Bank as this bank is capturing foreign markets at a fast pace. At the end, the present paper finds some challenges and also explores the future opportunities. On the basis of the experience of already global went banks, paper suggests some strategies that how Indian banks can make their presence effective in the global market. Globalization refers to widening and deeping of international flow of trade, capital, labour, technology, information and services. Privatization has led to an overall economic, political and technological integration of the world. In our country, first economic reforms (1991) gave birth to globalization and second phase of banking sector reforms strengthened the globalization. Various reform measures introduced in India have indeed strengthened the Indian banking system in preparation for the global challenges ahead. The banking sector in India has remained regulated since nationalization in 1969. Private bank entry was restricted after nationalization to prevent unfair competition, urban concentration and lending to rich and well known firms. This resulted in elimination of competition among public sector banks, public-private sector banks. India is the largest country in South Asia with a huge financial system characterized by many and varied financial institutions and instruments. The Indian financial sector was well-developed even prior to the political independence of the country in 1947. Privatization has become a popular measure for solving the organizational problems of governments by reducing the role of the state and encouraging the growth of the private sector enterprises. However, privatization takes a number of forms and has been approached in various ways during the move away from government control to other forms of owner¬ship in developing countries.

LITERATURE REVIEW
The role of public sector banks and other financial institutions in economic development has been examined in many studies. There are two broad views about government involvement in financial systems around the world, i.e., the 'development' view and the 'political' view. The development view as advocated by **Gerschenkron (1962)** states that governments can intervene through their financial institutions to direct savings of the people towards developmental sectors in countries where financial institutions are not adequately developed to channel resources into productive sectors. Gerschenkron's view was part of a broader consensus in development economics that favored government ownership of enterprises in strategic economic sectors. Realizing this importance of financial sector in economic development, governments in developing countries sought to increase their ownership of banks and other financial institutions in the 1960s and 1970s, in order to direct credit towards priority sectors. Contrary to this view, in recent years a new 'political' view of government ownership has evolved which asserts that state control of finance through banks and other institutions politicizes resource allocation for the sake of getting votes or bribes for office holders and thereby results in lower economic efficiency. **Barth et al. (2001)** using cross country data on commercial bank regulation and ownership from over 60 countries find that state ownership of banks is negatively associated with bank performance and overall financial sector development and does not reduce the likelihood of financial crises. Another study **[La Porta et al. (2002)],** 406 Opinions based on data of government owned banks from 92 countries around the world, finds that government ownership of banks is high in countries which are characterized by "low levels of per capita income, underdeveloped financial systems, interventionist and inefficient governments and poor protection of property rights". The study further finds evidence that government ownership of banks is associated with slower subsequent financial development, lower economic growth and especially lower growth of productivity. Now we come to the

question: how privatization can improve the performance of a state owned enterprise? Generally, the case for privatization of state owned enterprises can be grouped around three main themes, i.e., competition, political intervention and corporate governance. The competition argument states that privatization will improve the operation of the firm and the allocation of resources in the economy, if it results in greater competition. Privatization can improve efficiency even without changing market structure if it hinders interventions by politicians and bureaucrats who would like to use the SOEs to further their political or personal gains. It is also argued that corporate governance is weaker in state owned enterprises than in private firms because of agency problems. "SOEs have multiple objectives and many principals who have no clear responsibility of monitoring" **[Clark et al. (2003)].** Another reason for SOEs to have poorer corporate governance is the weak incentive structure for managers to perform efficiently. They do not face a market for their skills or the threat of losing their jobs for non-performance. Thus, "less competition, greater political intervention and weaker corporate governance are strong theoretical arguments against state ownership" [Clark et al. (2003)]. Clarke et al. (2003) using a combination of country case studies and cross country analyses conclude that privatization of banks improves performance as compared to continued state ownership. However, continued state ownership even in minority shares of privatized banks is found to have negative effects on their performance. Privatization of state owned banks through public share offerings produces lower gains than direct sales to strategic investors in countries where the institutional environment is weak. Lastly, they find that the benefits accruing are reduced if foreign banks are not allowed to participate in the privatization process. **Otchere (2003)** presents a comprehensive analysis of the pre and post privatization performance of privatized banks and their rival banks in low and middle-income countries. The author does not find any significant evidence of improvements in the privatized banks' post privatization performance. In fact, the privatized banks have a higher proportion of bad loans and appear to be overstaffed relative to their rivals, in the post privatization period. The continued government ownership of Opinions 407 privatized banks is found to be responsible for their underperformance, as it hinders managers' ability to restructure them effectively. Using a comprehensive dataset of bank privatizations in 101 countries during the Period 1982-2000, **Boehmer et al. (2003)** examine the economic and political factors that are likely to affect government's decision to privatize a state owned bank, in both developing and developed countries. Their findings indicate that in developing countries, a bank privatization is more likely the lower the quality of the country's banking sector, the more right wing the country's government is, and the more accountable the government is to its people. **Milind Sathye (2005)** examines the impact of privatization on bank performance and efficiency using data of banks in India for the five-year period — 1998-2002. Statistical analysis was performed using the difference of means test for three groups of banks — partially privatized, fully state-owned, and those already in the private sector. Partially privatized banks have performed better as compared to the fully public sector banks in respect of certain financial performance and efficiency parameters. Partially privatized banks also seem to be catching up with the banks already in the private sector. No significant performance or efficiency difference was seen in these two cohorts of banks. Overall, going by the results of this study, partially privatized banks have continued to show improved performance and efficiency in the years after privatization. In several countries, post-privatization outcomes were far from satisfactory.

INDIAN BANKING SCENARIO: NEED FOR A REVOLUTIONARY APPROACH TOWARDS PRIVATIZATION

Nationalized banks such as State Bank of India (SBI), though pygmies in the international banking market, are banking behemoths of India. They have branches spread over the entire length and breadth of the country. With the government offering an assured business, nationalized banks and State Bank of India in particular should not take a complacent view. They should evolve service-intensive products and make their employees customer-friendly. With competition from private and foreign banks knocking at the door, the banks should realize, size is no more an insurance against the onslaught of competition from sleek private and foreign banks. A revolutionary approach to privatize ownership is the need of the hour.

1. **Virtual Banking:** SBI has yet to computerize its operations and network all its branches. The computers currently available serve only to relieve the burden of the clerical staff of maintaining manual ledgers and not to penetrate into areas of customer service. ATMs, Anytime-Anywhere, round the clock and telephone banking is still a far cry. These computers at the best remain only as desk ornaments. With the New Telecom Policy (NTP) almost in place, telecom sector will soon be revolutionized. E-commerce, telephone banking, consumer banking, Internet banking, insurance et al are waiting just around the corner. At least in major metros, virtual banking will soon take-over from the brick-mortar banks.
2. **Manpower Retraining and not Retrenchment:** As a hangover of the past socialistic mindset, all the nationalized banks have excess workforce. This is indeed a hot potato for the management of many enterprises and is therefore being handled with kid gloves. In India, it is everyone's worry to look at business as a source of employment, while making money is secondary. In this ocean of manpower, every institution does have its share of highly skilled and talented manpower, which contribute to asset building. It is the semi skilled manpower having outdated skills, which form the excess baggage. All banks must invest in re-training the manpower so that they can migrate from the areas that will be vacated by computerization. The level of Non-Performing-Assets (NPAs) is still at very high levels and to start with, some of this excess manpower can cover areas of debt recovery.
3. **New Products and New technologies:** The new product areas that require greater penetration are personal banking, housing finance, consumer durable finance, auto-finance, internet banking, insurance, telephone banking et al. Development of these new areas call for heavy investments and this cash - flow can only generated by privatization. In addition, surplus manpower once retrained can be absorbed in the new ventures.
4. **Banking simplicity**: Private Banker is the one person who will serve as your point of access to the wide spectrum of premier products and services we offer throughout the TD Bank north financial services network.
5. **Time savings**: Private Banker will come to you. Whether your signature is required, or you request an analysis of products and services, they will do whatever it takes to ensure your convenience. In short, they'll make the bank operate on your schedule.
6. **A powerful partnership**: They'll work closely with you and your staff. They'll also work with your attorney, accountant, insurance specialist and investment advisor to coordinate services. They have an extensive array of in-house business partners at your disposal to provide their expertise in these areas as necessary.

STRUCTURE OF INDIAN BANKING INDUSTRY

Banking Industry in India functions under the sunshade of Reserve Bank of India - the regulatory, central bank. Banking Industry mainly consists of:
• Commercial Banks
• Co-operative Banks

The commercial banking structure in India consists of: Scheduled Commercial Banks Unscheduled Bank. Scheduled commercial Banks constitute those banks which have been included in the Second Schedule of Reserve Bank of India (RBI) Act, 1934. RBI in turn includes only those banks in this schedule which satisfy the criteria laid down vide section 42 (60) of the Act. Some co-operative banks are scheduled commercial banks although not all co-operative banks are. Being a part of the second schedule confers some benefits to the bank in terms of access to accommodation by RBI during the times of liquidity constraints. At the same time, however, this status also subjects the bank certain conditions and obligation towards the reserve regulations of RBI. For the purpose of assessment of performance of banks, the Reserve Bank of India categories them as public sector banks, old private sector banks, new private sector banks and foreign banks.

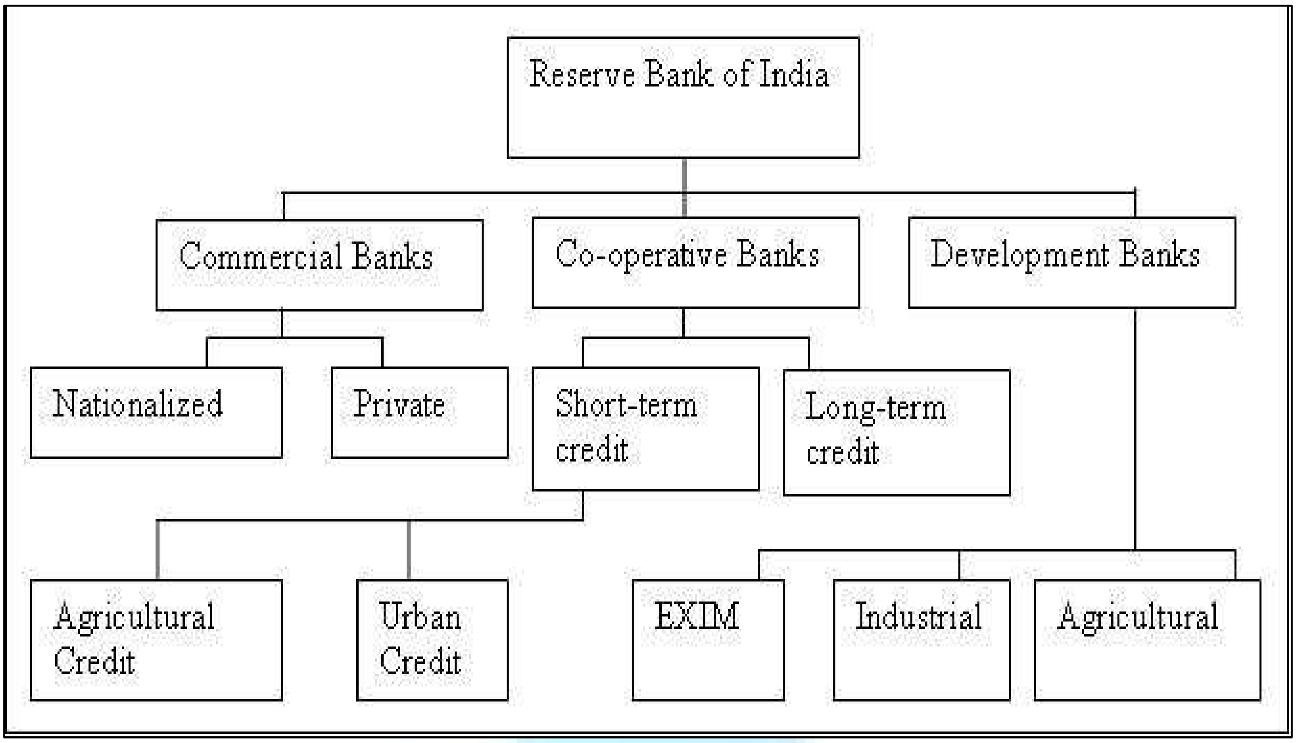

TABLE 1: COST OF FUNDS AND RETURN ON FUNDS - BANK GROUP-WISE (Per cent)

Sr. No.	Bank group/year	Cost of Deposits	Cost of Funds	Return on Advances	Return on Funds
1	**Public sector banks**				
	2009-10	**5.68**	**5.35**	**9.10**	**8.34**
	2010-11	**5.12**	**4.89**	**9.09**	**8.41**
1.1	Nationalised banks				
	2009-10	5.64	5.37	9.18	8.46
	2010-11	5.13	4.93	9.20	8.50
1.2	SBI Group				
	2009-10	5.75	5.32	8.93	8.10
	2010-11	5.09	4.80	8.84	8.21
2	**Private sector banks**				
	2009-10	**5.36**	**4.83**	**9.89**	**8.60**
	2010-11	**4.97**	**4.56**	**9.67**	**8.56**
2.1	Old private sector banks				
	2009-10	6.28	6.13	10.95	9.22
	2010-11	5.63	5.50	10.42	8.98
2.2	New private sector banks				
	2009-10	5.01	4.42	9.56	8.40
	2010-11	4.73	4.27	9.43	8.44

Source: *Report on Trend and Progress of Banking in India 2010-11, RBI, Mumbai.*

COST OF FUNDS DECLINED

As shown in above table cost of funds is declined in public sector from 5.35 to 4.89. In private sector also cost of funds is declined. The cost of funds is 4.83 in 2009-10 and declined to 4.56 in 2010-11.

RETURN ON FUNDS IMPROVED

Table 1. shows that return on funds improved of private sector and public sector both. But the return of private sector (8.56) is more than public sector (8.41). This indicates the better position of public sector.

TABLE 2: RETURN ON ASSETS OF BANKS FOR SELECT ECONOMIES

Country	2007	2008	2009	2010	2011*
Advanced economies					
France	0.4	0.0	0.4	0.6	...
Germany	0.3	-0.1	0.2	…	...
Greece	1.0	0.2	-0.1	-0.6	-0.3
Italy	0.7	0.3	0.2	…	...
Japan	0.3	-0.3	0.2	0.4	...
Portugal	1.2	0.4	0.4	0.5	0.5
Spain	1.1	0.8	0.6	0.5	...
United Kingdom	0.4	-0.4	0.1	0.2	...
United States	1.2	-0.1	-0.1	0.9	1.2
Emerging and developing economies					
Russia	3.0	1.8	0.7	1.9	2.3
China	0.9	1.0	0.9	1.0	...
India	0.9	1.0	1.1	1.1	...
Malaysia	1.5	1.5	1.2	1.5	1.8
Brazil	3.4	1.5	2.4	3.2	3.3

Source: *Report on Trend and Progress of Banking in India 2010-11, RBI, Mumbai.*

** Up to the period ending March*

France in 2010 (Table 2). The RoA of US banks turned positive by 2010 after staying in the negative zone in 2008 and 2009; it showed a further increase in 2011 (March). In Russia, China and Malaysia, RoA of the banking system, which had dipped between 2008 and 2009, recovered between 2009 and 2010. In Russia and Malaysia, the trend of increase in RoA continued even in 2011 (March). The RoA of Indian banks too showed a modest rise between 2008 and 2010.

FUTURE CHALLENGES OF BANKS IN INDIA

Deregulation: This continuous deregulation has made the Banking market extremely competitive with greater autonomy, operational flexibility and decontrolled interest rate and liberalized norms for foreign exchange. The deregulation of the industry coupled with decontrol in interest rates has led to entry of a number of players in the banking industry. At the same time reduced corporate credit off take thanks to sluggish economy has resulted in large number of competitors batting for the same pie.

New rules: As a result, the market place has been redefined with new rules of the game. Banks are transforming to universal banking, adding new channels with lucrative pricing and freebees to offer. Natural fall out of this has led to a series of innovative product offerings catering to various customer segments, specifically retail credit.

Efficiency: This in turn has made it necessary to look for efficiencies in the business. Banks need to access low cost funds and simultaneously improve the efficiency. The banks are facing pricing pressure, squeeze on spread and have to give thrust on retail assets.

Diffused Customer loyalty: This will definitely impact Customer preferences, as they are bound to react to the value added offerings. Customers have become demanding and the loyalties are diffused. There are multiple choices, the wallet share is reduced per bank with demand on flexibility and customization. Given the relatively low switching costs; customer retention calls for customized service and hassle free, flawless service delivery.

Misaligned mindset: These changes are creating challenges, as employees are made to adapt to changing conditions. There is resistance to change from employees and the Seller market mindset is yet to be changed coupled with Fear of uncertainty and Control orientation. Acceptance of technology is slowly creeping in but the utilization is not maximized.

Competency Gap: Placing the right skill at the right place will determine success. The competency gap needs to be addressed simultaneously otherwise there will be missed opportunities. The focus of people will be on doing work but not providing solutions, on escalating problems rather than solving them and on disposing customers instead of using the opportunity to cross sell.

PROBLEMS OF PRIVATIZATION

1. **Surplus employees:** The defect of the system is that some of the workers are declared surplus. There is an increase in the rate of unemployment.
2. **Unbalanced growth**: The management of privatized banks provides credit in specific areas and people. As a result, there is unbalanced growth in the country; especially rural areas may remains under developed where credit facilities do not exist.
3. **Loans for few persons**: The management of privatized bank can extend loans of their favored persons. In this way only few persons are benefited.
4. **Owners association**: The aim of privatized banks is to earn profit. For these purpose owners associations are made which enter into agreement of earning high profit. The bank can increase the rate of service charges. Such associations may not care for customer's welfare.
5. **No of branches in rural areas**: The private bank owners do not like to setup there branches in rural areas. The banking facilities remain confined to cities where sufficient deposits are available. A large part of population will be deprived of banking facilities.
6. **Jobs for relatives**: The management of privatized banks may provide jobs to their friends and relatives. The deserving persons are ignored.

CONCLUSION

Today the pace of economic change is far rapid than at any point in the history of mankind .With each passing moment, the economies of the world are getting further integrated and interlinked. The term 'global village' is no longer a myth, but a reality which we need to live with. The world over, there are the shifts towards the lesser government involvement in the field of business. The famous quote "The business of government is not to be in business" by John Moore seems to hold relevance these days, because of the privatization wave across the countries. The main purpose is to understand the issue and critically examine if increased private enterprises leads to any desired improvements. The result can be seen in the performances of the banks and the whole financial and non financial industries in India.

Privatization has changed the whole facet of Banking with new infrastructure, people, technology, high performances, quality services along with the giving a base to the concept of customer satisfaction.

SUGGESTIONS

As per the above discussion, we can say that the biggest challenge for banking industry is to serve the mass market of India. Companies have shifted their focus from product to customer. The better we understand our customers, the more successful we will be in meeting their needs. In order to mitigate above mentioned challenges Indian banks must cut their cost of their services. Another aspect to encounter the challenges is product differentiation. Apart from traditional banking services, Indian banks must adopt some product innovation so that they can

Compete in gamut of competition. Technology up gradation is an inevitable aspect to face challenges. The level of consumer awareness is significantly higher as compared to previous years. Now-days they need internet banking, mobile banking and ATM services. Expansion of branch size in order to increase market share is another tool to combat competitors. Therefore, Indian nationalized and private sector banks must spread their wings towards global markets as some of them have already done it. Indian banks are trustworthy brands in Indian market; therefore, these banks must utilize their brand equity as it is an valuable asset for them.

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POST IMPACT ANALYSIS OF GLOBALIZATION ON TOURISM SERVICES

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ABSTRACT

The Global dynamics is undergoing a sea of change in the modern era and has resulted in "Globalization". Tourism is considered as an economic and mechanical tool which focuses on social upliftment as well as economic prosperity for the society. It also brings international awareness and understanding between different cultures and societies. Due to automation and technological advancements, the global accessibility is now possible and it has managed to reduce the distance and time barriers. As per UNWTO barometer, the statistics for 2011 reveal that international tourism has reached a milestone figure of 980 million. Europe has maintained the top slot with 502 million arrivals followed by Asia Pacific with 217 million, Americas with 156 million, Middle East with 55 million and the African continent with 50 million international tourist arrivals recorded in 2011. It is expected to cross the 1 billion mark in 2012. Tourism is an international activity and many economies have understood the importance and relevance of internalization. The recent trends indicate that the Asian giants such as China, Malaysia, Thailand, Hong Kong and Singapore are surging ahead in international tourism and are the emerging destinations to watch out for in the next decade. This paper focuses on key issues related to globalization as it has opened new paradigms of opportunities especially for the emerging economies and this has helped these nations to brand themselves as major tourist destinations, especially the nations of the ASEAN group. Destinations such as Thailand, Malaysia, and Philippines have come up with new and innovative strategies to distinguish itself from the rest of the destinations. It also emphasizes on the various pros and cons of Globalization and its impact on the tourism businesses. It also discusses about the Global barriers and focus upon travel and tourism as global activity, trends and projection of globalization, emerging alliances and their roles in promoting tourism as well as post impact analysis of Globalization on Tourism Services.

KEYWORDS

Globalization, Tourist destinations, Tourism.

1. INTRODUCTION

Globalization is a major activity in the new millennium. It consists of various processes such as corporate strategy, technological advancements, flow of goods and services, consumer behaviour, politics. This paper focuses on key issues related to globalization as it has opened new paradigms of opportunities especially for the emerging economies and this has helped these nations to brand themselves as major tourist destinations, especially the nations of the ASEAN group and also to analyse the phenomenon of globalization in tourism and determine its aces and rip-offs. Globalization is the process by which organizations take up the challenge in attending marketplaces outside their place of residence.

It also discusses about the Global barriers and focus upon travel and tourism as global activity, trends and projection of globalization, emerging alliances and their roles in promoting tourism as well as post impact analysis of Globalization and Tourism. Globalization is the process of internationalizing and opening up of its doors to the world. The two major elements of globalization are international craft. It's two principal instruments are international trade and media which brands information a craft good. The major players of globalization are multinational corporations and jumbo corporations as well as consumers. Talking in economic terms globalization is dependent on markets and production in diverse countries through trade in goods and services, transfer of capital, international premeditated tie-ups, cooperation, unifications and technology transfer. It also stands for international division of labour, the dogmatic trend towards a more abundant economic order

Most organizations have understood the importance of globalization as domestic markets have now become saturated and they are venturing into new selling opportunities in global markets. Most of the organizations are implying innovative techniques and involving themselves into acquiring raw materials, goods and services to lower their companies' costs.

They are focusing on innovative techniques of marketing and moving to foreign markets to manufacture their goods.

2. OBJECTIVES

(i) To investigate and review key issues related to Globalization
(ii) To analyse the impact of globalization on tourism businesses
(iii) To study Travel and Tourism as a Global Activity
(iv) To foresee the trends and projection of globalization, emerging alliances
(v) To visualize the post impact analysis of Globalization on Tourism Services

3. RESEARCH METHODOLOGY

The methodology includes collecting secondary data from various sources like internet, reference material, visiting websites of the ASEAN Group ,magazines etc. so that a complete picture can be drawn regarding the Tourism industry in these countries and to analyse the pros cons of the post impact of Globalization on Tourism Services in this major economic bloc. The study will also include the data collection and analysing their current stature and their standing against the developed nations. It is proposed to study the viability of this emerging bloc and measure their effectiveness after globalization on tourism services.

4. GLOBALIZATION

There are numerous advantages of globalization as it involves growth and expanding its roots and in economic terms enhances revenues and profits .Global mega players are involved in exploitation of the opportunities and deliberately centralize their marketing and production effort whenever and wherever possible. International organizations must also structure their companies in order to accommodate barriers in national cultures and dissimilarities in corporate practices. The international companies should be swift enough to rotate information speedily and minutely around the world. International ring poses serious challenges perils. Cultural, corporate, linguistic, political, legal ambience.

The international arena entails some significant risks and challenges. Language, cultural and business practices, and political and legal environments can differ greatly across national borders as practices acceptable in one country differs from . Practices that are perfectly acceptable in one country can be offensive in another country. KFC's decision to enter India meant that its menu had to change drastically in order to accommodate the culture of a country in which cattle are respected.

Several challenges such as communiqué difficulties, little resistor over monitoring, Legal and political decisions, political uncertainties, different labour patterns, costs,Product supplies, religions, customs, work ethics, languages, lack of codes and Standards.

Globalization has impact on environment, culture, social values, with the replicated of the western culture in the first place, and regularization which leads to a uniform product in tourism and disappearance of local standards.

5. IMPACT OF GLOBALIZATION ON TOURISM SERVICES

Globalization has enriched the dependence on parsimonies and societies. It does not involve multinational corporations but also small and medium sized businesses together with family-run businesses . Globalization has unwrapped a whole new world of development opportunities. 938 million people travelled overseas in the year 2010,980 million in the year 2011 and it is expected world tourism would reach the magical figure of 1 billion and by the year 2020 the figures are expected to reach the figure of 1.6 billion and the foreign exchange earnings from tourism is expected to reach the massive figure of 2000 billion USD. Tourism has become a massive trade business and a huge revenue generating industry.

The global civilization means that tourism trades can function globally and many nations of the ASEAN group especially Singapore, Thailand, Malaysia have undertaken innovative strategy of globalization. These nations have a global occurrence . In tourism globalization affects the market forces of supply and demand . The demand can be stated in the form of disposable incomes in developing nations ,good knowledge base of the modern day tourist .Supply can be understood by impact of information and communication technologies ,emerging destinations and decreasing airfares which has brought the world closer

Destinations in the new millennium are involved in mega warfare in tourism with other destinations globally for international tourists. The destinations are branding themselves as major tourist destinations at various levels. The government sector has a major role to play in the emerging economies as they are involved in tourism planning at national level, regional level as well as the local level.. The government sector due to lack of resources cannot take initiative in tourism planning and the private sector has their vested interests as they are mainly small and medium enterprises. For proper tourism planning there should be equal public private partnerships and there should be equal participation and marketing efforts so that the destination is able to differentiate itself from other destination in the global market place. In the tourism industry there are various forms of strategic alliances, franchising, management contracts, joint ventures and acquisition.

6. GLOBALIZATION IN TOURISM

Tourism has impacted the life of the local population. Tourism has come up as a major revolution post WWII which is reflected from the UNWTO statistics .It is a major source of employment generation, poverty alleviation, economic development and foreign exchange generation. It has catapulted the economies most specifically of the developing nations and third world countries. The growth of tourism is stupendous and worth praising with foreign tourist arrival of meagre 25 million in 1950s to a meteoric rise to 70 million in the 1960s and in the year 1997 it touched the 617 million mark and the year 2011 saw it to climb at 980 million and by this year i.e. 2012 it will reach the 1 billion mark.

Now talking in terms of revenue generation tourism phenomena earned 6.8 billion USD in 1960s and it reached mercurial heights in 1997 with the figure reaching to 448 billion USD and it is expected that the foreign exchange earnings from tourism would reach 2000 billion USD by the year 2020.Tourism is a major employment generator globally and according to WTTC it employs more than 300 million directly or indirectly and by next ten years it will supplement hundred million more employment most specifically in the ASEAN Region .According to WTTC in the 21st century this sunrise industry will be a major economic and employment tool .The growth has been reported at 9% annually in spite of economic doldrums and global economic meltdown. The Asian Tigers crisis in the late 1990s was revived by giving priority to Tourism as tourism is a remedy to restructure and rebuild the economic structure of the ASEAN Region .

Tourism has been pursued as a major developmental strategy for the ASEAN and countries such as Malaysia ,Thailand ,Hong Kong ,Singapore are now featuring in the top 20 most visited nations of the world in the last five years which is a phenomenal growth for these cash ridden countries .International financial institutions such International Monetary Fund has inscribed tourism as part of its Structural Adjustment Programmes .These are some of the requirements for proving monetary aids as the monetary institution require the nations to be incorporated in the global economy and liberalize its financial sector and move from agrarian to manufacturing to service based economy .Structural Adjustment Programmes helps the local economies to foreign investments and multinational corporations. Tourism is being promoted by the World

Bank and International Monetary Fund as a tool for the developing economies to repay their loans .Most of the nations of the ASEAN group have initiated large level investments in tourism related projects.

The most phenomenal agreement on tourism was the General Agreement on Trade in Services signed in Morocco in April 1994 as it served as a legal basis for the eradication of the barriers to international trade in services .General Agreement on Trade in Services has eased the transnational companies to invest in local tourism businesses of the developing economies .It also eliminates the barriers on foreign corporations abilities for the transfer of employees from one nation to another, convenient use of trademarks ,operation of branch offices abroad and send their earnings to the parent company .

Tourism in some countries is seen as a threat to the local community and has disastrous effects on the local communities even before globalization .In the new millennium the new vertical of tourism i.e. ecotourism which is eco-friendly and nature based tourism .The locals are being targeted in the name of ecotourism .Eco Tourism focused on visiting undisturbed areas of nature with the intention of studying and enjoying flora and fauna and culture .The said sector is emerging as a major sub sector and accounts for almost a quarter of all the travel being undertaken .It has been witnessed that the local communities are a soft target of ecotourism in globalization .Nation of Philippines in the ASEAN Group has marketed itself as a major ecotourism destination as it is sanctified with rich biodiversity and has attracted foreign tourists from all corners of the world. The central ministry of tourism has developed sustainable tourism which is the prime reason for this island nation becoming a leading tourist destination in the Asian continent .In recent years the tourist arrivals have grown tremendously in the Asia Pacific region and presently it the second most tourist generating region out of the six tourist generating regions of the world in terms of foreign tourist arrivals lagging just behind Europe.

In recent years the ASEAN group nations have grown tremendously in the wave of globalization caused in part by the promotional packages and branding strategy such as Malaysia promoting itself as Truly Asia. Hotels and inns have also burgeoned changing the nation’s overall image at the same time have strained the water resources ,pushed the pollution levels as a result of mass tourist influx and has caused a major problem for the local community in particular.

The environment has also been degraded causing disturbance to the mother earth .There has also been reports of drug trafficking by the foreign tourists which has affected the local community to some extent .Deforestation has also affected the nearby forests and trees were severely cut to patronage the woodcarving activity so as to satisfy the foreign as well as domestic tourists demand.

These kind of activities had negative effects of globalized tourism as it has affected the local communities drastically most specifically nations of Asian Continent. The local community is paying a heavy price for tourism .Many central governments of the developing nations as well as mega tourism organizations have overlooked the interests of the local community .The effects have been disturbing as the local communities have been expelled from their own lands in the name of false promises .The foreign culture have to some extent have polluted their own culture .The rich ecosystem has also suffered from pollution and global warming through the increasing influx of tourists .The benefits are immense but the locals are deprived of the fruit of this billion dollar industry.

With globalization the threats have been aggravated as international treaties have allowed easy entry to the local tourism industry by big shots in the tourism industry .The entry will speed up the exploitation of natural resources and will intrude into the life style of the local community.

7. GLOBALIZATION IN THE ASEAN REGION

Globalization of tourism has come as a storm in the ASEAN Region .There is enough evidence to prove the effect of globalization .After the Asian Crisis in 1997 it posed a serious challenge to reconsider the issues related to globalization ,sustainable development and its impact on the tourism services .After globalization the Asian community has now understood that excessive economic growth had distressing effects on citizen’s life and the atmosphere .Now the governments are trying to find stringent measures to control the innumerable tourist numbers and putting a halt to mass tourism .Many nations are now trying and making efforts to implement social and ecological schemes so that tourism can be promoted as a major tool for economic ,social and cultural development .The nations also need to come together on a common global platform to discuss the social and environmental issues so that profound structural changes take place in the global system.

8. CONCLUSION

Excessive growth of the Tourism related services can cause serious perils to the ecology ,society and global relations .Nonetheless there are paths through which fruits can be reaped through stringent rules of economic ,environmental and social sustainable development to make world a better place to live .The government has a major role to play in the development of the tourism industry as a whole through Public-Private Partnerships(PPP's) and systematically investing in tourism infrastructure ,discovering new tourist circuits in underdeveloped regions and positioning tourism as a major instrument of social ,cultural, economic development and international understanding.

Globalization has helped to create standardized tourist options and helped the nations to prosper economically ,socially and culturally .Tourism Services on offer has to clearly differentiate itself from the others and brand as well as position itself in such a manner so that the growth of tourism is stupendous.

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