ISSN: 2454-4256

HIND BUSINESS REVIEW

A Peer Reviewed and Referred Research journal

Vol 05.	No.01	May 2019

HIND BUSINESS REVIEW (HBR) **ISSN 2454-4256**

A Peer Reviewed and Referred Research Journal of Commerce Forum, Department of Commerce, Assam University, Silchar.

Vol. 05, No. 01 May 2019

Published by: Chairman, Commerce Forum, Department of Commerce, Assam University, Silchar

Printed at: Silchar Sungraphics, Premtola, Silchar, Assam

Communication: All correspondence may be made to the Chief Editor, Hind Business Review, Commerce Forum, Department of Commerce, Assam University, Silchar, Assam, India.

EDITORIAL

Welcome to the 5th issue of our departmental annual research journal ***Hind Business Review*** (HBR) in 2019. The first issue of this journal was published in 2015 and thereafter it has been published regularly on annual basis. To acquire best benefits out of the diversified fields of contemporary issues in business studies, we support more empirical research and practice-based articles, and vital review articles. This will help us in scoring high in performance measures and moving up in journal ranking lists.

Though our journal is improving continuously over the years, we cannot really ignore the importance certified to the ranking exercises. It is time for us to look at the journal as truly competitive and continue to work hard to help the journal in climbing up the ranking ladder. We should find better papers that discuss new ideas and research directions, original articles that can produce deep interest in the readership of the journal and content that the researchers do not desire to overlook. It requires a lot of endeavor and dedication of the Editor to do this appraisal.

My heartiest thanks goes to all the faculty members of the Department for their constant support and encouragement. I thank the entire editorial advisory board and reviewers for all their support. Together we would work towards making the journal a truly influential publication.

Last but not the least, I sincerely convey my thanks to Mr. Punyapriya Choudhury of Silchar Sungraphics for his co-operation and support during the publication and printing task of the journal.

Dr. Parag Shil

Chief Editor

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Testing Seasonality in Indian Stock Market: A Study

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Abstract

The present study is an attempt to find out the presence of January effect in Indian stock market. The index used for our analysis is Nifty 50. The data has been collected from 1st January 2013 to 31st December 2017 from the website of National Stock Exchange of India (i.e., nseindia.com). Thereafter, parametric one-way ANOVA is conducted and then a regression is run to test the seasonality effect as per the standard procedure using the dummy variables. It is found that there exists no seasonality effect in Indian Stock Market between the period April 2013 to March 2017. Thus, the technical analyst cannot make any super normal profit by resorting to the season trading and hence they have to resort to some other ways of technical analysis of making super normal profit.

Keywords: *Seasonality, ANOVA, Dummy variable regression*

Introduction

Since the time a graduate student named Donald Kiem coined the phrase 'January effect', it is of much interest in the circle of stock market aficionados. That interest has produced so many research articles in this regard. Kiem made up his case taking evidence from the US stock market where a study has been conducted on stock prices from 1963 to 1979. The experiment showed that small cap stocks made exceptional returns in the first week of January. Rozeff and Kinney (1976) provided evidence of seasonal patterns in stock market returns taking data from 1970 to 1974 from NYSE. It has been found that the average return in the month of January was 3.48 percent whereas the average of other months was a mere 0.42 percent. However, as they weighed all the stocks equally which gave undue importance to stocks that are not traded much and failed to give importance to stocks that are highly traded or mostly the large cap ones. The study found support in Reinganum (1983). Roll (1983), found presence of January effect in his analysis. Taking data from 1963 to 1980, he proclaimed that the average return of the small cap firms is larger than that of large cap firms. To discover the seasonal effect of return, mean differences in return between value weighted and equally weighted index were calculated and found that there are significant differences between the two in the month of January. Research has also suggested that there is presence of some 'window dressing' by professional investors including mutual funds or insurance companies. Lakonishok, Shleifer, Vishny and Thaler (1991) have suggested that managers want to show an improved performance at the year end and tend to buy the winning stocks and sell the loser stocks. This gives rise to a positive price change in the beginning of the new financial year. However, this phenomenon is only seen in case of large institutional investors and not much for small caps where the effect is marginal. Ritter (1988) argued that investors sell stock at the year-end to realize their tax losses and then reinvest on the eve of the new financial year to get the gain out of a stock surge derived from year-end bonus issued by small cap firms. With regards to all this research, an attempt has been made to find out the presence of the seasonality effect in the Indian context.

The financial year in Indian context doesn't end with the month of December, but with the month of March. Hence it would be interesting to see if there exists any January effect on Indian context. Moreover, India is a part of global market today where all the markets affect each other. An Indian study in this context was much overdue and very little has been done in this regard. Financial trading times (2007) in its recent article has mentioned that the January effect in other countries may boils down to March or April effect in India. It has been tried to figure out whether there exist any seasonality in the Indian stock market. Hence the objective of the paper is to document the presence of any such seasonality, January or in any other month. The following hypothesis has been tested in the present study:

H_0: *There is no significant difference in the stock return of each of the month in Indian Stock Market.*

Literature Review

Ariel (1987) has taken data from 1963 to 1981 and found out that the mean return of the stock is positive only for the first half of the calendar months and indistinguishable from zero in last half of the calendar month. However, Roll (1983), points out that this effect is independent of the January effect and is caused by shift in the mean distribution of returns from the first half of the month to the second half of the month. Bondt and Thaler (1985) suggested that market overreaction and portfolio churning is one of the reasons behind the January effect. Kim (2006) provided a risk-based justification of the January effect and seasonality. He argued that January is the month reward the low quality or speculative stock more than the steady ones. George (1983) pointed out that investors realize the long term capital gain at the end of the year and repurchase stock at the beginning of New Year. Can (2007) analyzed data from 1986 from 2007 and found January anomaly in the Istambul stock exchange. However the effect is not consistent across all the industries. The reason behind lack of January effect can be vested to the maturity of the market and increase in market efficiency over last 30 years. Rathinasamy and Mantripragada (1996) found out that the return increases along with risk in small firms in January and the extra return is more than what is realized from the extra risk. This excess return is due to the January effect. Thaler (1987) has mentioned that anomalies are searched for securities markets are for several reasons. Firstly, there is abundance of data especially for the market where data are available from 1920. Secondly, securities market is believed to be highly efficient and any anomaly has to have a strong logic behind it. Thirdly anomaly is a completely new phenomenon. Though there existed January effect in 1940s also, its researched and penned down mostly at the beginning of 1980. He also mentioned that if securities follow the random walk model any new deduction is impossible from the past data as the information contents have already been incorporated. Moosa (2007) has pointed out that the January effect is gradually vanishing from US market. He has taken Dow Jones Industrial Average (DJIA) from 1970 to 2005 and ran a regression model using dummy variables. The result was that there was strong January effect other than the period of 1990-2005 where a strong negative July effect was seen. Kiem (1988) argued that weekend and holiday effect may be related to systematic bid-ask spread movements. Seyhun (1987) investigated the seasonal pattern and found out that the January return represent compensation that is generated from higher risk of trading from informed traders. Kajol et al (2020) found that volatility is the most important factor affecting seasonality.

George Barnard Shaw once pointed out that October and November are bad for investing, but so are the remaining months. This shows nothing but the unpredictability of market. However, researches have shown that some cyclicity exists in the market and hence there have been attempts to find out the seasonality. From the above review of literature, it is evident that there is little study conducted to test the seasonality in Indian Stock Market.

Data and Methodology

The present study is empirical one and attempts to describe the phenomenon happening in the Indian Stock Market and hence descriptive in nature. To study the seasonality, 5 years data is taken where the average of each month is calculated from the data. Hence, there are 60 data points for 5 years, 5 for each month. The index used for our analysis is Nifty 50. The data has been collected from 1st January 2013 to 31st December 2017 from the website of National Stock Exchange of India Limited, i.e., nseindia.com. Parametric one-way ANOVA is conducted thereafter to figure out any difference in the returns of the months. The F statistics can be compared to the standard statistics and if the reported statistics is more than the standard, one can reject the null hypothesis. In other way, if the calculated p value is less than our hypothesized p value of 5 percent, the null hypothesis will be rejected and the alternative hypothesis will be accepted. Then a regression is run to test the seasonality effect as per the standard procedure. The regression equation is as follows:

$$R_t = \beta_1 + \sum_{j=2}^{12} \beta j \text{ DUMjt} + \varepsilon_t$$

$$\varepsilon_t = NID(0, \sigma^2)$$

Where R_t is the daily return and DUM_{jt} are the dummy variables of month February to December. The dummies are indicated as 1 for the respective month and 0 for the other months. The intercept β_1 indicates the daily mean return in January and the coefficient β_j indicates the difference in return in the month of January and others. This other way means that if the betas are close to zero mean returns are almost equal. We also check the F value as a significant F value indicates that the model is significant.

However, there might be some presence of outliers in the model. To remove the outliers studentized residual can be used. The result of using the studentized residual is that the beta value has more chance of being significant and the F value too will be significant if there are presences of some outliers.

Analysis and Findings

Table 1: Monthly Average Return (2013-2017)

Year	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
2013	0.06%	-0.29%	-0.01%	0.21%	0.04%	-0.12%	-0.08%	-0.24%	0.24%	0.45%	-0.10%	0.09%
2014	-0.14%	0.16%	0.31%	-0.01%	0.37%	0.24%	0.07%	0.16%	0.01%	0.24%	0.17%	-0.19%
2015	0.31%	0.05%	-0.23%	-0.20%	0.15%	-0.04%	0.08%	-0.32%	-0.01%	0.07%	-0.09%	-0.02%
2016	-0.23%	-0.38%	0.51%	0.08%	0.18%	0.07%	0.21%	0.08%	-0.10%	0.01%	-0.23%	-0.02%
2017	0.21%	0.19%	0.15%	0.08%	0.15%	-0.05%	0.27%	-0.08%	-0.06%	0.27%	-0.05%	0.15%
Calculated Value of F = 1.33157												
Tabulated Value of F = 1.99458												

Source: Compiled from the data extracted from NSE website

There are 1232 data points in 5 years starting from 2013 to 2017. The return is calculated as log of a month divided by the preceding month. Thereafter, the average of a month is taken. Thereafter, mean return and standard deviation has been taken for those months and F statistics is compared. Table 1 shows that the calculated F value of 1.33 is less than the critical F value of 1.99 (with 5% level of significance). Hence, there is no evidence to reject the null hypothesis. There are no differences between the mean returns among the months that suggest that there exists no seasonality in Indian stock market.

Table 2: Regression Analysis for the Seasonality Effect

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.0005	0.0009	0.5180	0.6045
Feb	-0.0011	0.0013	-0.8340	0.4045
Mar	0.0010	0.0013	0.7934	0.4277
Apr	-0.0001	0.0013	-0.0843	0.9329
May	0.0013	0.0013	1.0228	0.3066
Jun	-0.0002	0.0013	-0.1840	0.8540
Jul	0.0006	0.0013	0.4710	0.6377
Aug	-0.0013	0.0013	-1.0168	0.3094
Sep	-0.0003	0.0013	-0.2698	0.7873
Oct	0.0017	0.0013	1.2920	0.1966
Nov	-0.0011	0.0013	-0.8512	0.3948
Dec	-0.0005	0.0013	-0.3818	0.7026
Calculated Value of F		1.120061471		
Tabulated Value of F		0.341230401		

Source: Compiled from the data extracted from NSE website

The result of the regression analysis (Table 2) provides confirmation of non-existence of any seasonal effect.

Conclusion and Policy Implications

It is found that there exists no seasonality effect in the Indian Stock Market between the periods April 2013 to March 2017. Thus, the technical analyst cannot make any super normal profit by resorting to the season trading and hence they have to resort to some other ways of technical analysis of making super normal profit. Archana, Safeer and Kevin (2014) couldn't find any presence of January effect in their paper. Pandey (2002) in a study of stock market in India found the existence of monthly effect though the results were contradictory. It has been figured that January effect exists in few times whereas the presence of it seems difficult to prove. Hence, policy implications based on any seasonality effect will be limited because it is tough to generalize it or at least our analysis suggests that.

Therefore, it is advisable to the fund managers to design their investment strategies without resorting to seasonal fluctuations in the market. It is a positive sign for the policy makers as there is no seasonality and hence also a sign that markets are moving in the direction of becoming efficient in the long run. The present study is conducted in Indian stock market and in order to have a comprehensive view of the state of affairs, there is a need to conduct similar kind of study in other markets as well. There is a need to conduct cross sectional as well as longitudinal study to generalize the findings of the study.

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A Conceptual Study on Mergers in Indian Banking Industry

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Abstract

The banking sector is a major pillar of an economy. It regulates the financial system and has a major contribution in growth and progress of the nation. The Indian banking sector has undergone various changes and reforms all throughout the years. There have been new policies, reforms, technological innovations, increasing competition and a lot of other changes. The growing competition from global players as well as from domestic banks along with innovation of various new financial products and services has made the Indian banking environment quite competitive. Merger of banks has evolved as a strategy to achieve that competitive edge. Merger is the process of unification of two or more organizations into one single entity. It is viewed as a strategy facilitating growth and expansion. This paper studies the concept of merger and acquisition and the various types of mergers. The paper studies the various purposes behind bank mergers in India and discusses the guidelines related to mergers of banks. The paper also studies the pros and cons of bank mergers. The various benefits as well as the problems associated with bank mergers must be judged judiciously and the decisions for mergers should be taken in such a manner that it maximizes the strengths of the merged banks and improves overall efficiency.

Keywords: *Banks, Mergers, Indian Banking Industry, Synergy*

Introduction

The different sectors of an economy are inter-related and inter-linked and is influenced by a variety of factors. There is no denial of the fact that there is competition in every sector and in every part of the world. Growth is the foremost objective of an organization and it can be achieved by improving performance. Sometimes, it becomes difficult to grow internally and so the company or organization resorts to mergers and acquisitions. There have been various mergers and acquisitions in different sectors of the Indian economy. Indian banking industry is also one such sector which has various cases of mergers and acquisitions. Banks are the financial institutions which accept deposits from people and also provide loans. Banks helps in mobilization of savings into productive channels. The banking industry has a pivotal part in maintaining the financial stability of the country. Indian banking industry has gone through tremendous changes in past years such as regulatory changes, rising competition, arrival of new technologies etc. After liberalization and globalization, the banking environment has become quite competitive. Only the strongest players could survive and tackle the competition. The competition in banking sector is both global as well as domestic. It is felt necessary that banks must adopt strategies to survive and remain competitive. Mergers and acquisitions are viewed as a means to expand, achieve growth and enhance profits. Indian banking sector has witnessed various mergers which were undertaken for various purposes such as generating synergies, expansion of market, restructuring of weak banks etc. Merger of banks has evolved as a strategy for survival, growth and expansion. It has been widely acknowledged that merger is the key to survive in the competitive world, achieve synergies and higher performance.

Background of Indian Banking Industry

Tracing back to the background, the evolution of Indian banking industry can be classified into three time periods -the beginning period from 1770-1969, the nationalization period of 1969-1991 and the liberalization phase of 1991 to current period.

Speaking of the beginning, the Bank of Hindustan was the first bank formed in 1770, later liquidated in 1832. Another bank was formed in 1786 named the General Bank of India, and its operations ceased in 1791. The Bank of Calcutta began functioning in 1806 and later became the Bank of Bengal. The Bank of Bengal, the Bank of Bombay and the Bank of Madras were the three presidency banks. In 1921, the three presidency banks were merged together to form the Imperial Bank of India. Later, after the country's independence, the Imperial Bank of India became the State Bank of India in 1955. The State Bank of India is the oldest bank which is still operational and working as the largest bank. The Reserve Bank of India is the central bank and regulator of the banking system in India. It was established in 1935 and it monitors, supervises and controls the banks in India.

The nationalization of banks is another important phase in the Indian banking industry. In 1969, the Government nationalized fourteen large banks. These banks comprised as much as 85 percent of the total bank deposits of the country. The government undertook another phase of nationalization of 6 more commercial banks in 1980. The government merged New Bank of India with Punjab National Bank in 1993 which was the only merger between nationalized banks. The government in 1990's adopted the policy of liberalization thereby giving license to some private banks. The tech-savvy banks and the fast economic growth strengthened the Indian banking sector with contribution from government, private and foreign banks. Mergers and acquisitions in the banking sector of India is not a new phenomenon and the banking sector of India has witnessed several mergers throughout the years which were undertaken for various purposes.

Review of Literature

Goyal and Joshi (2012) examined the progress of ICICI Bank Ltd in their study. ICICI Bank Ltd obtained nine financial firms through a period of time to achieve growth. The main aim of ICICI was the formation of a development finance institution engaged in giving long term and medium term financing to business. The study elaborately explains all the mergers, amalgamations and acquisitions. The article depicts that how an organization or institution can have synergy and gain competitive advantage through strategies of mergers and acquisitions. However, the after merger phase is tricky and complicated. The study points out that a firm can construct a strategy into before-merger, acquisition and after-merger phases.

Khan (2012) studied the merger and acquisition with more detailed attention on the banking sector of India in the post liberalization period. The paper attempted to make a comparison of before and after merger performance of merged banks by using various financial yardsticks. The paper considered two cases of merger and used secondary data. The study concluded that the performance of the banks have been better. For certain parameters, the performance of banks have depicted advancement whereas in respect of certain other parameters, no such changes have been exhibited, but it might be the event that the improvement might be reflected in the coming years. Mergers takes place because of a wide variety of reasons and it is not mandatory to immediately accomplish all the goals post the merger. Mergers and acquisitions are evolving as a strategy for survival in this era of tough competition.

Kumari (2014) studied the effect of mergers and acquisitions in the banking industry of India. The paper studied the pre and post merger status of banks. The study was based on secondary data and the data was gathered from magazines, books, newspapers as well as websites. The weak and small banks were facing constant threat because of various issues hampering their growth such as back dated technology, lack of resources, lack of innovations, faulty and weak management and financial structure. In Indian banking sector, mergers and acquisitions have been mostly done to support the weak banks and put them in right track by protecting them. After the mergers, the merged banks have been performing well.

Bishnoi and Devi (2015) studied to find out if the performances of banks have improved after the mergers. An analysis of the before-merger and after-merger performance facilitates understanding of effect of mergers. The performance analysis of banks is carried out in terms of various financial variables. The results of the study indicates that measures like ROA and ROE have been better after some mergers but the mean values of these ratios has not improved for all banks. In case of solvency ratios, it has been observed that the requirement of the new regulatory framework have been met by the merged banks. The study also points out that in Indian banking sector, the size of the merging banks have been very small compared to acquiring bank, thereby resulting in insignificant effect of the merger, regardless of whether the merger is voluntary or compulsory.

Mondal et al. (2017) studied and examined the effect of merger of banks on their performance with the help of various financial yardsticks. The paper studied the merger of Nedungadi Bank and Punjab National Bank. The analysis of the study depicts that most of the parameters of Nedungadi Bank Ltd and Punjab National Bank have revealed remarkable development and advancement in the performance during the after merger period. The study concluded that average financial ratios of the banks displayed a noticeable improvement with respect to profitability, liquidity and shareholders' wealth.

Objectives of the Study

1. To study the concept of merger and acquisition and types of mergers.
2. To study the purposes behind bank mergers in India and the guidelines on mergers and amalgamations of banks.
3. To study the pros and cons of bank mergers.

Methodology

The paper is based on secondary sources of information such as articles, journals and different websites.

Merger

Merger can be explained as the process whereby two or more companies combine to form a single company. It can be defined as the unification of two or more entities into a single entity. In merger, one company survives and retains its identity and the other company/companies lose its existence. Merger is the process through which a less significant entity becomes part of a more significant entity. The surviving company enjoys all the rights and privileges as well as assumes all the responsibilities and liabilities of the merged company or companies.

Acquisition

Acquisition can be termed as the process of acquiring ownership stake of a company. When a company buys all or most of the controlling interest in the share capital of another company with a view of attaining control over the company, it can be termed as acquisition. Acquisitions are the way of gaining ownership control over the target entity by acquiring 51% or more of the controlling stake in the target company. Acquisitions can be friendly or hostile. In friendly acquisitions, the target company's stakeholders agree and cooperate with the acquisition process, while in hostile acquisitions, there is resistance on the part of the target entity.

Types of Mergers

1. *Horizontal merger*: When a company merges with another company which produces similar products or services it is known as horizontal merger. It is the process by which a company or an entity merges with its direct competitor. For example, a company producing refrigerators merging with another company producing refrigerators. Such kind of mergers helps in reducing competition. Due to such mergers, there is increased level of production which in turn leads to economies of scale. The merger of HP and Compaq, Bank of Madura with ICICI Bank are examples of horizontal merger.
2. *Vertical merger:* Vertical merger can be referred to as the merger in which companies producing different products or services but for one final product, come together. In other words, when the companies producing different products in the supply chain of a final product merge together it is called as vertical merger. For example, a clothing company merging with a silk manufacturing company. This ensures regular supply of raw materials and facilitates smooth production process.
3. *Conglomerate merger:* When two companies operating in different industries which are completely unrelated to each other combine together it is called conglomerate merger. A merger between a car manufacturing company and jeans manufacturing company; a merger of watch manufacturing company and a tyre manufacturing company are examples of conglomerate merger. In conglomerate merger, the entities are in no way related to each other neither in terms of business nor in terms of products. This type of mergers are generally seen when an entity wants to expand or step into a whole new different industry.

4. *Concentric merger:* It is the merger between companies in a specific industry which are linked to each other, in terms of customer groups. Here, the companies produce different products or services but which are related to each other. The sale of one product influences the sale of other product. Such mergers help in earning higher level of income. An example of concentric merger may be the merger between a whiteboard manufacturing company and a marker manufacturing company.
5. *Market extension merger:* Market extension merger can be referred to as those in which the companies offering same products but in different markets merge together. Here, the companies operate in different markets and as such are not the direct rivals of each other. For example, a company, selling the product in Kerala and another company selling the same product in Delhi. Such merger facilitates the merged entity to capture larger markets and boost the sales as well as generate synergies from production process.
6. *Reverse merger:* Reverse merger is the process whereby a private company becomes a public company by acquiring it. This is a simple and fast method by which a private company can become a public company. Reverse merger can also be the case of a profit earning successful company merging into a loss making distressed company. (Goenka, 2019).

Purposes behind Bank mergers in India

1. *Growth:* Growth is the foremost objective of every organization. Every entity strives to achieve growth at a faster pace. Banks can grow internally but it is a time taking and slow procedure. On the other hand, mergers help the banks to grow rapidly in a short span of time thereby achieving desirable results.
2. *Synergy:* It is one of the important purposes behind mergers. Synergy is the basic concept that the combined effect of two will always be greater than the sum of individual efforts. Bank mergers provide a great way for the banks to have the synergy benefits.
3. *Economies of scale:* Merger of banks combines the functioning, activities, procedure of the banks together. The activities and various processes are undertaken on a larger-scale because of the merger. All these results in economies of scale leading to reduced costs and higher profits.
4. *Surviving the competition:* The fact that the banking industry has become very competitive cannot be ruled out. Introduction of various new financial products and services as well as competition from international banks has made it very difficult for small and weak banks to survive. Merger of such banks with strong banks helps them to survive in the tough competitive environment.
5. *Increase in customer base:* Merger of banks results in unification of banks and hence, it results in increased customer base.
6. *Variety of products:* Banks have their own set of products and services to be offered to the customers. Merger of banks combines the various financial products and services of the merged banks together which could now be offered to the customers thereby providing a variety of products.
7. *Expansion and diversification:* Another purpose behind bank mergers is to expand and diversify the activities which would lead to improved performance, wider reach and enhanced profits.

Guidelines on Mergers and Amalgamations of Banks

In the year 2005, the Reserve Bank of India declared the guidelines on mergers and amalgamations which are mentioned below:

- The draft amalgamation scheme should be individually approved by two-thirds of total members of the board of directors of each of the two banks.
- Those members of the boards of directors who had approved the draft amalgamation scheme need to be the signatories of the Deed of Covenants.
- The draft amalgamation scheme should be approved by the shareholders of each of the banking companies by a resolution passed by the majority comprising two-thirds in value of the shareholders who are present in person or through proxy at a meeting which is called for such purpose.
- The swap ratio has to be ascertained by independent valuers who have the requisite experience and proficiency. Also the Board must express if the swap ratio is accurate and fair.

- The Reserve Bank must ascertain the value which the specific banking company should pay to the dissenting shareholders in terms of the shares which are held by them.
- The pattern of shareholding as well as the composition of the board of amalgamating banking company post amalgamation must be in accordance with the guidelines of the Reserve Bank. (RBI Report on Currency and Finance, Competition and Consolidation, 2008).

Pros of Bank mergers

- Bank mergers help in improving the operational efficiency and functioning of banks, thereby leading to better and improved performance.
- Bank mergers results in economies of scale which ultimately leads to reduced cost.
- It helps in generating various synergies. The unification of banks brings about cost as well as revenue synergies.
- Merger of banks leads to reduction in competition by merging the institutions together.
- Weak and small banks find it difficult to face competition from strong players. Merging such banks with stronger banks ensures their survival in the competitive environment.
- Merger of banks leads to transfer of skill, technology, talent etc. The experienced managers and employees bring their expertise which leads to better performance and higher profits.

Cons of Bank mergers

- There arises pressure on the stronger banks to carry on the burden of the weak banks.
- Different banks have different set of employees and work culture. When banks merge together, there arises difficulty in synchronization of different employees. It becomes tough to coordinate and synchronize the working environment.
- Mergers might result in many branches in the same area. As a result, there might be the need for closing down some branches.
- There might be agitation on the part of the employees who might be worried about losing their jobs. The employees might be concerned about their job security.
- Mergers do not necessarily improve the situation of bad loans. There can be unfavorable effect on the performance of the stronger banks.
- Mergers require coordinating the work of different branches. The coordination and integration of the procedures, processes and functioning of the banks is a difficult task.
- Bank mergers also require the additional task of issuing new debit/credit cards, passbooks and cheque books to the customers.

Conclusion

The banking sector has a significant role in the financial stability of the country. It mobilizes the savings of people into productive channels. The Indian banking sector has undergone tremendous changes and reforms in the past and has transformed and evolved throughout the years. The banking sector of India has witnessed various mergers. Merger is the process whereby two or more entities combine to form a single entity. Mergers have evolved as a strategy facilitating growth and expansion. The various mergers in the banking sector of India were undertaken for a varied number of purposes such as for growth, expansion, creation of synergy benefits, to face the increasing competition as well as for supporting weak and small banks and ensuring their survival. Bank mergers have their own set of benefits right from generating synergies to economies of scale as well as combining the skill, talent, expertise and technology. But, at the same, there are also some problems and difficulties associated with the process of bank mergers. The various advantages as well as the issues associated with bank mergers must be judged and studied carefully so as to reap the benefits of merger judiciously. Decisions for mergers should be taken in such a way that it maximizes the strengths of the merged banks and leads to higher performance.

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Relative Worth of Human Traits: A Study on Employees of Public Sector Banks

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Abstract

Banking sector, being a service sector depends highly on its employees' skills and competence to attain new heights. Bank employees specially need to have a right blend of the traits with the help of which they can provide quality service to its customers. Thus, the study focuses on 12 traits classified into three groups i.e., 'Skills and Abilities- Largely Innate', 'Inter Personal Traits' and 'Behavioural Traits'. A sample of 52 employees working in Public Sector Banks of Silchar town of Assam have been surveyed. Statistical tools like Mean, Standard Deviation and Rank have been used to arrive at the findings of the study. The findings reveal that Honesty, Sincerity, Trustworthiness, Loyalty, Discipline and Punctuality are the top traits that are required to be there in the Public Sector Bank employees above the rank of Sub-Staff.

Keywords: *Personality traits, Interpersonal Skill, Behavioural Skill, Innate Skills, Recruitment.*

Introduction

Out of all the inputs of production it is the 'Men' on whose shoulders rests the responsibility of ensuring to provide the desired quality of goods and services as it is this who arranges all the inputs of production and side by side ensures that the best quality inputs are mustered with the lowest possible cost (Mahmood, et al., 2014). This quality can only be ensured when the quality of men itself is assured. Finding the best men for the job is the most difficult challenge for a manager (Rajwinder, 2013). When it comes to India, it is not difficult to have personnel with certain specified educational qualifications as because we have got a vast population which, to a large extent, is embedded with the desired technical and other specialized qualification. The problem, nonetheless continues to be of being able to locate the employees having a blend of the requisite quality i.e., human or personality traits (Newman & Lyon, 2009).

Managers unfortunately did not pay due and timely attention towards the set of human traits required in the workforce for their industry/organization. In some cases, even when the employers could identify the traits, they felt, should be in their employees it was difficult on their part to ensure the blend of it i.e., having an optimal blend of the traits keeping in mind the pragmatic aspect of the availability of the manpower. If the desired traits are known properly, the requisite kind of employees for the organization can be identified and recruited (Kinnunen & Parviainen, 2016). So, the most important task turned out to be identifying the set of the traits that are required to be there in the employees with the relative worth of these traits that an employee should possess in him/her.

Service industries like banking generally face a more delicate challenge while catering to the needs of its customers. Many more functions are undertaken by the bankers for proper utilization of funds for the benefit of the country. It is just due to the bank employees having in them the requisite traits that an organization attains the new heights. Public sector bank employees specially need to have a right blend of the traits with the help of which the banks can provide quality service to its customers. The present study, therefore, aims at identifying the personality traits bank employees should have in them with an appropriate blend of the relative worth of these traits.

Review of Literature

Human traits have a great relevance on a person's interest, behavior and plan of action. Especially the traits which have a bearing on the personality dictates a person's decision making and future course of action. Several theorists have developed various personality trait theories like Allport's Trait Theories (Allport, 1927), Cattell's 16 Personality Factor Questionnaire (Cattell & Mead, 2008), Eysenck's 3 Dimensions of Personality (Eysenck, 1991; 2008), Big Five trait theory of personality (Crae & Costa, 1999), which is being used by researchers from long ago. The relevance of the present study can be attributed to trait theories that are related to leadership qualities. Bankers are expected to have some leadership traits in their personality so as to encourage other member of a firm to work in such a way that benefits could be reaped not only by the organization but the customers as well. A person with leadership qualities is likely to achieve higher goals and objectives in life, leading people towards a common end. Early theorists of Trait theory of leadership opined that a leader has certain physical and personality characteristics that distinguish them from non-leaders. Learning or acquiring of traits and Influence of genetics has been totally ignored in these theories (Jenkins,1947; Stogdill,1948; Zaccaro, et al., 1991; Kirkpatrick & Locke, 1996; Burns, 2003). It focuses on those skills that a person has naturally within him/her. With the development of trait theories in leadership, several new theories focusing not only on learnt or acquired skills of a leader (Mumford, et al., 2000) but also on their behavioural attitude have emerged.

In banking sector, these theories have been used to find relevance in solving various issues. Rashid, et al (2016) revealed that personality of frontline workers of banks influences job performance resulting in long-term increase in customer loyalty and decrease in job turnover. Almandeel (2014) found that personality traits had relationship with job satisfaction, employee turnover and leadership behaviour also had influence on the same. Iqbal & Hassan (2016) linked workplace spirituality with personality traits & counterproductive work behaviour and also stated that this interlinkage encouraged deeper engagement of employees in the organization. Mutawa & Ibrahim (2013) found the influence of personality traits of front-line banking personnels on customer satisfaction, which revealed some independent effect of personality traits on customers' perception of service quality of banks. Emphasis had been laid on technical training and personality tests of potential bankers before recruitment in banks so that organization fit employees could be recruited first. Khalid, et al. (2015) found relationship between personality traits and conflict management styles which helped in prediction of decisions to be taken to solve issues or conflicts beforehand.

The above review of past researches gives a broad idea about various personality traits and its influence on various issues of a banker. Some of the influential personality traits that are expected to be present in a banker, especially for those who are above the rank of sub-staff, has been selected for the study.

Objectives of the Study

1. To identify the human traits required to be there in the bank employees above the rank of Sub-Staff in a Public Sector Bank.
2. To study the relative worth of the select human traits required in the bank employees above the rank of Sub-Staff in the opinion of the bank officers of PSBs working in Silchar town of Assam.

Research Methodology

The study is descriptive in nature. In order to attain the objectives of the study initially an extensive review of the existing literature was carried out to identify the various personality traits capable of influencing the performance of bank employees above the rank of Sub Staff. In order to ensure the relevance of the traits identified through the said literature review an exercise of in-depth personal interview with some senior bank employees (Officers) was conducted. These exercises facilitated the selection of the personality traits to be included in the questionnaire for finding out the relative worth of these traits required to be there in the bank employees above the rank of Sub-Staff. A total of 12 traits were identified and selected for the study which were then grouped into three groups namely 'Skills and Abilities- Largely Innate', 'Inter Personal Traits' and 'Behavioural Traits'.

With the help of a 5-point scale structured questionnaire, ranging from Highly Required (5) to Least Required (1), bank officers were asked to rate about the degree of requirement of the select personality traits in a Public Sector Bank (PSB) employee above the rank of Sub-Staff. The population includes all the officers working in the Public Sector Banks of Silchar town of Assam. A total of 52 bank employees (Officers) were surveyed based on convenience sampling. The data so collected was analysed using Statistical tools like Mean, Standard Deviation and Rank to arrive at the findings of the study.

Table 1: Profile of Respondents

Gender	Frequency	Percentage
Male	36	69.23
Female	16	30.77
Total	**52**	**100.00**
Age Group	**Frequency**	**Percentage**
Up to 30 years	22	42.31
More than 30 and up to 40 years	15	28.85
More than 40 and up to 50 years	6	11.54
More than 50	9	17.30
Total	**52**	**100.00**

Source: Field Survey

Table 1 delineates the profile of respondents Gender wise and Age wise. A total of 52 bank officers have been surveyed from different PSBs from Silchar town. About 69.23% of the respondents were male and 30.77% were female respondents in the survey. Age wise, 42.31% were of up to 30 years, 28.85% in the age group of more than 30 years and up to 40 years, 11.54% were more than 40 years and up to 50 years and 17.30% were more than 50 years of age.

Scope of the Study

- Only the officers, working in the Public Sector Bank branches within the municipal area of Silchar town, were consulted to note their perceptions about the traits required in bank employee above the rank of sub staff.
- Such traits which in any way may be required to be present in an employee in its full degree or for that matter in a degree equal to nil have not been included for the purpose of study in this work.

Limitations of the Study

- The study is confined to only select human traits generally applicable to bank employees.
- The possibility of sampling error(s) cannot be completely ruled out.

Result and Discussion

Human Traits were identified for the study by reviewing the literature and also discussing with senior employees over the matter. Twelve traits were identified and selected for the study and were broadly classified into three groups. The three groups are 'Skills and Abilities- Largely Innate', 'Inter-Personal Traits' and 'Behavioural Traits' which consists four-four traits clubbed under each head.

The attempt to attain the second objective i.e., to find out the relative worth of the select human Traits in terms of its requirements in bank employees above the rank of Sub-Staff with reference to the employees of Public Sector Banks in Silchar town is also made.

Table 2 portrays the relative worth of the traits under the group 'Skills and Abilities- Largely Innate'. It depicts the mean, standard deviation and ranks of select traits. The trait 'Honesty' has been found most important trait with a mean score of 4.769 followed by 'Sincerity' with 4.750 mean score. 'Thoughtfulness' and 'Creativity' have been found least important with 4.135 and 3.885 mean score. In terms of SD, consistency of data is more pronounced in 'Honesty' which has the lowest SD of 0.73 and 'Thoughtfulness' has highest SD of 1.010 which reveals the variability in the respondents' opinion.

Table 2: Category Wise Relative Importance of the Traits

Innate Skills and Abilities	Mean	Rank	SD	Interpersonal Skills	Mean	Rank	SD	Behavioural Traits	Mean	Rank	SD
Creativity	3.885	4	1.003	Friendliness	4.269	4	1.012	Dedication	4.615	3	0.844
Honesty	4.769	1	0.731	Humbleness	4.288	3	1.016	Discipline	4.673	1	0.834
Sincerity	4.750	2	0.738	Loyalty	4.462	2	0.939	Punctuality	4.635	2	0.864
Thoughtfulness	4.135	3	1.010	Trustworthiness	4.538	1	0.979	Tolerance	4.250	4	1.046

Source: Field Survey

Table 2 also depicts the mean, SD and ranks of the select traits under the group 'Inter Personal Skills'. The trait 'Trustworthiness' has been given the highest rank with 4.538 mean score followed by 'Loyalty' and 'Humbleness' with mean score of 4.462 and 4.288. 'Friendliness' has been found least important having mean score 4.269. In terms of SD, consistency in respondents' opinion could be seen for the trait 'Loyalty' with SD of 0.979, whereas it varies more for 'Humbleness' having SD of 1.016.

Table 2 further shows the mean, SD and ranks of the select traits under the group 'Behavioural Traits'. It depicts the importance of the trait 'Discipline' which secured the highest rank with 4.673 mean score followed by 'Punctuality' and 'Dedication' with a mean score of 4.635 and 4.615. 'Tolerance' has been found to be the least important trait with a mean score of 4.250. In terms of SD, consistency in the data can be seen in case of the trait 'Discipline' whereas variability is more for 'Tolerance'.

Conclusion

The study was aimed at identifying the human traits required to be there in a Bank employee above the rank of Sub-Staff of the Public Sector Banks. The study also aimed at finding out the relative worth of the select human traits in terms of its requirement in the bank employees above the rank of Sub-Staff in the Public Sector Banks.

In terms of relative worth, the traits namely, 'Honesty' and 'Sincerity' were found as the top two traits under the category of 'Skills and Abilities- Largely Innate' that are required to be there in the Public Sector Bank employees above the rank of Sub-Staff. The traits 'Trustworthiness' and 'Loyalty' are the top two traits in the category of 'Inter Personal Skills'. While 'Discipline' and 'Punctuality' were the top two traits under the category of 'Behavioural Traits' that are required to be there in the Public Sector Bank employees above the rank of Sub-Staff.

This study will give an objective approach to employers on hiring an employee having the right blend of personality traits that are needed in a banker for the benefit of the organization, customer as well as other stakeholders. Since employees are the ones who takes an organization to a greater height and thus recruiting a person having all the necessary traits becomes a matter of interest to the recruiters. Thus, effective personality tests should be involved in the hiring process to tap the most suitable personality for the job as a banker.

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Human Development Index Convergence across Global Level: A Bootstrapped Simultaneous Quantile Regression Approach

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Abstract

The objectives of the study are to reveal the true picture of σ- and unconditional β- convergence across very high, high, medium and low HDI nations during the period 1990-2018. We used composite HDI indicator that included both income and social indicators aspects and therefore offered more comprehensive estimates of HDI convergence across distinct nations. In order to obtained robust HDI convergence estimates, we applied bootstrap quantile regression approach in static panel framework under the concept of σ- and unconditional β- convergence, which allows for nonlinearities in the estimation of the convergence speed. Additionally, the estimated convergence results were more robustly tested with the pooled OLS model, which confirms the validity of our core applied model. The study found negative and statistically significant coefficient for all the HDI groups, revealing strong evidence of beta convergence across all the HDI groups during the study period. The estimated results of beta convergence suggest the existence of 'catch-up' phenomenon in all the HDI groups, implying rich and poorer countries continued to do better to attain better quality of life during the analysed period. The Sigma convergence results advocate that the HDI level dispersion gap is narrower in the middle and lower HDI group, however, the wider dispersion of HDI level exists only in the case of the higher HDI group.

Keywords: *σ- and unconditional β- convergence, bootstrap quantile regression approach.*

Introduction

It is necessary to investigate the convergence of the Human Development Index (HDI) while studying regional disparity in human development and inequality in human development globally (see e.g., McGillivray and Pillarisetti 2004; Decancq et al. 2009; McGillivray and Markova 2010). The lack of convergence between inter-countries and intra-countries indicates inequality within and between countries that can lead to political instability, social unrest and violence, given that the people of the country concerned should not only improve their own standard of living, but should also improve the wealth of their country like other rich countries (Kenny, 2005). This fact is strongly relevant in the case of cross-nation convergence analysis, which is not only helpful in demonstrating valid measures to regulators and policy makers towards countries that are actually lagging behind to achieve their economic growth, but also provide a good scope in design public policies (Caballero, 2012). Neumayer (2003) and Kenny (2005) concluded that if there is an absence of convergence in GDP per capita, this does not mean that there is also an absence of convergence in living standards (reflected by HDI) between poor and rich countries. To resolve such debates the broad aim of the present study is to assess the HDI convergence phenomenon among cross-countries during the period from 1990-2018.

Initially, Sen (1999) and UNDP (1990) opined that changes in nation's well-being and freedom cannot be captured by income statistics (i.e., per capita GDP) only. Similarly, Bourguignon and Morrison (2001) also advocated that the income factor is not just the only dimension of well-being, so it is advisable to take into account other socio-economic dimensions to measure the aspect of well-being. In addition, Mayer and Foulkes (2010) suggested that other socio-economic dimensions (such as quality of life, longevity and adult literacy rate) need to be considered to achieve the true scenario of HDI convergence. This line of argumentation has gained prominence among academics over the last decades, resulting in many attempts to synthesize different components of HDI in a composite index which is considered more comprehensive perspective of such a process of quality of life than per capita income alone (Jordá andSarabia 2015). It is notable here that all the above studies, such as, Mayer-Foulkes (2010); Boris (2012); Jordá and Sarabia (2015) and the most recent studies like, Janssen et al. (2016); and Yang et al. (2017) were focused on showing pattern of convergence for each dimension of HDI rather than the composite HDI. These studies opined that different components show different convergence patterns as each component HDI sources follows its own set of transitions. However, their studies failed to reveal an overall phenomenon of global-level HDI convergence, which we are tried to hypothesize and discuss in this study. However, another reason for choosing the composite HDI is the existence of high rank correlation of HDI and its underlying components, reflecting the problem of redundancy in the information provided by each dimension of HDI and so to analyse convergence phenomena among cross-country we found it the most adequate one (Jordáand Sabaria 2015).

Besides, it is also a well-known fact that such progress of HDI may vary among nations because each nation is using distinct policies to improve its HDI levels, consequently nations may be able to converge their HDI level globally or *vice-versa*. Therefore, it is believed that variation in the occurrence of HDI convergence across nations may exist while analysing it. However, such theories and measurement of HDI convergence like, 'whether inequalities in human development are decreasing across distinct nations' have never attracted adequate attention by policy makers, which could be an important aspect to see the phenomenon of economic progress across globally. Thus, the present study aims to attempt in this direction.

By fulfilling these objectives, this study aims to contribute in the literature in the following ways. First, the study examines the σ- and unconditional β- convergence characteristics of HDI in static panel framework for global level as a whole by classifying them into four distinct HDI groups, which is rarely determined by the researchers till now. Second, none of the existing studies took such kind of longer time period that covered reforms and global financial crisis era, which could provide a true scenario of HDI convergence globally. Third, as per methodological point of view, we followed Mayer-Foulkes (2010) and used bootstrapped simultaneous quantile regression approach, which allows solving the problem of non-linearity while estimating the composite convergence model. However, there are some other reasons for choosing such a methodology for our existing paper. First, BSQR follow a normal distribution pattern within each quantile of data while estimating the HDI score in the composite index. And, hence the probability of scores variations in a static panel framework in a given frequency based data-set is comparatively less than simple pooled OLS estimation. Second, BSQR is used to capture the effect of variables in a parametric framework so that it would provide true estimate of HDI convergence relative to other parametric models, which is also a novelty of our paper. Therefore, we believed that BSQR model would provide more robust convergence estimates for very high HDI level, high HDI level medium HDI level and low HDI level countries during the period from 1990 to 2018. Further, BSQR estimates have been more robustly checked and re-run the regression in the same static panel framework using OLS approach, which is also the uniqueness of our paper. The comparative OLS estimates again provide a strong justification of our core applied BSQR model and predicted results. Besides, we also checked whether the mean in the various HDI groups significantly improved or not over the period of analysis using ANOVA test that has been hardly examine in the existing literature.

Methodology

As discussed, this paper utilised the application of economic notion of σ and unconditional β HDI convergence across cross-nations from 1990-2018 as they provide us single measure to examine the phenomenon of convergence. We felt that such traditional convergence hypothesis needed to be tested and see how predictable results are applicable in the current context of global scenario so that the developmental plans and policies of nations can be addressed accordingly. On the basis of such application, the following questions are formulated, e.g., first, initially low HDI countries have the ability to catch up with initially high HDI countries from 1990-2018 ?; In particular we are more inclined to see the speed at which low HDI levels converge with high HDI levels during the period of analysis. Second, are the variation between low HDI level and high HDI level reducing over a period of time? Such questions make us more curious to delineate the broad aim of the present study that is to assess the hypothesis of σ and unconditional β HDI convergence phenomenon across countries over a period of time. This application is based on the neoclassical model as initially proposed by Barro and Sala-i-Martin 1991, 1992, 1995; Sala-i-Martin 1996a, b, which is still most frequently used in the literature. The β-convergence examines '*catching-up*' phenomenon of HDI convergence across distinct group level reflecting that initially low HDI economies have potential to catch-up with the initially high HDI economies. Likewise, σ convergence hypothesis examines whether the dispersion of HDI level across nations has decreased over a period of time. Note that, the absence of σ convergence does not imply that the convergence scenario has no existence across nations, while, the presence of β convergence does not necessarily imply that all nations are moving towards convergence, therefore, both sigma and beta convergence are prerequisites for knowing the convergence scenario, which we obtained in the present study. In addition, we tried to make explicit comparisons of HDI convergence estimation using two different models such as the bootstrapped simultaneous quantile regression (BSQR) approach and the pooled OLS approach, which may be a novel attempt in the existing literature. It is believed that the utilised approach will be able to draw comprehensive conclusions about the existence of HDI convergence among cross-country perspective.

Data-base

To obtain comprehensive estimates of HDI convergence for 189 countries, we used the most recently available quinquennial dataset extracted from the International Human Development Indicator (UNDP 2018) for the period 1990–2018. From UNDP, we obtained homogeneous and composite HDI data for large number of observations and for a wider period of analysis. UNDP has provided a 5-year lag data set for the period 1990–2015, however, from 2015–2018 UNDP has begun to provide an annual HDI data base. Therefore, Quinquennial database has been used because of non-availability of yearly data between 1990-2000; 2000-2010; 2010-2013; and 2013-2015. It is significant to note that this is the first study that classified the entire nations HDI level into four broad categories i.e., very high HDI level (62 countries), High HDI level (54 countries), Medium HDI level (37 countries) and Low level (36 countries), which helps in reveal intensive and critical situation of HDI convergence across global level. The hypothesized facts further allow us to compare converge phenomenon with each category of HDI level, which will help policy makers to implement appropriate policies towards well-being and against divergent nations.

Empirical Results and Discussion

Several points have been drawn from the estimated results for discussion. The empirical estimates of the study highlighted a negative and statistically significant coefficient for all the HDI groups in both the applied models, revealing strong evidence of beta convergence (i.e., 1 percent) in all the HDI groups during the study period. The estimated results of beta convergence suggest the existence of 'catch-up' phenomenon in all the HDI groups, implying rich and poor countries continued to do better to attain their higher income level and better quality of life during the analysed period. This finding is in line with Nissan and Niroomand (2005).

However, the results have changed considerably in the case of sigma convergence. In particular, the medium and low HDI group showed sigma convergence phenomena, whereas, the very high HDI group showed sigma divergence phenomena in both models. Here it is worth noting that in the case of BSQR only the high HDI group is consistently divergent, however, it appears convergent in the case of the OLS approach. The Sigma convergence results advocate that the HDI level dispersion gap is narrower in the middle and lower HDI group, however, the wider dispersion of HDI level exists only in the case of the higher HDI group.

Table 1: Analysis of Variance (ANOVA) of mean for different HDI groups: 1990-2018

Hypothesis	F-statistics	P-value
$H_0 = \mu_{VH\ HDI} = \mu_{H\ HDI} = \mu_{M\ HDI} = \mu_{L\ HDI}$	1975.749	0.000***

Note:*, **, and *** denotes significance levels at 1%, 5% and 10%, respectively.
Source: Authors' Calculation

Table 2: Pooled OLS estimates for *σ*- and *β*-convergence across cross nations

Models→	*σ*-convergence				Unconditional *β*-convergence			
HDI groups→	Very High	High	Medium	Low	Very High	High	Medium	Low
Panel A: Estimated model coefficients								
α	-1.201 (0.023)	-1.218 (0.088)	-1.121*** (0.056)	-1.113*** (0.037)	0.005*** (0.000)	-0.020** (0.009)	-0.011 (0.013)	-0.012 (0.014)
σ	-0.019 (0.004)	-0.047** (0.017)	-0.040** (0.011)	-0.031*** (0.007)				
β					-0.056*** (0.014)	-0.238*** (0.059)	-0.137** (0.052)	-0.109*** (0.039)
Panel B: Test statistics								
No. of observations	8	8	8	8	62	54	37	36
F-statistics (*p*-value)	17.23**** (0.000)	7.35*** (0.000)	13.50** (0.010)	18.48*** (0.005)	15.03*** (0.000)	16.13*** (0.000)	6.71** (0.013)	7.66*** (0.009)
R2	0.7417	0.5506	0.6924	0.7549	0.2003	0.2368	0.1609	0.1839

Notes: i) Figures in parentheses are standard errors, ii) *p*-values are reported in case of F-statistics, and iii) *, **, and *** denotes significance levels at 1%, 5% and 10%, respectively.
Source: Authors' calculations

The static pooled OLS sigma and beta convergence estimates also support the strong justifications of the applied BSQ regression approach. It is observed that the results of BSQR approach are similar with the pooled OLS estimation method, but over-estimated the coefficients when OLS is applied. The coefficient of ANOVA test is positive and statistically significant for each HDI groups, suggesting rejection of the null hypothesis, signifying a significant improvement in mean of each HDI groups during the period of analysis.

Policy Implications

Overall, the existence of sigma and beta HDI convergence across nations came to the fore during the study period. The estimated results of the study are relevant to the cross-nation, particularly in the light of recent initiatives that was taken by policy makers in their respective countries to raise HDI levels after the global financial crisis and subsequent sovereign debt crisis, integration has become possible among veryhigh, high, medium and low HDI groups.

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Problems and Prospects of Cross Border Trade with Special Reference to North East India

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Abstract

The North East Region (NER) of India is the easternmost region of India comprising of eight states namely – Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim. The region has some unique characteristics which are different from other sections of the country. The region shares about 2% of its border with the main land of the country and the remaining 98% is connected with international border of India's neighbouring countries like China, Bhutan, Myanmar and Bangladesh. Cross border trades are likely to be more cost effective for North East India's surplus production than the distant national markets. But despite these advantages, the NER has remained one of India's economically slacker regions, which accounts for a mere three percent to the country's gross domestic product (GDP). NER has the potential to grow faster than its current pace and become a developed region of the country in terms of trade because of its geographical advantage and natural richness. In view of the above the paper intends to generalize some of the important problems and prospects of cross border trade of North East India with its Neighbours country.

***Keywords**: North East, Cross Border Trade, Problems and Prospects.*

Introduction

The North East India (NEI) comprises of Eight states and People of North East India speaks about 220 languages. They belong to multiple language families. –The states of North Eastern Region are officially recognized under the North Eastern Council (NEC), constituted in 1971 as the acting agency for the development of the eight states. At the time of induction of NEC, the North Eastern Region comprised the Seven Sister States only. Sikkim was introduced as the eighth member in 2002. The region is located in the remote eastern corner of India. The total geographical area of the region is about 2.62 lakh sq. km, which covers 7.9 percent of the country's total area and sharing about 5000 kilometre as international borders. The population of the region occupies 3.7% of the country's total population. More than 71% of the region's population lives in the state of Assam.

North East India is gifted with various natural resources like bio-diversity, hydro-potential, oil and gas, coal, limestone and many other mineral resources along with flora and fauna. It is also rich in forest resources which occupy nearly half of the total area in the region. Forest resources include rubber, cane and bamboo, timber, hardwood, medical plants and herbs. But industrially the region is not developed and does not seem to be significant also. Only a small percentage of the country's total number of factories are in this part of north-east region. They are mostly engaged in manufacturing of food products, wood and wood-based items and non-metallic mineral products. Tea and petroleum are the two important industries and both these industries are playing a dynamic role in NEI's economy. The other large and medium-scale industries include cement, paper, sugar, jute, oil and natural gas, mining and fertilizer. In medium and small-scale sector plywood, handicraft and handlooms are occupying a significant share.

The region is also famous for its exotic flora and fauna. It is ideally situated to produce spices, fruit & vegetables, flowers and herbs. Therefore, the North East India can also emerge as an exporter of orchids, flowers, apple, orange, pineapples, spices, herbs, etc. to the South East Asian Region.

NEI is a very significant part of the country as far as trading is concerned as NEI has natural border-trading advantages. Trading advantage of the region for export promotion through establishment of multi-dimensional relations in terms of trade, business and commercial activities in the region has a wide scope of generating economic activities through the mechanism of exports with its neighbouring countries. In fact, its neighbouring nations was the traditional markets for a variety of goods and services provided by NEI before its traditional links were disrupted by partition of the country. However, there is a renewed focus on trade in view of the need to forge closer commercial and economic links with larger markets in fast developing South East Asian economies.

From the geo-political approach, the NE is positioned in a strategic location as it shares border with China, Myanmar, Bangladesh and Bhutan. Logically it has got both advantages and disadvantages due to its position. So, advantages are good connectivity with the South-East Asian countries mainly China, Myanmar, Bhutan, Bangladesh, Malaysia, Thailand, Philippines, Cambodia and Indonesia etc. and these places are abode of almost half of the world's population. There is no doubt that this vast population could have great impact by establishing different kind of trade and commerce. But the topographical condition basically the rivers and rough mountains of the country stand as a blockade and create geo–political tensions which ultimately act as disadvantages and factors in creating a unfavourable atmosphere in the path of developing trade relation among those countries

The NER is rich in different mineral and natural resources like hydrocarbons, natural gas and other, and has immense potential to produce hydroelectricity but absence of essential infrastructure has hindered its development. Insufficient and meagre infrastructure, inhospitable landscape (terrain) and a comparatively late participation in the development process are some of the factors for economic backwardness of the region. Still, the NER has certain strengths and enough opportunities in different angles to achieve economic development in easy way. Because of the region's geo-political location, the region can develop, create and culture cross-border markets, which are likely to be more cost effective for North East India's surplus production than the distant national markets. This is one of the open opportunities for NE region for achieving progress in a faster way.

Objectives of the Study

1. To study the prospects of Cross Border Trade in N.E. states of India.
2. To study the challenging factors responsible for cross border trade pertaining to India's North East India.

Research Methodology

This paper is descriptive and theoretical in nature. This paper is mainly based on secondary data collected from different published, unpublished records, books journal, articles, internet, etc.

Theoretical Framework of Cross Border Trade

Trade and commerce of commodities can flow between individual human groups, regions and between two countries or among many countries. If such exchanges of good is done on international border of two or more countries it is known as "Cross Border Trade". This Border trade plays a pivotal role in creating diplomatic, cultural and business relations The borders have their own natural location, human legacy, history, strategic reputation and its own constraints. This trade activity between the borders of the two countries improves in developing the sociocultural and economic relationship. In recent days the term 'border trade' has given a international importance all over the world. This is for the reason that this is the only way of enriching a nation which is not gifted by nature. Adam Smith had himself argued that cross border trade is essential for economic competence and development. Adam Smith also showed how all countries could gain from international trade through international division of labour. Ricardian theory of Comparative Cost (Ricardo, 1817) explained a more valid and widely admired explanation of international trade. Ricardo did not reject Smith's analysis of absolute advantage as the basis of international trade. But he explained even further and contended that even if the countries did not have absolute advantage in any line of production over the other, international trade would still be beneficial, bringing improvements and benefits from trade to all the participating countries. The basic instinct is: If country X is better than country Y in production of cars and country Y is better than country X at producing paddy- both obviously gain if X specializes making cars and Y paddy- it is a case of absolute advantage. Even if country X is better than Y at making both, still both can benefit if each of them specializes at making the one it does best.

As per Ricardo, a country should specialize and export those goods in which it has comparative advantage. This theory highlights the need for elimination of artificial restriction in the form of tariffs, license and other means of trade restriction so that various countries can specialize on the basis of their comparative costs and derive mutual benefits from international trade. Trade theory developed by Heckscher (1919) and Ohlin (1933) provided a thorough and possible explanation of international trade as compared to the classical comparative advantage model. The theory states that the main determinant of pattern of production, specialization and trade among different regions is the relative availability of factors supply. Some countries have much capital, others have more labour. The theory articulates countries, that are rich in capital will export capital intensive goods and countries that have more number of labour will export labour intensive goods (Sodersten, 1970). Ohlin stated that the main cause of trade between regions is the difference in prices of commodities. Samuelson in the year 1948 provided a rigorous proof to the Heckscher Ohlin theorem of factor price equalization. The factor price equalization theorem says that international trade brings equalization in the absolute and relative returns to homogeneous factors of production and in their prices.

Agricultural Importance

It is a fact that Agriculture is a pre-dominant activity of the people and the region is known for 'slash and burn' type of shifting cultivation, also known as jhum cultivation, but the region is deficient in production of quite a few agricultural commodities. The region is totally dependent on supplies from other parts of India for almost entire food supply of pulses and a significant requirement of rice also. Rice and pulses have steady and stable demand as it is the staple food of the region. Large transport cost, lengthy and scary supply routes are prone to disruption during monsoon due to landslide and floods. Myanmar is traditionally surplus producer and exporter of these two products. There is no apparent reason why Myanmar should not be able to supply these commodities to the consumers of neighbouring North East India. Indeed North East India can provide markets for other agricultural products of neighbouring countries too. For instance, onion from Myanmar often appears in the markets in Manipur whenever there is a shortage of its supply in India. Once border trade is liberalised the item can be regularly exported to North East India and even beyond. As of now supplies to North East India come from such distant states as Maharashtra. Which time consuming and costly process. Road Connectivity from Agartala to Kolkata via Dhaka road can cut this distance from Agartala to Kolkata to 499 km from the existing 1,590 km route via Badarpur, Lumding, Guwahati and New Jalpaiguri and able to reduce the time and process cost. For development of North Eastern Region and to bring it at par with the rest of the country, much importance needs to be given to Agriculture and Allied Sectors as it is one of the important economic activities of the region.

Border Trade and North East India

It is said that South East Asia begins where North East India ends. About 98% of the region is connected with international border of neighbouring countries like China, Bhutan, Myanmar and Bangladesh China. Therefore, cross border trade has special significance for the economics of North Eastern states. The rapid growth of development in the neighbouring countries and the process of growing regional cooperation, the prospects of north east region emerging as an exporter of several indigenous and local products at foreign market to derive benefits from the enhancing trade activities. The following table depicts the main potential items from the NER for Cross Border Trade.

Table 1: Potential Items from the North East India for Cross border Trade

Sl. No.	States	Items
1	Assam	Tea, Jute product, areca-nut, Different kind of Chilly, Handloom & handicrafts, , ginger, processed fruits, handmade paper, Pickle and floriculture items, essential oil, minerals like coal & limestone, etc.
2	Tripura	Fresh fruits, processed fruits, rubber, gas, plastic clay, Handloom & handicrafts (Bamboo Items) etc.
3	Meghalaya	Ginger, turmeric, orange, potato, betel vine, areca-nut, broom stick, coal limestone, gypsum, mica, uranium etc.
4	Arunachal	Energy generating rivers, Handmade carpet, handmade paper, citrus, fruits, processed fruits, ginger, herbal and medicinal plants, wild orchids etc.
5	Manipur	Pineapple is a major Cash crop cultivated in the slopes of hills and hillocks, handloom, handicrafts products, horticultural product, and few products that are procured from outside the state and are exported to Myanmar.
6	Mizoram	Fruit, raw cotton, tung seeds, citrus fruits, tapioca, ginger, processed fruits, processed spices, tung oil, Handloom & handicrafts etc.
7	Nagaland	Chopsticks, horticulture products, handloom & handicrafts etc.
8	Sikkim	Organic fruits and vegetables, Tea.

Source: Sing and Singh (2010)

Prospects of cross border trade in NEI

The Prospects of border trade for north east region of India can be realized on the following points:

- The NE India is well known for its bio-diversities and heritage sites are beautiful hotspot for tourist also. These Hotspots are Tawang, Dong Valley, Gangtok, Mazuli, Kaziranga, Pabitara, Manas, Cherrapunji, Halflong, and Jatinga. NEI can be developed further as tourist spots by attracting more tourists from all over the world. In the year 1996, an internationally reputed consultancy farm 'Coopers & Lybrand' submitted a report to the Govt. of Assam, which has stated that if the vast tourism capacities of NE India are fully developed in the coming years, the region will receive more tourist than Singapore and Bangkok. Because almost all the western and Japanese tourists visiting South East Asian region would drive a few hundred kilometres more to enjoy the scenic and cultural beauties of the NEI. This alone can boost the economy of entire NEI and young male and female can earn in dollars.
- Tea industry, being a leading industry of Northeast encourages the growth of several ancillary industries as like Plywood, Saw-Mills, Coal, Mining, General Engineering works etc. Moreover, Assam alone produces about 50% percent of the country's tea and the tea industry so needs new international markets. Thus, tea industry can find new outlets for exporting its products to the South East Asian countries, if such regional economic cooperation is built up.
- Other potentiality of NE India is the plantation of Jatropha, from which bio-diesel can be produced. This plant is grown widely in the entire NEI. If its scientific cultivation can be undertaken in large scale, the region can save lot of foreign exchange in terms of reduced import of crude-oil, the price of which is increasing rapidly. The plant produces seeds with an oil content of 37% and the oil can be used as fertilizer as well. It has marketing importance too.
- The NER of India is a treasure house of various recourses. With the establishment of India ASEAN free trade area the region will no longer be handicapped by physical inaccessibility from the rest of India. It is to be hoped that such free trade will open the door of new opportunities for the development of NEI, which has been stagnating due to lack of economic development for the last six decades.
- The opening up of trade of South East Asian countries as visualized in the India's Look East Policy could certainly add some vigour to the land locked and lean economy of NEI. Giving the geo-political situation of the NEI cross-border markets are likely to be most cost-effective business for surplus production of the

region and also for imports of some consumable items in comparison of dealing in far-away main-land markets. From the order point of Arunachal Pradesh, export of India could reach by the Stil- well road to Kunming in South China nearly thousand miles within two days, Yangon in Myanmar within two and half days, Bangkok in four days and Singapore in five days, Agartala to Kolkata via Dhaka road can cut the distance from Agartala to Kolkata to 499 km from the existing 1,590 km route via Badarpur, Lumding, Guwahati and New Jalpaiguri.

- The NEI, with its locational advantage could emerge as a business transit centre for both the SAARC and ASEAN countries. In this regard the region will have the potential to become the hub of future growth engine of Asia. In certain places of the NE, large warehouse with business offices of exporters and importers from both sides would be built-up. Such places would emerge commercial hub of the region bustled by business executives, hotels, clubs, departmental stores etc.
- NER of India is famous for its exotic flora and fauna. Out of the 925 verities of orchids available in India, as many as over 600 can be grown in the region due to its favourable climatic conditions. It is also ideally situated to produce spices, fruits, vegetables, flowers and herbs. Therefore, the region can emerge as an exporter of orchids, flowers, apples, pine apples, oranges, spices etc.
- Moreover, the NEI is considered to be very rich in many medicinal plants. If large scale cultivation of these plantation crops is undertaken in the region, it will not only protect region's environment but also create the region a hub for the pharmaceutical companies.
- In case of cane and Bamboo products too NEI has vast potential. Various type of product made by the Bamboo and cane in NRI has huge demand in the international market. Whish will help to increase the foreign exchange reserve of the nation.
- Another area with great potentials is handloom and handicraft. Assam-Silk particularly Muga can earn huge revenue for the region.

So, border trade gives the impression to offer huge potential and development scope for North East India. To achieve this, the states must develop its basic infrastructure, promote mechanized agriculture and industry to such a status that their products can compete in international market.

Constraints/ Challenges of Cross Border trade in North East India

The challenges and obstacles in the growth of cross border trade in NEI are being discussed below**:**

- ***Number of Exchangeable Items:*** Trade in the barter and exchange mechanism is restricted to the items listed in Ministry of Development of North Eastern Region, North East India. All items are not permissible to trade with all the neighbouring countries. Moreover, only a few items are listed which are grown and available on both sides of the border. Goods of high demand in both sides are not included in the list some country. It is found that all these items are being smuggled illegally.
- ***Multiple Check Post:*** Multiple check posts and obstruction on movement of import/export goods on the National Highways. Representations received from the trade indicate that there are 53 numbers of check posts of various depts. of the Govts. of Manipur and Nagaland from Moreh to Dimapur on NH-39 and as many as 12 check-posts of the Govt. of Manipur on NH-53.
- ***Restrictions on Export/ Import of Plant and Plant Materials:*** Growth of export trade from India to Myanmar is adversely affected because of the restrictions on export of plant and plant materials by Ministry of commerce which restricts export of such items only through the ports of Mumbai, Kolkata, Cochin, Delhi, Chennai, Tutticorine and Amritsar. Import of plant and plant materials are restricted through the Moreh Land Customs Station. Agartala Land Customs Station and Karimganj Steamer-ghat and Ferry Station are only notified entry points for this purpose. As a result of this restriction trade has been suffering.
- ***Restriction on the Import of Timber:*** The import of Myanmar timber is allowed through every post of India except through Moreh. This is one of the cost effective ways to import. There is a tremendous potential for timber imports from Myanmar as the location of Moreh is in the vicinity of vast timber producing areas of Myanmar and the scarcity of timber in our own country holds a natural advantage for trading in Myanmar timber. As per the decision of High Powered Committee’s meeting, import of timber

from Myanmar was allowed only under the condition that it will be used for local consumption only and will not be allowed to be moved outside Manipur. As a result, other part of the county and even other states of NEI also not getting the benefits of this type of cross border trading.

- ***Collection of Taxes:*** Collection of sales tax, forest royalty and other taxes on import of goods by the state governments of north eastern states has added to the tax burden of the Indian importers. High transportation cost and such taxes ultimately reduce the cost-effectiveness of the trade.
- ***Illegal Collection Taxes:*** The main vehicles plying on this national highway are Bus, Tata Sumo, Maruti Van and Truck for the purpose of transportation of goods and passengers. So many underground organizations are levying illegal taxes not only from these vehicles but also from the traders. Which is one of the major Barrier of cross border trade in north east India.
- ***Community Crises and Law and Order Problem of Moreh Town:*** Moreh town is a place of different communities with Kukis, the highest number of population. Community crisis between Kukis and Meiteis is a major problem. In such situation, it is very difficult to have a free and smooth trade. In addition to this, there are frequent bandhs and blockades in the Moreh town as well as in this highway.
- ***Lack of Infrastructural Facilities for International/Border Trade:*** North east India is lagging behind in terms of infrastructural facility. Mainly the road condition of the region is very poor. This leads to create barrier in the smooth transportation and increase the transportation costs. Instate of that other necessary infrastructure which are very much essential of cross border trade is also not sufficient. In this situation it is very difficult to prosper the cross-border trade.
- ***Security Consideration:*** Security considerations and insurgency in the North Eastern states of India is a major threat. Few insurgent groups have established camps in many parts of North East and operating their illegal activity like Smuggling of duplicate currency, arms, drugs trafficking narco-terrorism and Illegal immigration from neighbouring parts. This kind of illegal trades many times creates problem for the importer/ exporter by make the product available to the consumer lower than the price offer by them.
- **Natural Obstacles:** Natural obstacles like flood, land slide etc. are one of the major problems of north eastern region of India. Flood is a common phenomenon in north east specially in Assam. Mostly in every year flood affects the state which leads to create problems for cross border trade in the region. Because of frequent floods in Assam necessary infrastructures damaged very frequently and create a barrier not only for cross border trade but also for infrastructural development of the region.

Conclusion

Due to the Geo-Strategic location, changing strategy from look-east policy to Act-East policy and significant long international borders with the countries both Government and people can take initiative by utilizing this part of India as a base to improve India's economic association with its neighbouring countries. Furthermore, the region has one of the most fertile stretches of land along its valley and has enough viability for the cultivation of a wide variety of cash and food crops both for domestic consumption and for commercial purpose as well. But people of this region need some kind of training to fully explore the opportunity. Border Trade Development between the neighbouring countries is perceived as a necessary precondition for the economic development of the NEI in particular and the country in general. Few well known trade points in the NER border are Moreh (Manipur) and Tamu (Myanmar), Zakhawthar (Mizoram) and Rikhwadhar (Rhee, Chin), Avankhug-Somra point at Nagaland, Nam pong through Pangsu Pass in Arunachal Pradesh, Dawkiin Meghalaya, Suter Kandi in Assam and Nat-hula Pass in Sikkim need to be develop in terms of proper communication, proper security and made operative for fructifying the essence of economic cooperation with the neighbouring countries.

However, the ground realities of the region have certain challenges to the realistic realization of the trade transactions at border. Proper infrastructure like good communication, Hotels, restaurants, resorts, Guest house needs to be built up for sophisticated tourists and traders. If that cannot be achieved, border trade will not beneficial. So, NE India will not be able to create bridge between the rest of India and South East Asia. These inherent topographical limitations need to be spoken and addressed in order to make the trade transaction dynamic and sustainable. Advancement of trade at borders is a precondition for utilizing the comparative geographic and natural advantage of the NEI and needs support so the region can come out of the menace of economic backwardness, poverty and insurgency problem.

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Service Quality Gap in Rural and Urban Branches of State Bank of India

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Abstract

Service quality is considered to be an important aspect for the Indian banking sector in today's world of cut-throat competition. Due to the reforms in banking sector, private sector banks have started their journey of banking business in the country. This has created a competitive environment for the public sector banks of the country in which they are fighting for their survival. The wave of competition is not only affecting the public sector banks operating in urban areas of the country but the branches operating in rural areas of the country are also experiencing the wave. It is the need of the hour that public sector banks of India should build a customer centric culture by meeting the expectation of their customers and State Bank of India (SBI) is no exception to this. This calls for deliverance of quality services to the customers as it will not only enable the public sector banks of the country to retain their market share but will add more potential customers to their basket as well.

In the present study an attempt has been made to measure the service quality gap in rural and urban branches of SBI in Cachar district of Assam. The study concludes that there exists negative gap in all five dimensions of service quality which implies that none of the branches of SBI irrespective of their location could meet the expectation of their customers.

***Keywords**: SERVQUAL, perception, expectation, reliability, responsiveness.*

Introduction

Service quality of a bank can be measured by comparing the gap between what customers are experiencing from the bank and what their expectation was from the bank. Since the level of awareness of the customers belonging to the current century is continuously evolving, their expectation with regard to receiving of qualitative services from the bank also increases. So, the public sector banks are in such a state where they are left with no other option but to satisfy their customers through the delivery of quality services (Rajaram & Ganesh, 2011). Hence it is the need of the hour for all the public sector banks operating in the country to satisfy the customers by meeting their expectations and SBI is no exception this. In this context the present paper tries to examine the branch location wise service quality gap of SBI in Cachar district of Assam.

Review of Literature

Parasuraman, Zeithaml and Berry (1988) suggested five dimensions, namely, reliability, tangibility, responsiveness, assurance and empathy under SERVQUAL model to measure the service quality of service firms. Rajaram & Ganesh (2011) concluded that there existed negative gap regarding all five dimensions of service quality suggested by Parasuraman, et. al. (1988) but the gap was found to be highest with respect to responsiveness dimension and lowest in case of assurance dimension. Javadi, Balochianzadeh & Nasirzadeh (2012) observed that the negative gap was highest in case of responsiveness dimension and lowest in case of tangibility dimension. In a similar way, Rathee, Deveshwar & Rajain (2014) found that the negative gap was highest with respect to reliability dimension and lowest negative gap was observed regarding tangibility dimension. Kakouris & Finos (2016) opined that there existed negative gaps regarding all five dimensions of SERVQUAL model. Marathe (2017) revealed negative gaps regarding all five dimensions except reliability and responsiveness dimensions.

Thus, to measure the gap in service quality of SBI in Cachar district of Assam all five dimensions under SERVQUAL model have been considered.

Objectives of the Study

1. To examine the branch location wise gap in select dimensions of service quality of SBI in Cachar district of Assam.

2. To examine the branch location wise gap in service quality of SBI in Cachar district of Assam.

Hypotheses of the Study

1. Rural and urban branches of SBI do not differ significantly with respect to gap in select dimensions of service quality.

2. Rural and urban branches of SBI do not differ significantly with respect to gap in service quality.

Data Source and Methodology

Primary data has been collected for the present study. An interview schedule has been prepared with 26 statements for conducting the survey. Out of 26 statements, 24 statements have been included under five dimensions of SERVQUAL model developed by Parasuraman, et.al. (1988) and 2 statements have been used for obtaining the information regarding service quality. The responses of the customers have been collected upon two aspects i.e. perception as well as expectation. The survey has been carried out with 80 customers, taking 20 customers each from two rural branches (Dargakona and Kabuganj branches) and 20 customers each from two urban branches (New Silchar and Tarapur branches) of SBI operating in Cachar district of Assam. The customers have given their response on a numerical scale ranging from Strongly Disagree (1) to Strongly Agree (5).

Gap in the dimensions of service quality has been computed by considering the methodology of SERVQUAL model (Parasuraman, Zeithaml & Berry, 1985). Gap is computed by deducting the mean score of expectation of customers from the mean score of perception of customers. Negative gap scores imply that customers' expectation is more than their perception and positive gap scores imply that customers' expectation is less than their perception. Mann Whitney test has been employed to test the hypotheses of the study.

Data Analysis

Table 1 shows branch location wise gap in reliability dimension of service quality of SBI in the district under study. Based on mean scores of reliability dimension in table 1, it can be inferred that the expectation of customers of urban branches is more than the expectation of customers of rural branches of SBI in the said district. The mean scores further disclose that customers' perception of both rural and urban branches about reliability dimension of service quality is not much favourable. However, the perception of customers of rural branches is relatively good than the perception of customers of urban branches of SBI in the said district with respect to this dimension.

Table 1: Branch Location Wise Gap in Reliability Dimension of Service Quality of SBI

Location of the Branches	**Mean**		
	Expectation of Customer	**Perception of Customer**	**Gap**
Rural (2)	4.82	3.71	-1.11
Urban (2)	4.87	3.68	-1.19
Result of Mann Whitney Test	Mann Whitney U Value = 736.000, *p value* = 0.535		

Source: Primary Data through Survey

It is visible from table 1 that in both rural and urban branches of SBI the mean value of the gap between customers' perception and expectation about reliability dimension is negative. Nonetheless the negative gap is comparatively more in urban branches than that of rural branches of SBI in the district considered for the study.

Since the p value (0.535) of Mann Whitney test is more that 0.05 it can be said that there is no significant difference between rural and urban branches of SBI in the said district regarding gap in reliability dimension.

Table 2: Branch Location Wise Gap in Tangibility Dimension of Service Quality of SBI

Location of the Branches	**Mean**		
	Expectation of Customer	**Perception of Customer**	**Gap**
Rural (2)	4.48	4.01	-0.47
Urban (2)	4.58	3.79	-0.79
Result of Mann Whitney Test	Mann Whitney U Value = 578.000, *p value* = 0.031		

Source: Primary Data through Survey

Table 2 depicts branch location wise gap in tangibility dimension of service quality of SBI in the district considered for the study. Based on mean scores of tangibility dimension in table 2, it can be inferred that the expectation of customers of urban branches is more than the expectation of customers of rural branches of SBI in the said district. The mean scores further reveal that customers' perception of both rural and urban branches about tangibility dimension of service quality is not much favourable. However, the perception of customers of rural branches is relatively good than the perception of customers of urban branches of SBI in the district under study with respect to this dimension.

It is evident from table 2 that in both rural and urban branches of SBI the mean value of the gap between customers' perception and expectation about tangibility dimension is negative. However, the negative gap is comparatively more in case of urban branches than that of rural branches of SBI in said district. Since the p value (0.031) of Mann Whitney test is less than 0.05 it can be said that there is no significant difference between rural and urban branches of SBI in the said district regarding gap in tangibility dimension.

Table 3: Branch Location Wise Gap in Responsiveness Dimension of Service Quality of SBI

Location of the Branches	**Mean**		
	Expectation of Customer	**Perception of Customer**	**Gap**
Rural (2)	4.79	3.50	-1.29
Urban (2)	4.84	3.14	-1.70
Result of Mann Whitney Test	Mann Whitney U Value = 505.500, *p value* = 0.004		

Source: Primary Data through Survey

Table 3 represents branch location wise gap in responsiveness dimension of service quality of SBI in the district under study. Based on mean scores of responsiveness dimension in table 3, it can be inferred that the expectation of customers of urban branches is more than the expectation of customers of rural branches of SBI in the said district. The mean scores further reveal that the perception of customers of both rural and urban branches about responsiveness dimension of service quality is not much favourable. However, the perception of customers of rural branches is relatively good than the perception of customers of urban branches of SBI with respect to this dimension.

It is observable from table 3 that in both rural and urban branches of SBI the mean value of the gap between customers' perception and expectation about responsiveness dimension is negative. But the negative gap is comparatively more in case of urban branches than that of rural branches of SBI in the district considered for the study. Since the p value (0.004) of Mann Whitney test is less than 0.05 it can be said that there is no significant difference between rural and urban branches of SBI in the said district with respect to gap in responsiveness dimension.

Table 4: Branch Location Wise Gap in Assurance Dimension of Service Quality of SBI

Location of the Branches	Mean		
	Expectation of Customer	Perception of Customer	Gap
Rural (2)	4.81	4.15	-0.66
Urban (2)	4.86	3.71	-1.15
Result of Mann Whitney Test	Mann Whitney U Value = 380.000, *p value* = 0.000		

Source: Primary Data through Survey

Table 4 portrays branch location wise gap in assurance dimension of service quality. Based on mean scores of assurance dimension in table 4, it can be inferred that the expectation of customers of urban branches is more than the expectation of customers of rural branches of SBI. The mean scores further reveal that the perception of customers of both rural and urban branches about assurance dimension of service quality is not much favourable. However, the perception of customers of rural branches is relatively good than the perception of customers of urban branches of SBI in the said district with respect to this dimension.

Table 4 further shows that in both rural and urban branches of SBI the mean value of the gap between customers' perception and expectation about assurance dimension is negative. Nonetheless, the negative gap is found to be more pronounced in case of urban branches as compared to rural branches of SBI in the district considered for the study. Since the p value (0.000) of Mann Whitney test is less than 0.05 it can be said that there is no significant difference between rural and urban branches of SBI about gap in assurance dimension.

Table 5 depicts branch location wise gap in empathy dimension of service quality of SBI. Based on mean scores of empathy dimension in table 5, it can be inferred that the expectation of customers of urban branches is more than the expectation of customers of rural branches of SBI. The mean scores further reveal that the perception of customers of both rural and urban branches about empathy dimension of service quality is not much favourable. But the perception of customers of rural branches is relatively good than the perception of customers of urban branches of SBI in the district under study regarding this dimension.

Table 5: Branch Location Wise Gap in Empathy Dimension of Service Quality of SBI

Location of the Branches	Mean		
	Expectation of Customer	Perception of Customer	Gap
Rural (2)	4.53	3.82	-0.71
Urban (2)	4.56	3.54	-1.02
Result of Mann Whitney Test	Mann Whitney U Value = 568.000, *p value* = 0.025		

Source: Primary Data through Survey

It is evident from table 5 that in both rural and urban branches of SBI the mean value of the gap between customers' perception and expectation about empathy dimension is negative. However, the negative gap is found to be more pronounced in case of urban branches as compared to rural branches of SBI in the said district. Since the p value (0.025) of Mann Whitney test is less that 0.05 it can be said that there is no significant difference between rural and urban branches of SBI regarding gap in empathy dimension.

Table 6: Branch Location Wise Gap in Service Quality of SBI

Location of the Branches	Mean		
	Expectation of Customer	Perception of Customer	Gap
Rural (2)	4.94	3.55	-1.39
Urban (2)	4.89	3.11	-1.78
Result of Mann Whitney Test	Mann Whitney U Value = 573.000, *p value* = 0.023		

Source: Primary Data through Survey

Table 6 shows branch location wise gap in service quality of SBI in the district under study. Based on mean scores of service quality in table 6, it can be inferred that the expectation of customers of rural branches is more than the expectation of customers of urban branches of SBI. The mean scores further reveal that the perception of customers of both rural and urban branches about service quality is not much favourable. However, regarding service quality, the perception of customers of rural branches is relatively good than the perception of customers of urban branches of SBI in the district considered for the study.

It is visible from table 6 that in both rural and urban branches of SBI the mean value of gap in service quality between customers' perception and expectation is negative. But the negative gap is found to be more pronounced in case of urban branches as compared to rural branches of SBI. Since the p value (0.023) of Mann Whitney test is less than 0.05 it can be said that there is no significant difference between rural and urban branches of SBI regarding gap in service quality.

Conclusion

The present study concludes that there exist negative gaps in the rural and urban branches of SBI operating in the said district regarding all five dimensions of SERQUAL model of Parasuraman, et.al. (1988). Thus it can be said that none of the branches of SBI irrespective of their location could meet the expectation of customers. Further it can be inferred from the calculated p values of Mann Whitney test that at 5 % level of significance, there exist significant differences in the gap between rural and urban branches of SBI regarding all five dimensions except reliability dimension of service quality. However, the gap in service quality between rural and urban branches of SBI in the district considered for the study is also found to be significant.

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