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ON

# Money, Finance and Economic Growth: Emerging Issues

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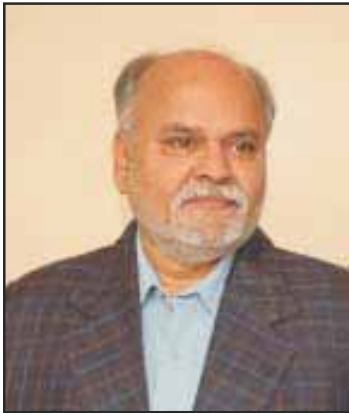
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## *Chairman's Message*



*I have great pleasure in handing over this proceeding of the International Conference on Money, Finance and Economic Growth: Emerging Issues. To fulfil the vision "Information to Knowledge and Knowledge to Wisdom", VPM's Josh-Bedekar College, Thane, India, has been organizing National and International Seminars and Conferences on various subjects, which would enrich and enhance the knowledge of the students, teachers and research scholars.*

*This year college has chosen a theme "Money, Finance and Economic Growth: Emerging Issues", which is very near and dear to our people, society and country as whole. The objectives seem to be very realistic.*

*There are various factors which influences the growth and development of an economy such as savings, natural resources, educational attainment, institutitonal development, effective legal systme, international trade, etc. We know that countries grow and develop at different rate and it is also true that India is one of the fastest as well as largest growing economy in the world. For any country's economic growth and development sound and robustfinance system is essential. It can be financed through either internal finance or and external finance.*

*Conference has covered many facets of this theme such as the role of finance, reforms in fiscal and financial sector, open and diversified financial system, fiscal and monetry policies, banking, finance and insurance sector, financial innovation and financial engineering, RBI's role, inclusive development, foreign trade etc.*

*I wish this International conference a grand success.*

**Dr. Vijay V. Bedekar,**  
Chairman ,  
Vidya Prasarak Mandal, Thane, Maharashtra, India.

## ***Combining Finance with Ethics***



*Finance and growth go together. In every aspect of life, whether as a basic and necessary need or as a luxury, money or finance plays a vital role.*

*Today's criteria of differentiating developed countries from developing countries is money, finance and wealth related issues of money power.*

*Food, shelter, clothing, education, industries etc are all dependent on the availability of finance.*

*More money signifies a more developed populace — more advanced and with greater luxuries. Less money signifies underdevelopment, a poor and underprivileged society.*

*According to Indian Philosophy, Money or Artha is one of the four Purusharthas, the others being Kama, Dharma and Moksha. Artha and Kama have been given a high status in life but they should be earned and enjoyed under the overarch of Dharma. Money is required to do all kinds of actions whether religious, moral or sacred. Money is power, and when someone with such a powerful weapon walks on the path of virtue, he, in a real sense, makes himself, his society and nation, rich.*

*Any financial policy not based on ethical principles, any emerging market without any virtues, or any financial/economic growth based on immorality, will lead you nowhere. There will only be temporary pleasure but no long lasting happiness.*

*Money by itself is blind. It should be directed properly. The direction or vision should be given by ethics. Once money gets a right direction, it should be utilized to create wealth. Wealth has different expressions — physical, intellectual, industrial, educational, agricultural, celebral, so on and so forth; and ultimately leads to the creation of developed countries, refined societies and rational beings.*

*One who knows the potentiality of money and the strength of ethics, and knows how and when to combine these two, becomes not only successful individually, but a visionary leader of men and societies. It is like a blind man and a lame man who want to reach a destination, but without each others' help, cannot do so. When the lame sits on the shoulders of the blind and gives him direction, both can complete their journey. Money is like the blind man, and ethics is like the lame one. Both need each other to bring about sustainable, worthy development.*

*Thus, it can be said money without ethics is blind and ethics without money is empty.*

*As a teacher of philosophy my concerns, along with the usual problems of money, finance and economic growth, would be:*

- *How did our wise men try to utilise money on the path of liberation?*
- *How earning and spending of money is important, but in a virtuous manner?*
- *How finance or money in itself is zero or nothing, but the moment it is connected to ethics, it becomes a Purushartha ?*
- *Last, but not the least, how money without ethics is blind and ethics without money is empty?*

*Let there be a dialogue between economists and philosophers. Let every plan, project and theory be based on and guided by ethics and morality. Only then every pleasure produced by money will result in happiness; excitement created by finance will end in contentment; and luxury produced by earning will end in peace.*

*Let there be prosperity, contentment and peace which is the very essence and purpose of money and finance.*

*I am sure this Conference, besides tackling the nitty-gritties of money, finance and economic growth, will also take a step in this direction.*

*I wish the deliberations every success.*

**Dr. Shakuntala A. Singh**  
Principal

## ***Convener's Message***

*I am indeed delighted and feel very great pride to express myself as a convener of a two day International Conference on “ Money, Finance and Economic Growth: Emerging Issues”.*

*The Department of Economics of VPM's Joshi-Bedekar College, Thane, has completed 44 years from its inception. The Department has guided and educated a large number of students who have excelled in diversified careers. The Department constantly organizes various activities for the students to enhance their subject knowledge through study visits, remedial teaching, series of expert lectures. The Department also conducts events like Cartooning, Poster Making, Essay Competition, Debate, Elocution Competition as a part of economic festival related to economic issues.*

*The main theme and sub-themes were finalized after a lot of discussion and valuable guidance from Dr. Neeraj Hatekar, Professor, The Department of Economics, University of Mumbai. We invited abstracts from Academicians, Research Scholars, Economists, Management Professionals, Bankers and Students. The theme has global significance as a result of which we received excellent response from all over the country and from seven foreign countries.*

*Economists emphasize different channels of transmission. Numbers of studies have dealt with different aspects of the financial sector development and economic growth relationship at both the theoretical and empirical levels. This concept is still very much in progress theoretically and empirically. The relationship between financial sector development and economic growth can be analyzed from three angles: financial deepening leading to economic growth, economic growth leading to financial deepening and a bi-directional relationship between the two. There are pertinent questions such as Who should finance our economic growth? Should the government or private sector or should foreigners or emigrants finance the economic growth? Or Should there be a combination of all sources of financing?*

*The papers received would boost the critical thinking. The conference would bring many aspects of Money, Finance in the Economic Growth process which might hold mirror in present scenario. This conference would intend to bring all those aspects of finance which would contribute to the growth and development of an economy.*

**- Dr. Deepak P. Sable**  
Convener,  
Head of the Department of Economics.





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**Section I**  
**The Role of Finance in Growth and  
Development**



# Islamic Financial Development and Economic Growth Empirical Evidence from Qatar

Mosab I. Tabash<sup>1</sup> and Raj S. Dhankar<sup>2</sup>

<sup>1</sup>PhD Scholar, Faculty of Management Studies (FMS) University of Delhi

<sup>2</sup>Dean and Professor of Finance, Faculty of Management Studies (FMS) University of Delhi

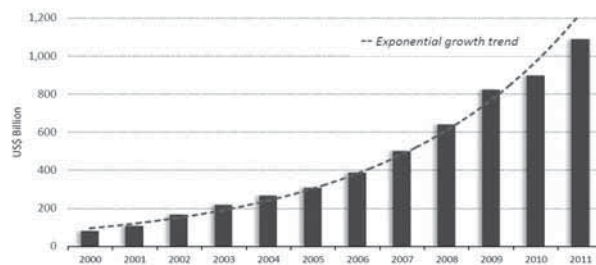
**Abstract :** This paper examines empirically the relationship between the development of Islamic finance system and economic growth in Qatar. The study tries to investigate the long-term relationship between Islamic banks' financing and economic growth in the case of Qatar. Annually time-series data of economic growth and Islamic banks' financing from 1990 to 2008 is used. We have used Islamic banks' financing credited to private sector through modes of financing as a proxy for the development of Islamic finance system and Gross Domestic Product (GDP) as a proxy for economic growth. For the analysis, the unit root test, co-integration test and Granger causality tests were done. Our empirical results generally signify that in the long run, Islamic banks' financing is positive and significantly correlated with economic growth in Qatar which reinforces the idea that a well-functioning banking system promotes economic growth. The results obtained from Granger causality test reveals a positive and statistically significant relationship between economic growth and Islamic bank's financing in the long run. The relationship, however, is neither Schumpeter's supply-leading nor Robinson's demand-following. It appears to be a bi-directional relationship.

**JEL classification:** O16, C32

**Key words:** Islamic finance, Economic growth, Causality, Qatar

## 1. Introduction

Islamic finance is growing as a source of finance for Islamic and other investors around the world. During the past years, one of the rising stars in the world of finance has been Islamic finance. The year 2012 marked a turning point for Islamic finance growth, as new markets and new regulations in the Mid East, helped the sector to flourish. Recently, Ernst and Young's World Islamic Banking Competitiveness Report 2013 said global Islamic banking assets are expected to reach \$1.8tn by 2013, up from the \$1.3tn of assets held in 2011<sup>1</sup>. Neither the ongoing turmoil in the Middle East nor the Euro Zone debt crisis could prevent Islamic banks in the Middle East from reaching out to new markets and more business. This rapid growth has been fuelled by surging demand for Shariah<sup>2</sup>-compliant products not only from financiers in the Middle East and other Muslim countries, but also by investors globally, thus making it a global phenomenon. Despite the financial crisis which has plagued the economies of both industrialized and developing nations, the Islamic finance industry has been flourishing and has enjoyed a 29 percent growth in assets to reach more than U.S.\$ 600 billion in 2008 (Figure 1).



**Fig.1 Global Shariah-Compliant Financial Assets (2000-2011)**

Source: *Deutsche Bank, (2011),*

The relationship between financial development and economic growth has been extensively examined in the literature. Most empirical studies find that the former together with a more efficient banking system accelerates the latter. Levine (2005) suggested that financial institutions and markets can foster economic growth through several channels, i.e. by (i) easing the exchange of goods and services through the provision of payment of services (ii) mobilizing and pooling savings from a large number of investors (iii) acquiring and processing information about enterprises and possible investment projects, thus, allocating savings to their most productive use (iv) monitoring investment and carrying out corporate governance and (v) diversifying, increasing liquidity and reducing risk. Each of these functions can influence saving and investment decisions and hence economic growth.

<sup>1</sup> These statistics can be reached through the website [www.gulf-times.com/qatar/178/details/343320/qatar-has-potential-to-become-major-islamic-finance-platform,-says-qiib-ceo](http://www.gulf-times.com/qatar/178/details/343320/qatar-has-potential-to-become-major-islamic-finance-platform,-says-qiib-ceo).

<sup>2</sup> "The Path", term of Islamic law consists of Islamic instructions based on the Holy Quran and Sunnah).

Despite there are many studies examining the relationship between conventional finance and economic growth, the studies that examine the relationship between Islamic finance and economic growth are not too many. So, in this study, the relationship between the development of Islamic finance system and growth of the economy in Qatar will be tested to see whether Islamic finance contributes to economic growth or not.

## 2. Islamic Finance in Qatar

Qatar has the highest GDP per capita in the world as of 2012, according to World Fact book<sup>3</sup>. The economic growth of Qatar has been almost exclusively based on its petroleum and natural gas industries, which began in 1940<sup>4</sup>. The banking sector in Qatar benefited from rapid economic growth. As a result, Islamic banks posted strong results over the past few years. During the period expanding from 1990 till 2008, combined assets of Qatar Islamic Banks, including Qatar International Islamic Bank, Qatar Islamic Bank, Masraf Al Rayan and First Finance Company generated an impressive increase from less than 5,000 U.S. \$ millions in 1990 to more than U.S \$ Millions 30,000 in 2008 with a cumulative increase up to 0.98 percent as shown in figure 2. The Banking industry in Qatar consists of 11 local banks registered with the central bank and 7 foreign banks with branches in Qatar. Under the list of local banks, there are 4 Islamic banks fully operating under Shariah principles, 3 conventional banks with Islamic windows and 5 conventional banks with no Islamic banking operations.

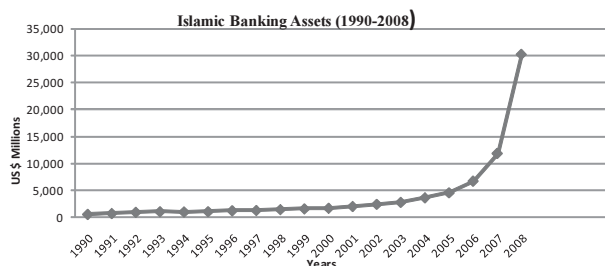


Fig.2: Islamic Banking Assets (1990-2008)

Shariah-compliant assets, offered by both fully Islamic banks and Shariah-compliant windows (or branches) of conventional banks, experienced a strong growth of more than 95% in 2006 (Blominvest report, 2009). This trend is likely to continue as banks see Islamic banking as an opportunity to attract new clients. Islamic banking assets in Qatar witnessed a strong growth over the last couple of years, mainly driven by robust economic growth, increased

demand for Shariah-based products and government willingness to promote the Islamic Banking industry. Many underway projects including petrochemical, housing and construction projects are demanding Shariah-based products and this is likely to act as a future driver for Islamic banking, especially, the country has outlined public investment plans worth \$95bn over five years to 2016, as it prepares to host the 2022 World Cup.

The Islamic Banking industry in Qatar has a great potential for growth backed by a booming economy, new line of projects and people’s increasing acceptance of Shariah-based products. Compared to Saudi Arabia and Kuwait, Islamic banking in Qatar still claims a small share in the total banking assets. With the increased awareness, the Islamic banking industry in Qatar is expected to grow well in the near future.

## 3. Research Problem and Objectives

There is no doubt that Islamic financial sector development plays an important role in the overall development of an economy. Although, there are many empirical studies that examined the relationship between finance and economic growth but specific empirical studies on the relationship between Islamic finance and economic growth are not too many. So, this study tries to examine empirically the relationship between Islamic finance and economic growth and its direction in Qatar.

## 4. Research Methodology

The qualitative and quantitative methods have been used. The data set is extracted from World Trade organization, Global Development Finance and Islamic Banks and Financial Institutions Information (IBIS) database for all Islamic banks’ financing in Qatar<sup>5</sup>. To serve our purpose, appropriate variables were established and the long term relationships between those variables are determined by using econometric estimation methods. We use annually time series data from 1990 to 2008 for the variables. Islamic bank’s financing through modes of financing as a proxy for financial sector and Real Gross Domestic Product (GDP) as a proxy for economic growth were used.

The first step of the study is to determine the relationship between financial deepening and economic growth and whether the series are stationary or not. In a model, for a correct evaluation, time series should be separated from all effects and the series should be stationary. Thus, logarithms of time series were taken. Augmented

<sup>3</sup>This information can be reached through this website [www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html](http://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html)

<sup>4</sup> This information can be reached through the website [www.onlineqatar.com/info/tourist-info.aspx](http://www.onlineqatar.com/info/tourist-info.aspx)

<sup>5</sup>The Islamic Banks and Financial Institutions Information (IBIS) database is built to help researchers and finance professionals working in the area of Islamic economics and finance. It seeks to provide comprehensive data and information on the activities of Islamic finance institutions, up-to-date research and literature. It can be reached through the website <http://www.ibisonline.net/IBISHomepage.aspx>

Dickey Fuller (1981) and Phillips Perron (1988) tests are used. After that, Johansen co-integration test was used to examine the long-term relationship between financial deepening and economic growth and then, the Granger causality test is used to test the causality between Islamic bank financing and economic growth. We use Eviews<sup>6</sup> software to test and analyze the results.

## 5. Literature Review

The relationship between financial development and economic growth has been extensively analysed in the literature. The relationship between financial development and economic growth is a controversial issue. Some authors consider finance as an important element of growth (Schumpeter, 1934; Goldsmith, 1969; McKinnon, 1973, Shaw, 1973; King and Levine (1993) whilst for others it is only a minor growth factor (Robinson, 1952; Lucas, 1988). Schumpeter (1934) sees the banking sector as an engine of economic growth through its funding of productive investment. On the contrary, Lucas (1988) argues that the role of finance has been overstressed.

According to the theory, the development of the banking industry is favourable to the economic growth because the activity of the banks increases the mobilization of the saving, improves the efficiency of the resources allowance and stimulates the technological innovation. Most studies (including recent ones) argue in accordance with the theoretical predictions that there is a positive relation between the financial development and the economic growth. Beck et al (2000), Bekaert et al (2001) and Levine (2005) strongly supported the idea that there is a positive relationship between financial development and economic growth.

With regard to the relationship between Islamic financial development and economic growth, Abduh and Omar (2012), Furqani and Mulyany (2009) and Majid and Kassim (2008) are among the limited studies in this area. Abduh and Omar (2012) identify that the relationship is bi-directional. Therefore, the government policies in supporting the development of Islamic finance in Indonesia are strongly needed in order to support the economic development. However, using different time span of quarterly data, findings from Furqani and Mulyany (2009) and Majid and Kassim (2008) are different in terms of the direction of the relationship. Furqani and Mulyany (2009), on the one hand, state that the relationship between Islamic financial development and economic growth is following the view of “demand-following” which means that growth in real sector economy stimulates Islamic banking institutions to change and develop. On the contrary, finding from Majid and Kassim (2008) is in favour of the supply-leading view.

<sup>6</sup> Eviews is a statistical and econometric software package, which provides data analysis, regression, and forecasting tools. It is produced by Quantitative Micro Software (QMS) in Irvine, California, USA.

## 6. Analysis and Results:

### 6.1 Descriptive Statistics

Table (1) presents summary statistics of the variables used in the econometric analysis for Qatar. This shows the relationship between Gross Domestic Product (GDP) and Islamic banks’ financing in Qatar graphically.

**Table 1:** Summary Statistics (1990-2008)

| Statistics (US \$ Millions) | GDP       | IBF       |
|-----------------------------|-----------|-----------|
| Mean                        | 26,081.03 | 2,589.737 |
| Median                      | 12,393.13 | 0,861.00  |
| Maximum                     | 115,019.8 | 21,313.00 |
| Minimum                     | 6,883.520 | 0,510.00  |
| Std. Dev.                   | 29,345.49 | 2,589.737 |
| observations                | 19        | 19        |

From table 1, we notice that the maximum value for IBFinancing in 2008 reached to 21,313.00 from 0,861.00 in 1990 with standard deviation of 2,589.737. This gives us an indication of high growth of the Islamic finance industry in the recent years. The statistics show that the median for GDP and IB Financing is less than the mean which indicates that the values are positively skewed.

### 6.2 Unit Root Test

Results of ADF and PP Tests applied to time series show that all series belong to economic growth and financial deepening indicators are not stationary at level. To make these series stationary, first differences of series have been taken. Failure to reject the null hypothesis of unit roots implies that the linear combination of the variables is non-stationary; hence we cannot pursue for the cointegration tests. ADF Test results are shown in Table 2:

**Table 2:** Unit Root Test

| Country  | Variable    | ADF Test                |                          | Phillip-Person Test     |                         |
|--|-------------|-------------------------|--------------------------|-------------------------|-------------------------|
|  |             | Level 1                 | First difference         | Level 1                 | First difference        |
|  |             | t- statistic<br>P value | t- statistic<br>P value  | t- statistic<br>P value | t- statistic<br>P value |
| Qatar  | GDP         | -<br>2.008458<br>0.5618 | -<br>4.889556*<br>0.0051 | -2.056949<br>0.0015     | -5.039952***<br>0.0038  |
|  | IBFinancing | -2.3974<br>0.3688       | -4.7272**<br>0.01        | -2.4425<br>0.35         | -15.8247<br>0.0001***   |
| *, **, *** significant at 1%, 5%, 10% level respectively |             |                         |                          |                         |                         |

The results of the table 2 indicate that the data at the first difference is stationary at a 1%, 5%, and 10% level of significance respectively. For GDP variable, if p value is less than  $\alpha$ , then  $H_0$  is rejected, and the series is stationary. From table 2, the first row shows that the p value (0.0051) is less than  $\alpha$  (0.05) in ADF test. Similarly, for IB Financing, the result from the second row shows that the p value (0.01) is less than  $\alpha$  (0.05). This suggests that the null hypothesis is rejected for both variables. Hence, the failure to reject the alternative hypothesis indicates that the two series are stationary.

### 6.3 Johansen Co-integration Test

Table 3 shows the results of Johansen test for the long relationship between Islamic banks' financing and economic growth. The trace test rejects the null hypothesis if the trace statistics exceeds the critical value.

**Table 3:** Johansen's test (trace statistic)

|                             |                    | Trace statistics | Critical values |       |
|-----------------------------|--------------------|------------------|-----------------|-------|
|                             |                    |                  | 5%              | 1%    |
| Null hypothesis             | $H_0: r = 0$       | 23.61007*<br>*   | 15.41           | 20.04 |
| Alternative hypothesis      | $H_1: r \geq 1$    | 4.991680*<br>*   | 3.76            | 6.65  |
| Co-integration Equation     | GDP = 0.853113 IBF |                  |                 |       |
| ** significant at 5 % level |                    |                  |                 |       |

The first row of table 3 shows that the trace statistics (23.61007) exceeds the critical value of (15.41) at 95 percent confidence level. It suggests that the null hypothesis of no cointegrating relationships is rejected. The results confirm that there is a cointegrating relationship among the variables. The eigen value test tests the null hypothesis of  $r$  versus  $r+1$  cointegrating relationships. This test rejects the null hypothesis if the eigen value test statistics exceeds the respective critical value. Table 4 presents the results from this test. Similarly, the result from the first row of table 4 shows that the eigen value test statistics (18.61839) exceeds the critical value (14.07) at 95 percent confidence level. This suggests that the null hypothesis is rejected. Hence, the failure to reject the alternative hypothesis indicates that there is one cointegrating relationship among the variables.

**Table 4:** Johansen's test (Max-Eigenvalue statistic)

|                             |                    | Max-Eigenvalue | Critical values |       |
|-----------------------------|--------------------|----------------|-----------------|-------|
|                             |                    |                | 5%              | 1%    |
| Null hypothesis             | $H_0: r = 0$       | 18.61839**     | 14.07           | 18.63 |
| Alternative hypothesis      | $H_1: r = 1$       | 4.991680**     | 3.76            | 6.65  |
| Co-integration Equation     | GDP = 0.853113 IBF |                |                 |       |
| ** significant at 5 % level |                    |                |                 |       |

The results from table 3 and 4, if read together, show that the null hypotheses of non-cointegration are rejected at 5 percent level of significance. This suggests that in the long run Islamic banks' financing will contribute in the growth of GDP of Qatar.

### 6.4 Granger Causality Test

Statistics and probability values constructed under the null hypothesis of non-causality are reported in Table 5. It can be observed that there is a causal relationship between Islamic banks' financing and economic growth. However, our results show that two-way causality exists from Islamic banks' financing to economic growth and from GDP towards Islamic Banks' financing, since the probability values 0.01937 and 0.03306 are less than 0.05. So, the null hypothesis is rejected and it can be concluded that the higher flow of Islamic finance has led to the growth of the economy. At the same time, the development of the real sector economy stimulates Islamic banking institutions to change and develop.

**Table 5:** Pair wise Granger Causality Tests (1990-2008)

| Null Hypothesis                | F statistics | Probability |
|--------------------------------|--------------|-------------|
| IBF does not Granger Cause GDP | 5.55321      | 0.01937**   |
| GDP does not Granger Cause IBF | 4.53842      | 0.03306**   |
| ** Significant at 5 % level    |              |             |

## 7. Conclusion

This paper makes an attempt to examine the relationship between the development of Islamic finance and economic growth in the long-term in Qatar. We analyzed empirically the relationship between Islamic banks' financing and economic growth. Since, the variables in this paper are non-stationary; therefore, the Johansen's co-integration technique has been applied. The co-integration results provide evidence of a unique cointegrating vector. In other words, there is a long-term stable relationship between Islamic banks' financing and economic growth in Qatar. That means Islamic banks' financing and economic growth move together in the long-run. It is proved that the Qatar has benefited from strong banking system. We also find that the causality relation exist in a bi-directional relationship from Islamic banks' financing to economic growth and vice versa. Our results also indicate that improvement of the Islamic financial institutions in the Qatar will benefit from economic development and it is important in the long run for the economic welfare and also for poverty reduction. The results of study are quite significant as it is one of the pioneering studies of Islamic finance.



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# Role of Finance in Growth and Development

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**Abstract :** The financial system of a country consists of specialised and non-specialised financial institutions, organised and unorganised financial markets and systematically related markets and instruments which can mobilise the financial surpluses available in the economy.

Development economists have ignored the financial system and focussed on other policy areas. Lucas (1988) said that the role of finance in the growth process has been overstated. Robinson (1952) also argued that financial development automatically follows economic growth, not vice versa.

Economists in the 1970s related financial development to economic growth. Empirical studies have found the impact of financial deepening on economic growth statistically and economically significant. Recent studies have related the development of the financial sector to other real sector outcomes, like improvement of trade balance, income distribution and poverty levels.

The same mechanism that focussed on the positive role of finance also states that finance is a source of risk and fragility for the entire economy. The history of finance is full of boom-and-bust cycles, bank failures and currency crises, which negatively affected the real sector. There are major socio-economic costs of financial fragility, because of which the financial sector is often at the top of the Government policy agenda. It is clear, however, that these sources in isolation are incapable of giving a thrust to development. It is important to note: -

- Finance influences growth through the linkages provided through saving and investment.
- Financial development is a State induced activity and the Government has to play a very significant role in furthering it.

Our Five Year Plans have encouraged the creation and functioning of a diversified base of financial Institutions. This paper proposes to show that financial institutions in general, have created a massive infrastructure in our economy which furthers the development processes.

**Key Words** – Financial System, Organized & Unorganized Financial Markets, Instruments, Financial Deepening, Risk & Fragility.

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## I. Introduction

The Financial System of a country consists of a variety of specialised and non-specialised financial institutions, organised and unorganised financial markets and systematically related markets and instruments which can mobilise the financial surpluses available in the economy. A well-developed financial system is essential to ensure smooth functioning of the economy and speed up its future growth. We can ask ourselves the question – What role does finance have in growth and development of an economy? In the beginning, politicians and economists emphasised the importance of the financial system for the rise of capitalism, industrialisation and economic development. On the other hand, Development Economists have for many decades ignored the financial system and focussed on other policy areas. Lucas (1988) said that the role of finance in the growth process has been overstated. Robinson (1952) also argued that financial development automatically follows economic growth and not vice versa. Economists like Goldsmith (1969), McKinnon (1973) and Shaw (1973) have empirically studied the connection between financial sector development and growth. Empirical studies have found the impact of financial deepening on economic growth statistically and economically significant. Recent studies have related the development of the financial sector to improvement of trade balance, income re-distribution and reduced poverty levels.

The same mechanism that focussed on the positive role of finance also states that finance is a source of risk and fragility for the entire economy. The history of finance is full of boom and bust cycles, bank failures, all of which negatively affect the real sector. There are many socio-economic costs of financial fragility because of which the financial sector is often at the top of Government Policy agenda.

Though we will be discussing the financial sector in the beginning, we must note that, this sector in isolation is incapable of giving a thrust to development. This is because:-

- Finance influences growth only through the linkages provided through saving and investment.
- Financial development is a State induced activity and the Government has to play a very significant role in strengthening this sector.

Our Five Year Plans have succeeded in creating a large number of Financial Institutions. We propose to show that through these financial institutions, a massive infrastructure has been created which has quickened the development process. The infrastructure – both physical and financial has propelled the economy faster on the road to development.

## II. Constituents of the financial System

The relevance of the financial system to a modern economy exists to the extent of support it provides to the 'real' sectors engaged in production and distribution of goods which not only accelerates economic development but also enhances social welfare. The constituents of the financial system are:-

**a) Financial Institutions** – These are business organisations dealing in financial assets. They may be banks which accept savings for lending to investors, participate in payments mechanism or create bank credit. The non-banking institutions also mobilise financial resources directly or indirectly from the people and lend to the extent of resources made available. These institutions lend funds but do not create credit.

**b) Financial Markets-** As against real transactions pertaining to goods and services, financial markets are characterised by only financial transactions. A financial transaction could mean the creation of a financial asset or a transfer involving buying or selling of a financial asset. The Money Market and Capital Market deal in financial assets pertaining to short term and medium to long term assets or claims. Another way of classification of financial markets is the Primary Market (New issues market) and Secondary Market (dealing in already created financial securities). Yet another classification of financial markets is the Organised Market (Commercial banks and Co-operative banks under control of the Reserve Bank of India (RBI)) and the Unorganised Market (Moneylenders, Indigenous bankers etc.)

**c) Financial Instruments** -A developed financial system is characterised by a wide range of instruments which can mobilise and allocate savings for productive use. The hallmark of financial assets or securities such as equity shares of companies - debentures, government securities and bonds is that they are viewed as liquid since they are tradable and therefore transferable. One of the most important Financial Instruments is primary securities created by companies engaged in the production of goods and services, equity shares, preference shares and debentures as well as bonds. Financial intermediaries can create secondary securities against themselves as a result of which they can generate funds for subscribing to primary securities. They can sell secondary securities on the one hand and buy primary securities on the other thereby shifting funds from savers to investors.

## III. Financial Systems and Economic Development

We can mention some of the channels through which the financial system can help to increase growth rates by improving capital accumulation and productivity. Financial Systems can:-

1. Enable efficient exchange of goods and services by enabling large number of transactions.
2. Transfer pooled savings from savers and financial institutions for investment purposes, thus enabling the investors to earn economies of scale, which can be obtained in large infrastructural projects.
3. Economise on screening and monitoring costs thus allowing more investment projects to be financed thus creating a positive impact on investment and resource allocation
4. Monitor enterprises and reduce agency problems within firms, managements and shareholders. By building long term relationships, Financial Institutions can further reduce monitoring costs. Financial markets and institutions can thus improve resource allocation and increase productivity.
5. Reduce liquidity risk and enable long term investment. Financial institutions can transform short term liabilities into long term assets so that economic growth can take place.
6. Allow cross-sectional diversification across projects.

We can see from the above that higher growth induced by financial deepening increases demand for financial services, ultimately resulting in a "virtuous circle of economic and financial development" (Greenwood and Jovanovic 1990)

There are two views in regard to the relationship between financial development and economic growth. One view regards an efficient financial system as a necessary precondition for economic growth. The other view is that economic growth actually creates demand for financial services because of which financial development follows economic growth. There is clearly a virtuous circle of interdependence between finance and development. In fact, the two way relation between the two with growth inducing factors working on both sides is obvious. Availability of finance encourages growth and growth in turn facilitates economic development. The process of growth fosters participation in financial markets thereby facilitating financial development. Financial development in turn enables selection of efficient projects, thereby stimulating more investment which increases growth.

## IV. Financial Development and Economic Growth in India

The Indian Financial System has changed in modern times from being an undersized constricted one, to a more open, deregulated and market oriented one. The process of financial development is effectively linked to the following:-

1. Development of Commercial Banks- The number of banks and branches has increased. Small banks have

been consolidated and support has been given to the Co-operative credit movement.

2. Impetus given to Industrialisation in the Five Year Plans
3. Nationalisation of Commercial Banks.
4. Financing of trade and industrial activities especially during the 'fifties' and 'sixties'
5. Impetus given to:
  - a) All India Financial Institutions (IFCI, ICICI, IDBI, SIDBI and NHBI)
  - b) Specialised Institutions (EXIM Bank, IVCF, ICICI Venture)
  - c) Investment Institutions (UTI, LIC, GIC and its subsidiaries)
  - d) Refinance Institutions (NAABARD, NHB)
  - e) State level Institutions like SFC's and SIDC's (To date, there are 18 State Financial Corporations and 26 small Industries Development Corporations.
6. Expansion of NBFCs.
7. Mutual Funds- They provide households an option for portfolio diversification and risk aversion by using the funds collected for investment in the stock and debt markets.
8. Increase in the number of Stock Markets, increase in liquidity and increased prospects of long term growth. Market capitalisation has increased manifold. The increased turnover of BSE and NSE is indicative of growth of our economy. The financial deepening and widening in India as well as the role of Financial development and Capital Formation taking place in our country is evident from the various financial developmental ratios given below:-
  - a) Finance Ratio (Ratio of total issues to National Income)
  - b) Financial Interrelations Ratio (Ratio of total Issues to Net Domestic Capital Formation)
  - c) New Issues Ratio (Ratio of Primary issues to Net Domestic Capital Formation)
  - d) Intermediation Ratio (Ratio of Secondary Issues of Banks and Financial Institutions to primary Issues)

Critical Appraisal of Performance of Industrial Financing Institutions:-

From the quantitative point of view, the lending of our Financial Institutions to Industries seems to be quite impressive especially when we examine the assistance

provided during the last two decades. From a meagre Rs 60.5 crore in 1961-62 (of which 29.8 crore was disbursed) the total assistance has increased to Rs 8,01,998 crore by end of March 2004 of which Rs 5,82,156 crore was disbursed. As far as the quality of lending is concerned, though these institutions are supposed to provide assistance to new enterprises, small, medium firms and industries established in backward areas, they have granted a major part of their assistance to large industrial houses. Also more financial assistance has been given to industries in developed states like Maharashtra, Gujarat and Tamil Nadu. When assistance had to be channelled to backward areas, the backward areas in developed states received more assistance.

In recent years, the non-Performing Assets of the Industrial Financing institutions have been increasing on the one hand as also the cost of raising funds. As a result, their profitability has gone on a downward spiral. The non-performing assets of some financial institutions have risen to more than 30 per cent of net assets which is very high. The cost of raising funds has been 11 per cent for financial institutions as against only 8.5 per cent for banks. Their lacklustre performance has made it difficult for these institutions to raise funds from the Capital Market.

Despite the above, we can see that the relevance of Specialised DFI's such as NABARD and EXIM Bank has not declined despite competition from the securities market and commercial banks. All that these institutions have to do is to increase their competence and efficiency. The concept of public-private partnership can also be emphasised so that the private sector also feels responsible for introducing different development strategies. The most important factor responsible for development is of course, our vast manpower. Unless the Government invests heavily on human capital, we cannot expect an increase in development.

**Endogeneous growth:-** The link between finance and economic development has been resurrected over the past decade by the endogeneous growth theory. This theory traces the steady state growth ( $g$ ) in terms of three crucial parameters namely the level of technology as captured by the Social Marginal Productivity of Capital ( $A$ ), the proportion of Savings channelled to Investment ( $f$ ) and the savings rate ( $s$ ). Not taking into account depreciation, we get the equation  $g = Afs$ . This equation implies that Financial development could influence economic growth either by increasing the productivity of capital or lowering the interrelation costs by increasing 'f' or by enhancing the saving rate 's'.

Professor Indirani Chakraborty of the Institute of Development Studies, Kolkata has studied the impact of developments in the financial sector on economic growth in India in the post reform period. The paper formalises the relationship between Financial Development and economic growth in the structure of an endogeneous growth model.

The model was estimated using quarterly data for the period 1993 to 2005 for India. The results show that the investment-output ratio has a positive significant effect on real rate of growth in the GDP, irrespective of the indicator of stock market development. An increase in market capitalisation dampens economic growth but an increase in the money market rate of interest has a positive significant effect. Real wealth and interest rate differentials have negative significant effect and the lagged values of foreign exchange reserves have a marginally significant negative effect on economic growth. The findings do not support the theory that stock markets play an important role in enhancing economic growth in India. However the banking sector reforms seem to have promoted economic growth significantly.

Panicos O. Demetriades and K.B. Luntel used newly collected data from the RBI to examine the various types of banking sector controls on the process of financial deepening. They selected India to carry out an empirical study not only because it is one of the most important developing economies in the world, but also because it has a rich history of varying types of banking sector controls. They found that with the exception of a lending rate ceiling, these controls were found to influence financial deepening negatively independent of the well-known effect of the real interest rate. Exogeneity tests suggest that financial deepening and economic growth are jointly determined. Thus, policies which affect financial deepening may also have an influence on economic growth.

We can note that when funds are allocated to projects with the highest marginal product, development is bound to take place. This process is definitely costly as we need to closely screen alternative projects. Individuals would shun very risky projects unless they were given a chance to share the risk with some dependable party preferably with Government backing. In fact, the role of financial institutions is to collect and analyse information so as to channelize funds into investment activities that yield highest returns. Capital could be invested in a safe low yielding technology or in a risky high yielding one. In contrast to individual investors, financial intermediaries with their large portfolios can obtain better information on aggregate productivity. Savings can be channelized into those areas which would result in higher productivity of capital and generate higher growth in the economy.

## **V. Infrastructure and Economic Development**

We have seen above how a well-developed Financial System is vital to ensure Growth and Development. The financial structure, however, cannot be viewed as the main cause of development in isolation. Development of the financial structure is a continuous process and it has to be preceded, accompanied and followed by progress in infrastructure if our objective of self-propelling Economic Development has to take place. Adequate quantity, quality

and reliable infrastructural facilities are essential for the development of an economy. The availability of these facilities is all the more relevant in the case of a developing country like India which is characterised by multiple economic problems reinforcing one another. Good infrastructure raises productivity, lowers production costs, helps to diversify production, expands trade, improves living standard, enables expansion of Commercial Banks all over the country, increases the number of industries and NBFCs. Improvement in Transport and Communication enables people to easily invest in Mutual Funds and Stock Markets. Infrastructure serves as an edifice for building the super structure of an economy. As a necessary precondition, it fosters and propels growth. That is why infrastructural facilities are considered as the wheels of economic activity, if not the engine. (Rao and Rao- 1999). In recent decades, infrastructural facilities have become more vital with dramatic advances in information technology and telecommunications. (Chandran 1998). The World Bank has put forward various benefits accruing to the economy from infrastructure and increased public investment in Social Overhead Capital. Financial Infrastructure is vital for every economy. India has asked the World Bank and other Multilateral Development Banks to create special windows for ensuring finance for infrastructure development. In the words of the Finance Minister P. Chidambaram in his intervention at the G 20 meeting of finance minister- "Special windows need to be created in the World Bank and other Multilateral Development Banks (MDBs) for ensuring finance in support of infrastructure development, including provision of finance for on-going projects which face a sudden scarcity of funds owing to volatile capital flows".

It is very important to note that financial infrastructure can play a critical role in sustaining global recovery in case of economic crises. Investment in infrastructure in emerging markets will increase the potential of these countries. They will be able to service global demand in the short run itself and grow more rapidly in the medium run.

## **VI. Conclusion**

There have been a great number of studies using national and international data supporting the result that Infrastructure is important to growth. Research indicates that while total infrastructure stocks increase by 1 per cent with each 1 per cent increment in per capita GDP, household access to safe water increases by 0.3 per cent, paved roads by 0.8 per cent, power 1.5 per cent and telecommunications i.7 per cent. It is infrastructure productivity which will determine how India will cope with the increasing pace of urbanisation, globalisation and technological innovations in manufacturing and logistics.

We have seen the importance of Finance and Financial Infrastructure in growth of the Indian Economy. Government of India Policy initiatives have served the purpose of

opening the Indian Economy. Today, we have achieved a higher degree of integration with the world economy. A focussed effort is being made to make Indian firms globally competitive, reduce the barriers to entry and provide an impetus to exports. To attain these goals, India has to demonstrate its competitive advantage in terms of a deep domestic market, purchasing power, natural resources and infrastructure.

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# Recent Labour Market in China: Labour Shortage and Wage Rising

Yuming Cui

**Abstract :** China's abundant labour resource took an important role in the process of China's rapid economic growth. Recently, however, China experienced labour shortage and rapidly wage rising, which implies that China's long-lasting competitiveness: abundant labour force and low costs are vanishing. We find that demographic changes, regional disparity and household registration system caused recent labour shortage in some coastal areas of China, while relatively long-lasting low wage and household consumption in China drove wage increasing rapidly. Also, recent higher inflation pressed China's government and employers to increase workers' wage. Labour shortage and rapidly wage rising signal that China is entering a new stage of economic development. China's past successful model of economic development need to make adjustment.

**Keywords:** China, Labour market, Wage rising, Labour shortage

**JEL classification:** J2, J3

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## I. Introduction

China has achieved remarkable economic performance for more than three decades since the introduction of Reform and Opening policy in 1978. Undoubtedly, China's abundant labour resource took an important role in the process of China's rapid economic growth. Since the beginning of 1980s, millions of migrant workers shifted from rural area to coastal cities to work which significantly contributed China to becoming the world manufacturing centre or "world factory", while keeping wages at a relatively low level for many years.

Nevertheless, such "unlimited" labour supply in China can not last forever. The initial labour shortage appeared in 2004 when "migrant workers shortage phenomena" in manufacturing cities of Peal River Delta and Yangtze River Delta was reported (Huang, 2004) and has spread to other areas (Banister and Cook, 2011). More recently, more reports on labour shortage in some manufacturing cities were repeatedly highlighted in media since China's economy boldly recovered from the global financial crisis in the mid-2009. Meanwhile, compared to China's economic growth, Chinese workers' wage increased over the last several decades but not significantly. According to the statistics from National Bureau of Statistics of China (NBSC), in 1981, the annual average wage in urban areas was about yuan 772 in nominal terms (US\$ 453). In contrast, it increased to yuan 36,500 (US\$ 4,400) in 2010. The average annual growth rate is 14 per cent in nominal terms and less than 8 per cent in real term. However, along with labour shortage emerged, wage rising also accelerated to increase in the aftermath of the global financial crisis.

The dramatic changes in China's labour market attracted heated debate. According to Cai (2007 and 2010), China's demographical dividends, which is one of the most important China's competitiveness advantage is diminishing by analyzing China's demographic transition. Zhang *et al.* (2010) argue that China's era of "unlimited labour supply" is over. On the contrary, some researches (Minami and Ma, 2010) argue that there still exists the significant amount of surplus labour in China's agricultural sector by examining marginal productivity of labour (MPL). In addition, Knight

*et al.* (2010) find the same evidence that a large pool of surplus labour in rural area and rising wages in urban area simultaneously exist in China. They also argue that there will not be a "neat" Lewis turning point because of China's unique characteristics such as size and related regulations.

Labour shortage and rapidly wage rising signals that China is entering a new stage of economic development. History of economic development also suggests that cheap labour and demographic dividends cannot last forever. Given China's expanding size of economy and increasing trade share in the global economy, it is meaningful to understand recent development of China's labour market and wage rising in China. In this paper, we review recent development of labour market in China in the last decade. Also, we analyse why labour shortage appeared and wage increased readily in China.

Rest of this paper is organized as follows. We briefly review recent development of China's labour market including labour shortage and wage rising in section Two. This is followed by section Three, in which, the reasons of drastic changes in China's labour market are analysed. Section Four concludes the paper.

## II. Recent Development of Labour Market in China

Over the past decades, one of main challenges confronted by Chinese government was creating sufficient jobs for its growing labour force. Along with rapid economic growth, China has created millions of jobs every year to meet the needs of new young workers, who enter into China's labour market. From Table 1, we can see that total employment and employment in urban area grew continuously from 1990 to 2010. But it is also notable that employment in rural area shrunk since 1997. More detailed, increase of employment in urban area was faster than the growth of total employment during the same period. It reflects the fact that China's rapid economic growth created a large number of jobs, especially in manufacturing sector which mainly is based in urban area. What's more, employment in secondary and tertiary sector considerably increased, particularly in secondary sector in last decades. In contrast, employment in primary sector has

declined since 2002. We also noticed that growth of employment in secondary sector decreased since 2008. It is

partly because of impact of global financial crisis on China's economy, especially on its manufacturing sector.

Table 1: China's employment by sector, millions, 1990-2010

| Year | Total  |            | By region |            |        |            | By industry |            |           |            |          |            |
|------|--------|------------|-----------|------------|--------|------------|-------------|------------|-----------|------------|----------|------------|
|      |        |            | Urban     |            | Rural  |            | Primary     |            | Secondary |            | Tertiary |            |
|      | Amount | Growth (%) | Amount    | Growth (%) | Amount | Growth (%) | Amount      | Growth (%) | Amount    | Growth (%) | Amount   | Growth (%) |
| 1990 | 647.49 |            | 170.41    |            | 477.08 |            | 389.14      |            | 138.56    |            | 119.79   |            |
| 1991 | 654.91 | 1.15       | 174.65    | 2.49       | 480.26 | 0.67       | 390.98      | 0.47       | 140.15    | 1.15       | 123.78   | 3.33       |
| 1992 | 661.52 | 1.01       | 178.61    | 2.27       | 482.91 | 0.55       | 386.99      | -1.02      | 143.55    | 2.43       | 130.98   | 5.82       |
| 1993 | 668.08 | 0.99       | 182.62    | 2.25       | 485.46 | 0.53       | 376.80      | -2.63      | 149.65    | 4.25       | 141.63   | 8.13       |
| 1994 | 674.55 | 0.97       | 186.53    | 2.14       | 488.02 | 0.53       | 366.28      | -2.79      | 153.12    | 2.32       | 155.15   | 9.55       |
| 1995 | 680.65 | 0.90       | 190.4     | 2.07       | 490.25 | 0.46       | 355.30      | -3.00      | 156.55    | 2.24       | 168.80   | 8.80       |
| 1996 | 689.5  | 1.30       | 199.22    | 4.63       | 490.28 | 0.01       | 348.20      | -2.00      | 162.03    | 3.50       | 179.27   | 6.20       |
| 1997 | 698.2  | 1.26       | 207.81    | 4.31       | 490.39 | 0.02       | 348.40      | 0.06       | 165.47    | 2.12       | 184.32   | 2.82       |
| 1998 | 706.37 | 1.17       | 216.16    | 4.02       | 490.21 | -0.04      | 351.77      | 0.97       | 166.00    | 0.32       | 188.60   | 2.32       |
| 1999 | 713.94 | 1.07       | 224.12    | 3.68       | 489.82 | -0.08      | 357.68      | 1.68       | 164.21    | -1.08      | 192.05   | 1.83       |
| 2000 | 720.85 | 0.97       | 231.51    | 3.30       | 489.34 | -0.10      | 360.43      | 0.77       | 162.19    | -1.23      | 198.23   | 3.22       |
| 2001 | 727.97 | 0.99       | 241.23    | 4.20       | 486.74 | -0.53      | 363.99      | 0.99       | 162.34    | 0.09       | 201.65   | 1.72       |
| 2002 | 732.8  | 0.66       | 251.59    | 4.29       | 481.21 | -1.14      | 366.40      | 0.66       | 156.82    | -3.40      | 209.58   | 3.93       |
| 2003 | 737.36 | 0.62       | 262.3     | 4.26       | 475.06 | -1.28      | 362.04      | -1.19      | 159.27    | 1.56       | 216.05   | 3.09       |
| 2004 | 742.64 | 0.72       | 272.93    | 4.05       | 469.71 | -1.13      | 348.30      | -3.80      | 167.09    | 4.91       | 227.25   | 5.18       |
| 2005 | 746.47 | 0.52       | 283.89    | 4.02       | 462.58 | -1.52      | 334.42      | -3.98      | 177.66    | 6.32       | 234.39   | 3.14       |
| 2006 | 749.78 | 0.44       | 296.3     | 4.37       | 453.48 | -1.97      | 319.41      | -4.49      | 188.94    | 6.35       | 241.43   | 3.00       |
| 2007 | 753.21 | 0.46       | 309.53    | 4.47       | 443.68 | -2.16      | 307.31      | -3.79      | 201.86    | 6.84       | 244.04   | 1.08       |
| 2008 | 755.64 | 0.32       | 321.03    | 3.72       | 434.61 | -2.04      | 299.23      | -2.63      | 205.53    | 1.82       | 250.87   | 2.80       |
| 2009 | 758.28 | 0.35       | 333.22    | 3.80       | 425.06 | -2.20      | 288.90      | -3.45      | 210.80    | 2.56       | 258.57   | 3.07       |
| 2010 | 761.05 | 0.37       | 346.87    | 4.10       | 414.18 | -2.56      | 279.31      | -3.32      | 218.42    | 3.61       | 263.32   | 1.84       |

Source: National Bureau of Statistics of China and authors' calculation.

It is difficult to estimate the exact amount and scale of labour shortage because of constraint of China's statistic system. Media reports about migrant worker shortage may only provide us a surface phenomenon rather than a real story. One of the striking features, however, is that labour shortage in China is inconsecutive. It is relatively sensitive to the fluctuation of external economy. This evidence is more obvious in the manufacturing sector. Take 2008 and 2009 as example, many migrant workers lost their jobs and returned to hometown because of the global financial crisis in 2007-2008. Nevertheless, since 2009 when China's economy boldly recovered due to China's large stimulus package, labour shortage in Guangzhou, Hangzhou and other coastal cities in which usually there were a large number of migrant workers to work was extensively reported. China's labour shortage also appeared with seasonality. In other words, labour shortage mainly occurs in specific periods such as Chinese Spring festival. It is important to distinguish

seasonal labour shortage from real labour shortage. Therefore, it may be too early to judge whether China is already in the stage of labour shortage or not.

Lewis (1954) points out that wage would increase when 'unlimited' labour supply in subsistence sector was fully absorbed by capitalist sector. Recently, however, it appeared that China's long-lasting international competitiveness is vanishing. Chinese labour's wage increased considerably since 2008. In 2011, 25 provinces or regions of China's 32 provinces and regions lifted local minimum wage standard (see Table 2). (China doesn't have national minimum wage standard but local standard). Only in the first half of 2011, 18 provinces or regions adjusted minimum wage standard with increase of average 22 per cent. However, question on if recent rapid wage increase implies China has reached the Lewis turning point remains unclear.



Table 2: Adjustment of minimum wage standard by province or region

| Regions        | Date of implementation | Monthly minimum wage standard, unit: yuan |        |        |        |        |        |        | Hourly minimum wage, unit: yuan |        |        |        |        |        |
|----------------|------------------------|---|--------|--------|--------|--------|--------|--------|---------------------------------|--------|--------|--------|--------|--------|
|                |                        | Tier 1                                    | Tier 2 | Tier 3 | Tier 4 | Tier 5 | Tier 6 | Tier 7 | Tier 1                          | Tier 2 | Tier 3 | Tier 4 | Tier 5 | Tier 6 |
| Beijing        | 1/1/2011               | 1160                                      |        |        |        |        |        |        | 13.00                           |        |        |        |        |        |
| Tianjin        | 4/1/2011               | 1160                                      |        |        |        |        |        |        | 11.60                           |        |        |        |        |        |
| Hebei          | 7/1/2011               | 1100                                      | 1040   | 960    | 860    |        |        |        | 11.00                           | 10.40  | 9.60   | 8.60   |        |        |
| Shanxi         | 4/1/2011               | 980                                       | 900    | 820    | 740    |        |        |        | 10.80                           | 9.90   | 9.00   | 8.10   |        |        |
| Inner Mongolia | 11/1/2011              | 1050                                      | 980    | 900    | 820    |        |        |        | 8.90                            | 8.30   | 7.60   | 6.90   |        |        |
| Liaoning       | 7/1/2011               | 1100                                      | 900    | 780    |        |        |        |        | 11.00                           | 8.50   | 7.50   |        |        |        |
| Jilin          | 5/1/2011               | 1000                                      | 950    | 890    | 830    |        |        |        | 7.70                            | 7.30   | 6.80   | 6.30   |        |        |
| Heilongjiang   | 7/1/2010               | 880                                       | 840    | 720    | 700    | 670    | 620    | 600    | 7.50                            | 6.50   | 6.00   | 5.80   | 5.50   |        |
| Shanghai       | 4/1/2011               | 1280                                      |        |        |        |        |        |        | 11.00                           |        |        |        |        |        |
| Jiangsu        | 2/1/2011               | 1140                                      | 930    | 800    |        |        |        |        | 9.20                            | 7.50   | 6.50   |        |        |        |
| Zhejiang       | 4/1/2011               | 1310                                      | 1160   | 1060   | 950    |        |        |        | 10.70                           | 9.50   | 8.60   | 7.70   |        |        |
| Anhui          | 7/1/2011               | 1010                                      | 900    | 800    | 750    | 720    | 680    |        | 10.60                           | 9.40   | 8.40   | 7.80   | 7.50   | 7.10   |
| Fujian         | 3/1/2011               | 1100                                      | 950    | 850    | 750    |        |        |        | 11.60                           | 10.00  | 9.00   | 7.90   |        |        |
| Jiangxi        | 7/1/2010               | 720                                       | 660    | 600    | 550    | 500    |        |        | 6.80                            | 6.20   | 5.70   | 5.20   | 4.70   |        |
| Shandong       | 3/1/2011               | 1100                                      | 950    | 800    |        |        |        |        | 11.50                           | 9.80   | 8.70   |        |        |        |
| Henan          | 10/1/2011              | 1080                                      | 950    | 820    |        |        |        |        | 10.20                           | 8.90   | 7.70   |        |        |        |
| Hubei          | 12/1/2011              | 1100                                      | 900    | 750    |        |        |        |        | 10.00                           | 8.50   | 7.70   |        |        |        |
| Hunan          | 7/1/2011               | 1020                                      | 930    | 840    | 770    |        |        |        | 10.00                           | 8.50   | 7.00   |        |        |        |
| Guangdong      | 3/1/2011               | 1300                                      | 1100   | 950    | 850    |        |        |        | 12.50                           | 10.50  | 9.30   | 8.30   |        |        |
| Guangxi        | 9/1/2010               | 820                                       | 710    | 635    | 565    |        |        |        | 6.00                            | 5.50   | 5.00   | 4.50   |        |        |
| Hainan         | 7/1/2010               | 830                                       | 730    | 680    |        |        |        |        | 7.20                            | 6.30   | 5.90   |        |        |        |
| Chongqing      | 1/1/2011               | 870                                       | 750    | 710    |        |        |        |        | 8.70                            | 7.50   | 7.10   |        |        |        |
| Sichuan        | 8/1/2010               | 850                                       | 780    | 710    | 650    |        |        |        | 8.90                            | 8.20   | 7.50   | 6.80   |        |        |
| Guizhou        | 9/1/2011               | 930                                       | 830    | 740    |        |        |        |        | 10.00                           | 9.00   | 8.00   |        |        |        |
| Yunnan         | 9/1/2011               | 950                                       | 845    | 720    |        |        |        |        | 9.00                            | 8.00   | 7.00   |        |        |        |
| Tibet          | 8/1/2010               | 950                                       | 900    | 850    |        |        |        |        | 8.50                            | 8.00   | 7.50   |        |        |        |
| Shaanxi        | 1/1/2011               | 860                                       | 780    | 730    | 680    |        |        |        | 8.60                            | 7.80   | 7.30   | 6.80   |        |        |
| Gansu          | 10/1/2010              | 760                                       | 710    | 670    | 630    |        |        |        | 7.90                            | 7.50   | 7.10   | 6.60   |        |        |
| Qinghai        | 12/1/2011              | 920                                       | 910    | 900    |        |        |        |        | 9.30                            | 9.20   | 9.10   |        |        |        |
| Ningxia        | 4/1/2011               | 900                                       | 820    | 750    |        |        |        |        | 9.00                            | 8.50   | 8.00   |        |        |        |
| Xinjiang       | 6/1/2011               | 1160                                      | 960    | 880    | 800    |        |        |        | 11.60                           | 9.60   | 8.80   | 8.00   |        |        |

Note: Shaded provinces or regions mean that minimum wage standard was increased in 2011.

Source: Ministry of Human Resources and Social Security of the People's Republic of China, published on January 19, 2012.

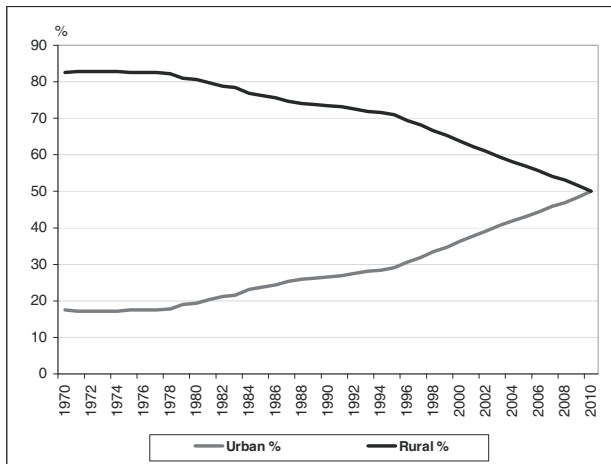
### III. Reasons of Labour Shortage and Wage Rising

There are couple of reasons to cause recent labour short in China. Recent labour shortage was only one of the elements caused the adjustment of Chinese workers' wage. Also, rapidly wage rising need to be carefully studied. We analyse the reason of labour shortage and wage rising in China in this section.

#### A. Demographic change

China's economic growth and urbanization process significantly affect its population distribution and population migration. Constantly shrinking share of population residing in rural area and growing share of population in urban area reflect the fact that a large number of surplus labour moved from rural area to urban area to live since the end of 1970s (see Figure 1). More than 80 per cent of population lived in rural area in 1970. However, this share dropped to around 50 per cent in 2010. In contrast, the share of population residing in urban grew to about 49.95 per cent in 2010 from less than 20 per cent in 1970. This significant demographic transformation is mainly due to surplus labour in rural area, called Nongmingong in Chinese, shifting to urban area.

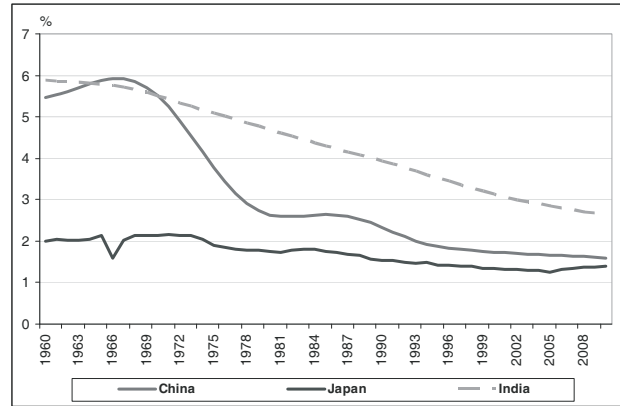
**Figure 1: China's residence in rural and urban area, percentage, 1970-2010**



Source: National Bureau of Statistics of China

China's economy benefited considerably from the migration of its large pool of surplus labour from rural area to urban area over the last three decades. This labour abundance advantage which fuelled China's economy growing for decades, however, appeared to change. As Figure 2 shows that China's fertility rate plunged since 1970s because of China's One-child Policy. Compared with India's 2.6 fertility rate per woman, China's 1.6 of fertility rate in 2010 is relatively low. It is similar to 1.4 of fertility rate in Japan in 2010. Population aging is a durable challenge for Japanese government.

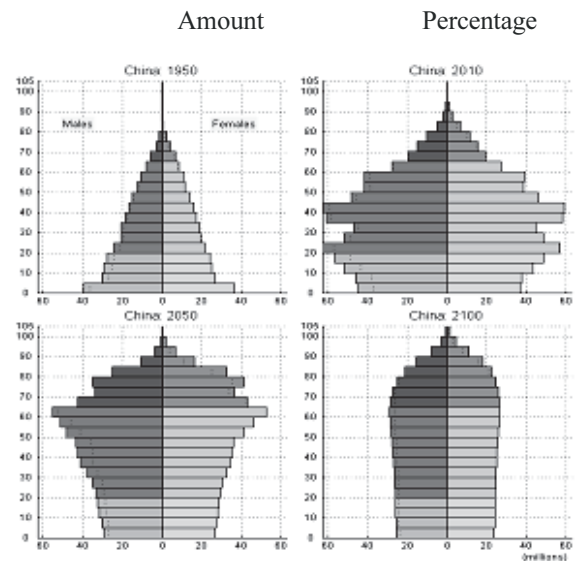
**Figure 2: Fertility rate, births per woman, 1960-2010**

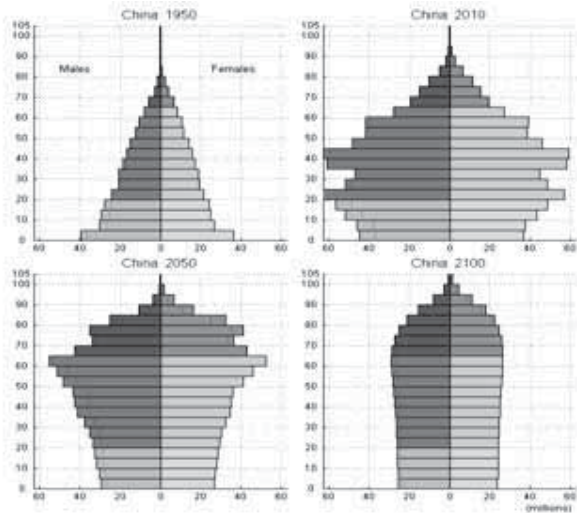


Source: World Development Indicators, World Bank

The UN's population division estimates population composition by age for its member states. Figure 3 illustrates that compared to population composition in 1950, China's working age group which includes groups from age 20 to age 60 considerably expanded in 2010. However, group of age 40-45 became the largest part, followed by the group of age 35-40. China would run out of its demographic dividend and become an aging society by 2050 when groups of age 50 and above become the larger than groups of age 20-50. It implies that China's population shows the aging trend which will unavoidably change China's labour supply. It will further to change China's economic growth pattern.

**Figure 3: China's total population by five-year age group and sex, millions, 1950-2100**

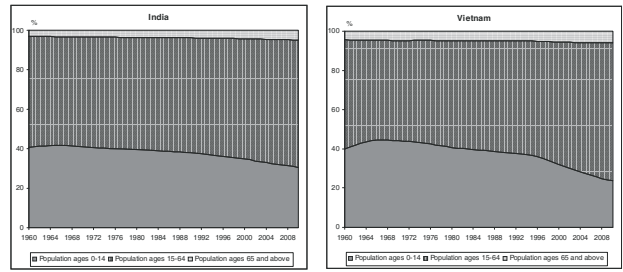
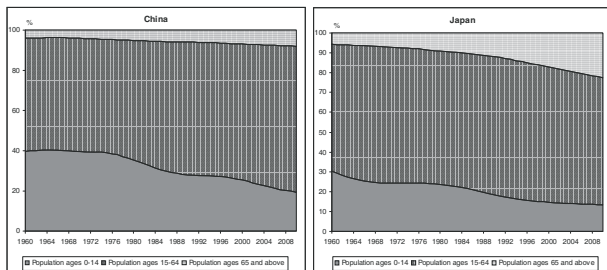




Source: United Nations, Department of Economic and Social Affairs, Population Division (2011): World Population Prospects: The 2010 Revision, New York.

Large share of working age population which covers age 15-64 was one of China's competitiveness advantages. It allows China to develop labour-intensive manufacturing industry while keep wage relatively low. China's this advantage, however, is vanishing. Figure 4 shows comparison of population composition by age between China, Japan, India and Vietnam over the period of 1960-2010. Japan is widely regarded as an "old" country where challenge of population aging impaired the prospect of Japanese economy. Later two, regarded as "young countries", are China's main competitors in global low-cost manufacturing industry. As for China, share of age 15-64 slightly increased mainly due to the decline of age 0-14. More strikingly, age 65 and above increased significantly from 4 per cent in 1960 to 8 per cent in 2010. Japan, which has the oldest society in the world, is a good example to compare. It shows that share of age 65 and above accelerated to increase since 1990s. Meanwhile declining share of age 0-14 reflects low fertility rate in Japan. On the other hand, both India and Vietnam have the increasing shares of working age population and relatively low share of aging group. By comparison, we found that China's population composition is changing and China may be approaching to an aging society.

Figure 4: Comparison on population by age, 1960-2010

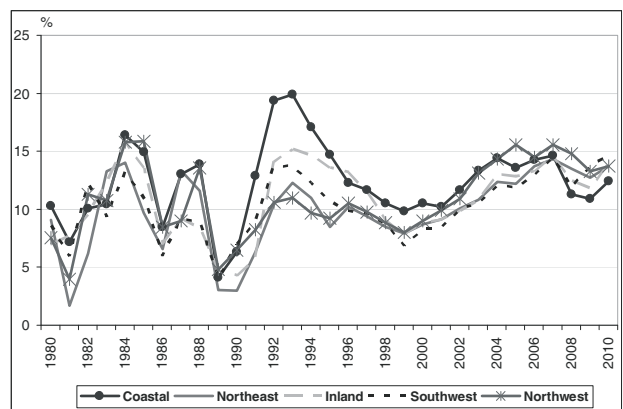


Source: World Development Indicators, World Bank.

## B. Regional disparity

Economic growth in China's non-coastal area growth outpaced coastal area since mid-2000 (see Figure 7). Economic growth in coastal area, such as Guangdong, Shanghai and so on, was higher than the rest of area since China adopted Reform and Opening policy. From the mid-2000s, however, inland and west of China outperformed the coastal area in term of economic growth partly because of the Western Development and Northeast Area Revitalization Plan implemented by China's central government. From Figure 5, we can see that rest of area of China, especial Northwest and Southwest of China, achieved higher growth rate than coastal area since 2004 which implies that there are more jobs opportunities in non-coastal area. Migrant workers from urban area do not have to transfer to coastal area to find jobs. Alternatively, they can choose their home provinces to live and work. In addition, some inland and western provinces encourage labour-intensive industries transfer to these provinces from coastal area when cost surged in some coastal manufacturing cities. This change of growth speed of regional economy also made contribution to recent labour shortage in the coastal area of China.

Figure 5: Real GDP growth by region, base year=1979, 1980-2010



Source: National Bureau of Statistics of China and authors' calculation

### C. Household registration system

Hukou system, a household registration system existing in China, was criticized as an obstacle of labour flow from rural area to urban area. Migrant worker with registration in rural area are not allowed to share the equal right as their peers with urban registration. This institutional constraint creates difficulties living in urban area for migrant workers (Knight and Song, 1999 and Knight et al, 2010). Another factor could cause labour shortage in China is social factor. Wang (2008) finds that there are obvious intergenerational differences between two generations of migrant workers in China. Compared to the first generation of migrant workers, young migrant workers who were born after 80s demand more social security and social recognition than their parent's generation. This suggests that formerly stable labour supply from rural area is no longer to continue. Related regulations and laws to protect migrant workers' right weren't improved as new generation of migrant workers expected. It caused a series of social problems as well as labour shortage in some urban areas of China.

### D. Productivity improving

China's labour productivity has been dramatically improved due to constant investment in human capital and technology. Relative high labour productivity is China's one of powerful competitiveness advantage compared to other advanced countries and emerging economies. Table 2 shows that China's labour productivity surged at high growth rate since 1996. In contrast, major economies, like the US, the EU and Japan's productivity grew at very low rate. Some emerging countries, like India and Russia, experienced a relative high growth of labour productivity, but not as fast as China's. Unit labour cost (ULC), the ratio of wage to productivity, is one of the important factors to measure one country's international competitiveness. It appears that labour productivity and wage increase exist simultaneously in China. Given labour productivity has been improved considerably, China's wage adjustment will significantly affect on China's international competitiveness.

Table 3: Growth of labour productivity in major emerging and developed economies

|                   | Indon-esia |      |      |     |     | US  |     | EU  |      |     |
|-------------------|------------|------|------|-----|-----|-----|-----|-----|------|-----|
| 1996-2005         | 7.1        | 0.4  | 3.8  | 4.3 | 1.4 | 1.1 | 4.6 | 2.3 | 1.5  | 1.9 |
| 2006-2010         | 10.8       | 2.2  | 3.2  | 6.2 | 0.3 | 2.8 | 0.8 | 1.3 | 0.7  | 1.4 |
| 2009              | 8.8        | -0.9 | -6.3 | 6.2 | 4.9 | 2.3 | 5.2 | 1.6 | -1.3 | 1.2 |
| 2010              | 9.9        | 4    | 3.7  | 6.3 | 4.3 | 2.8 | 2.8 | 2.7 | 1.7  | 5   |
| 2011 (estimate)   | 8.8        | 1.4  | 4.4  | 5.2 | 0.8 | 5.4 | 5.8 | 0.6 | 1.1  | 0.2 |
| 2012 (projection) | 7.6        | 1.9  | 4.8  | 5.1 | 2.3 | 4.3 | 2.1 | 0.8 | 0.8  | 1.2 |

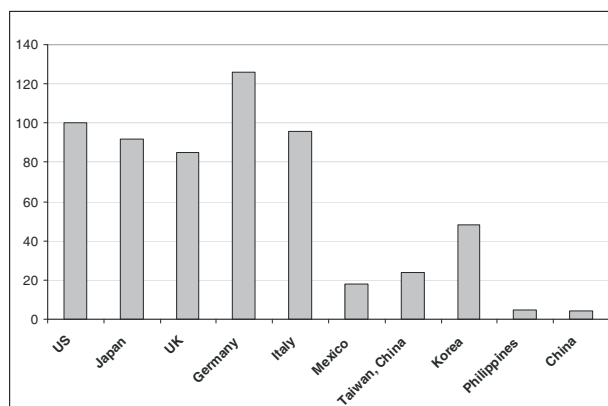
Note: growth rates are based on the per cent changes in the levels of each variable.

Source: the Conference Board Total Economy Database™, January 2012

### E. Wage comparison with other countries

China's wage level is still relatively low compared to other countries. Wage in China is not only much lower than that in developed countries, but also lower than emerging economies, like Mexico and Philippines (see Figure 6). According to Banister and Cook (2011), Chinese hourly labour compensation cost in manufacturing sector were roughly 4 per cent of that in the US and 3 per cent in of that in the Euro Area in 2008. Federal minimum wage in the US is US\$ 7.25 per hour in 2011. While the hourly minimum wage (Tier 1) in Beijing, the highest provincial minimum wage in China by 2011, is yuan 13 (US\$ 2.01) per hour which is only about a quarter of US's federal minimum wage.

Figure 6: Index of hourly compensation costs in manufacturing sector, selected countries and areas, 2010



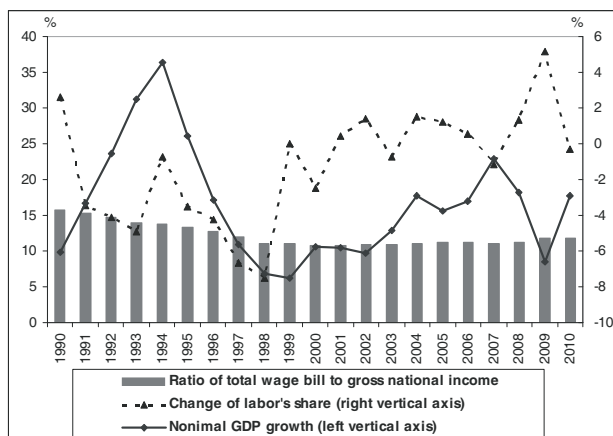
Note: China's data is calculated by using average provincial hourly minimum wage (Tier 1) in 2011. It is an overall average wage rather than compensation costs in manufacturing sector.

Source: Bureau of Labour Statistics, the US.

Labour's share, which is the percentage of compensation for labour to total outcome, indicates that wage increase in China has lagged behind its GDP growth. Some literatures find the evidences of falling trend of labour's share in China (Cai 2005, Bai and Qian 2009), although China's economy achieved a rapid growth. Figure 7 shows China's labour's share which is valued as ratio of total wage bill to gross national income, nominal GDP growth and labour's share growth. We can see that wage share at national level (in column) has slightly declined since 1990s. In contrast, China's nominal GDP grew at about 10 per cent during the same period. Compared to China's rapid GDP growth, labour's share did not grow at the same pace of GDP. Therefore, to some extent, backward labour's share could explain recent wage adjustment occurring in China. What's more, Wei and Qian (2011) examine the regional

disparity of China's labour's share by using provincial data from 1997 to 2007. They finds that labour's share in inland of China is higher than coastal area which implies that wage increase in coastal area of China was lagged behind the rest area of China even though economic growth in coastal area is faster in coastal area during the most of period. It suggests that wage in coastal area where the most migrant workers live did not increase as the same as national income growth. This is one of reason that migrant workers in China, especially in coastal area, demanded higher wage.

**Figure 7: Change of labour's share and nominal GDP growth, 1990-2010**

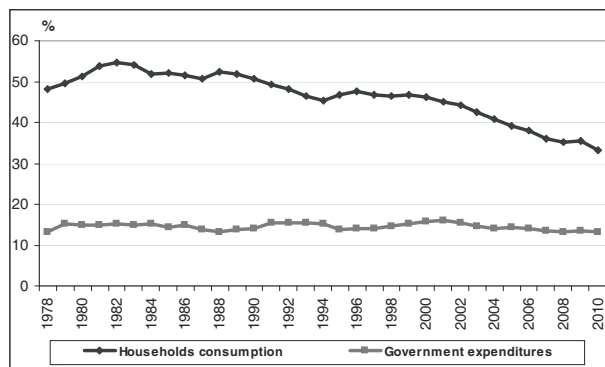


Source: National Bureau of Statistics of China

### F. Household consumption

One of the reasons to explain China's rapid wage increase is household consumption growth which has not kept pace with GDP growth. Ma (2010) finds saving rate rose in the last two decades which implies a falling consumption share to GDP. Ideally, with rapid GDP growth at around 9-10 per cent annually, China's household consumption should increase with China's rapid economic growth. But Baker and Orsmond (2010) find that China's household consumption share to GDP has continuously declined even though total household consumption has grown solidly. Figure 8 illustrates that household consumption share to GDP constantly declined since 2000 except for year 2009. In contrast, government expenditures share to GDP kept stable. It implies that China's stagnant wage increase discouraged Chinese people's consumption. Wage or salary is the main part in China's household income, especially in urban area. Household consumption share to GDP should rise at the pace of GDP growth. More importantly, it is also critical for government's attempt that transfers China's growth model from export and investment-oriented to domestic consumption-oriented. Recent wage increase at national level reflected the fact that China's government would like encourage household consumption to drive economy growing.

**Figure 8: Ratios of household consumption and government expenditures to nominal GDP, 1978-2010**



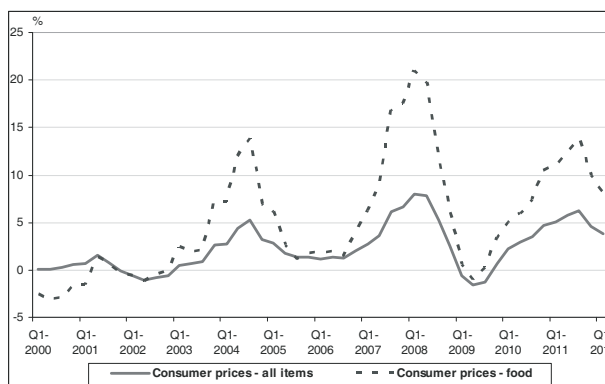
Source: National Bureau of Statistics of China

### G. Inflation

Recent high inflation occurred in China also pressed government and employers to increase workers' wage. Since 2007, China experienced durable relatively high inflation, especially in food prices (Figure 9). Couples of reasons are behind it. First, import prices, particularly commodity prices, rose fast. This imported inflation pushed China's CPI index increase. Second, agricultural product prices were relative high during that period. Third, expectation of RMB appreciation attracted speculative capital flow into China. It therefore deteriorated the bubble in property market and stock market which indirectly caused high inflation. Higher inflation caused living cost increasing, especially when food CPI rose at double digit in some periods. Several strikes which workers demanded increasing wage happened in some cities in coastal area in 2010-2011. It is unusual in China. Thus rising inflation pressed employers to increase wage in order to attract sufficient workers.

**Figure 9: China's overall and food inflation rate, quarterly,**

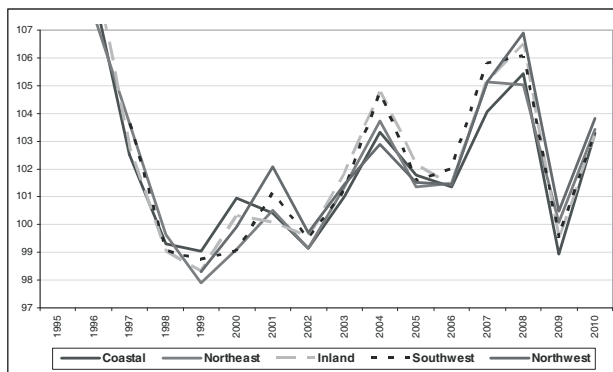
From Q1 of 2000 to Q1 of 2012



Source: OECD database.

In addition, as China's regionally uneven development, inflation in each of regions is various. Figure 10 shows that inflation rate in coastal area is higher than rest of area of China. Rapid rising of living costs in coastal area led a certain number of migrant workers leaving from cities in coastal area and return to their home towns where living costs are low.

Graph 10: CPI index by region, nominal GDP weighted, 1995-2010



Source: National Bureau of Statistics of China.

Above we analyze the reasons of recent labour shortage and rapid wage rising in China. It implies that China's economy is entering a new phase of development. "Unlimited" labour supply and low labour costs in China are no longer true. However, it is worth noting that wage levels and its dynamics in China are probably overstated, because official data, on the one hand, mixes the skilled and unskilled workers, on the other hand, tend to underestimate the informal employment which is increasing rapidly since the late of 1990s. Survey data, in fact, reveals that migrant workers' wages are considerably lower than those of urban citizens and growth rate of wage of migrant worker has been quite slow. Park *et al.* (2009) reports that in the period 2003-2006 real wages of migrant workers grew by an average annual rate of 6.9 per cent, compared to the growth rate of 12 per cent in aggregated official figures. According to Banister and Cook's estimations, despite the rapid increase of wages in the manufacturing sector, average hourly compensation costs were just US\$ 1.36 in 2008, which is lower than not only those of advanced countries, but also those of many emerging countries, such as Mexico (6.5 US\$), or Taiwan (8.7 US\$). Indeed, hourly wages in China are more alike those of much poorer countries, such as the Philippines.

#### IV. Conclusion

China's abundant labour force and internal migration from rural to urban area together significantly contributed China to becoming the world manufacturing centre, while keeping wages at a relatively low level for many years. However, history of economic development also suggests that cheap labour and demographic dividends cannot last

forever. Recently drastic change occurred in China's labour market attracted intensive discussion on if China could prolong its "economic miracle" or not.

We find that demographic change, regional disparity and household registration system caused recent labour shortage in some coastal areas, while relatively long-lasting low wage and household consumption in China drove wage increasing rapidly. Also, recent higher inflation pressed China's government and employers to increase workers' wage. Labour shortage and rapidly wage rising signal that China is entering a new stage of economic development. China's past successful model of economic development needs to make adjustment.

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**Section II**  
**Reforms in Fiscal and**  
**Financial Sector**





# Monetary and Fiscal Policy in a Financial Accelerator Model

Marko Ringmann\*

**Abstract :** The paper at hand develops a dynamic stochastic general equilibrium (DSGE) model in order to examine the recent policy measures which were undertaken during the financial crisis that has started in 2007. Based on existing literature, we extend the standard New Keynesian framework by incorporating financial frictions and a richly specified financial sector. In our model, monetary policy can be both conducted by a standard Taylor rule mechanism in non-crisis times and the facilitation of lending in times of a crisis. Fiscal policy, in turn, is passively modeled via fiscal rules which respond to output and debt changes. The fiscal policy parameters are then estimated for the Euro Zone with data ranging from 1980 to 2011. We show that by intervening on capital markets and by expanding fiscal activity in times of a crisis, the government and/or central bank are able to reduce the deterioration of assets severely. This, in turn, also reduces the output decrease significantly and hence yields a considerably lower negative effect on overall economic activity than without any intervention.

**Keywords:** DSGE model, financial crisis, financial accelerator Unconventional monetary policy, fiscal policy, Bayesian estimation

**JEL classification:** C11, E52, E58, E62

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## 1. Introduction

The financial crisis which started in 2007 and which had its origin in the US was one of the most severe economic crises in the last decades, even in the last centuries. It has brought up that the standard macroeconomic models had failed in explaining or predicting the crisis. Conventional monetary policies as well as fiscal stimulus packages have not been enough to combat the financial crisis. Therefore, adjustments in the established macroeconomic theory are necessary to get a more surround understanding of these phenomena.

Until the mid-1990s models assumed frictionless financial markets, in which households, firms and banks could borrow or lend infinitely. By introducing financial frictions the amount which agents can borrow will be limited and in addition, interest rate spreads between risky and risk-free assets can be modeled. Thereafter, by abandoning the assumption of frictionless financial markets, these modified DSGE models were able to capture the recent increase in interest rate spreads. Further, besides the issue of financial frictions, models which primarily focused on monetary policy often disregarded fiscal policy as another important policy tool. Models, in turn, that featured a richly specified fiscal sector did not take into account financial frictions. This research addresses the aforementioned problems by combining the insights of both research areas. Moreover, by estimating the extended model for the Euro Zone with data ranging from 1980 to 2011, it does not only evaluate the effectiveness of unconventional monetary policy, but also of anti-cyclical fiscal policy.

The first landmark in the field of models which abandon the assumption of frictionless financial markets was published by Bernanke, Gertler and Gilchrist (1999). Their model indigenizes credit markets by introducing an agency problem between borrowers and lenders. They show that this financial accelerator propagation mechanism has significant influence on business cycle dynamics. Based

on New Keynesian models of Christiano, Eichenbaum and Evans (2005), Smets and Wouters (2007), Gertler and Karadi (2011) extend these models by incorporating banks as financial intermediaries. By doing so, they show that financial frictions in terms of banks have a significant impact on overall economic activity in times of a crisis. Further, the monetary authority can conduct unconventional monetary policy, i.e. it can provide funds to banks in a crisis. We extend this framework by expanding investment opportunities for banks.

A paper which analyses the role of fiscal policy in an extended DSGE model was published by Coenen, Straub and Trabandt (2013). The basic framework for their analysis is the New Area Wide Model (NAWM) which is used by the European Central Bank (ECB). They extend the NAWM by a richly specified fiscal sector i.e. they introduce several channels through which the government can influence economic activity. This is done by assuming feedback rules for fiscal variables. However, this model lacks in modeling the financial sector. We, now, combine both insights.

The remainder of this paper is structured as follows. In Section 2, we present a summary of the main features of the model, while the data and empirical strategy is presented in Section 3. Section 4 presents the main results and Section 5 closes with a conclusion and future research ideas.

## 2. The Model

In this section we give a brief overview of the model. As the model features elements that are standard as well as elements which are based on contributions from Gertler, Karadi (2011), Kirchner (2012) and Coenen, Straub, Trabandt (2013), we will highlight the specific features of this model and only sketch the basics non-technically.

### 2.1 Baseline Model

The baseline version of the model, which is presented subsequently, is a New Keynesian Financial Accelerator

Model first of all presented by Gertler, Karadi (2011). As standard DSGE models it does not only consist of four types of agents, namely households, non-financial firms, a fiscal authority and a monetary authority, but also of banks, which act as financial intermediaries between all agents.

Households face a trade-off between consuming goods and supplying labor. Non-financial firms can be distinguished in capital-producing, intermediate goods producing and retail firms. Capital producers determine the capital stock of the economy. Intermediate goods producing firms use labor and capital as inputs for the production of the final output. They act in monopolistically competitive markets, i.e. prices are set as mark-ups over the marginal rate of substitution between consumption and leisure. Finally, retailers simply repackage the intermediate goods and sell it.

Agents face nominal and real rigidities. Real rigidities are habit formation in consumption and investment adjustment costs. Nominal rigidities are modeled via staggered price setting in a Calvo-fashion in combination with indexation of prices to lagged inflation. Furthermore, the inclusion of financial intermediaries yields financial frictions, which arise because of interest rate spreads between the risk free interest rate and the capital market interest rate.

The fiscal authority finances its expenditures by issuing bonds and raising distortionary taxes on consumption and labor income. Fiscal instruments are assumed to follow feedback rules, which are dependent on output and debt changes. Eventually, the monetary authority conducts monetary policy via a simple Taylor rule. The features that are specific to my model are presented in more detail subsequently.

### Financial Intermediaries

Gertler, Karadi (2011) introduced banks as financial intermediaries between households and firms. These banks lend funds obtained from households to non-financial firms. In distinction from Gertler and Karadi, banks cannot only invest in non-financial firms, but also in government bonds (see e.g. Kirchner (2012)). Hence, the balance sheet of a bank is given by

$$P_t = Q_t S_t + B_t = D_t + N_t$$

With  $\mathcal{F}_t$  being claims on intermediate goods firms with a price  $Q_t$ ,  $B_t$  being investments in government bonds,  $D_t$  being deposits obtained from households and  $N_t$  the intermediaries' net worth.

As mentioned, banks face a portfolio choice. Capital market investments yield a return  $R_{kt}$  and government bonds

a return  $R_{bt}$ . Households demand a return  $R_{dt}$  on their funds. Therefore, bankers' net worth in  $t + 1$  evolves as the difference between his/her earnings on assets and his/her costs of liabilities:

$$N_{t+1} = R_{kt+1} Q_t S_t + R_{bt+1} B_t - R_{dt+1} D_t.$$

As it is obvious, the banker has an incentive to increase the amount assets as long as the return on assets is greater than the cost of borrowing. To limit this, we introduce a moral hazard problem which, after some rearranging, yields the following condition:

$$P_t = \phi_{ct} N_t.$$

With  $\phi_{ct} = \frac{1}{1 - \psi_t} \frac{\eta_t}{\lambda - v_{kt}}$  being the overall leverage

ratio consisting of model parameters and the parameter  $\psi_t$ , which represents the unconventional credit policy parameter. If it is greater than zero, then the leverage ratio increases. We see, the bankers' amount of assets positively depends on the net wealth the banker has. In other words, financial intermediaries are endogenously capital constrained. This, in turn, leads to the fact that in times of a crisis, the bankers' assets may deteriorate severely and the central bank may jump in and provides funds. This is what we call unconventional monetary policy.

### Government budget constraint and fiscal rules

A significant drawback of Gertler, Karadi's financial accelerator framework is the little importance of the government. By introducing distortionary taxes and expanding the fiscal sector, we ascribe more importance to it as it is seen in reality.

The government finances its expenditures by raising taxes on consumption and labor with different tax rates. It consumes the public good  $G_t$ , issues Bonds  $B_t$ , makes lump-sum transfers to households  $TR_t$  and in times of a crisis, can provide funds  $\mathcal{F}_{gt}$  to financial intermediaries. Hence, the budget constraint is given by

$$T_t + B_t + (R_{kt} - R_{bt}) S_{gt-1} = G_t + R_{bt} B_{t-1} + \tau S_{gt} + TR_t.$$

Government's tax income is as follows

$$T_t = \tau_t^c C_t + (\tau_t^l + \tau_t^{ssh} + \tau_t^{ssf}) W_t L_t$$

With  $\tau_t^c$  being the consumption tax rate,  $\tau_t^l$  being the labor tax rate and  $\tau_t^{ssh}$  and  $\tau_t^{ssf}$  the social security contributions by households and firms respectively.

The fiscal instruments are assumed to follow simple feedback rules like proposed in Coenen, Straub,Trabandt (2013). Hence, taking consumption tax rate as an example, the fiscal rule is given by

$$\tau_t^c = \tau_{t-1}^c \left[ \tau^c \left( \frac{Y_t}{Y} \right)^{\theta_{cy}} \left( \frac{B_t}{B} \right)^{\theta_{by}} \right]^{1-\rho_c} \varepsilon_t^c.$$

Tax rates react to their own lagged values as well as to output and government debt.

### 3. Data

The model is calibrated and estimated for the Euro Zone. For this purpose, we use quarterly time series for selected macroeconomic variables in the Euro zone. These observables are real GDP, real private consumption, real government consumption, total employment, inflation, and real wages per head. Data is taken from an updated version of the Area Wide Model (AWM) database, which covers the years 1980 until 2011. Further, in line with Coenen, Straub, and Trabandt (2013), we exploit a new fiscal database by Paredes, Pedregal and Perez (2009). This dataset provides data on consumption and labor tax rates, social security contributions from firms and households, lump-sum transfers to households and aggregated government debt.

Since all macroeconomic aggregates except the tax rates are non-stationary, we use the first log-difference minus the average growth rate in order to match the data to the model. From social security contributions, tax rates and transfers we subtract HP-trends.

As we use twelve observables, we need at least twelve shocks to have enough degrees of freedom. The shocks affect households' preferences regarding consumption and labor supply, productivity, the interest rate, the net wealth of banks, capital quality, government spending, credit policy and the fiscal policy variables. All shocks except the fiscal policy variables shocks.

## 4. CALIBRATION AND ESTIMATION

The model is estimated with Bayesian techniques. In order to estimate posterior distributions of selected parameters, we assume prior distributions for parameters and use observables to update these distributions.

Formally, let  $p(\Omega|m)$  be the prior distribution of a parameter vector  $\Omega$  for some model  $m$  and let  $\mathcal{L}(Y_T|\Omega, m)$  be the likelihood function for the observed data conditional on parameter vector and model, then the posterior distribution is obtained by the product of the prior distribution and the likelihood function:<sup>1</sup>

$$p(\Omega|Y_T, m) \propto \mathcal{L}(Y_T|\Omega, m)p(\Omega|m)$$

This relation holds with proportionality. We eventually obtain a mean, mode and standard deviation for the posterior distribution and confidence intervals for the estimated parameters.

### 4.1 Calibration

In Table 1 we calibrate key parameters. Since some model parameters as for instance the subjective discount factor are fairly standard in the DSGE literature, we calibrate them as in Gertler and Karadi (2011). For the time being, we also calibrate the three financial parameters, namely the fraction of capital that can be diverted  $\lambda$ , the proportional transfer to entering bankers  $\omega$  and the survival probability  $\theta$ , as in Gertler and Karadi (2011). There are two reasons. Firstly, these parameters are hard to identify empirically and secondly, by choosing the same parameter values we are able to compare the results of both models. Specific to our model are the fiscal policy parameters. Here, we calibrate the steady state tax rates on consumption, labor and social security contributions as the average between 1980 and 2011.

**Table 1**  
Calibration of key steady-state ratios and selected parameters

| Share / parameter | Description                               | Value |
|-------------------|---|-------|
| Households        |   |       |
| $\beta$           | Discount factor                           | 0.99  |
| $h$               | Habit parameter                           | 0.815 |
| $\chi$            | Relative utility weight of labor          | 3.409 |
| $\varphi$         | Inverse Frisch elasticity of labor supply | 0.276 |

<sup>1</sup>See Christoffel, Coenen, Warne (2008) for a short and An, Schorfheide (2007) for a detailed description

| Firms                         |  |            |
|-------------------------------|--|------------|
| $\alpha$                      | Capital share in production                                  | 0.33       |
| $\zeta$                       | Elasticity of marginal depreciation w.r.t. utilization rate  | 7.2        |
| $\eta_i$                      | Inverse elasticity of net investment to the price of capital | 1.728      |
| $\varepsilon$                 | Elasticity of substitution                                   | 4.167      |
| $\gamma$                      | Probability of price change                                  | 0.779      |
| $\gamma_p$                    | Price indexation parameter                                   | 0.241      |
| Financial Intermediaries      |  |            |
| $\lambda$                     | Fraction of capital that can be diverted                     | 0.381      |
| $\omega$                      | Proportional transfer to entering bankers                    | 0.002      |
| $\theta$                      | Survival rate of bankers                                     | 0.972      |
| $\phi$                        | Steady state leverage ratio                                  | 4.0        |
| $R_k - R_b$                   | Quarterly interest rate spread                               | 0.0025     |
| Monetary and Fiscal Authority |  |            |
| $\frac{G}{\bar{Y}}$           | Proportion of government expenditures                        | 0.2        |
| $\frac{B}{\bar{Y}}$           | Debt-to-output ratio   | 0.6        |
| $u$                           | Unconventional monetary policy parameter                     | [0,10,100] |
| Tax rates                     |  |            |
| $\tau_t^c$                    | Consumption tax  | 0.2162     |
| $\tau_t^l$                    | Labor income tax   | 0.2347     |
| $\tau_t^{ssh}$                | Employees' social security contribution                      | 0.1578     |
| $\tau_t^{ssf}$                | Employers' social security contribution                      | 0.165      |

Notes: Values are based on Gertler, Karadi (2011). Tax rates, however, are calculated with data from the fiscaldatabase and reflect average tax rates from 1980 to 2011.

## 4.2 Highlights

We estimate the fiscal policy parameters as well as the Taylor Rule parameters. We assume the same prior distributions for the fiscal parameters as Coenen, Straub, Trabandt (2013). That means all feedback parameters for output and debt are assumed to follow a normal distribution with mean zero and standard deviation two. The autoregressive parameters follow beta distributions with mean 0.5 and standard deviation two. The Taylor rule parameters' prior distributions are set as in Smets and Wouters (2007). We then estimate all parameters with Bayesian techniques and obtain the posterior distributions. Results are presented in Table 2.

Table 2  
Estimated Parameters - Priors and Posteriors

| Parameter                                    | Prior distribution | Posterior distribution |         |         |         |
|--|--------------------|------------------------|---------|---------|---------|
|  |                    | Mode                   | Mean    | 5%      | 95%     |
| Output feedback coefficients in fiscal rules |                    |                        |         |         |         |
| $\theta_{cy}$                                | $N(0,2)$           | -0.7549                | -0.7429 | -0.9558 | -0.5369 |
| $\theta_{ly}$                                | $N(0,2)$           | 0.3324                 | 0.2422  | 0.1572  | 0.3495  |
| $\theta_{sshy}$                              | $N(0,2)$           | -0.1885                | -0.0977 | -0.2638 | 0.0392  |

|  |                 |         |         |         |         |
|--|-----------------|---------|---------|---------|---------|
| $\theta_{ssf_y}$                           | $N(0,2)$        | 0.0534  | 0.0230  | -0.2159 | 0.2476  |
| $\theta_{tr_y}$                            | $N(0,2)$        | 0.2218  | 0.1015  | 0.0009  | 0.2298  |
| $\theta_{g_y}$                             | $N(0,2)$        | 0.9809  | 0.9923  | 0.7424  | 1.2030  |
| Debt feedback coefficients in fiscal rules |                 |         |         |         |         |
| $\theta_{cb}$                              | $N(0,2)$        | 0.2486  | 0.2492  | 0.1385  | 0.3692  |
| $\theta_{lb}$                              | $N(0,2)$        | 0.0386  | 0.0661  | 0.0046  | 0.1245  |
| $\theta_{sshb}$                            | $N(0,2)$        | -0.1833 | -0.3181 | -0.4898 | -0.1405 |
| $\theta_{ssfb}$                            | $N(0,2)$        | 0.0636  | 0.0650  | -0.0222 | 0.1550  |
| $\theta_{trb}$                             | $N(0,2)$        | 0.2645  | 0.3229  | 0.1378  | 0.4788  |
| $\theta_{gb}$                              | $N(0,2)$        | -0.1730 | -0.2193 | -0.3664 | -0.0765 |
| Lagged dependent variable in fiscal rules  |                 |         |         |         |         |
| $\rho_c$                                   | $B(0.5,0.2)$    | 0.9078  | 0.9044  | 0.8976  | 0.9102  |
| $\rho_l$                                   | $B(0.5,0.2)$    | 0.8026  | 0.7860  | 0.7860  | 0.8074  |
| $\rho_{ssh}$                               | $B(0.5,0.2)$    | 0.9561  | 0.9586  | 0.9428  | 0.9722  |
| $\rho_{ssf}$                               | $B(0.5,0.2)$    | 0.9064  | 0.9041  | 0.9002  | 0.9079  |
| $\rho_{tr}$                                | $B(0.5,0.2)$    | 0.9348  | 0.9357  | 0.9346  | 0.9371  |
| $\rho_g$                                   | $B(0.5,0.2)$    | 0.9610  | 0.9614  | 0.9602  | 0.9624  |
| $\rho_{tax}$                               | $B(0.5,0.2)$    | 0.8263  | 0.8235  | 0.8101  | 0.8387  |
| Taylor Rule Parameters                     |                 |         |         |         |         |
| $\kappa_\pi$                               | $N(2,0.125)$    | 1.6564  | 1.6477  | 1.6294  | 1.6601  |
| $\kappa_y$                                 | $N(0.125,0.05)$ | 0.0227  | 0.0240  | 0.0213  | 0.0270  |

Notes: The posterior distribution is obtained using the Metropolis-Hastings algorithm.

Source: Coenen, Straub, and Trabandt (2013), Smets and Wouters (2007), own calculations

## 5. Results

Figure 1 presents the main result of the paper. It combines moderate credit policy with fiscal policy adjustments (dashed line) due to a 5% capital quality shock. This result is compared to the baseline case, where there is neither credit policy nor fiscal policy and to the case with just moderate credit policy by the central bank.

The combination of both tools, that is providing funds to financial intermediaries and the adjustment of fiscal parameters in times of a crisis, has the most recession easing effect. If both tools are combined, output drops by 3.8% which is about 3.5% lower than without any intervention and another 1.6% less than with just feedback parameter adjustment.

This is because the capital quality shock reduces the effective amount of capital, which directly yields an output drop because of less capital to produce and because of the deterioration of assets. Banks deleverage and the interest rate spread increases severely. As a result, investment and output decrease. We see a sharp recession. By providing 4.5% of overall funds to banks, the central bank is able to successfully reduce the interest rate spread increase, which is about 8% in the case without any intervention, whereas the spread is only 6% in the case with fiscal policy intervention and 1.8% in the case where both policies are combined respectively.

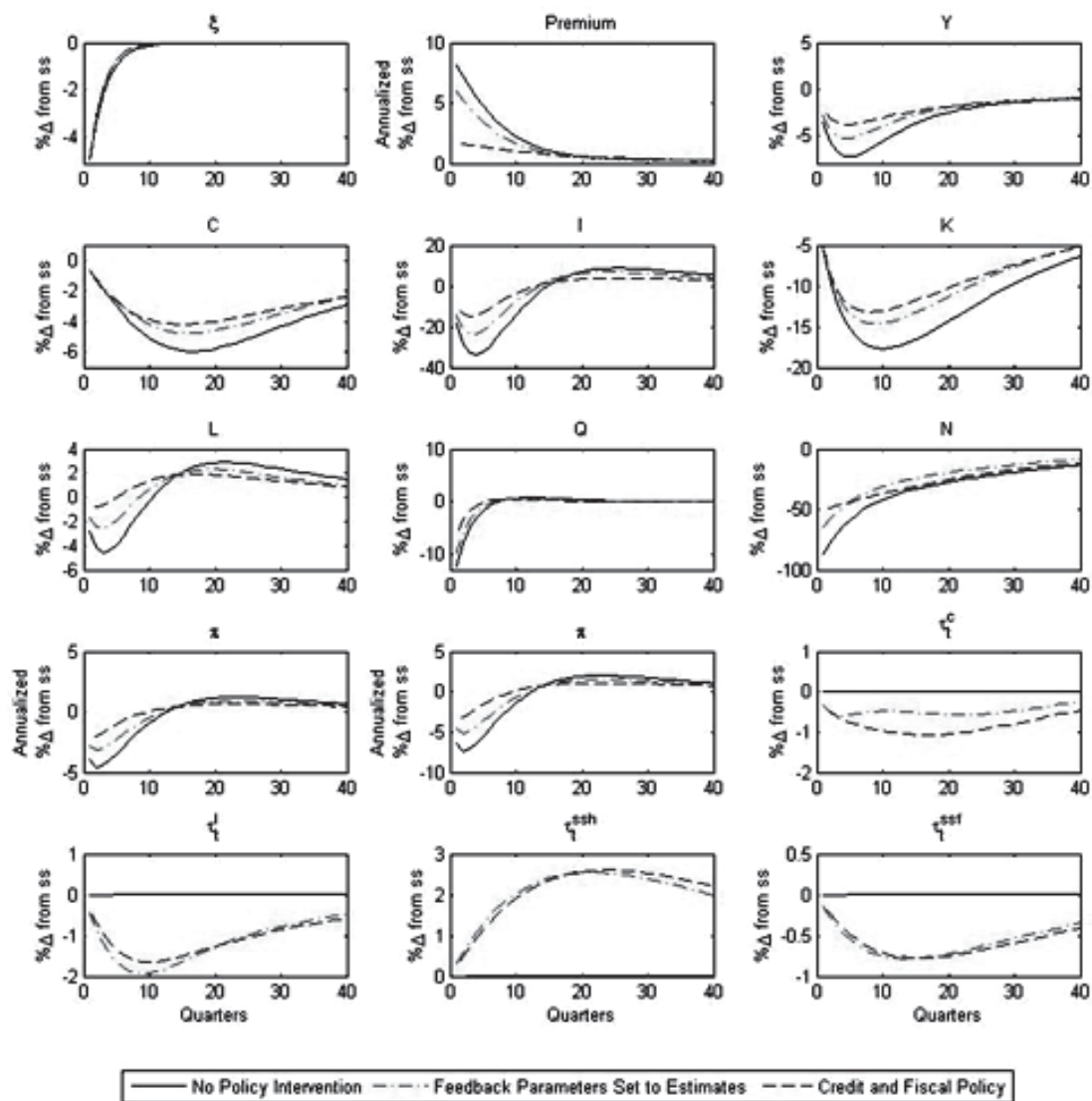


Figure 1: Impulse Response Analysis after a Capital Quality Shock

## 6. Conclusion

In this paper, we develop and estimate a model to identify the impact of credit policy as well as fiscal policy. To do so, we use a DSGE model with financial frictions and an extended fiscal sector. With data from the Euro Zone we estimate monetary and fiscal parameters.

We find that our extended financial accelerator model well replicates the output deterioration of about 7.3% due to a capital quality shock during the financial crisis. However, the incorporation of distortionary taxes and portfolio choice for banks leads to a more severe recession than in Gertler and Karadi. In order to combat the recession, the government adjust its fiscal parameters, whereas the monetary authority does not jump in. Therefore, we estimate feedback rules parameters. This policy leads to less significant drop in output of about 5.3%. Finally, we show

that the combination of both instruments reduces the output drop to 3.8%. Both instruments have the most recession easing effect.

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**Section III**  
**Open and Diversified Financial System**



# The Issue of Black Money in India: A study on its movement and implications on the Indian economy

Conrad Pinto

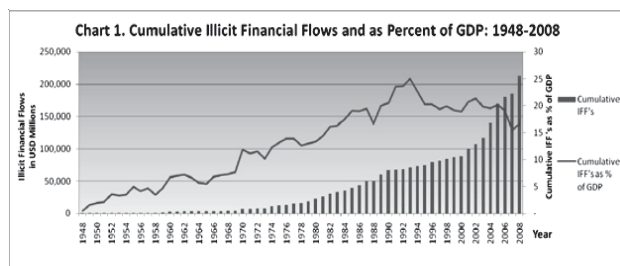
**Abstract :** Various claims have been made in the past about the effect of Indian black money on the Indian economy, as well as its effect on the standard of life if it were to be routed back to the country by the government. It also has been asserted that the current financial disorder is a result of the diversion of black money from the country. Politicization of the issues has meant that the public has been wronged about the implications of black money on the economy. FDI has also received a lot of criticism for its implementation by the government. This study tries to show the movement of Indian black money in foreign markets. While it shows its movements, it also intends to draw out its implications on the Indian economy. It also outlines the role of FDI in routing black money back into the economy.

## 1. Background

Claims have been made in the past by opposition parties in the Indian polity, that by bringing back the black money of the country from the tax havens across the globe, the standard of living would dramatically increase. It also has been asserted that the current financial disorder is a result of the diversion of black money, also referred to as the underworld economy.

## 2. Introduction

Black money, or 'unaccounted income', 'black income', 'dirty money', black wealth', 'underground wealth', 'black economy', 'parallel economy', 'shadow economy', 'underground/unofficial economy', is defined as "proceeds, usually received in cash, from underground economic activity"<sup>1</sup>. Such a term is usually not used in economic theory, but is informally referred so. The extent of black money deposited in tax havens is estimated to be `9,295 crore for the year 2010 by the Swiss National Bank, that is 0.13 percent of the total deposits of all the nationals held in Swiss Banks. The myth that India has a substantial amount of currency in Swiss Banks is falsified by the White Paper on Black Money published by the Ministry of Finance, Government of India in May 2012. This document further goes on to claim that the black money by Indian deposits in Swiss Bank accounts were to the tune of `23,373 crore in the year 2006, that is 0.29 percent, which is still unsubstantial in the contexts Indian black money held in Swiss Banks.



However, according to a study shown by Dev Kar and Cartwright-Smith, India has lost around US \$23.7 to US \$27.3 billion annually in illicit financial flows in the period of 2002-06. The same study also showed that in the period of

1948-2008, US \$213.2 billion has been shifted out of India. This same amount, if halved and compound interest would be calculated, would amount to a staggering US\$462 billion as of end-December 2008. This would've been sufficient to liquidate India's external debts that amounted to US\$230.6 billion at that same juncture.

An estimate<sup>2</sup> has further gone on to project that the total amount of India's underground economy should be US \$640 billion dollars in 2008, which is around 50 percent of the total GDP.

In 2009, before the General Elections in India, Sharad Yadav of the JD(U), the then member of the opposition NDA alliance, claimed that the black money held in Swiss Banks by Indian nationals were to the tune of US\$1.46 trillion, which is more than the actual size of GDP. This report was published following circulations being forwarded on various portals of the same data. This data was later scrapped in the Go I's White Paper on Black Money, published in May 2012. Furthermore, overhyped claims after the politicization of the issue has asserted in unrecognized news portals that the black money which has been estimated at around 40 percent of the total GDP can be distributed, by which every citizen can get a monthly income of Rs 2000 for a span of 60 years. Also the money can create much needed jobs to the extent of 60 million fresh openings. While the calculations on these facts might be certified as feasible, it is uneconomic altogether.

In an article by the Indian Express<sup>3</sup>, it was reported that the Swiss National Bank figures showed Indian black money at US\$3 billion in 2008, US\$2.7 billion in 2009 and US\$2.5 billion in 2010. Sources, according to the report, stated that the steady decline in the Swiss deposits over the years might be due to growing pressure on Swiss banks from the Indian polity and the funds have been transferred to safer tax havens such as Dubai, Mauritius, Singapore and other regions in the Middle-East. But due to vigilant regulators such as RBI and SEBI, the deposits in the Middle-East are seeing a spurt, while they are being routed back in the recent times, through either FIIs or FDIs.

In another article by the Economic Times<sup>4</sup>, the Foreign Tax and Tax Research (FT and TR) in 2013, made approaches to the lesser known tax havens, to which most of the black money which had speculatively been moved to from Swiss and Dubai Banks. The reported places that were approached were Singapore, British Virgin Islands, Cayman Islands, Cooks Islands and Samoa; this after the International Consortium of Investigative Journalists (ICIJ) expose of secret offshore accounts held by individuals from the cities of Delhi, Bangalore, Kolkata, Chennai, Hyderabad, Pune, Ahmedabad, Baroda, Surat, Chandigarh and a few other cities.

### 3. Means of redirecting Black Money back into India

Redirecting black money back into India can be done in three ways, which is by legislation, judiciary or by economic policy. The methods by legislation can be by way of declaring the black money as a national asset either by passing a law in the parliament or by the Supreme Court ruling. The methods by judiciary is as already mentioned above, that is by government intervention and approaching respected countries to persuade and make co-operate those countries to make-know of the details of amount of assets hoarded, etc. While both these methods can be rigid and ineffective, they can also be virtually impractical given their indirect touch. A more effective means of redirecting black money back is by economic policy and is most effective off-late in the form of Foreign Direct Investments (FDIs).

### 4. Foreign Direct Investments (FDIs)

It is “an investment made by a company or entity based in one country into a company or entity based in another country.” FDI has been a major economic policy in the

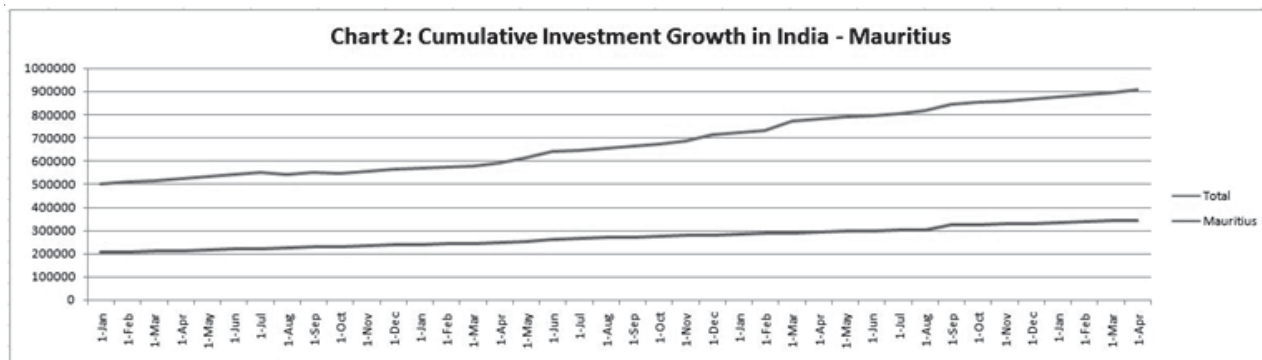
Indian economy. It was first introduced in India among the 1991 economic reforms penned as the Foreign Exchange Management Act (FEMA). In 1997, FDI in cash and carry (wholesale) was permitted through the Government route. In 2006 it brought under Automatic route and FDI in single brand retail with 51 percent investment was permitted. In September 2012, a bill on FDI in multi-brand retail was passed, that enabled 51 percent ownership on retail chains in India.

### 5. Returning trend of Black Money via FDI

The growth in FDI in India has been noteworthy in the past few years, not particularly due to the passing of these various laws in the realm of Foreign Investments, but for the investments made into the economy by the tax havens that have been held in the radar of the Indian government. Data maintained by the Department of Industrial Policy and Promotion (DIPP) of the Ministry of Finance shows a telling trend in the same. It is important to note that Mauritius, Singapore, British Virgin Island, U.A.E. have all been well-known tax havens, the case of Cyprus is an uncertain one, however, it shall be presented here for the sake of justice of argument.

#### a. Mauritius

Mauritius is a tiny country on the Indian Ocean, whose economy accounts to less than a hundredth of the Indian economy and yet it is one of the largest investors in FDI in India. According to the Department of Industrial Policy and Promotion (DIPP), as of April 2013, Mauritius has an investment total amounting to Rs 3.4 lakh crores or US \$74 billion, which is 38 percent of the total investments made among all foreign entities, while the second-highest holds only 11 percent of that stake.

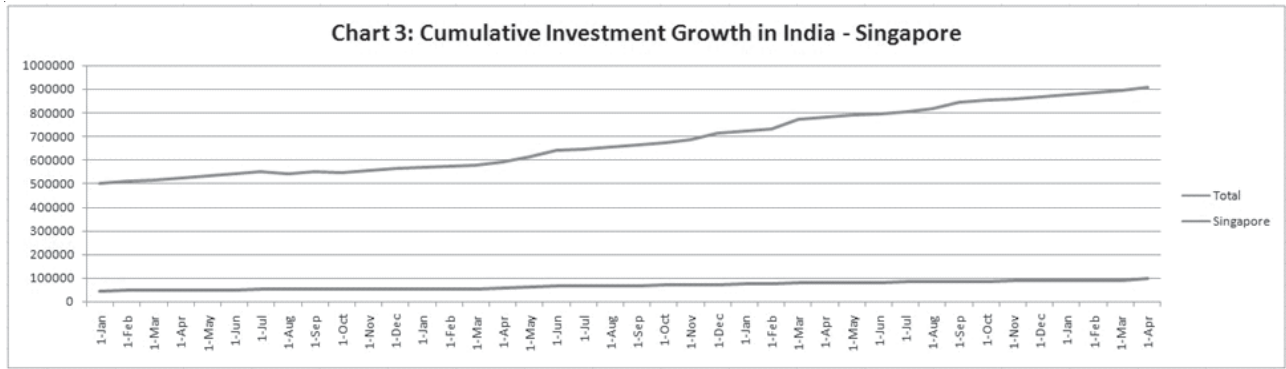


Mauritius has toughened its role in helping the Indian government to trace down erring financial agents in the nation in the recent past<sup>5</sup>, it has also shown positive responses in cases of government correspondences et al<sup>6</sup>.

On August 6, 2012, Firstpost.com reported<sup>7</sup> that Mauritius-based financial entities off-loaded shares to the

tune of Rs 3,000 crore in the period of April-1-2012 to August-6-2012. This was found to be highly contrasting of the share purchases in the same period that amounted to a total of Rs 600 crore, translating to a net outflow of over Rs 2,200 crore. These developments have all been in the wake of a toughened stand on black money by the two countries.

**b. Singapore**



Singapore is a small island nation on the southern tip of the Malay Peninsula. With a geographical area of 720sq.kms, and a measly population of 5,312,400, it is pegged as the fastest growing tax havens in the world and assumed to topple Switzerland as a major tax haven by 2020<sup>8</sup>. According to the DIPP FDI data, Singaporean financial entities have a total investment of Rs 97,214 crore or US \$20.7 billion, standing second to Mauritius in the total nation-wise total investments in India. However, the trend seems to see a lesser growth than Mauritius with an average ‘1,365.35 million increase in the total investment, in the period of the surveyed 40 months, when compared to Mauritius’ average of Rs 3,407.4 million increase.

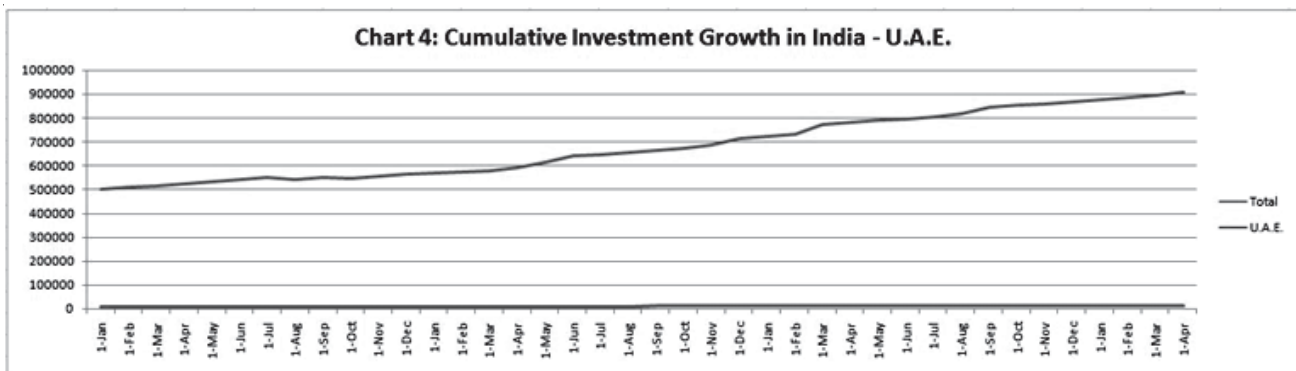
However, President Lee Hsien Loong of Singapore, asserted<sup>99</sup> “It’s wrong to cite Singapore in white paper on black money: Hsien Lo ong, Prime Minister, Singapore” that Singapore wasn’t a destination for tax-laundering activities of erring individuals in India. In justification to his argument, it is also noteworthy that the Governments of India and Singapore had entered into an agreement for avoidance of double taxation and prevention of fiscal evasion with

Singapore (DTAA) on 27<sup>th</sup> May, 1994 that has been amended at various occasions, including one off-late in 2005.

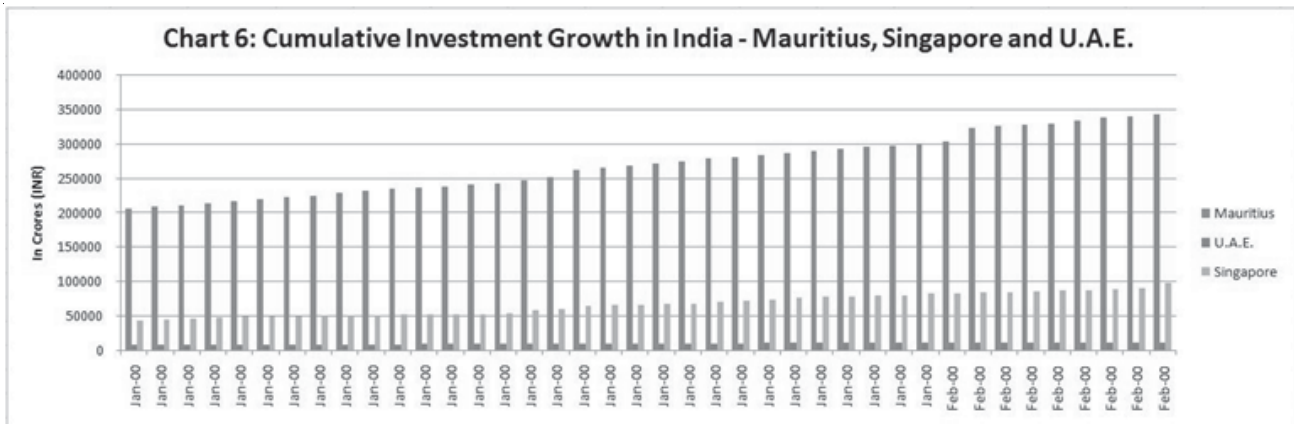
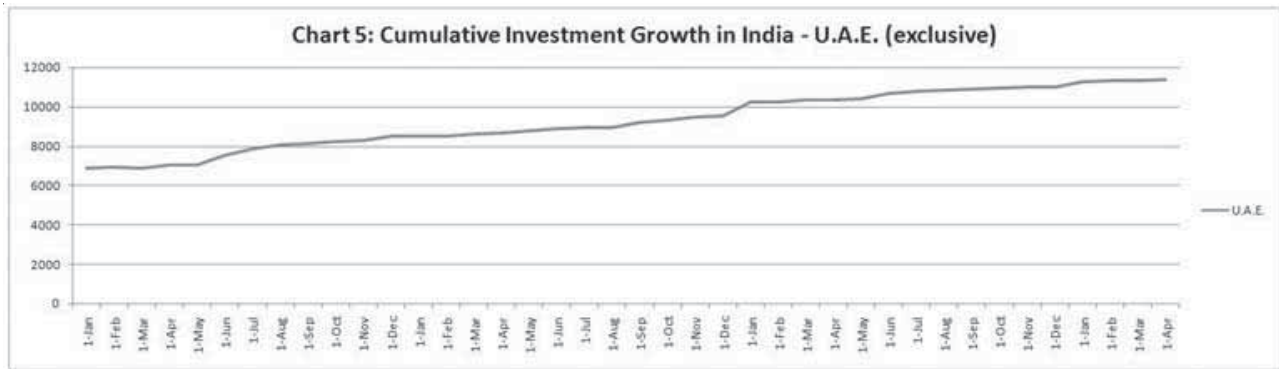
**c. U.A.E.**

This includes the investments from all the emirates of the U.A.E., inclusive of the seven emirates, Abu Dhabi, Dubai, Sharjah, Umm al-Quwain, Ajman, Ras al-Khaimah and Fujairah. Although it is largely publicized that Dubai is a tax haven, Abu Dhabi is also a potential target as a tax haven<sup>10</sup>, and as Dubai and Abu Dhabi constitute for a majority GDP in the U.A.E, it is safe to assume that the U.A.E. has a proportion of Indian black money.

According to the study obtained by the data from DIPP on FDI, U.A.E. has shown the least amount of total foreign investments, among the countries studied, ranking a lowly 10 on the April 2013 survey of the DIPP at a meager Rs 11,363 crore or US \$2.4 billion, with an average monthly growth of Rs 284.08 and a mere 1 percent of the total investments.



For the sake of clarity of the graph, Chart 5 below demonstrates the singular trend of U.A.E.’s FDI growth.



## 6. Implications on the Economy

With the extent of exported Indian black money being to the tune of US\$462 billion, it is evident that this has created serious faults in the monetary system.

- Currency deflation is caused by unequal balance of payments. When the monetary authority produces more currency units and pumps it into the system, the unaccounted money is not taken into consideration. Under such a situation, the currency value depreciates in the global market and hence causes currency deflation.
- Inflation is a major and an evident implication on the economy. Huge inflows of unaccounted money converts desires into demands and postpones the dip in the demand curve, while the supply stays the same or barely rises (at its peak) in response creating disorder and ultimately a hike in the prices to meet the demand. The amount of proportion of unaccounted money to the accounted money can lead to reciprocating effects on price levels.
- The calculations of the policy-makers with respect to the fiscal measures undertaken periodically can be significantly affected with misappropriated monetary assets accounted during that period. This can severely affect the economic system of that economy in the future years, by forces outside of that economy; especially the monetary denomination.

- Investment of black money into another country can mean a rise in growth and productivity of that country. Employment increases, wages are upgraded, output swells and exports flourish. Also, growth rates escalate quickly for that period.

## 7. Conclusion

With Black Money being routed out of India through a passage left unchecked by the judiciary system, there exist major flaws in the economic policy of the country. The issue of Black Money in tax havens is a serious issue to the economy, as it empowers economic freedom to the various tax havens in which a huge chunk of the Indian currency deposits lie. With Swiss Bank's estimates of Rs 9,295 crore worth of Indian black money held with its banks in 2010, the next bid goes to Mauritius as being the highest holder of Indian black money in today's age, with a total of Rs 3.4 lakh crore worth of investment entering India till April 2013, which is 37 times larger than the total amount of Indian deposits held in Swiss Banks. Dubai, on the other hand, has shown an unclear trajectory with regards to FDIs. While it was claimed that Dubai has a significant proportion of black money, if true, it has not been routed back through FDI. It has either been transferred to another tax haven, or has been invested in a foreign land. Singapore shows an interesting graph at Rs 97,214 crore investments to-date. While Singapore can be ascertained to be a far advanced economy in comparison to Mauritius, it should also be noted that the investments are more substantial to the ones made

by U.S.A. and the U.K. (both who stand at 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> positions in the period, ahead of Singapore's 2<sup>nd</sup> on the FDI stats), both of whom have more economic interests in India than Singapore. Hence, it can be assumed that a proportion of the black money is returning back through the Singapore route as well.

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# “The Indian Economy : An Overview of Challenges and Measures”

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**Abstract :** The global economic environment continues to be weak and challenging. The world economy which was passing through unprecedented financial turmoil since August 2007 experienced a jolt in September 2008 when the failure of Lehman Brothers led to widespread panic financial markets. **Challenges faced by global economy:**

- Challenges facing global economy
- Weak growth prospects
- Inflation
- European sovereign debt crisis
- Fiscal cliff in US and Chinese slowdown

**Challenges faced by Indian economy:**

- Growth projections are bleak
- GDP down trends
- Inflation
- Stagnation in Industrial Production
- Currency Depreciation

India's Preparedness:

Indian economy and financial system have a unique set of strengths and weaknesses but like any other emerging economy it cannot protect itself from the global headwinds. Its resilience to overseas developments would be severely tested as domestic growth and inflation dynamics are affected both by global and local factors. Let us throw light on India's preparedness

- **Exchange rate measures**
- **Measures towards Export Promotion**
- **Measures towards Capital Flow**

**Conclusion:** The global environment is characterised by slow down and uncertainty. However structural adjustments, appropriate macro and micro economic policy initiatives, credible action for fiscal consolidation, tax reforms and control inflation is the need of Indian economy. There is also a need to tone up our political administrative regulatory framework.

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## Introduction

The global economic environment continues to be weak and challenging. The world economy which was passing through unprecedented financial turmoil since August 2007 experienced a jolt in September 2008 when the failure of Lehman Brothers led to widespread panic across global financial markets. Many systemically important commercial banks, investment banks, insurance companies and other financial institution in the US and Europe suffered large losses that undermined their capital bases. The US Federal Reserve and other central banks/governments; rescued financial institutions through large bailout packages, but financial markets continue to suffer from a crisis of confidence. The consumer price inflation touched at highest level in several advanced countries. The unemployment rate in the US increased to 8.5 percent, the highest since 1983. Unemployment rate in the Euro, UK and Japan too increased significantly.

### Challenges faced by global economy:

The sovereign debt crisis in the EU intensified during 2011-12, with more countries of the region coming in the grip of it. This pulled down the output growth significantly in the Euro-zone and jolted global growth prospect. Another development was slowdown in growth momentum in the

emerging market economies which had led to recessionary pressure.

### Structural reforms:

The recent slowdown of advanced economies is both cause and effect of the sovereign debt crisis. The fiscal austerities taken in response are further weakening the prospect of growth and employment in the affected European countries. The US continues face high level of unemployment, the consumer and business confidence remains shaken. The action by policy makers across the advanced economies to save global economy from falling in to downward spiral, rejuvenate employment led recovery and pave the way for structural reforms required for sustainable and balanced growth is not only in these countries but also in India.

### Weak growth prospects:

The economic growth around the world weakened significantly. The overall global growth slipped to 3.9% in 2011 from 5.3% in 2010, with growth in both advanced and emerging economies slipping to 1.6% and 6.2% in 2011 from 3.2% and 7.5%, respectively in 2010. The growth in US has fallen in Q2 2012, while GDP growth in UK, Japan and Euro area has been negative. Even the growth in BRIC nations,



which serves as an engine of growth in the developing world, has considerably slowed down.

**Inflation:**

The US is facing the worst drought in over half a century. There are fears that corn and soya bean crops could fail leading to an increase in the price of these crops. Since these crops also serve as animal feed and bio-fuel, there could be an eventual increase in price of animal products like meat, milk and milk products and bio-fuels due to fall in supply. The drought could have a bearing on the production of other crops and consequently potential increase in global food inflation.

**European sovereign debt crisis:**

European debt crisis which originated in Greece spread initially to other near periphery and has now moved to the bigger core European countries like Spain, Italy and so on. A large number of banks in Euro zone stand to suffer significant losses due to escalation of sovereign debt crisis. European Financial Stability Facility (EFSF) is likely to be over-stretched if bigger economies like Italy and Spain require bail-out fund.

**Fiscal cliff in US and Chinese slowdown:**

Another potential crisis on the horizon is the ‘fiscal cliff’ in the US. There is a risk that government spending could fall abruptly in the US by as much as 4 per cent of GDP in 2013. It would potentially harm the economic growth. The rate of unemployment is unlikely to fall. It is, therefore, suggested that policy makers in US must take steps to avoid the fiscal cliff and also raise the debt limit while devising plan to return to long term fiscal prudence.

China, according to the IMF, is the most ‘central’ trading power (with trading partner for 78 countries) based on extensive trade link with other economies. The recent fall in investment and export demand has dampened the hopes that China could make up for weak demand from the debt-crippled Europe and United States.

**Challenges faced by Indian economy:**

India has benefited from greater integration with the world economy and global financial markets. It also entails huge cost. Over the years, India’s globalisation indicators have been going up; e.g. current and capital account receipts and payments as a percentage of GDP has been around 110 per cent in the last two years. The European debt crisis and global slowdown are creating serious headwinds for Indian recovery and posing major challenges to the economy.

**Indian economy and global turmoil:**

Growth decelerations, lower private consumption, food inflation coupled with sharp currency depreciation are major concerns for Indian economy.

**Growth projections are bleak:** The growth assumptions have gone wrong with more downward revisions. The projections given by rating agencies for FY 13 are:

**Table. 1 Growth projection FY 2013**

| Rating Agency  | %cent Growth |
|----------------|--------------|
| Budget 2012-13 | 7.6          |
| PMEAC          | 6.7          |
| Deutsche Bank  | 6.0          |
| Nomura         | 5.8          |
| CLSA, Crisil   | 5.5          |
| City           | 5.4          |
| Morgan Stanley | 5.1          |

(Source: Business standard 15<sup>th</sup> Sept-12)

The capital flows are often determined by the sovereign ratings. The outlook for India has been downgraded by few credit rating agencies. India’s sovereign rating was put under ‘watch-list’ due to weak fiscal performance, uncertain investment environment, declining growth and governance related issues.

**GDP down trends:**

The growth deceleration is one of the major concerns for India. The latest GDP growth number of 6.5per cent is the lowest in the last nine years. Growth figures for last few years’ shows downward trends.

**Table. 2 GDP Growth (at 2004-05 prices)**

| Year                      | % cent Growth |
|---------------------------|---------------|
| 2009-10                   | 8.0           |
| 2010-11                   | 8.6           |
| 2011-12                   | 6.5           |
| *2012-13 (RBI projection) | 6.5           |

(Source: RBI Bulletin Sep-12) Fiscal Deficit:

Government of India’s expenditure growth at 17% y-o-y outpaced the budget aim of 14.8% for entire FY-13. The large twin deficit viz., current account deficit and fiscal deficit pose significant risk to micro economic stability and growth sustainability. Financing the huge fiscal deficit from internal domestic saving would potentially crowd out the private investment, thus lowering growth prospects.

**Table.3 Fiscal Deficit**

| Years          | As % cent to GDP |
|----------------|------------------|
| 2007-08        | 2.5              |
| 2008-09        | 6.0              |
| 2009-10        | 6.4              |
| 2010-11        | 4.7              |
| 2011-12        | 5.0              |
| *2012-13(proj) | 6.1              |

(Source: Economic Times)

**Import Export Gap:** There is a record high gap between exports and imports which will push up current account deficit. Exports are lower. There is a decline in merchandise exports by 1.7% as June12. Indian export is in for turbulent times. IMF estimated only 3.8 % growth as against 5.9% in world trade.

**Table.4 Import Export Gap**

| Years     | Import | Export | Balance of Trade |
|-----------|--------|--------|------------------|
| 2006-07   | 185737 | 126414 | -59321           |
| 2007-08   | 251439 | 162904 | -88535           |
| 2008-09   | 303696 | 185295 | -118401          |
| 2009-10   | 288373 | 178751 | -109622          |
| * 2010-11 | 161051 | 105064 | -55987           |

**Table .5 Current Account Deficits:**

| Years   | As % cent to GDP |
|---------|------------------|
| 2007-08 | 1.3              |
| 2008-09 | 2.3              |
| 2009-10 | 2.8              |
| 2010-11 | 2.6              |
| 2011-12 | 4.2              |

(source: Economic Times)

The high current account deficits (CAD) in 2011-12 are much above the country's comfort levels. India's CAD is also relatively higher than its peers. Fiscal deficit and inflation in India limits the policy manoeuvrability.

**The consequences of acute twin deficits:**

- Cost of funds rise for borrower as government compete with private sector for the funds.

- Emergence of inflationary pressure.
- Slow down in the foreign inflow.
- Sharp depreciation of local currencies.

**Inflation:**

India is now ranked at 151 out of 180 countries in respect of inflation level as against a rank below 100 few years back. The stubborn inflation has hindered support and stimulus by the government and RBI.

**Table. 6 Inflation (WPI %)**

| Period  | % cent inflation |
|---------|------------------|
| Mar.11  | 7.7              |
| Sept.11 | 10.0             |
| Dec.11  | 7.7              |
| June12  | 7.3              |
| Aug.12  | 7.6              |

(Source: Business Standard 15th Sept.12)

**Credit rating:**

According to Standard and Poor's India's rating currently is BBB. Any downgrade from current rating will lead to a 'non- investment grade status and could have implications on capital flows. Cross currency studies have revealed that downgrades cause depreciation of currencies and increases currency volatility.

**Stagnation in Industrial Production:**

The capital goods is the main driver for growth which have remained in the negative zone.

**Table.7 Index of Industrial Production**

| Periods | % cent IIP |
|---------|------------|
| Sep.11  | -5.00      |
| Dec.11  | 1.00       |
| Mar.12  | -2.90      |
| Aprl.12 | -1.26      |
| May 12  | 2.50       |
| June 12 | -1.80      |

(Source: Bus. Standard 15<sup>th</sup> Sep 12.)

## Currency Depreciation:

The year 2011-12 witnessed sharp depreciation of more than 12 per cent, which is much higher.

**Table.8 Performance of Currencies against US dollars**

| India  | Indonesia | Thailand | S.Korea | Malaysia | Taiwan | Singapore | Japan | Hong Kong | China |
|--------|-----------|----------|---------|----------|--------|-----------|-------|-----------|-------|
| -10.19 | -10.39    | -5.36    | -4.35   | -3.44    | -3.29  | -2.16     | -1.54 | 0.64      | 1.16  |

(Source: RBI Bulletin Sep 2012)

Overall negative sentiments can quell investment plans of portfolio investors, deter long term direct investor to commit funds and can have negative effect on financial markets. Recognising this issue, the RBI had mandated that participation in the call /money market be limited to only domestic entities like primary dealers and banks without any role for non-resident entities. Even the debt market has been insulated due to limited exposure to the non-residents.

The overall Indian approach has been to focus on active capital account management so that the domestic currency is not unduly affected by global factors unrelated to the local fundamentals.

### India's Preparedness

Indian economy and financial system have a unique set of strength and weaknesses but like any other emerging economy it cannot protect itself from the global headwinds. Its resilience to overseas developments would be severely tested as domestic growth and inflation dynamics are affected both by global and local factors. Let us throw light on India's Preparedness.

### Exchange rate measures:

The number of policy measures have been undertaken to mitigate the effects of unfavourable movement in the exchange rate. The RBI intervened in the forex market to contain excessive volatility. The measures taken are like:

- Attract the capital flows to reduce supply demand mismatch for US dollars.
- Permission to trade invoicing in Indian rupees.
- Hedging of rupees exposures by non- residents.
- Measures towards Export Promotion
- Rationalisation of Export procedures
- Inclusion of more coverage under the Focus Market and Focus Product Schemes
- Enhancing export credit refinance limit from 15% to 20 % of the banks outstanding Rupee Export Credit
- Increasing in respect of FCNR (B) which would provide source for foreign currency denominated export credit to Indian exporters.

- Deregulating interest rate on export credit in foreign currency for incentivising banks to extend more foreign currency export credit.

### Measures towards Capital Flow:

The capital flows are determined by global investor's sentiment, investment climate in destination country and its credit rating. India is structurally a current account deficit country; therefore, financing the CAD has become a major challenge. The capital flow plays an important role. A number of policy measures have been undertaken to augment the capital into India are like:

- Deregulating interest rate on NRE deposits scheme.
- Increase in the spread for FCNR (B) deposits.
- Streamlining the remittances facilities for Indian expatriate.
- Calibrated enhancement in the investment limits for FII in sovereign and corporate bonds.
- Enhancement in the investment limits in G-Secs from US \$ 15 billion to 20 billion.
- Permission to investment in Government securities for long term investors like; Sovereign Wealth Funds (SWF), endowment funds, pension funds, foreign Central Banks.
- Introduction of new scheme viz; Qualified Foreign Investors (QFI), for investment in corporate bonds up to US \$ 1billion.
- Increasing limits for refinancing rupee loans out of ECB's.
- Increasing limits for unavailing of ECB under automatic route.
- New scheme of ECB for export earner of US \$ 10 billion.

India has remained to be the largest remittance receiving country. This policy initiative has resulted in NRI deposits flows, which has witnessed a sharp rise of more than 200 per cent stood at US \$ 11.9 billion in 2011-12 against an inflow of US \$ 3.2 billion in 2010-11.

### Recent Major Reforms:

The Cabinet Ministry of Manmohan Singh has taken many decisions to bolster economic growth and make India a more attractive destination for foreign investment. The step to liberalise FDI in multi-brand retail, aviation, broadcasting and power was the need of the hour.

**Table.9 Liberalisation in FDI**

| Sector                      | New FDI norms  |
|-----------------------------|--|
| Civil aviation              | Foreign airlines can pick up to 49% in Indian carriers. FIPB clearance is mandatory                      |
| Multi brand retail          | Foreign retailers like Wall Mart, others can pick up to 51% stake in local retail networks.              |
| Single brand retail         | Conditions of foreign ownership of brands change; 30% sourcing clause tweaked.                           |
| Broadcast carriage services | FDI cap hike to 74% from 49% for DTH, HITS, Mobile, T.V.; up to 49% on automatic route; 49-74% via FIPB. |
| Power exchanges             | 49% foreign investment allowed with rider of 26% cap on FDI and 23% cap on FII overall cap.              |

(Source: Economic Times 15<sup>th</sup> sep. 12)

### Disinvestment:

Disinvestment in the listed public sector companies can be:

- Follow on public offer (FPO).
- Offer for sale through stock exchange
- Auction method
- Financial restructuring of PSU like Prasar Bharati.

Disinvestment in public sector was a major step, through which government expected to get Rs.10,000 crores by selling shares of the 4 PSU companies like Hindustan Coppers, MMTTC, Nalco and Oil India.

### Conclusion:

The global environment is characterised by slow down and uncertainty. However, structural adjustments, appropriate macro and micro economic policy initiatives, credible action for fiscal consolidation, tax reforms and control inflation is the need of Indian economy. There is also need to tone up our political-administrative –regulatory framework.

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**Section IV**  
**India as Emerging Market**



# The Role Of Micro, Small And Medium Enterprises (MSMEs) In An Emerging Economy Like India

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**Abstract :** The Micro, Small and Medium Enterprises (MSMEs) have been accepted as an engine of economic growth for promoting equitable development. The MSME sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the past few decades.

The MSMEs are the backbone of Indian industrial structure. Promotion and growth of MSME has been principal feature of new Indian Industrial Policy. The MSME sector today occupies a position of strategic importance in the Indian economy in terms of its contribution to Gross Domestic Product (GDP), industrial output, exports, income generation and specially employment generation.

In the post reform era, the MSME sector has undergone drastic changes. Indian economy which is trying to assimilate itself with the world economy is facing new challenging environment. In such situation, MSMEs have to become competitive by accepting challenges of new world order.

The MSMEs are considered a harbinger of economic progress. This sector is believed to be an elixir for all the ills of a developing economy like India. There is an urgent need of rapid expansion of MSME sector and to make possible a significant shift of workforce from agriculture to SSI sector.

**Keywords:** Challenges, Importance, Measures, Performance, Policy Initiatives and Role,

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## Intorduction

Emerging economies are playing a key role by keeping global economy at a positive growth rate. The US and European nations are struggling to keep up their growth rates and tackle the problem of rising unemployment. The emerging economies are experiencing higher growth rates, improvements in development indicator-HDI along with lower employment rates. After the subprime crisis in US and the major economic crisis in European Union, the growth centre is surely shifting away from the West.

At this juncture, it is indeed necessary to keep the growth engine of the emerging economies moving at a faster speed to meet the global aspirations. The advanced countries need to restore their economic power and underdeveloped economies also need to grow at a higher pace. The Micro, Small and Medium Enterprises (MSMEs) can help to achieve higher growth rates along with better employment opportunities for the foster rate of innovation and technological changes. Currently, every nation is trying to encourage MSMEs through innovative policy measures. An emerging economy like India, with a high percentage of young population, can hope to achieve a high and sustained economic growth by creating more jobs through MSMEs.

Since 2003 India has been one of the fastest-growing major economies in the world, leading to rapid increases in per capita income, increasing demand and integration with the world economy. India has made structural reforms that have led to its growing prowess in certain sectors of the service economy as well. India's GDP in dollar terms could surpass that of the United States by 2050, making it the world's second-largest economy. The increase in service

and manufacturing productivity has been a large component of India's surging GDP. The gradual opening up of the economy introduced competition that forced the private sector to restructure, emerging learner and more competitive. Leading this change have been international trade, financial sector growth, and the spread and adoption of information technology.

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One of the striking features of planned economic development in India has been the development of The Micro, Small and Medium Enterprises (MSMEs). The country accorded high priority to this sector on account of its employment generation potential, comparatively low requirement of capital, promotion of regional development, utilization of local resources, production of exportable products etc.

The small scale sector has played a very important role in the socio-economic development of the country during the past five decades. It has significantly contributed to the overall growth in terms of the Gross Domestic Product (GDP), employment generation, and exports earnings. The performance of the small scale sector, therefore, has a direct impact on the growth of the overall economy. MSMEs contribute 8 per cent of the country's GDP, 45 per cent of the manufactured output and 40 per cent of our exports. The labour and capital ratio in MSMEs and the overall growth in the MSMEs is much higher than in the larger industries. MSMEs are better dispersed. In view of these factors, MSMEs are important for achieving national objectives of growth with equity and inclusion. As per the quick estimates of 4<sup>th</sup> All-India Census of MSMEs, (2006-07), the number of enterprises is estimated to be about 26 million and these provide employment to an estimated 60 million persons. Of

the 26 million MSMEs, only 1.5 million are in the registered segment while the remaining 24.5 million (94%) are in the unregistered segment. The state-wise distribution of MSMEs shows that more than 55% of these enterprises are in 6 states, namely, Uttar Pradesh, Maharashtra, Tamil Nadu, West Bengal, Andhra Pradesh and Karnataka.

In a labour abundant and capital scarce country like India, MSMEs have come to occupy a significant position in the planned industrial of the economy. The MSMEs have stimulated economic activity of a far reaching magnitude. Elimination of economic backwardness of rural and under developed regions in the country. The present study is an attempt to identify the state of growth of small sectors in India and their performance over the years. The research paper also highlights the specific problems affecting the performance of MSMEs.

### Objectives of the Study

- To examine the performance and challenges of MSME in changing scenario
- To evaluate the policies provided by the government to MSME sector

### Methodology

This research paper based on secondary data. The data have been collected through reports of Ministry of MSME, All India Census of MSMEs, books, journals, various websites, publications, magazines, seminars and other reports.

### Significance and Performance

Worldwide, the micro small and medium enterprises (MSMEs) have been accepted as an engine of economic MSMEs at a glance

growth and for promoting equitable development. The major advantage of the sector is its employment potential at low capital cost. The labour intensity of the MSME sector is much higher than that of the large enterprises. The MSMEs constitute over 90% of total enterprises in most of the economies and are credited with generating the highest rates of employment growth and account for a major share of industrial production and exports. In India too, the MSMEs play a pivotal role in the overall industrial economy of the country.

A vibrant SMEs sector can play a key role in creating jobs and high economic growth. It has the most potential to provide employment for the 70 percent labour force still working in agriculture. Achieving and sustaining such growth and higher employment will require a boost in industrial and services growth, spurred by SMEs.

The Micro, Small and Medium Enterprise (MSME) sector is one of the most vibrant sector of the Indian economy. India has recently attracted global attention for its rapid growth. There is a broad consensus that India must continue to grow rapidly and faster to eradicate poverty than in the past. There is also an emerging consensus that this growth must be more inclusive. The factors that can contribute to high and inclusive growth are more jobs, increased productivity, better skills and education. In recent years the MSME sector has consistently registered higher growth rate compared to the overall industrial sector. With its agility and dynamism, the sector has shown admirable innovativeness and adaptability to survive the recent economic downturn and recession.

### Overall Performance of Micro, Small and Medium Enterprises

| Year    | Number of MSMEs (in lakh) | Fixed Investment (Rs. Crore) | Production (Rs. Crore) At Current Prices | Employment (number in Lakh) | Export (Rs. Crore) |
|---------|---------------------------|------------------------------|--|-----------------------------|--------------------|
|         | 1                         | 2                            | 3  | 4                           | 5                  |
| 2000-01 | 101.01                    | 1,46,845                     | 2,61,297                                 | 238.73                      | 69,797             |
| 2001-02 | 105.21                    | 1,54,349                     | 2,82,270                                 | 249.33                      | 71,244             |
| 2002-03 | 109.49                    | 1,62,317                     | 3,14,850                                 | 260.21                      | 86,013             |
| 2003-04 | 114.00                    | 1,70,219                     | 3,64,547                                 | 271.42                      | 97,644             |
| 2004-05 | 118.59                    | 1,78,699                     | 4,29,796                                 | 282.57                      | 1,24,417           |
| 2005-06 | 123.42                    | 1,88,113                     | 4,97,842                                 | 294.91                      | 1,50,242           |
| 2006-07 | 261.01                    | 5,00,758                     | 7,09,398                                 | 594.61                      | 1,82,538           |
| 2007-08 | 272.79                    | 5,58,190                     | 7,90,768                                 | 626.34                      | 2,02,017           |
| 2008-09 | 285.16                    | 6,21,753                     | 8,80,805                                 | 659.35                      | N.A.               |
| 2009-10 | 298.08                    | 6,93,835                     | 9,82,919                                 | 695.38                      | N.A.               |
| 2010-11 | 311.51                    | N.A.                         | 10,95,758                                | 732.20                      | N.A.               |

**Note :** 1. N.A. Not available, 2. Since 2001-02, production figures are at 2001-02 prices, 3. Data upto 2005-06 refer to only Small Scale Industries, Data from 2006-07 refer to micro, small and medium enterprises (MSMEs)

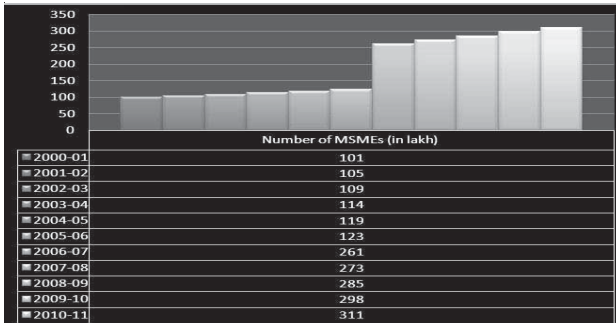
**Source:** (i) EPW Research Foundation, India: A pocket Book of Data Series 2012 (New Delhi, 2012), Table 37, p.54; and (ii) Reserve Bank of India, Handbook of Statistics on Indian Economy 2011-12 (Mumbai, 2012), Table 35.



## Number of MSMEs

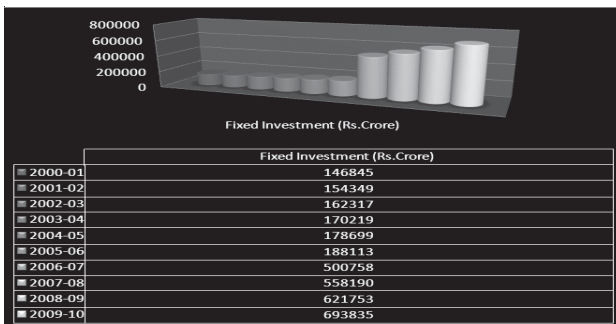
As per the quick results of 4<sup>th</sup> All India Census 2006-07 there were 261.01 lakh enterprises (registered and unregistered) in the country, out of which 15.33 lakh were registered working enterprises and 245.48 lakh unregistered enterprises.

The data reveals that the total number of MSMEs was 101 lakh in the year 2000-01, 121 lakh in 2005-06 and 311 lakh 2010-11 respectively. During eleven years (i.e. 2000-01 to 2010-11), MSMEs increased by three times but growth of MSMEs was not much impressive during the period.



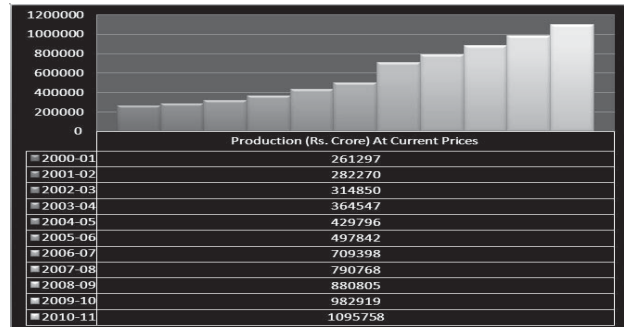
## Investment

It is visible that in 2000-01 the investment was 1,46,845 crore, increased 1,88,113 crore in 2005-6. There is a slight increase in investment level in six years. Investment has increased more than double if we compare 2005-06 to 2006-07. But in the ahead years such momentum could not be maintained. It is visible from the following graph.



## Production

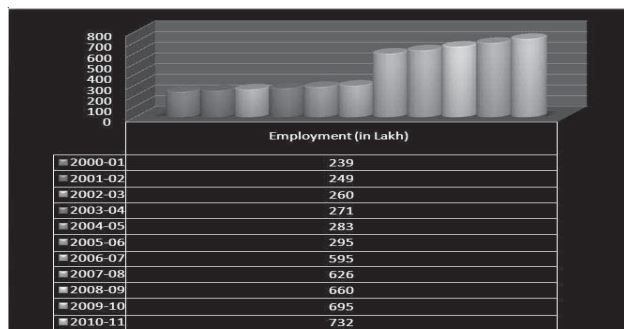
As far as output is concerned, the output of MSME units in 2000-01 was Rs. 2,61,297 crore and this rose to Rs. 4,97,842 crore in 2005-06. Output of MSME units in 2006-07 was Rs. 7,09,398 crore and this rose to Rs. 10,95,758 crore in 2010-11. It is estimated that the MSME contributes about 8 percent of GDP and about 45 percent of manufactured output.



## High Employment Potential

MSMEs have substantial higher employment potential than large scale industries. For a labour abundant and capital scarce country like India, the employment argument is perhaps the strongest that can be put forward in favour of the small scale industries. MSMEs provide maximum employment next to the agricultural sector. Within the manufacturing sector itself, small and decentralized sector contributes about fourth-fifths of manufacturing employment in India. Given the acute unemployment problem in India, creation of employment opportunities will depend crucially on the development of small scale enterprises.

The SME sector employed 240.9 lakh people in 2000-01 and this number rose to 294.9 lakh people in 2005-06. Employment in MSME sector stood at 594.7 lakh in 2006-07 and this increased to 732.3 lakh in 2010-11.

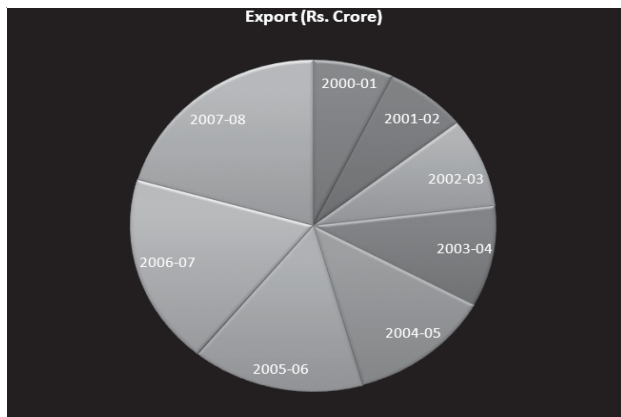


## Export Potential

The rapid growth of the MSMEs has a great relevance in exports of sports goods, readymade garments, woollen garments and knitwear, tiles, plastic products, processed food, leather products, Chemical and Allied products and a large number of engineering goods. In the recent years handicrafts have emerged as a leading revenue-earning item in India's exports. There is a tremendous potential to expand the quantum of exports from traditional MSMEs because handicrafts are unable to take advantage of economies of scale. In other words, we can say that small industries constitute an import segment of the Indian economy.

The value of exports of small sector industry products increased from Rs. 155 crore in 1971-72, Rs. 1,643 crore in 1980-81 and to a record high figure of Rs. 1,50,242 crore in

2005-06 and 2,02,017 crore in 2007-08. This meant an increase in the share of the small-scale industries in the total exports of the country from 9.6 percent in 1971-72 to around 31 percent in 2007-08. MSME sector, as a whole, contribute about 40 percent of exports earnings presently.



### Challenges to SME Sector

The largest source of employment after agriculture, small sector in India enables lakhs of men, women, and children living in urban slums, upcoming towns, remote villages and isolated hamlets to use indigenous knowledge, cultural wisdom, and entrepreneurial skills for the sustenance of their lives and livelihoods. Apart from the contribution to national income, small enterprises are instruments of inclusive growth, touching the lives of the most vulnerable, the most marginalized, viz. Women, Muslims, Scheduled Castes, Scheduled Tribes and Other Backward Class. Thus, instead of taking a welfare approach, this sector seeks to empower people to break the cycle of poverty and deprivation.

Despite its commendable contribution to the economy, SME sector does not get the required support from the concerned government departments, Banks, Financial Institutions and Corporate, which is handicap in becoming more competitive in the national and international markets.

The problems faced by MSMEs are multidimensional. The major problems are — infrastructure, sickness, location problem, problem of delay in payment, problem in price variation, poor pricing of the product, problem of packaging and product display, raw material storage, involvement of many middlemen, acute competition, poor advertisement and sales promotion, lack of marketing assistance, lack of appropriate support from government, impact of liberalization, entry of multinational corporations, impact of global market, lack of financial resources, delay in getting assistance, lack of technical development, lack of training programmes by the government, frequent power cuts, non-availability of skilled labour, underutilization of capacity, inadequate water supply, high rate of interest and delay in implementation of the project are some of the problems that weigh them down.

### Globalisation and MSMEs

Globalization implies widening and deepening integration with the *globe*, i.e. with people and processes abroad. Moreover, at the end of the integrative effort there must lay some concrete benefits for the country, because otherwise the globalization attempted would not be worth the effort. The trends towards the evolution of a global society are generally thought of in economic terms and in terms of the consequences of the revolution in communication technologies. There is undoubtedly much greater economic integration among the nations of the world today. Globalization is widely seen as the most important factor that could influence economies of nations the world over in the new millennium.

Today, India is one of the fastest growing economies in the world and poised to become an economic super power. This has been fuelled by the excellent growth rate of Indian economy during the past decade and also the stagnation suffered by the developed world during the recent period. The deceleration of the developed economies, sovereign debt issues in the European Countries and USA etc. have stymied exports from developed countries

With the enhancement of the productivity and quality, a significant section of Indian MSMEs has acquired global competitiveness. Exploring newer markets and opportunities, particularly in developing world like Africa could be multi folded through enabling services like information on new markets /products, offshore warehousing, offshore manufacturing, product promotion etc.

### Policy Initiatives for MSMEs

In the wake of globalization wave sweeping across the countries, new opportunities and challenges have emerged for the small industries. Appropriate policies are needed to meet these challenges to sustain the growth of small industries.

In view of the importance of the Micro, Small and Medium Enterprises, government continues to lay emphasis on their growth and various measures have been taken to enable them to stand in competition with large industries. Cluster based intervention has been acknowledged as one of the key strategies for comprehensive development of Indian industries, particularly the Micro and Small Enterprises. The Ministry of MSME has adopted the cluster approach as a key strategy for enhancing the technical and physical infrastructure as well as capacity building of micro and small enterprises and their collectives in the country. It launched a special scheme known as 'Integrated Technology Upgradation and Management Programme' (UPTECH) in 1998. In August 2003, the Scheme was renamed as 'Small Industry Clusters Development Programme' (SICDP) and was made broad-based by adopting holistic development encompassing soft interventions (viz. technology, marketing,

exports and skill development) and hard interventions (viz. setting up of Common Facility Centre (CFC), etc.), Working Group on Credit to Small Industries, 2004 (to look into various aspects of credits flow to the SMEs sector), National Manufacturing Competitiveness Programme (NMCP) Schemes Under XI Plan 2005 (to support the Small and Medium Enterprises (SMEs) in their endeavor to become competitive), Guidelines on Credit flow to Small Sector, 2005 (to review all circulars and guidelines issued by the RBI in the past regarding financing of SMEs, suggest appropriate terms for restructuring of guidelines), Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 (to expand focus to the entire gamut of MSMEs both in manufacturing and service enterprises), Working Group on Credit Delivery to Small Enterprises, 2008, (to address problems being faced by the sector in getting adequate & timely credit). The Ministry of MSME launched a special programme, namely, 'Outreach Programme for Skill Development in Less Developed Areas' in September, 2006.

Apart from the above measures some are other initiatives such as Financial Concessions, Reservation, Infrastructure Support, Training, Technology Support, Export promotion, Credit Guarantee Scheme.

### **Conclusion**

To conclude, the SMEs have emerged over three decades as a highly vibrant and dynamic sector of Indian economy. Undoubtedly, the Government of India has helped the MSMEs through supportive policy measures since adaptation of planned economy model.

The emerging regime of liberalization of international trade, deregulation and privatization of internal economy, MSMEs the highly volatile and vulnerable. Despite the fact that SMEs responded well but they face a variety of problems due to the unorganized nature of this sector.

In the post reform era, the position for MSME sector has undergone a drastic change. Indian economy which is trying to assimilate itself with world economy faces new challenges environment. In such situation MSMEs have to become competitive by accepting challenges in new world order.

The role of micro, small and medium enterprises (MSMEs) in the economic and social development of the country is well established. The MSME sector is a nursery of entrepreneurship, often driven by individual creativity and innovation. This sector contributes 8 percent of the country's GDP, 45 percent of the manufactured output and 40 percent of total exports of the country. This sector estimated to employ about 69 million persons through 26 million enterprises. The labour to capital ratio in MSMEs and the overall growth in the MSME sector is higher than in the large industries. Thus, MSMEs are important for the national objectives of growth with equity and inclusion.

The Micro, Small and Medium Enterprises (MSMEs) have been accorded a pivotal role in the industrial resurgence of India. Since the early 1950s, India has adopted a conscious policy for the promotion and development of MSMEs. During the first 4 years of XI Plan, MSME Sector exhibited a growth rate of 13% on an average, an impressive performance compared to most of the other sectors. However, the sector is suffering from quite a few impediments, which need to be addressed immediately to make Indian MSMEs a global hub of entrepreneurship and global supplier of competitive and innovative products of highest quality.

Another aspect that is critical for their growth is technology. The Government has launched the National Manufacturing Competitiveness Programme with the objective of enhancing the competitiveness of MSMEs. The programme includes several new and innovative schemes (viz., Lean Manufacturing, Design Clinics, Quality Management Standards and Quality Technology Tools, Incubators, etc.) for assisting the MSMEs in adoption of best international practices to enhance their competitiveness. Simultaneously, there is a need to make massive efforts for dissemination of information on the latest/modern technologies among the MSMEs and supporting them for undertaking technology upgradation, acquisition, adaptation and innovation. In addition, the Government also needs to encourage R&D in the engineering/technical institutions through suitable tax incentives and setting up of Business Incubators.

The economic reconstruction of India depends on the balanced growth of economy in the fields of agriculture and industry. As capital and finance have been scarce in India, the Government of India has encouraged alternatives to agriculture and heavy industries like small-scale industries, which can operate on limited resources. A small-scale industry can be operated by an entrepreneur without needing sophisticated machinery and modern technology. These small-scale industrial units can be established in semi-urban and rural areas where the infrastructure is underdeveloped.

Under this environment, there is an urgent need to look afresh at the policy framework to make the SMEs more growth oriented and enable it to withstand the stress and strains of global competition. The need of the hour is to provide sustenance through suitable measures to strengthen MSMEs for converting the challenges into golden opportunities for reaching new heights.

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# India As Emerging New Market In The World

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**ABSTRACT:** Despite challenging economic conditions, India continues to be among the fastest growing Economy in the world and emerging a new market for the world. According to Ernst and Young's 2012 India attractiveness survey, India's rapidly rising middle class should grow from more than 160 million people in 2011 to 267 million people in 2016 and the availability of low labour cost and inexpensive manufacturing capabilities as a key attraction for the India as new market. India's attractive labour cost is also one of the reasons for phenomenal growth of India's BPO industries and its rapidly growing manufacturing sector. Manufacturing is one of the key drivers for India's economic growth, which contributes 16% to the country's GDP, 50% to exports and employs 12% of the total workforce. As per Global ranking India is third in terms of FDI value, fourth for number of projects India occupying a strong position. The Indian automotive sector has become significantly more attractive in the past three to four years, as evidenced by the number of investment announcements from global automotive companies. The four-wheel passenger vehicle market has grown impressively in recent years at the hands of the new middle class. By 2020, the overall passenger vehicle market is expected to grow to 9 million units from 3.2 million units at present. By 2020, India is also forecast to become the world's third-largest auto market. The technology sector in India has a major impact on the Indian economy. The industry has grown from US\$4 billion in 1998 to more than US\$80 billion in 2011, employing directly and indirectly more than 10 million people. The Indian pharmaceutical market growing around 15% per annum is very attractive for investment. India is emerging as a new market because of strong, well-capitalized banking structure, low-cost and highly educated English-speaking labour force, global leader in IT and business-process outsourcing India has the potential to take its right full place as a major economic power along with the US and China by 2020.

**Keywords:** Emerging market, Manufacturing, Automotive, FDI, pharmaceutical market.

## Introduction

In 2008-09, the world faced an economic slow-down and witnessed one of the most severe global recessions in the post-war period that affected countries across the globe in varying degrees. All major economic activities like industrial production, trade capital flows, unemployment, investment and consumption took a hit India has not been affected to the same extent as other economies of the world (USA, UK, JAPAN, EUROPEAN COUNTRIES) during this phase. As table 1 shows the growth of world output has declined from 2011 to 2013

**Table No. 1 Growth of world output, 2011 – 2014, annual percentage change**

| Developed economies      | 2011 | 2012 <sup>a</sup> | 2013 <sup>b</sup> | 2014 <sup>b</sup> | Change from January 2013 |      |
|--------------------------|------|-------------------|-------------------|-------------------|--------------------------|------|
|                          |      |                   |                   |                   | 2013                     | 2014 |
| United States of America | 1.8  | 2.2               | 1.9               | 2.6               | 0.2                      | -0.1 |
| Japan                    | -0.6 | 2.0               | 1.3               | 1.6               | 0.7                      | 0.8  |
| European Union           | 1.5  | -0.3              | -0.1              | 1.3               | -0.7                     | -0.4 |
| EU15                     | 1.4  | -0.4              | -0.2              | 1.3               | -0.7                     | -0.3 |
| New EU Members           | 3.2  | 0.8               | 1.1               | 2.2               | -0.9                     | -0.7 |
| Euro area                | 1.4  | -0.6              | -0.4              | 1.1               | -0.7                     | -0.3 |

**Source:** United Nation /Department of Economic and Social Affairs

<sup>a</sup>Partly estimated.

<sup>b</sup>Forecast, based in part on Project Link.

As per the World Economic Situation and Prospects 2013 (United Nations publication) stated that among developed countries, unemployment is the most severe in parts of the Euro area, which continues to see sharp contractions of economic activity in critical fiscal programs. In early 2013, the unemployment rate increased to 26.7 per cent in Spain and 27.2 per cent in Greece, with youth unemployment rates exceeding 59 per cent. As per the World Bank Report 2011, GDP of India is 10<sup>th</sup> largest in the World and secured the 3<sup>rd</sup> position for purchasing power parity. India is considered 'Youngster', a country with highest number of youth in the age group of 15-35. As such the quality of the educated population would play an important role in the development of country. India today is the world's third most powerful country in economic terms. On 18<sup>th</sup> May 2011, Business Standard has stated, the World Bank predicts that India along with five other emerging economies will account for more than half of all global growth by 2025. The bank also showered praise on Tata's Nano car, as it's a tremendous research on automotive sector for middle class people in India and global market.

The bank said in its 'Global Development Horizons 2011—Multipolarity: The New Global Economy' report that

Brazil, China, India, Indonesia, South Korea and Russia will help drive growth in lower income countries through cross-border commercial and financial transactions.

### Significance of study

The purpose of this paper is to ascertain the vital role of India as a new emerging market in the world. Indian economy is one of the fastest growing major economy and the second highest populated country in the world, which has tempted all business organisations specially foreign companies towards India for expansion and diversification of their business as well as to grab the opportunity Indian market provides in upcoming periods in various sectors like investment, infrastructure, employment, education and health sector, etc. and various opportunities for domestic skilled and unskilled labour, optimum utilisation of resource ( Population of India)

### Research Methodology

The study was based on secondary data. The information has been collected from various reports of government source World Bank Report, World Outlook Report, India’s foreign trade policy 2009-2014, magazines, books, journals, research papers and various articles in leading newspapers and related websites.

### Objectives

The objective of study is:

- To understand the concept of emerging market.
- To know the role of India as emerging market for the world.
- To know the India’s present economic status and future prospect in FDI , manufacturing, automotive and infrastructure, pharmaceutical
- To study the challenges and opportunities in front of India as emerging market.

### Concept of emerging markets

The term “Emerging markets” traces back to the early 1980s. Mr. Agtmael, then an economist at the international financial corporation (the world bank’s private sector arm) wanted to make a fund that was investing in what was at the time commonly and fairly referred to as “third world equities” appeared more attractive to western. Emerging markets, he thought, sounded much more uplifting and enticing. Since

then, from a marketing perspective, the term has become a smashing success. Today milliner search emerging market in globe for huge investment

### Definition of emerging market given by Dr. Kvint

**Dr. Vladimir Kvint** is an economist and strategist, the President of the International Academy of Emerging Markets and an Adjunct Professor (since 2005) at La Salle University’s School of Business (Pennsylvania, USA). In 1999, **Dr. Kvint** published this definition in his book Strategic Management and Economics in the Global Emerging Market, Bujet Publishing House, Moscow, 2012.

: “Emerging market country is a society transitioning from a dictatorship to a free-market-oriented-economy, with increasing economic freedom, gradual integration with the Global Market place and with other members of the GEM (Global Emerging Market), an expanding middle class, improving standards of living, social stability and tolerance, as well as an increase in cooperation with multilateral institutions.

### India and FDI

According to Ernst and Young’s 2012 India attractive survey stated that India is the fourth destination country for FDI in terms of projects. India is one of the emerging markets for FDI. In 2011 FDI projects increased by 20%, attracting 932 projects, which created an estimated 255,416 jobs in various fields.

United Nations Conference on Trade and Development (UNCTAD) survey projection on FDI: Starting from a baseline of less than \$1 billion in 1990, a recent UNCTAD survey projected India as the second most important FDI destination (after China) for transnational

corporations during 2010–2012. Services, telecommunication, construction activities, computer software and hardware attracted higher inflows. Mauritius, Singapore, the US and the UK were among the leading sources of FDI. According to Ernst and Young, foreign direct investment in India in 2010 was \$44.8 billion and in 2011 experienced an increase of 25% to \$50.8 billion. The world’s largest retailer Wall Mart has termed India’s decision to allow 51% FDI in multi-brand retail as a “first important step” and said it will study the finer details of the new policy to determine the impact on its ability to do business in India.

**Table No. 2 Top five recipient countries by number of projects**

| Rank | Top five countries | No. Of project 2010 | No. of project 2011 | Change 2011vs2010 | Value US\$ Million 2011 |
|------|--------------------|---------------------|---------------------|-------------------|-------------------------|
| 1    | United states      | 1,522               | 1,707               | 12                | 57,275                  |
| 2    | China              | 1,344               | 1,409               | 5                 | 1,00,688                |
| 3    | United kingdom     | 941                 | 1,014               | 8                 | 36,039                  |
| 4    | India              | 774                 | 932                 | 20                | 58,261                  |
| 5    | Brazil             | 366                 | 507                 | 39                | 63,018                  |

Sources: FDI intelligence

**Table No. 3 Investment in India in 2011:  
Breakdown by functions**

|                            | FDI value   | Job Creation | No. of FDI projects |
|----------------------------|-------------|--------------|---------------------|
| FDI in manufacturing       | 71%         | 57%          | 35%                 |
| FDI in services            | 22%         | 31%          | 51%                 |
| FDI in strategic functions | 3%          | 3%           | 5%                  |
| FDI in other functions     | 4%          | 9%           | 9%                  |
| <b>Total</b>               | <b>100%</b> | <b>100%</b>  | <b>100%</b>         |

Source: FDI intelligence

**Manufacturing includes:** manufacturing, logistics, distribution and transportation, electricity

**Services include:** sales, marketing, business services, design, development and testing, customer contact center, technical support center, maintenance and servicing, ICT.

**Strategic functions includes:** headquarters, R&D, education and training.

**Other function includes:** retail, construction, recycling, extraction.

#### India and manufacturing

During 2011, investors committed US\$58,261 million in India, 71% of which went into the manufacturing sector, creating 320 projects and 144,449 jobs (57% of the total jobs) and producing an average of 451 jobs per project. Since 2007 the attractiveness profile of India has evolved. Although industry was always important, it has grown from supplying 47% of every FDI job in India in 2007 to 57% of every FDI job in 2011. At the same time, in India service jobs have fallen by creating 36% of every FDI job in 2007 to creating 31% in 2011. Investors increasingly see India as the destination for their new manufacturing projects (50% drawn by the high potential of its domestic market and (45%) by its attractive cost base. When investing in manufacturing projects in India, investors tend to target the industrial machinery, equipment and tools (126 projects) and the automotive (78 projects) sectors. In 2011, the automotive sector also topped the manufacturing projects in job creation, attracting 40,518 jobs.

**Table No. 4 Investment break down by functions (2011)**

| FDI type 2011             | No. of FDI projects | Job creation    | FDI value (US\$ million) |
|---------------------------|---------------------|-----------------|--------------------------|
| FDI in manufacturing      | 320                 | 1,44,449        | 41,092                   |
| FDI in services           | 479                 | 79,578          | 12,601                   |
| FDI in strategic function | 50                  | 8,725           | 1,639                    |
| FDI in other function     | 83                  | 22,664          | 2,929                    |
| <b>Total</b>              | <b>932</b>          | <b>2,55,416</b> | <b>58,261</b>            |

Source: fDi intelligence

Manufacturing sector is again witnessing renewed interest after years of neglect by policy makers and the recent efforts of Indian government bode well for the economy and consequently investors. The government unveiled the National Manufacturing Policy (NMP) in October 2011. Through this policy, the government has walked the first steps to resolve the key challenges facing the manufacturing sector in India. More are likely to come soon. NMP offers some novel solutions to resolve problems related to labour, ease of exit, skill availability, environmental law and infrastructure. One of the key features of NMP is the establishment of National Manufacturing and Investment Zones (NMIZ). NMIZ is proposed as a green field/ brown field industrial cluster having state-of-the-art infrastructure and offering business friendly policies or services. The infrastructure would range from logistics, power, skill development, public utilities, environment protection, which

are all the essential requirements of a competitive manufacturing base. They will be supported by business-friendly approval mechanisms and operating policies. Thus, NIMZ shall provide the conducive environment for industries to set up and be competitive in global economy. Manufacturing in China has thrived in similar designated clusters or SEZs. India also aims to achieve the same success through NIMZ. In this regard, the government has already identified key clusters under Delhi-Mumbai Industrial Corridor (DMIC) project as an NMIZ. DMIC is another initiative of the government which is generating huge investor interest. DMIC envisages development of industrial clusters along the high speed freight rail network. The Government of Japan has already evinced interest in picking up 26% equity in the company implementing DMIC. Many international manufacturers particularly Japanese are keen to invest in DMIC manufacturing base in DMIC as an alternative to China.

## India and Automotive Sector

Automotive Industry, globally, as well in India, is one of the key sectors of the economy. Due to its deep forward and backward linkages with several key segments of the economy, automotive industry has a strong multiplier effect and acts as one of the drivers of economic growth. The well-developed Indian automotive industry produces a wide variety of vehicles: passenger cars, light, medium and heavy commercial vehicles, multi-utility vehicles such as jeeps, scooters, motor-cycles, mopeds, three wheelers, tractors and other agricultural equipments etc.

The Indian automotive sector has become significantly more attractive in the past three to four years, as evidenced by the number of investment announcements from global automotive companies. This attractiveness is partly driven by the economic imperative of what is going

on globally — growth has slowed down in the US and European markets while Asia Pacific is gaining increasingly more attention. In contrast, automobile penetration in India is very low compared with mature markets. The four-wheel passenger vehicle market has grown impressively in recent years at the hands of the new middle class. By 2020, the overall passenger vehicle market is expected to grow to 9 million units from 3.2 million units at present. By 2020, India is forecasted to become the world's third-largest auto market. India is one of emerging market in automotive sector as we can get the conclusion that a German automotive company Volkswagen AG has been present in India since 2001 with established brands such as Volkswagen, Audi and Skoda etc. Company also states that India has become a key component of Volkswagen strategy aiming to become the number one automaker in the world by 2018. In 2012 Volkswagen company announced its plan to invest minimum Rs 20 billion (approximately US\$380 million). Today, India has become the export hub for several global automobile manufactures.

India is emerging as a strong automotive R&D hub with foreign players like Ford, Volkswagen, Hyundai, Suzuki and General Motors setting up base in India. This move is further enhanced by Government's support towards setting up centres for development and innovation. Tata Nano's successful entry in the Indian market has steamed up the opportunities of growth available in alternative segments like electric cars, vehicles run on natural gas etc. "By 2016, India will emerge as the destination of choice in Asia for the design and manufacturing of automobiles and automotive components. The output of the India's automotive sector will be \$145bn by 2016 (from \$34bn in 2006) contributing to 10% of India's Gross Domestic Product and providing employment to 25mm people additionally." - According to Draft Automotive Mission Plan 2006-2016 by the Ministry of Heavy Industries and Public Enterprises.

## India and Medical Tourism

As per the report published by McKenzie Consultants and Confederation of Indian Industries (CII), the response of medical tourism is quite positive and it could be generating revenue approximately Rs.100billion by the year 2012. Our medical tourism provides low cost treatment. India is promoting the high-tech healing provided by its private health care sector as a tourist attraction. This budding trade in medical tourism, selling foreigners the idea of travelling to India for world-class medical treatment at the lowest cost has really got attention in the overseas market. The Indian system of medicine which incorporates ayurveda, yoga, sidha, unani, naturopathy and other traditional healing treatments, is very unique and exotic. This medical expertise coupled with allopathic and other modern methods become our new focus segment to project India as a Global Healing Destination. Perhaps we would wonder that the cost of same treatment in the US is ten times more than that in India. Many state governments like Kerala, Andhra Pradesh, Uttaranchal, and Karnataka have been showcasing their medical tourism segment in certain focused market like the Gulf and African regions.

### Conclusion

India has been facing many challenges as inflation, high population, food security in global market yet India will become emerging market by 2020 in FDI, automotive sector, manufacturing, medical tourism etc. Mr. Chandrajit Banerjee, Director General, Confederation of Indian Industry (CII) said in Ernst and Young's 2012 India attractiveness survey that India has the potential to take its rightful place as a major economic power, along with USA and China by 2020. According to FDI intelligence India is third in terms of FDI value and fourth for number of projects. The US remains the leading investor in India both in terms of projects and jobs generated followed by Japan, UK, Germany, Sweden etc. As per the report published by McKenzie Consultants and Confederation of Indian Industries (CII), the response is quite positive and it could be generating revenue approximately Rs.100 billion by the year 2012. "By 2016, India will emerge as the destination of choice in Asia for the design and manufacturing of automobiles and automotive components. According to Draft Automotive Mission Plan 2006-2016 by the Ministry of Heavy Industries and Public Enterprises. India ranks among the well known emerging markets in the global economic scenario. Since the economic liberalization policies were undertaken in the 1990s, as an emerging market, India has really prospered which has helped to boost the Indian economy to a great extent. In simple terms, emerging market is used to evaluate the socio economic scenario of the country in terms of the growth of the market and industrial development. According to the recent survey, there are around 28 emerging markets in the world out of which India ranks in the second place. The



main factors behind this booming emerging market are the economic liberalization and the perfect competition market, the high standard of living and per capita income, the development of medical facilities and infrastructure, the increase in foreign investments and so on.

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# Analysis of Emerging Trends in Indian Tourism Industry

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**Abstract :** Tourism, as an instrument of economic development and employment generation, particularly in remote and backward areas, has been well recognized the world over. It is a large service industry globally in terms of gross revenue as well as foreign exchange earnings. Tourism can play an important and effective role in achieving the growth with equity – an objective which we have set for ourselves. Now India is one of the fastest growing outbound travel markets in the world and has geared up to emerge as the second fastest growing tourism economy in the world. The growth in tourism sector is expected to rise further in the coming years. Present paper highlights the role of tourism industry in social and economic development of country. To analyse all these fact the following research questions have been prepared:

- a) What has been the trend in Tourist arrivals in India?
- b) What is the economic contribution of tourism sector in India?
- c) What are the the challenges before tourism industry in India?
- d) Are the initiatives taken by the Government of India sufficient to increase the tourist inflow?

After analyzing all the facts it can be concluded that tourism industry in India can be called as the “industry of big paradoxes.” It is expanding day by day and contributing a lot towards the economic development of society by providing employment opportunities and huge increase in foreign exchange earnings, however, it is a way behind even from its small neighbours in South-East Asia. This industry needs the cooperation of public and private sector players, tourism organizations, media, and of course local communities.

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## Introduction:

Tourism, as an instrument of economic development and employment generation, particularly in remote and backward areas, has been well recognized the world over. It is a large service industry globally in terms of gross revenue as well as foreign exchange earnings. Tourism can play an important and effective role in achieving the growth with equity – an objective which we have set for ourselves. Tourism has the potential to grow at a high rate and ensure consequential development of the infrastructure of the destinations. It has the capacity to capitalize on the country's success in the services sector and provide sustainable models of growth. It is primarily a service industry as it does not produce goods but renders services to various classes of people. It is a combination of various interrelated industries and trade like food industry, transport industry etc. It is a complicated business because it involves multiple socio-economic activities like attracting people to a destination, transporting them, housing, feeding and entertaining etc. In the process, it brings about tremendous infrastructural improvements and helps in the development of the region. Perhaps tourism is one such rare industry, which earns foreign exchange without exporting national wealth. Tourism is the main stay of economics of many countries and in India it has emerged as a single largest net earner of foreign exchange. Tourism, like other economic activities flourishes best when it fits into the context of general economic policies and programmes designed to lead

to the optimum growth of the economy of a country as a whole. (Gupta and Bansal 2001).

Tourism is driven by the natural urge of every human being for new experiences and the desire to be both educated and entertained. The motivations for tourism also include religious, business interests and the spread of education which has fostered a desire to know more about different parts of the globe. The basic human thirst for new experience and knowledge has become stronger, as communication barriers are getting overcome by technological advances. Progresses in air transport and development of tourist facilities have encouraged people to venture beyond the boundaries. A person who indulges in tourism is known as a tourist. Tourism is a multi- faceted phenomenon which involves movement and stay at a destination outside the normal place of residence. The latest annual research from WTTC and their research partner Oxford Economics, shows that Travel and Tourism's contribution to GDP grew for the third consecutive year in 2012 and created more than 4 million new jobs. The strongest growth in 2012 was evident in international demand as appetite for travel beyond national borders, from leisure and business visitors, remains strong. Travel and Tourism's importance to the wider economy continued to grow in 2012. Its total contribution comprised 9% of global GDP (US \$6.6 trillion) and generated over 260 million jobs – 1 in 11 of the world's total jobs. The industry outperformed the entire wider economy in 2012, growing faster than other notable industries such as manufacturing, financial services and retail.

With such resilience in demand and an ability to generate high employment, the importance of Travel and Tourism as a tool for economic development and job creation is clear. In total, the industry contributed to over 10% of all new jobs created in 2012. According to WTTC, less restrictive visa regimes and a reduction in punitive taxation levels would help the industry to contribute even more to broader economic development. Tourism 2020 vision of WTO calls the motivating factors for tourism - the three Es - Entertainment, Excitement and Education.

**Scope and Methodology of the Study:** The scope of this study is limited to the Indian Tourism Industry, its various facts and figures and the challenges before this industry.

The methodology is primarily secondary data analysis of various reports of GOI – Ministry of Tourism, WTTC, STDC, FICCI and research papers.

**Indian Scenario: Banking on Robust Growth**

India is a country, which is known for its lavish treatment to all visitors, no matter where they come from. It entertains its visitors with its varied attractions which include beautiful beaches, forests, wild life, landscapes, snow, river, mountain peaks, technological parks, science museums, centres of pilgrimage, heritage trains, hotels, yoga, ayurveda and natural health resorts. The Indian handicrafts particularly, jewellery, carpets, leather goods, ivory and brass work are the main shopping items of foreign tourists. The launch of Incredible India campaign in the last decade resulted in a visible spurt in the flow of foreign tourists into India and earnings therefrom, which grew in double digit until the onset of the financial crisis of slowdown in 2008. The growth trend resumed after a couple of years of slowdown after 2008, notwithstanding the FTA (Foreign Tourist Arrival) growth rate see-saw in recent times, foreign tourist inflows in India is predicted to grow at an average annual rate of 8.8% in the coming decades. A 2011 forecast of the World Travel and Tourism Council (WTTC) predicted that FTAs will cross 11million by 2021, which is approximately one percent of the global tourist population. This is also supported by the steady rise in T-VoAs (Visas on Arrival Tourists). During February 2013, the number of Visa on Arrival Tourist registered a growth of 54.6% as compared to the T-VoAs issued in the February 2012. The India’s share in International Tourist Arrivals is 0.64% with ranking at 41 and its share in the in International Tourist Receipts is 1.65% with 16<sup>th</sup> ranking. India is expected to receive nearly half a million medical tourist by 2015, implying an annual growth of 30%. India has received 43.06 lakh foreign tourists during January – August 2013. Foreign Direct Investment inflows in hotel and tourism sector during April 2000 to July 2012 stood at US\$ 6754.49 million , as per the data released by Department of Industrial Policy and Promotion(DIPP).

Following tables, charts, graphs and statements highlight the composition and trend in tourism

Ø Foreign Tourist Arrivals in India for a period 1997 –2012.

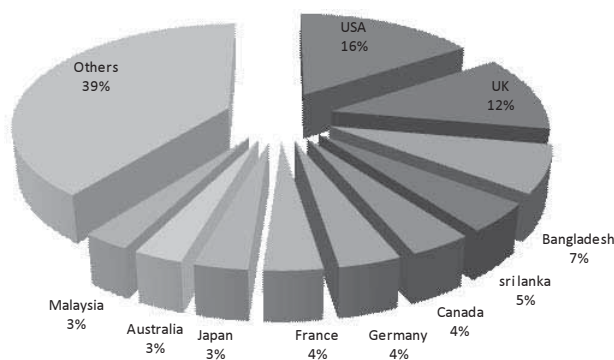
Table1:

| Year | FTA in India in millions | % change form last year |
|------|--------------------------|-------------------------|
| 1997 | 2.37                     | 3.8                     |
| 1998 | 2.36                     | -0.7                    |
| 1999 | 2.48                     | 5.2                     |
| 2000 | 2.65                     | 6.7                     |
| 2001 | 2.54                     | -4.2                    |
| 2002 | 3.38                     | -6                      |
| 2003 | 2.73                     | 14.3                    |
| 2004 | 3.46                     | 26.8                    |
| 2005 | 3.92                     | 13.3                    |
| 2006 | 4.45                     | 13.5                    |
| 2007 | 5.08                     | 14.3                    |
| 2008 | 5.28                     | 4                       |
| 2009 | 5.17                     | -2.2                    |
| 2010 | 5.78                     | 11.8                    |
| 2011 | 6.31                     | 9.2                     |
| 2012 | 6.58                     | 4.3                     |

Source: 1.Bureau of Immigration Govt. Of India, for 1997-2012

**2. Ministry of tourism, Govt. of India**

- The Percentage share of top 10 countries for FTA in India in 2012 has been reflected in the following diagram.



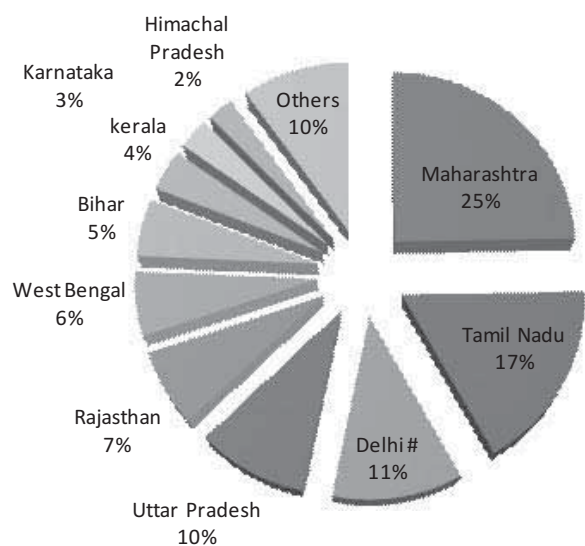
Source: Bureau of Immigration Govt. Of India

**Foreign Tourist Visits to States/ UTs**

- During 2012, the number of foreign tourist visits (FTVs) to the States/ UTs was 20.7 million as compared to 19.5 million in 2011 and 17.9 million in 2010.

- During 2012, the number of FTVs to States/ UTs registered a growth of 6.33% over 2011 as compared to a growth of 8.9% in 2011 over 2010.
- The top ten States in terms of number of FTVs (in millions) during 2012 were Maharashtra (5.1), Tamil Nadu (3.6), Delhi (2.3), Uttar Pradesh (2.0), Rajasthan (1.5), West Bengal (1.2), Bihar (1.1), Kerala (0.8), Karnataka (0.6) and Himachal Pradesh (0.5).
- The contribution of top 10 States was about 90.1% to the total number of FTVs in the country during 2012.
- The top ten States in terms of FTVs in 2012 remained the same as those in 2011. Data shows that DTVs continue to grow at a double digit rate in 2012 also. The growth in FTVs declined to 6.3% after an impressive growth of 8.9% in FTVs in 2011. The rate of growth of Foreign Tourist Arrivals (FTAs) also reduced to 4.3% in 2012 as compared to 9.2% in 2011. The share of top 10 state / UTs in number of foreign tourist visits in India can be reflected through following pie chart.

**Chart 3**



Source: 1. Bureau of Immigration Govt. Of India, for 1997-2012

## 2. Ministry of tourism, Govt. of India

Foreign Exchange Earnings (FEE) from tourism grew by 19.8 % in rupee terms in February 2013 as compared to February 2012, although the FTA growth was much lower. This indicates an impressive growth in the exchange earnings per tourist despite, slowdown in developed country market, an increasing cost of travelling and fluctuating exchange rate. Foreign Exchange Earnings from tourism in US \$ millions and the percentage change from last year is shown below.

**Table 2.**

| Year  | FEE from tourism (in US \$ million) | % change over previous year |
|-------|-------------------------------------|-----------------------------|
| 1997  | 2889                                | 2                           |
| 1998  | 2948                                | 2                           |
| 1999  | 3009                                | 2.1                         |
| 2000  | 3460                                | 15                          |
| 2001  | 3198                                | -7.6                        |
| 2002  | 3103                                | -3                          |
| 2003  | 4463                                | 43.8                        |
| 2004  | 6170                                | 38.2                        |
| 2005  | 7493                                | 21.4                        |
| 2006  | 8634                                | 15.2                        |
| 2007  | 10729                               | 24.3                        |
| 2008  | 11832                               | 10.3                        |
| 2009  | 11136                               | -5.9                        |
| 2010# | 14193                               | 27.5                        |
| 2011# | 16564                               | 16.7                        |
| 2012# | 17737                               | 7.1                         |

# Advance Estimates, @Growth rate over Jan – June 2012  
Source: 1. Reserve Bank Of India, for 1997-2012

2. Ministry of tourism, Govt. of India, for 2010, 2011, 2012

### Domestic Tourist Visits to States/ UTs :

- During 2012, the number of domestic tourist visits to the States/ UTs was 1036 million as compared to 865 million in 2011 and 748 million in 2010.
- During 2012, the number of domestic tourist visits to States/ UTs registered an increase of 19.87% over 2011 as compared to increase of 15.6% in 2011 over 2010.
- The top ten States in terms of number of domestic tourist visits (in millions), during 2012, were Andhra Pradesh (206.8), Tamil Nadu (184.1), Uttar Pradesh (168.4), Karnataka (94.1), Maharashtra (66.3), Madhya Pradesh (53.2), Rajasthan (28.6), Uttarakhand (26.8), Gujarat (24.4) and West Bengal (22.7).
- The contribution of top 10 States was about 84.5% to the total number of domestic tourist visits during 2012.

| States         | % Share |
|----------------|---------|
| Andhra Pradesh | 17.8    |
| Tamil Nadu     | 16.2    |
| Uttar Pradesh  | 9.1     |
| Karnataka      | 6.4     |
| Maharashtra    | 5.1     |
| Madhya Pradesh | 2.8     |
| Rajasthan      | 2.6     |
| Uttarakhand    | 2.4     |
| Gujrat         | 2.2     |
| West Bengal    | 15.5    |
| Others         |         |

- Andhra Pradesh has occupied the first rank in terms of DTVs in 2012, whereas Tamil Nadu, which was at the third rank in 2011, has moved to the second rank. Uttar Pradesh which was at the first rank in 2011 has moved down to the third place.
- Though the top ten States in terms of DTVs in 2012, remained the same as those in 2011, the rank of some of the States, changed slightly (by one place).

According to World Travel and Tourism Council Forecasts, India will be a tourism hotspot from 2009 to 2018, having the highest 10 year growth potential. The onset of financial crises in 2008 delayed the realization of this potential, which resumed in 2010. In recognition of the potential and domestic efforts, India was conferred three awards by the World Travel Awards organization at the WTM 2012.

### Contribution to Indian Economy:

#### Travel and Tourism's contribution to GDP

The direct contribution of Travel and Tourism to GDP in 2012 was INR 1,919.7bn (2.0% of GDP). This primarily reflects the economic activity generated by industries such as hotels, travel agents, airlines and other passenger transportation services (excluding commuter services). But it also includes, for example, the activities of the restaurant and leisure industries directly supported by tourists. The direct contribution of Travel and Tourism to GDP is expected to grow by 7.8% pa to INR 4,360.6bn (2.1% of GDP) by 2023.

#### Travel and Tourism's contribution to employment

Travel and Tourism generated 25,041,000 jobs directly in 2012 (4.9% of total employment).

This includes employment by hotels, travel agents, airlines and other passenger transportation services (excluding commuter services). It also includes, for example,

the activities of the restaurant and leisure industries directly supported by tourists. By 2023, Travel and Tourism will account for 30,631,000 jobs directly, an increase of 2.1% pa over the next ten years. Chain and induced income impact was 39,512,000 jobs in 2012 (7.7% of total employment).

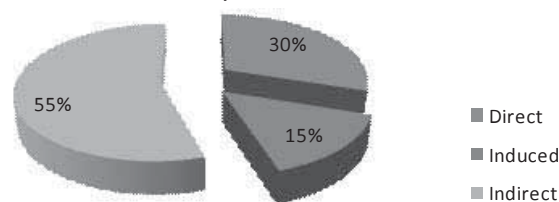
The total contribution of Travel and Tourism to employment (including wider effects from investment, the supply by 2023, Travel and Tourism is forecast to support 48,592,000 jobs (8.0% of total employment), an increase of 2.1% pa over the period.

#### Visitor Exports and Investment

Visitor exports are a key component of the direct contribution of Travel and Tourism. In 2012,

India generated INR1,004.6bn in visitor exports. In 2013, this is expected to grow by 8.7%, and the country is expected to attract 7,518,000 international tourist arrivals. By 2023, international tourist arrivals are forecast to total 13,699,000 generating expenditure of INR 1,892.0bn an increase of 5.7% pa. Travel and Tourism is expected to have attracted capital investment of INR 1,761.4bn in 2012. This is expected to rise by 5.5% in 2013 and rise by 6.5% pa over the next ten years to INR 3,491.2bn in 2023. Travel and Tourism's share of total national investment will fall from 6.2% in 2013 to 5.1% in 2023.

#### Breakdown of Travel & Tourism's Total Contribution to GDP, 2012



The total contribution of Travel and Tourism to GDP is three times greater than its direct contribution.

From all the above description it is clear that tourism industry is growing day by day in the world and India is sharing a major part of world tourism receipts and world tourism traffic and has proved successful in maintaining its place on world tourism map. The major constraint in the expansion of international tourist traffic to India is non-availability of adequate infrastructure including adequate air seat capacity, accessibility to tourist destinations, accommodation and trained manpower in sufficient number. Poor visitor experience, particularly, due to inadequate infrastructural facilities, poor hygienic conditions and incidents of touting and harassment of tourists in some places are the factors that contribute to poor visitor experience.

Different Schemes and Programmes initiated by Government to Promote Tourist Infrastructure and to Increase Tourist Inflow:

Different components of infrastructure like airport, railways, waterways, roads and other amenities like electricity, supply of water, sewage drainage and other facilities like accommodation, recreational facilities, restaurants and shopping facilities etc. play an important role in tourism infrastructure. As all these components create the foundation of tourism industry the Government of India and Ministry of Tourism with the help of state and U.T. Governments are launching and developing various development schemes to improve the present situation of infrastructure in India.

#### **Product Infrastructure Development for Destination and Circuits Scheme:**

To develop high standard infrastructure facilities, a large number of mega projects have been sanctioned by government in different states of India. In the financial year of 2010-11 total number of 136 projects have been sanctioned by the government in different parts of India and a huge amount of Rs. 72,879.90 lakhs have been sanctioned for the same. In the financial year 2011- 12, under the scheme of Product Infrastructure Development for Destination and circuit, total number of 58 projects have been sanctioned in 19 states of India.

#### **Central Financial Assistance for IT Scheme:**

Keeping in view the advantage of computer technology or IT sector, Ministry of Tourism, Government of India has launched a scheme named “Central Financial Assistance for IT” for developing various tourism information facilities with interactive touch screen kiosks and audit guides, setting up of mobile multimedia tours, setting up of information kiosks at 10 selected major cities of India and for providing facilities for internet online reservation and information to tourists. In the year 2010-11, total number of 8 mega projects has been sanctioned under the CFA scheme and an amount of Rs.189.710 lakhs have been sanctioned for the same. Further in the year 2011-12, four projects have been sanctioned to provide instant information services to the tourists and an amount of Rs. 77.050 lakhs have been sanctioned by the Ministry of Tourism, Govt. of India, out of which Rs. 69.350 lakhs have been released for the effective implementation of the programme.

#### **Capacity Building for Service Providers Scheme:**

In order to facilitate high standard infrastructure and superstructure in India, Ministry of Tourism has launched another Scheme “Capacity Building for Service Providers” to develop various software work plan and Rural Tourism Project in different states of India. In the year 2010-11 a total

no. of 7 mega projects have been sanctioned under the CBSP scheme, and an amount of Rs.174.910 lakhs has been sanctioned for the same. Further in the year 2011-12, six projects have been sanctioned to develop software work plan and rural tourism projects in different states of India and an amount of Rs. 179.850 lakhs has been sanctioned by the Ministry of Tourism, Govt. of India, out of which Rs. 143.890 lakhs have been released for the effective implementation of the programme.

#### **Scheme for Assistance for Large Revenue Generating Projects**

In order to remove all shortcomings and to bring in private sector, corporate and institutional resources as well as techno- managerial efficiencies, it is proposed to promote large revenue generating projects for development of Tourism infrastructure. In the financial year 2008-09, two large revenue generating projects, one in Rajasthan and one in Tamil Nadu has been sanctioned and an amount of Rs. 750.000 lakhs and Rs. 802.700 lakhs respectively, have been released for the same. In order to bring out the private, corporate and institutional support for infrastructure development, one large revenue generating project in Delhi has been sanctioned in the year 2009-10 and for which an amount of Rs.1,237.000 lakhs has been sanctioned and released by the Government of India.

#### **Foreign Investment:**

Government of India has allowed 100% Foreign Investment under the automatic route in the Hotel and Tourism Related Industry. The term hotel includes restaurants, beach resort and other tourism complexes and the term tourism related industry includes travel agencies, tour operating agencies, transport organizations and other event organizing agencies.

#### **Marketing:**

To promote Golf- Tourism in India the Ministry of Tourism has organized a Workshop on “Promotion of Golf-Tourism” in New Delhi in January 2011. Cruise Tourism is emerging as one of the most dynamic segment of the tourism industry. With an objective of making India attractive as cruise tourism destination, to develop infrastructure facilities and to attract right segment of the foreign tourists to cruise shipping in India a policy “Cruise Shipping Policy of the Ministry Of Shipping” was approved by the Government of India on June 28, 2008. The Ministry of Tourism has included the promotion of wellness Tourism as new initiatives. The Marketing Development Assistance Scheme (MDA) administered by the Ministry of Tourism provides financial support to Wellness Tourism Service Providers accredited by State Governments till the guidelines of AYUSH-NABH for accreditation are finalized. As per the report ‘Domestic Tourism in India’, 2008-09’ released by the National Sample Survey Office on October 20, 2010, trips for health and

medical purposes formed 7% of overnight trips in the rural population and about 3.5% in the urban population. Recently, the Ministry of Tourism has sanctioned INR 1.2 million under the Marketing Development Assistance (MDA) Scheme to 10 Medical Tourism Service Providers during 2010.

#### **Visa on Arrival:**

To make Tourism sector in India more attractive the Government has launched a scheme of 'Visa on Arrival' from January 2010 for citizens of five countries, viz. Finland, Japan, Luxembourg, New Zealand and Singapore visiting India for tourism purposes. The Government has now extended this scheme to the citizens of six more countries, namely Cambodia, Indonesia, Vietnam, Philippines, Laos and Myanmar from January 2011. In this order, 5774 VoAs were issued during the period January to June 2011.

#### **Scheme for the Development of Emerging Tourism Products:**

Now the main concern of Ministry of Tourism and Government of India is to develop infrastructure for Rural Tourism, Golf Tourism, Cruise Tourism, Adventure Tourism, Sustainable Tourism, Well-ness Tourism and Medical Tourism etc.

By developing rural tourism, the Ministry of Tourism intends to help the local community economically and socially. On 28th February 2011, 169 rural tourism sites in 28 states/ UT have been sanctioned by the Ministry of Tourism.

Tourism in India has vast potential for increasing foreign investments, foreign exchange earning, for generating employment; besides contributing towards the economic and social development of the society. Central and State governments with the help of private sector and voluntary organisations are working towards improving the status of infrastructure including increasing air seat capacity, increasing trains and railway connectivity to important tourist destinations, four-laning of roads and availability of accommodation by adding heritage hotels and 7 star hotels.

This industry can be called as the "industry of big paradoxes". Firstly, on one hand it has almost unbeatable competitive advantages, huge potential and high growth rates (*in terms of - generating foreign exchange, growth rates, and employment generation*) and on the other hand, in spite of above mentioned positives, Indian Tourism and Hospitality Industry is still way behind even from its small neighbours in South-East Asia, not to mention the large counterparts like China. Second paradox is that, on one hand, in order to be competitive, this industry needs the cooperation of both public and private sector players as both play a vital role in it and on the other hand, cut throat competition also exists between the two in this industry itself. Finally, the 'offering' of this industry is also paradoxical. For India, where 'history' is an important

attraction for tourists, this industry has to offer 'history', but it cannot lose sight of modernization either. In other words, Indian Tourism and Hospitality Industry has to be a 'historian' and a 'futurist' simultaneously.

#### **Challenges for Indian Tourism Industry :-**

On basis of current performance, Indian Tourism Industry can be termed as 'successful', but being 'successful' is very different from being 'competitive' and there are critical challenges which are negatively dictating and adversely affecting its competitiveness. These challenges can be classified into 3 broad categories

**i. Sector Specific Challenges:** Being a part of the service sector, Tourism Industry faces the below mentioned challenges posed by the sector itself –

- High Exit Barrier and Difficulty in trial – One characteristic of services is that it is hard to escape from the consequences of a poor choice (of service and service provider). Tourists know this and they also understand that once they are at a destination, a U-turn is not easy.

Hence, they are over-cautious while deciding on the tourism services (choice of destination, transporter and hotels etc.).

Another service characteristic that affects tourism industry is 'reduced trialability'. Since the trialability is also almost nil in services, in case of tourism industry, it is a prerequisite to have a good 'product' and a sound reputation in place, only then sustainable sales can be expected.

- Word-Of-Mouth (WOM) – WOM is crucial in selling of (tourism) services because usually the choice of destination is affected by WOM publicity. Here, it is important to realize that tourists tend to believe more on information from independent sources and less on promotions, thus, a destination may be 'pushed' through a heavy promotion, but the length of its PLC is finally dictated by the WOM.

**ii. Industry Specific Challenges:** Certain challenges are related to the very nature of this particular industry and exist along with the industry around the globe, like:

- Highly infectious industry – Tourism Industry is very sensitive to environmental changes and it gets affected by them and reacts very fast to them.

- High Social Cost – Tourism takes a toll on the resources (especially natural resources), and a large part of the revenues brought in by tourism is required for sustaining the resources, so the profitability of tourism industry is suspicious, especially in countries where proper 'sustainability' mechanisms are not in place.

- Intermediary Conflicts - Components of the tourism industry have different commercial objectives, strategic

interests and operational procedures, so as channel partners protect and advance their own interests, often at the expense of their partner's gains, several intra-channel conflicts emerge inevitably. Major reasons behind such conflicts are

1. Price and Profit Margin Distribution
2. Exceeding Vertical Integration generates Oligopolistic behaviour
3. Operational issues - partners failing to fulfil their obligations or providing the service they promised

- Tourists rating the overall experience – Visitors tend to rate their overall experience at the destination and in the process they credit tourism industry for the performance of industries and sectors, which are not directly related to tourism. If 'anything' is not according to tourists' expectations, it might go against the tourism industry, because the negative WOM will be generated for the destination.

**iii. India Specific Challenges:** - Some challenges facing Indian Tourism Industry are uniquely India specific, like –

Sensitizing the diverse Human Resources – It is an industry where even the behaviour of general public affects the overall experience of tourists and people associated with this industry vary significantly in their background, education, occupation and experience etc (an hotelier is totally different from a taxi driver) so having a 'common program' addressing everyone in this industry is inviting failure and neither it is easy to have so many different / customized programs. Finally, it is a big challenge to sensitize such a large number of diverse people simultaneously.

Although efforts (like – "Atithi Devo Bhava" campaign) have been made to train and groom the HR associated with this industry, but they have not been as successful in achieving significant and measurable results as they were expected to and neither much research has been done to measure and evaluate the impact of such efforts.

Hotel Infrastructure –High Operating Costs – Indian hotels suffer from high operating costs and this ultimately reflects in their higher prices. The biggest sufferer is the 'budget tourists' and even for those who can pay, when the facilities are not according to the prices it leads to dissatisfaction and also makes the destination unattractive for tourists.

Adding to all this, an unprecedented rise in real estate prices is working as an "entry barrier" for hotel industry, negating the government's effort (incentives) to attract new players, thereby slowing down the pace of growth of hotel rooms.

Transportation Chaos – Increasing number of airlines has rapidly increased the number of passengers, resulting in a virtual collapse of facilities at Indian airports.

Moreover, there is no supervising authority, maintaining and monitoring the quality and standards of services delivered by airlines making an unpleasant experience a rule, rather than an exception. Indian Railways, another popular mode of transportation suffers from conditions worse than the airlines (in terms of reservations, punctuality, cleanliness, facilities etc). Since India welcomes tourists mostly from developed countries these problems convert their trip into a 'mission' and few return with good memories.

**Manpower woes** - Population was formerly considered an evil for India, but now, be it industries in manufacturing or service sector, all are capitalizing on the 'manpower' which has been a blessing in disguise. Ideally, tourism industry should not be an exception, more so because it has earning and paying capacities and it is rapidly growing, so an obvious strategy to enhance its competitiveness is to equip it with the talent it requires, but unfortunately almost all components of Indian Tourism Industry are suffering from an acute shortage of skilled manpower. As Hindustan Times Horizons reports (April 2007), India prepares approximately 18000 hotel management graduates annually which is very less than what is required and more importantly only 5000 of these actually join the core industry and rest leave for more attractive avenues. India not only lacks in training and development infrastructure, but there are other problems also which are related to HR as indicated by the Director General of Archaeological Survey of India, answering about the reasons for poor condition of historical monuments in India and he pointed towards the 'financial and infrastructural limitations of ASI'. This clearly implies that one of the highest earning industries of India is not able to manage recruitment for protection and site management for its 'heritage buildings' which are the most popular tourist attractions of India.

## Conclusion

After analyzing all the facts it can be concluded that tourism industry is expanding day by day and contributing a lot towards the economic development of society by providing employment opportunities and huge increase in foreign exchange earning. Tourism Industry is a very dynamic industry and so are its challenges and strategies, therefore a learning approach towards 'best-practices' would yield better results in enhancing competitiveness of this industry. Also, the need for sound perspective in planning and "private-public-community" participation is imperative for this purpose. This paper was an attempt to illuminate the areas of current scenario of Indian Tourism Industry, its impact, initiatives of the Govt. of India and various challenges of the industry. It leaves a background for further research,



on strategies to combat the challenges in Indian Tourism Industry . To sum up, the problems of Indian tourism industry can be eliminated to a great extent by the joint efforts of government, tourism organizations, media and of course local communities.

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# Indian Pharma : The trusted and sustain driver of emerging Indian economy

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**ABSTRACT :** The Indian Pharmaceutical market is big and getting bigger, driven by disease patterns, growing lifestyle disease, super-speciality therapies (high cost therapies) emergence of a strong middle class, new intellectual property protection laws, increase healthcare insurance are the most prominent drivers of the growing industry. It also becomes a hub for clinical drug trials due to low cost and ease of resources availability. Major driver of growth in the healthcare sector is India's booming population, currently 1.1 billion and increasing at a 2% annual rate. By 2030, India is expected world's most populous nation so even of drug pricing and control regulations companies are preparing to play on volumes with mass. During the 1990s, Indian healthcare grew at a compound annual rate of 16%. Today the total value of the sector is more than \$34 billion. This translates to \$34 per capita, or roughly 6% of GDP. By 2012, this sector always has been unaffected by global recession and crisis. Healthcare Index shows the sustainable and continuous growth. Pharma multinationals seize these opportunities in India to enrich their global footprint upbeat trend in formulation exports is expected to continue in future too, with 14-16 per cent CAGR envisaged between 2012-13 and 2017-18. Over the next five years, drugs with sales of more than \$100 billion are expected to lose patent exclusivity and open up to generic competition. India's key strengths of cost-competitiveness and advanced process chemistry skills, Indian players are well-placed to tap into this opportunity and increase their presence in the generics market and proceeding to become a major global market by 2020.

**Keywords:** Indian economy, healthcare market, therapy, formulations, WHO, generics, R&D

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## Introduction

The Indian Pharmaceutical industry came into existence in 1901, when Bengal Chemical and Pharmaceutical Company started its maiden operation in Calcutta. The next few decades saw the P

harmaceutical industry moving through several phases, largely in accordance with government policies. Commencing with repackaging and preparation of formulations from imported bulk drugs, the Indian industry has moved on to become a net foreign exchange earner, and has been able to underline its presence in the global pharmaceutical arena as one of the top 35 drug producers worldwide. Currently, there are more than 2,400 registered pharmaceutical producers in India. There are 24,000 licensed pharmaceutical companies. Of the 465 bulk drugs used in India, approximately 425 are manufactured here.

60,000 distributors and 700,000 to 800,000 retailers competing for the pharmaceutical market share. The top 10 companies control about 30% of the market and 250 companies control 70% of the market.

## The Growth Drivers

The main drivers include the growth of India's middle and upper classes, who can afford high-quality health care and the widespread adoption of health insurance products, which will enable a larger proportion of the population to access allopathic treatments. India's Parliament deliberately drafted the patent law to set a high standard for inventiveness and to ensure sufficient flexibility for generic companies to provide low-cost medicines if the original patented drugs were too expensive for local consumers. Unlike most countries, where only governments can seek a

compulsory license authorizing production of low-cost copies of patented drugs, India permits generics companies and patient groups to apply directly to patent authorities for such licenses. Clinical research also forms a significant portion of drug development costs and time, off-shoring or outsourcing of phase I to IV trials is one of the most appealing options in pharma R&D. According to survey results, average costs for clinical trials in India are 50 to 60 percent as compared to sites in the United States or other developed countries. Additionally, because of faster and easier patient enrolment, timeframes for conducting clinical trials in India can be reduced by up to 40 percent. The Indian Pharmaceutical market is unique where branded low-cost generics dominated. Currently, multinationals jointly only achieve a market share of 22 percent. The market is also dominated by generics. Protected products currently are estimated to have a market share below 5 percent, and are expected to grow to 10 percent in 2015. The opportunity in the Indian Pharmaceutical market does not lie in sales only; it is the combination of three factors: (1.) R&D, (2.) sourcing and manufacturing, and (3.) domestic market opportunities. This combination makes India unique: It offers "front-end" capabilities in the domestic market as well as "backend" capabilities, including strong off shoring benefits in R&D, sourcing, manufacturing and assisting processes. In India, it is very much evident from this projection that lot of opportunities lies with chronic therapy segment; however, growth is initially slow but it may generate good revenue in the long run. Referring to India's reverse-engineering heritage, skills like synthesis, analytical and medicinal chemistry, have already reached a high level of sophistication. Because of the long history of process patents, India's domestic industry managed to become well versed in designing, synthesizing and developing new chemical entities (NCE) as well as optimizing processes. A

cost-competitive manufacturing base combined with low-cost, technically skilled human resources and a high number of internationally approved facilities have contributed to India's emergence as an attractive destination for off shoring and outsourcing production. Another factor driving the growth of India's healthcare sector is a rise in both infectious and chronic degenerative diseases.

### Industry SWOT

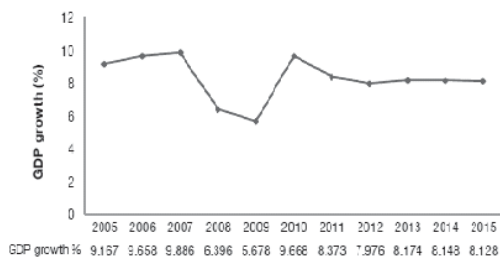
| Strengths   | Weaknesses  |
|---|---|
| <ul style="list-style-type: none"> <li>Higher GDP growth leading to increased disposable income in the hands of general public and their positive attitude towards spending on healthcare</li> <li>Cost Competitiveness</li> <li>Low-cost, highly skilled set of English speaking labour force</li> <li>Growing treatment to naive patient population</li> </ul>  | <ul style="list-style-type: none"> <li>Poor all-round infrastructure is a major challenge</li> <li>Stringent price controls</li> <li>Lack of data protection</li> <li>Poor health insurance coverage</li> </ul>   |
| Opportunities   | Threats   |
| <ul style="list-style-type: none"> <li>Global demand for generics rising</li> <li>Rapid OTC and generic market growth</li> <li>Increased penetration in the non - metro markets</li> <li>Large demand for quality diagnostic services</li> <li>Increase in healthcare insurance coverage</li> <li>Significant investment from MNCs</li> <li>Public-Private Partnerships for strengthening Infrastructure</li> </ul> | <ul style="list-style-type: none"> <li>Labour shortage</li> <li>Wage inflation</li> <li>Government expanding the umbrella of the Drugs Price Control Order (DPCO)</li> <li>Considerable counterfeiting threat</li> <li>Competition from other emerging economies</li> </ul> |

### Overview of emerging Pharmaceutical market

The paradigm faced by the leading economies of the US, Europe and Japan are significantly different from those in the emerging markets of India, China, South America and Russia. According to IMS Health, the emerging markets of Asia/Africa/Australia grew at a rate of 15.9% in 2009, as compared to much slower growth rates in North America (5.5%), Japan (7.6%) and Europe (4.8%). Emerging markets will be the next major growth drivers for the global Pharma industry, with more than 40% of incremental growth of the industry coming from emerging economies in the next decade.

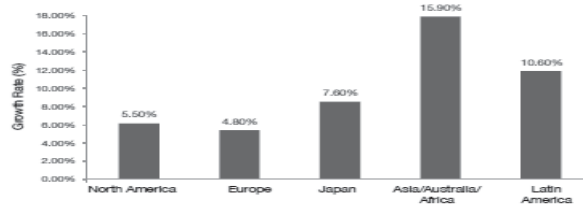
The Indian economy is growing fast, and is valued at US\$1.430 trillion in 2010. GDP growth, calculated on a Purchasing Power Parity basis has reached 9.66% in the year 2010, and the International Monetary Fund (IMF) expects it to remain consistently above 8% till 2015. Furthermore, India's share in the world GDP has been steadily increasing, and is expected to reach 6.28% in 2015.

India's strong GDP growth rate



Source: International Monetary Fund, World Economic Outlook

Figure 1: Emerging markets (Asia/Australia/Africa & Latin America) growing faster than developed markets

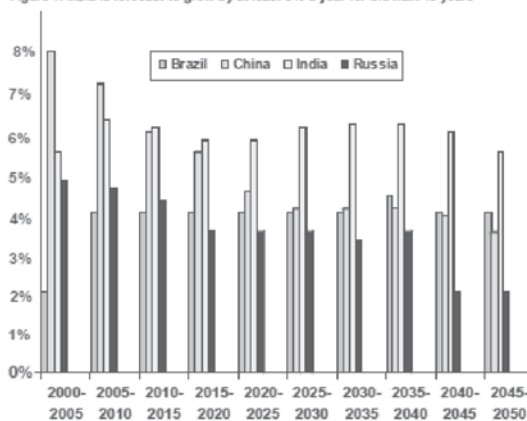


Source: IMS Health market prognosis, March 2010

Large numbers of forthcoming patent expiries, a dry pipeline of new drugs, regulatory challenges and pricing restrictions have collectively contributed to low growth rates for prominent global pharmaceutical markets. As global markets such as North America, Europe and Japan continue to slow down (See figure 1), Pharmaceutical companies are scanning markets for new growth opportunities to boost drug discovery potential, reduce time to market and squeeze costs along the value chain. The Industry is beginning to realize that some of the most promising opportunities will come from emerging markets of Asia, Australia, Africa and Latin America.

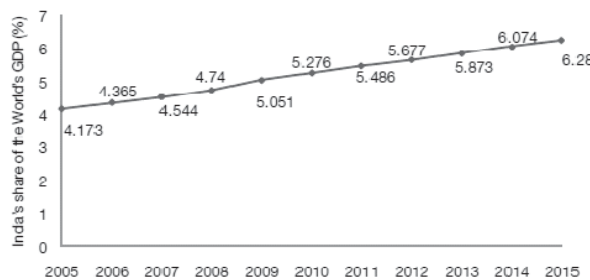
### India with comparison of Brazil, China and Russia

Figure 1: India is forecast to grow by at least 5% a year for the next 45 years



Source: Goldman Sach

Growing global share of India's GDP (%)

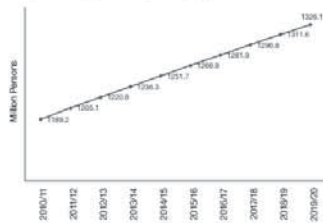


Source: International Monetary Fund, World Economic Outlook

## Growing middle class with higher purchasing power

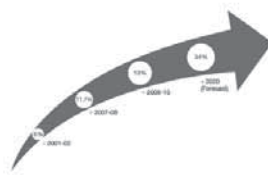
India's population is currently just over 1.1 billion and is projected to rise to 1.6 billion by 2050 – a 45.5% increase that will see it outstrip China as the world's most populous state. Besides, India has a huge middle class population, which has grown rapidly, from 25 million people in 1996 to 153 million people in 2010. If the economy continues to grow fast and literacy rates keep rising, around a third of the population (34%) is expected to join the middle class in the near future. The middle class population is rapidly acquiring the purchasing power necessary to afford quality western medicine due to an increase in disposable income. The Indian population spent 7% of its disposable income on healthcare in 2005; this number is expected to nearly double, to 13%, by 2025.

Figure 5: Population growth projections



Source: IIF analytics (2010)

Figure 6: Ascent of the Indian Middle Class - Percentage of the population



Source: Economic Times (April 2009), PwC analysis

## Rise of disease

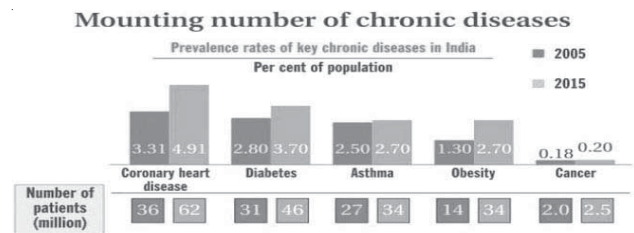
The Indian population is experiencing a shift in disease profiles. Traditionally, the acute disease segment held a significant share of the Indian pharmaceutical market. This segment will continue to grow at a steady rate, due to issues relating to public hygiene and sanitation. But, with increase in affluence, rise in life expectancy and the onset of lifestyle related conditions, the disease profile is gradually shifting towards a growth in the chronic diseases segment. India has the largest pool of diabetic patients in the world, with more than 41 million people suffering from the disease; this is projected to reach 73.5 million in 2025. IMS Health indicates that some of the fastest growing therapeutic segments in the Indian Pharma space today are chronic disease-related therapeutic segments. The anti-diabetic segment grew 29%. Cardio-vascular medication and nervous system disorder medication grew at 22% for the same period of time, indicating rapid growth. The growing size of the Indian geriatric population will be a key factor in influencing the growth of the chronic segment. By 2028, an estimated 199 million Indians will be age 60 or older, up from about 91 million in 2008. Along with chronic, in the last year there has been a rebound in sales in the acute diseases segment. This trend is likely to continue over the next few years, as we see companies widening their reach into newer markets, which have a relatively higher number of treatments to naïve patients requiring basic treatment, thus, creating new demand for drugs of the acute therapies segment.

Another factor driving the growth of India's healthcare sector is a rise in both infectious and chronic degenerative diseases. While ailments such as poliomyelitis, leprosy, and neonatal tetanus will soon be eliminated, some communicable diseases once thought to be under control, such as dengue fever, swine flu, viral hepatitis, tuberculosis, malaria, and pneumonia, have returned in force or have developed a stubborn resistance to drugs.

In addition to battling infectious diseases, India is grappling with the emergence of diseases such as AIDS as well as food- and water-borne illnesses. And as Indians live more affluent lives and adopt unhealthy western diets that are high in fat and sugar, the country is experiencing a rise in lifestyle diseases such as hypertension, cancer, and diabetes, which is reaching epidemic proportions. Over the next 5-10 years, lifestyle diseases are expected to grow at a faster rate than infectious diseases in India, and to result in an increase in cost per treatment.

## The Indian as CHD and Diabetes Epidemic

Diabetes is a life-long, incurable disease marked by high blood sugar levels. It is estimated that almost 41 million Indians are diabetic, and that figure is expected to reach 73.5 million by 2025. The total annual cost to treat India's diabetic patients including direct and indirect expenses) is estimated at \$420 per capita. If that per capita expenditure were to remain constant, the total estimated cost of treating the disease would reach \$30 billion by 2025. However, it's likely that treatment costs will be even greater by then, due to growing affluence in India and improvements in standards of care.



## Intellectual Property

India has accepted and made a commitment to the Trade-Related Aspects of Intellectual Property Rights (TRIPS) in 1995, and keeping with this commitment, implemented the Patent (Amendment) Act in 2005. Although this act does not apply for drugs patented before 1995, it is a major step forward on the earlier patent scenario. Since then, recommendations have been made to the government regarding improvement and expansion of the Patent (Amendment) Act, by the Satwant Reddy Committee and the Mashelkar report. These reports highlighted the need for data exclusivity and the prevention of 'ever greening'. Domestic and global Pharma companies are showing an increased confidence in the patent laws, and we expect an

increase in the number of launches of patented products in the Indian market in the future. Resolution of data exclusivity laws and capacity building at patent offices will help in increasing confidence among foreign companies.

### Potential for infrastructure

India's healthcare infrastructure has not kept pace with the economy's growth. The physical infrastructure is woefully inadequate to meet today's healthcare demands, much less tomorrows. While India has several centers of excellence in healthcare delivery, these facilities are limited in their ability to drive healthcare standards because of the poor condition of the infrastructure in the vast majority of the country. After years of under-funding, most public health facilities provide only basic care. With a few exceptions, such as the All India Institute of Medical Studies (AIIMS), public health facilities are inefficient, inadequately managed and staffed, and have poorly maintained medical equipment.

The number of public health facilities also is inadequate. For instance, India needs 74,150 community health centers per million population but has less than half that number. In addition, at least 11 Indian states do not have laboratories for testing drugs, and more than half of existing laboratories are not properly equipped or staffed. The principal responsibility for public health funding lies with the state governments, which provide about 80% of public funding. The federal government contributes another 15%, mostly through national health programs.

### Medical tourism on the rise

Medical tourism is one of the major external drivers of growth of the Indian healthcare sector. A Google search of "India medical tourism" turns up more than two million results. The emergence of India as a destination for medical tourism leverages the country's well educated, English-speaking medical staff, state-of-the art private hospitals and diagnostic facilities, and relatively low cost to address the spiraling healthcare costs of the western world. India provides best-in-class treatment, in some cases at less than one-tenth the cost incurred in the US. India's private hospitals excel in fields such as cardiology, joint replacement, orthopedic surgery, gastroenterology, ophthalmology, transplants and urology.

According to a joint study by the Confederation of Indian Industry and McKinsey, Indian medical tourism was estimated at \$350 million in 2006 and has the potential to fast growth. An estimated 180,000 medical tourists were treated at Indian facilities in 2004 (up from 10,000 just five years earlier), and the number has been growing at 25-30% annually. According to the Confederation of Indian Industries, India has the potential to attract one million medical tourists each year, which could contribute \$5 billion to the economy. In addition to receiving traditional medical treatments, a growing number of western tourists are

traveling to India to pursue alternate medicines such as *Ayurveda*, which has blossomed in the state of Kerala, in southwestern India.

The number of medical tourists visiting Kerala was close to 15,000 in 2006 and is expected to reach more than 400,000 by 2014. To capitalize on medical tourism and build a sustained public-private partnership in the hospital industry, the Indian government is supporting an initiative by well known heart surgeon Dr. Naresh Trehan to build a "Medi City" in Gurgaon, on the outskirts of Delhi. The compound will include a 900-bed hospital that supports 17 super specialties, a medical college and paramedical college. The project, on 43 acres of land, The Medi City will integrate allopathic care with alternative treatments, including unani, ayurvedic and homeopathic medicine, and it will provide telemedicine services as well. To encourage the growth of medical tourism, the government also is providing a variety of incentives, including lower import duties and higher depreciation rates on medical equipment, as well as expedited visas for overseas patients seeking medical care in India.

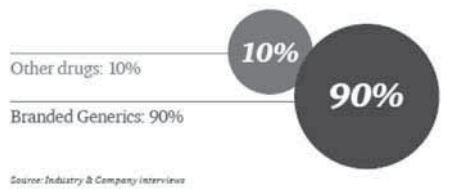
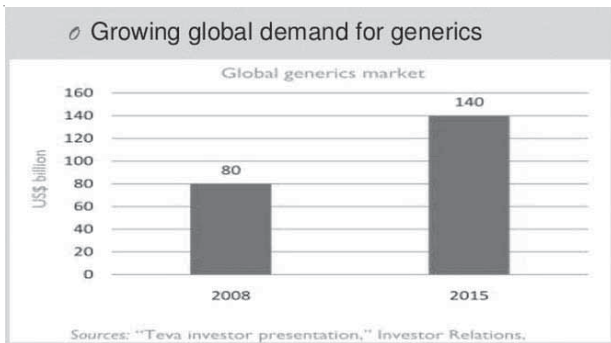
| Area                  | Size in 2010 | CAGR over 10 years |                   | Estimated size in 2020 |                      |
|-----------------------|--------------|--------------------|-------------------|------------------------|----------------------|
|                       |              | Base growth        | Aggressive growth | Base valuation         | Aggressive valuation |
| Total domestic market | US \$ 12bn   | 15%                | 20%               | US \$ 49bn             | US \$ 74 bn          |
| Rural market          | US \$ 2 bn   | 15%                | 20%               | US \$ 8bn              | US \$ 12 bn          |
| OTC market            | US \$ 1.8bn  | 18%                | 20%               | US \$ 11 bn            | US \$ 13 bn          |
| Vaccine market        | US \$ 524 mn | 10%                | 13%               | US \$ 1.4 bn           | US \$ 1.8 bn         |

Source: PwC Analysis

### India as generic giant

Prescription drugs worth \$40 billion in the U.S. and \$25 billion in Europe are due to lose patent protection in 2007-08. Indian firms will likely take around 30 percent of the increasing global generics market, the Associated Chambers of Commerce and Industry of India (Assocham) forecast. Currently, the Indian industry is estimated to account for 22 percent of the generics world market. Low production costs give India an edge over other generics-producing nations, especially China and Israel. It will be easier for Indian firms to win larger generics market shares overseas than at home, particularly in the U.S. and Europe.

Indian drug manufacturers currently export their products to more than 65 countries worldwide. Their largest customer is the U.S., the world's biggest pharmaceutical market. The use of generic drugs is growing quickly in the U.S. due to cost pressure by payers. India has the largest number of U.S. Food and Drug Administration (FDA)-approved drug manufacturing facilities outside the U.S. Indian firms now account for 35 percent of Drug Master File applications and one in four of all U.S. Abbreviated New Drug Application (ANDA) filings submitted to the FDA.



Any non patented molecule with brand name, which is other than innovators name is termed as branded generics. Indian players are majorly in branded generics. It is difficult to track and estimate the exact composition of India's domestic Pharma market; but industry experts believe that this market is largely dominated by branded generics. This segment contributes around 90% of total sales, and represents one of the key strengths of the market, encompassing the OTC segment as well. Only about 10% of the market constitutes commodity generics sold through institutional sales and innovator products. The branded generics segment is expected to grow at a CAGR of 15% - 20% for the next decade.

### Over-the-Counter Medicines

The OTC segment is going to grow faster. We are looking at a growth rate of around 25%, more than that of the overall market growth of around 15% or double the rate for prescription medicines.

### OTC segment growth drivers



The Indian market for over-the-counter medicines (OTCs) is worth about \$940 the government is keen to widen the availability of OTCs to outlets other than pharmacies. Developing an innovative new drug, from discovery to worldwide marketing, now involves investments of around \$1 billion and the global industry's profitability is under constant attack as costs continue to rise and prices come under pressure. One of the potential growth drivers for the Indian Pharma industry, as the sale of OTC drugs in India has been increasing over the years. The OTC market was worth about US\$1.8 billion in 2009, and PwC estimates that by 2020, it will grow to US\$11 billion - a CAGR of 18%, with the potential to reach US\$13 billion - at an aggressive CAGR of 20%. 'OTC Drugs' means drugs legally allowed to be sold 'Over the Counter' by pharmacists, i.e. without the prescription of a Registered Medical Practitioner. Although the phrase 'OTC' has no legal recognition in India, all the

drugs not included in the list of 'prescription-only drugs' are considered to be nonprescription drugs (or OTC drugs).

### Patented Products

The market size for patented drugs as of today is very small. Only about 1-2% of the market is made up of patented drugs, which are being sold by multinational innovators. There are multiple Indian companies that have drugs in the pipeline, with a greater focus on R&D, but estimates suggest that it would be at least 7 to 10 years before these begin to have a serious impact on the industry. Industry experts believe that the current size of the patented drug market is estimated at US\$120-130 million. Due to weak patent laws in the past, and multiple, cheap generic versions of drugs present in the market, multinational players were hesitant to introduce their patented products. In future, with growing affordability, deepening of health insurance and steady

improvement in Intellectual Property Rights (IPR); patented product launching increases.

**Indian MNCs achieve higher growth by focusing on branded generics**

With its domestic formulations market expected to grow to a size in excess of US\$40 billion by 2020, India has become one of the strategic markets for the pharma MNCs. Most of these companies have a two-pronged strategy for the Indian market: target the mass market via product localisation and India-specific pricing to capture the branded generics segment and address affordability issues; and launch globally patented products in niche segments at a premium. Thus, GlaxoSmithKline (GSK) for instance has launched branded generics like Benitec A (Olmesartan in combination with Amlodipine) in the cardiology segment, Meropenem in the antibiotic segment, and Calamine lotion in dermatology. Similarly, Pfizer has come out with “branded value offerings” (branded generics) like Telmisartan and Rabeprazole in the therapeutic segments of Cardiovascular Management (CVM) and Gastrointestinal, respectively. Further, the pharma MNCs are launching products from their global portfolios at a fraction of the global prices in the Indian market, with such products including, among others, Diovan (Novartis), Januvia (Merck Sharp & Dohme), Galvus (Novartis), and Crestor (Astra Zeneca); these are being sold in India at a discount of upto 80% to the global prices. Besides, the pharma MNCs are expanding their existing product portfolio in India through line extensions and lifecycle management of existing key drugs. Most pharma MNCs operating in India have reported healthy growth rates during the last three years. The growth rates are relatively low for some players because of the lackluster performance reported by some of their non-pharma businesses; the pharma business has done well for most of the companies.

Also when we focus on some mergers and acquisition in last decades the target and acquirer are Paras- Reckitt Benckiser, Solavay Piramal - Abbot, Aventis- Hoechst GmbH, Shantha- Sanofi pasture, Ranbaxy- Daiichi Sankyo, Dabur-Fresenius kabi, Matrix- Mylan, Orchid- Hospira.

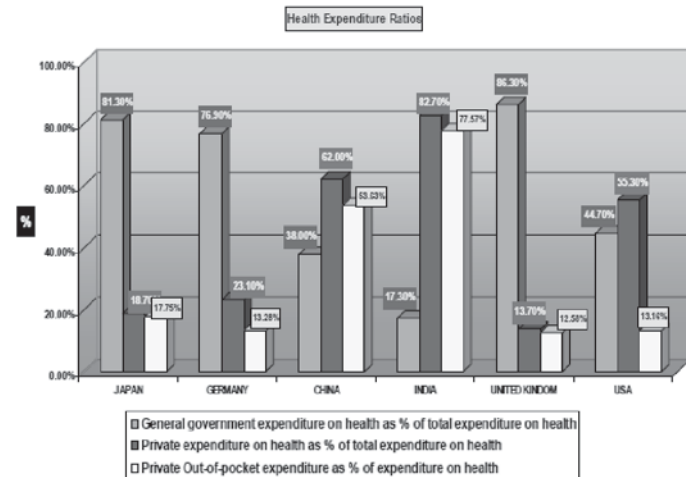
**Drug Price Control Order (DPCO)**

Government introduced the DPCO to guarantee its citizen access to ‘essential drugs’, at a reasonable cost with adequate rate of return to companies without compromising quality. In response to the DPCO, many firms discontinued the production of the controlled item and concentrated on production of nonessential drugs and other combinations to escape the control. As a result, essential drugs were more difficult to access than before the introduction of DPCO. Another derivative effect of the DPCO was that it exempted smaller firms from price controls, thereby encouraging them to participate in the pharmaceutical industry. This caused small companies to be represented more prominently than might otherwise be

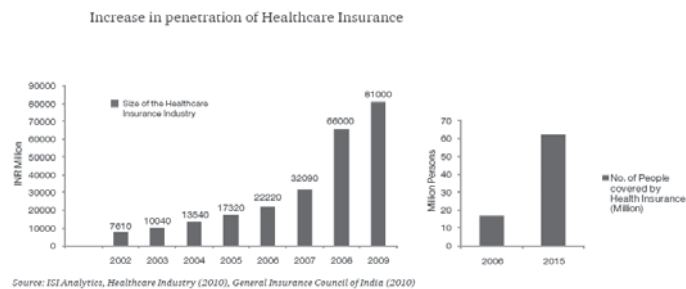
expected. Result of this now the production of controlled drug is concentrated to limited companies and they are enjoying the volume

**Emerging health insurance market**

Health insurance has become one of the most prominent segments in the insurance space today and is expected to grow significantly in the next few years. The government runs a programme called the National Rural Health Mission (NRHM), for the development of the poor, allocating US\$2920 million under the NRHM. A health insurance scheme called *Rashtriya Swasthya Bima Yojna* (RSBY) that provided US\$745 worth of cover for every worker was also included. The total allocation of this inclusion was US\$51 million, which was then increased in the subsequent budgets. The latest budget, 2010-11, incorporated a further 20% of the population covered under the NREGA (National Rural employment Guarantee Act).



Over 80% of health financing is private financing, much of which is out of pocket payments and not by any pre-payment schemes. Given the health financing and demand scenario, health insurance has a wider scope in present day situation in India. However, it requires careful and significant efforts to tap Indian health insurance market with proper understanding and training



In recent years, there has been a liberalization of the Indian healthcare sector to allow for a much-needed private insurance market to emerge. Due to liberalization and a

growing middle class with increased spending power, there has been an increase in the number of insurance policies issued in the country. The Insurance Regulatory and Development Authority (IRDA) eliminated tariffs on general insurance, and this move is expected to drive additional growth of private insurance products. In the wake of liberalization, health insurance reached to \$5.75 billion by 2010, according to a study by the New Delhi-based PHD Chamber of Commerce and Industry. The IRDA believes that eliminating tariffs will encourage scientific rating and adoption of better risk management practices, and lead to independent pricing for each line of business, so that Premiums will be based on actual risks and costs. The implementation of the new policy also will encourage the development of innovative practices and customer-friendly options for policyholders, boosting penetration. In the post liberalization era, some companies have been licensed to act as third party administrators of health services. The objective is to strengthen the health insurance industry and increase its penetration by bringing more professionalism to claims management, facilitating cashless services to policyholders, and reducing the claims ratio. Currently there are 25 licensed third party administrators in the Indian health insurance industry. In another effort to improve the insurance prospects for India, the IRDA is focused on standardizing medical definitions to ensure consistent pricing and products, and is providing incentives for stand-alone insurance in emerging market. In addition, government subsidies and tax incentives for health insurance are expected to attract key players to the industry. In response to liberalization, a large number of international private insurance companies are moving into India and forming joint ventures. Two prominent examples are Max New York Life, a joint venture between Max India and New York Life, and ICICI Prudential Life Insurance, a joint venture between the ICICI Group and UK-based Prudential plc. Some companies are experimenting with more targeted forms of insurance coverage. For example, ICICI Prudential is offering plans designed specifically for diabetics. We can expect to see more innovations as the health insurance market. IRDA has classified health insurance as a separate category and has permitted the insurers to tie-up with banks. All the four exclusive health insurance companies will be tying with the banks across the country and that will help them to move to the next level. The penetration of health insurance is now expected to increase with banks pushing for it through tie-up.

Ninety-four percent of all private health spending is out of pocket, mostly at the time of the incident, and more than 40 percent of hospitalized people borrow money or sell assets in order to cover their expenses. The remaining 6 percent of spending is provided by insurance -3.7 percent social, 1.6 percent employer-sponsored and 0.7 percent private insurance. Just 15 percent of the population has some form of insurance; an estimated 800,000,000 people in

India have none. The health insurance market was opened up to the private sector in 2000 and, since then, growth has been fast, with nearly 10.3 million policies sold in 2003-04 compared to 7.5million in 2001-02 and it is expected to be more than 35 million policies by 2015. A 40 percent compound annual growth rate (CAGR) is forecast for the health insurance sector

### **Clinical trials**

India historically lacked the expertise to perform clinical trials, because most companies only tested different processes for producing copycat versions of Western products, and the rules were quite lenient. Several drug makers have also been caught behaving unethically or even illegally.

However, in recent years, India has become a more attractive market for clinical testing. One reason is that in November 2004, the federal government amended Schedule Y of the Drugs and Cosmetics Act to make the rules on clinical trials more consistent with international practice. In addition, in January 2005 India became compliant with the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement and formally recognized product patents. Currently there is product and process both. This triggered growth in Indian clinical trial activity by contract research organizations, such as Quintiles, Omnicare, Pharma-Net and Pharm-Olam, and by multinational corporations such as Novo Nordisk, Sanofi-Aventis, Novartis and GSK. Some multinationals, such as Pfizer and Eli Lilly, have been conducting tests locally for a while. Government taxation incentives are further boosting R&D in India. As a market for clinical testing, India holds other attractions as well. According to a study by Rabo India Finance, a subsidiary of the Netherlands-based Rabo Bank, the huge patient population offers vast genetic diversity, making the country an ideal site for clinical trials. It has the largest pool of diabetic patients, the population is relatively easy to access, and many people are “treatment-naïve”; they have not been treated with medications being tested, which potentially could distort test results.

As a result of these favorable factors, the Indian clinical trials market, currently estimated at \$120 million, It is reached \$1 billion by 2010, according to Info media. To achieve that level of growth, India will have to address a lack of skilled workers, high wage inflation, and inadequate infrastructure. For western companies that can navigate these obstacles, the rewards will be substantial: Clinical trials account for over 40% of the costs of developing a new drug, and Rabo India Finance estimates that a standard drug could be tested in India for as little as \$90 million—60% of the cost of testing in the US and India to conduct 5% Global Clinical Trials by 2012. In 2007, the country conducted around 220 clinical trials, making up for less than 2% of the global clinical trials But according to “Booming Clinical Trials Market in India”,



a new research report by RNCOS, a number of factors such as low cost, large patient pool, easy recruitment, strong government support and strengthening of its intellectual property environment will enable India to conduct nearly 5% of the global clinical trials by 2015. Glaxo SmithKline, among the world's top ten. Global Pharma majors is carrying out the largest number of Clinical Trials in India Due to the high population density of urban areas that have few, but large hospitals, in the limited number of trials conducted, most of the MNCs have been able to recruit a large number of patients quickly..Indian companies like Ranbaxy, Sun Pharma, Cadila, Nicholas Piramal, Lupin have set up worldclass clinical research facilities to bring the drug from mind to market.

Advantages in conducting clinical studies in India in brief are welltrained medical community to global standards, wide spectrum of diseases, with low per capita drug expenditure, Huge patient base, Heterogeneous population base, High enrolment rates, Large and fast growing private healthcare sector, Stateoftheart hospital facilities, proposed changes to regulatory policies to facilitate clinical research, lower costs of clinical researchers, nurses, IT staff, along with reduction in patientrelated costs, diversity in India's gene pool, difficulty in recruiting for trials globally. India has adequate patients and investigators, Overall lower costs for conduct of trials, Rapidly increasing awareness of ICHGCP( The International Conference on Harmonisation Good Clinical Practice) guidelines for conduct of clinical research, All investigators speak English and GCP trained investigators are increasing in number, Education level of the clinical researchers in India is quite high, Increasingly, accommodating regulatory environment, Data generated in India is accepted by all major conferences and journals, Import duties on clinical material has been eliminated.

### Contract Research

Indian Pharma expects to see significant growth in India's custom manufacturing business, as a result of high and rising costs to innovative manufacturers in Europe and the U.S., and also forecasts that there will be a Indian Company International Partner Outsourced Products Cadila Healthcare Altana Two intermediates for Altana's underpatent molecule Protonix (pantoprazole) Hikal Limited Degussa Hikal has signed an agreement with Degussa for supplying pharmaceutical intermediates and active pharmaceutical ingredients Nicholas Piramal AMO Neutralizing tablets and sterile FFS packs (product names not disclosed) Nicholas Piramal Allergan APIs for Levobunolol (Betagen) and Brimonidine (Alphagan and Alphagan - D) Nicholas Piramal Pfizer 7-year agreement relating to R&D services under which Nicholas Piramal will provide process development and scale up services to Pfizer's animal health division from the latter's facilities in India Dishman Pharma Solvay 6 projects; the main one being for starting material and advanced intermediate for Tevetan

(eprosartan maleate) Dishman Pharma AstraZeneca Intermediate for Nexium (esomeprazole) Dishman Pharma Merck Intermediate for Losartan (to be supplied to its contract manufacturer in Japan) Shasun Chemicals GlaxoSmithKline Ranitidine API Shasun Chemicals Eli Lilly Nizatidine, metohexital and cycloserine APIs Key Contract Manufacturing Agreements. Growing number of collaborations between Indian and foreign firms in the domestic market, especially involving the biotechnology sector, in a wide variety of areas such as collaborative R&D (including drug discovery and clinical trials), co-marketing and manufacturing. India and China's drug outsourcing discovery markets combined are currently worth around \$7.3 billion and, driven by government initiatives to diversify the drug discovery portfolio and develop infrastructure, are set to reach \$19.8 billion in 2011.

In September 2004, a global innovation survey by the Economist Intelligence Unit identified

India as an R&D "hotspot," defined as a place where (1) companies are able to tap into existing scientific and technical expertise networks, (2) there are good links to academic research facilities, (3) the environment supports innovation and (4) it is easy to commercialize. Costs of pharmaceutical innovation in India are estimated as low as one-seventh of their levels in Europe, and the country's clinical research industry is currently worth \$100 million and growing around 40 to 50 percent annually.

#### Some examples of R&D Inward Investments

- AstraZeneca is conducting research into tuberculosis (TB) at the AstraZeneca Research Foundation India in Bangalore. India's estimated 8.5 million TB patients 36 mean clinical trials can be conducted easily and economically. Although the revenue potential for anti-TB drugs is limited as the disease mainly affects poorer nations, the reduced research costs of developing the drug in India and the goodwill associated with helping to eradicate a major disease in developing countries still present a good business opportunity for AstraZeneca.
- GSK and Ranbaxy have set up an early-stage partnership in drug research, under which GSK will provide the Indian firm with leads, Ranbaxy will conduct lead optimization and animal trials, and GSK will take the drug through human trials. GSK will have exclusive rights to sell any resulting product in developed-world markets, and the two firms will co-promote it in India.
- Pfizer is exploring the establishment of an R&D facility and setting up an Academy for Clinical Research in Mumbai. Major drug producers that are already conducting trials in India include Pfizer, estimated to have some 20 ongoing clinical trials there; GSK, with

seven trials; Eli Lilly, with 17 trials; plus AstraZeneca and Novartis. As well as Chiltern, leading contract research organizations (CROs) such as Quintiles, SFBC International and ICON Clinical Research have extensive operations in India.

### Conclusion

There are many factors which show the tremendous potential for Indian pharmaceutical industry growth. It is observed that from above research and trends; the growth pattern and support to Indian economy will be sustain and continuous as this market is least bothered by the other economy affecting issues. India's middle and upper class, there lifestyle, disease pattern, accessibility of health related product and services, health awareness with favorable industrial aspects like human, production/plant setups, research and development and quality expertise, ample and low cost of easily available resources with the support from government regarding various regulatory laws and litigations will act as driving fuel for the overall pharmaceutical industry and economic growth.

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# Critical Analysis of Emerging Trends in Growth of Tertiary Sector in Globalized India

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**Abstract:** As a consequence of the adoption of the New Economic Policy (NEP) of 1991, the growth rate of the Indian economy which stood at 3.5 per cent per annum during 1951-79, 5.0 percent per annum during 1980-91, in fact accelerated to 6.1 per cent per annum during 1992-2000. The economy has moved on from the 'Hindu Rate of Growth' of 3.5% per annum of yesteryears to 'unstoppable India' at 9 % per annum at present. India emerged as one of the fastest growing economies of the world during the 1990s. The remarkable performance of India's economy is attributable in significant part to the spectacular dynamism shown by the services sector. Against this background, it would be appropriate if we try to find out: What are the constituents of service sector in India? How this sector performed on growth and employment fronts? What happened to service sector productivity in post 1980 period? What are the policies adopted by the Government of India to promote the services sector? what are the problems or challenges ahead in this sector? and what are the prospects /potential for growth in this sector?

While India is distinctive among developing countries for its fast-growing service sector, skeptics have raised doubts about the quality and sustainability of this service-sector growth and its implications for economic development. We show, consistent with the views of the sceptics, that while growth of the sector has been unusually rapid, it started 15 years ago from unusually low levels. That the share of services has now simply converged to the international norm raises questions about whether it will continue growing rapidly. In particular, whether service-sector output and employment continue to grow in excess of international norms will depend on the continued expansion of modern services (business services, communication and banking) but, also, on the application of modern information technology to more traditional services (retail and wholesale trade, transport and storage, public administration

and defense). The second aspect obviously has more positive implications for output than for employment. We also show that the modern services that are growing most rapidly are now large enough where their future performance could have a significant macroeconomic impact. The expansion of modern service-sector employment is not simply disguised manufacturing activity. Finally, we show that the mix of skilled and unskilled labor in manufacturing and services is increasingly similar. It is no longer obvious therefore that manufacturing is the main destination for the vast majority of Indian labor moving into the modern sector and that modern services are a viable destination only for the highly-skilled few. We conclude that sustaining economic growth and rising living standards will require shifting labor into primary, secondary and tertiary sectors.

The **service sector**, also called the **tertiary sector**, is one of the three parts of the **economy** in the **Three-sector hypothesis**. This **hypothesis** breaks the economy into three main areas so it can be better understood. The other two are the **primary sector**, which covers areas such as **farming, mining and fishing**; and the **secondary sector** which covers **manufacturing** and making things. The service sector provides a service, not an actual product that could be held in your hand. Activities in the service sector include **retail, banks, hotels, real estate, education, health, social work, transport, computer services, recreation, media, communications**, electricity, gas and water supply.

**I firmly believe that, Services are highly important but they cannot by themselves assure rapid and sustained growth of the Indian economy by neglecting primary and secondary sectors.**

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## Introduction:

The Service Sector constitutes a large part of the Indian economy both in terms of employment potential and its contribution to national income.

The Sector covers a wide range of activities from the most sophisticated in the field of Information and Communication Technology to simple services pursued by the informal sector workers,

The large chunk of labour force engaged for their daily bread and butter in this sector namely, vegetable sellers, hawkers, rickshaw pullers, etc.

The following broad grouping of activities can be considered to form part of the Service Sector:

- (a) Trade
- (b) Hotels and restaurants
- (c) Transport including tourist assistance activities as well as activities of travel agencies and tour operators
- (d) Storage and communication
- (e) Banking and insurance
- (f) Real estate and ownership of dwellings
- (g) Business services including accounting; software development; data processing services; business and management consultancy; architectural, engineering and other technical consultancy, advertisement and other business services

- (h) Public administration and defense
- (i) Other services including education, medical and health, religious and other community services, legal services, recreation and entertainment services
- (j) Personal services and activities of extra-territorial organizations and bodies

Although the Service Sector has a very pivotal role in the country's economic development, the database in this Sector is highly disorganized. A major limitation of the existing statistical system in this respect is the absence of a well-organized mechanism for maintaining a regular and proper database for this Sector.

The problem of data collection from this Sector through the Follow-up Enterprise Surveys of Economic Census is compounded by the fact that the Sector is dominated by a large number of unorganized units.

Further, the composition of units in the domain undergoes changes at a rapid pace because new units or newer service areas come into existence and others disappear with alarming frequency. Thus, a sound official statistical system should endeavour to address all these methodological issues for properly estimating the size and contribution of the Service Sector marked by a rapid change in its composition.

The Service Sector of the economy can be broadly grouped into three broad segments namely,

1. Public sector
2. Private corporate sector
3. Household sector.

The first two are generally referred to as the organized part of the economy, as the accounts of all the business transactions of these sectors are recorded in specified documents and are made available as public documents at regular intervals. The remaining part of the economy, that is the household or unorganized sector, constitutes all unincorporated enterprises including all kinds of proprietorship and partnerships run by the individuals.

India's service sector contributes to about 60 per cent of the country's gross domestic product (GDP), 35% of employment, a quarter of the total trade, and over half of the foreign investment inflows.

The service industry is one of the largest and fastest-growing sectors in the global market. Its contribution to the Indian economy is particularly significant, with regard to employment potential and impact on national income.

This sector covers a wide range of activities, such as transportation, communication, trading, finances, real estate and health, among others.

The service industry provides massive business prospects to investors. Without the sector's capacity to generate revenue, it would be difficult for the Indian economy to acquire the healthy place it currently enjoys on the global platform.

Service Sector in India today accounts for more than half of India's GDP.

In the post-reform period, the service sector has shown considerable growth both in terms of contribution to GDP and in the share of employment in India.

In the financial year 2008-2009, the share of services, industry, and agriculture in India's GDP is 53.7%, 29.1 %, and 17.2 % respectively.

India ranks fifteenth in the services output and it provides employment to around 23% of the total workforce in the country.

The entire study is based on the hypothesis that growth of service sector is one of the most important indicators of economic growth.

#### **Historical background:**

**Service industry**, an industry in that part of the economy that creates services rather than tangible objects. Economists divide all economic activity into two broad categories, goods and services.

Goods-producing industries are agriculture, mining, manufacturing, and construction, each of them creates some kind of tangible objects. A services-dominated economy is characteristic of developed countries. In less-developed countries most people are employed in primary activities such as agriculture and mining.

The service sector consists of the "soft" parts of the economy, i.e. activities where people offer their knowledge and time to improve productivity, performance, potential, and sustainability, what is termed affective labor. The basic characteristic of this sector is the production of services instead of end products. Services (also known as "intangible goods") include attention, advice, access, experience, and discussion. The production of information is generally also regarded as a service, but some economists now attribute it to a fourth sector, the quaternary sector.

The tertiary sector of industry involves the provision of services to other businesses as well as final consumers. Services may involve the transport, distribution and sale of goods from producer to a consumer, as may happen in wholesaling and retailing, or may involve the provision of a service, such as in pest control or entertainment.

The goods may be transformed in the process of providing the service, as happens in the restaurant industry. However, the focus is on people interacting with people

and serving the customer rather than transforming physical goods.

For the last 100 years, there has been a substantial shift from the primary and secondary sectors to the tertiary sector in industrialized countries. This shift is called **Tertiarisation**. The tertiary sector is now the largest sector of the economy in the Western world, and is also the fastest-growing sector.

### Service Sector around the World:

Service sector is the lifeline for the social economic growth of a country. It is today the largest and fastest growing sector globally contributing more to the global output and employing more people than any other sector.

For most countries around the world services are the largest part of their economy. The real reason for the growth of the service sector is due to the increase in urbanization, privatization and more demand for intermediate and final consumer services.

Availability of quality services is vital for the well being of the economy. In advanced economies the growth in the primary and secondary sectors are directly dependent on the growth of services like banking, insurance, trade, commerce, entertainment, social and personal, etc.

The U.S. and other developed economies are now dominated by the services sector, accounting for more than two-thirds of their Gross Domestic Product (GDP).

### Significance of Service Sector:

**Service economy** can refer to one or both of two recent economic developments:

- a) The increased importance of the service sector in industrialized economies. The current list of Fortune 500 companies contains more service companies and fewer manufacturers than in previous decades.
- b) The relative importance of service in a product offering. The service economy in developing countries is mostly concentrated in financial services, hospitality, retail, health, human services, information technology and education. Products today have a higher service component than in previous decades. In the management literature this is referred to as **the servitization of products**. Virtually every product today has a service component to it.

The old dichotomy between product and service has been replaced by a service-product continuum. Many products are being transformed into services.

For example: IBM treats its business as a service business. Although it still manufactures computers, it sees the physical goods as a small part of the “business

solutions” industry. They have found that the price elasticity of demand for “business solutions” is much less than for hardware. There has been a corresponding shift to a subscription pricing model.

Rather than receiving a single payment for a piece of manufactured equipment, many manufacturers are now receiving a steady stream of revenue for ongoing contracts.

Full cost accounting and most accounting reform and monetary reform measures are usually thought to be impossible to achieve without a good model of the service economy

- i. Many productive systems, such as hospitals, beauty salons, consulting companies, banks and airlines do not produce a tangible product that can be stored for later consumption. Instead, the output of such systems is a service – for example, health care, good looks, advice, loans, and transportation – that is consumed in the process of its production.
- ii. From our day-to-day experience, we know that the cost and quality of services provided even within the same industry can vary a great deal. We have preferences and are willing to pay for different components of service, such as speed, quality, degree of variety, and so on. Better management of the system that provides the service, consistent with customer preferences and requirements, will lead to greater profitability for the firm.
- iii. We must therefore understand the nature of the various types of service systems and the associated management tasks that are required to improve a service firm’s competitiveness.
- iv. In 1980, the service sector employed more than two thirds of the working population and accounted for more than 60 % of the gross national product. For the first time in history, investment per office worker now exceeds investment per factory worker. With the continuing trend towards a service economy, a greater proportion of future operations managers will be employed by this sector.
- v. In addition to the continuing growth of the service sector, the role of services in the manufacturing sector has been increasing. With increasing automation and the use of computers in the design of a product and its manufacturing process, technical and professional staffs will have a greater role in the actual production of the product than will unskilled workers. Thus, in the factory of the future the productive process may be guided by design engineers, computer operators, and production planners.

The order will be relayed to the factory, where a car meeting the customer’s specific requirements will be

manufactured and readied for delivery in a short time. It is clear that corporate profitability demands that the design and implementation of the service component of a product be strategically evaluated. The integration of product and service is vital for a firm's success, as it influences how a customer perceives the product.

The inputs to a service productive system are the consumers themselves. The productive process that transforms the inputs into outputs consists of labour, technology, information and the like. The output of such a system is the altered state of the consumer.

The key distinction between service and manufacturing systems is that services are intangible outputs that are consumed in the process of their production. The technology and process for supplying the service can differ significantly from one industry in the service sector to another.

Several distinctions between systems that produce products and systems that produce services were noticed.

#### **Reasons for flourishing of Service Sector: -**

There are immense future prospects in service sector in India.

1. Now days this sector is booming like anything. Because now business firms are taking customer as king.
2. There is n-number of varieties available in market for the same goods or services, that's why the rate of switching over from one product to another is very high.
3. Now companies are giving their best because they want to retain their customers for a long time.
4. Companies want to make their better services their USP.
5. Service sector is directly concern with customers. So it is important to give the best quality to the customers to differentiate the company from others.

#### **Key Points to the growth of Service Sector:**

- The growth of the service sector has long been considered as an indicator of a country's economic progress.
- Services are continually being launched to satisfy our existing needs and to meet needs that we did not even know we had.
- Service organizations can vary in size from large corporations to small, locally owned businesses.

#### **Terms:**

- Service

Action or work that is produced, and then traded, bought or sold, and then finally consumed.

#### **Secondary**

The secondary sector of the economy or industrial sector includes those economic sectors that create a finished, tangible product, such as production and construction.

#### **Primary**

The primary sector of the economy is the sector of an economy making direct use of natural resources.

#### **Key Statistics:**

1. The services sector received foreign direct investment (FDI) equity inflows worth Rs 179,150.49 crore (US\$ 28.78 billion) in the period April 2000–August 2013, according to Department of Industrial Policy and Promotion (DIPP).
2. About 80 % of India's total exports are dominated by high-skilled services, such as software business services, financial services and communication services.
3. The expenditure of Indian banking and securities companies on IT products and services is expected to be around US\$ 422 billion in 2013, a 13% increase from 2012.

#### **Government Initiatives:**

The government will set up a joint task force together with the services industry to prepare an action plan for the development of the services sector and increase services exports. The majority of services sector exports are from verticals such as IT, ITES and BPO sectors.

However, there is a wide scope for segments such as animation, legal servicing, architecture, media and entertainment, healthcare, and tourism, among others.

The portal, which is now the largest online bus ticketing system in the world, will give commuters the opportunity to comfortably plan their bus travel, including stopovers, changing routes, multi- and round-trips, etc. The ratio of bus users to train users in India is 6:1, highlighting the potential of connectivity bus services in India.

Enterprise solutions provider SAP has launched three new applications in an effort to help government bodies improve their delivery mechanism.

#### **Road Map Ahead to realize the task:**

The ministry of Commerce and Industry, has highlighted services trade as an important element to economic growth, sustainable development and employment generation.

Also, the government is planning an annual survey for the service sector, which will give data on the industry's detailed performance.

The Indian food service industry is expected to grow to Rs 408,040 (US\$ 65.56 billion) crore by 2018 at a compound annual growth rate (CAGR) of 11%, as per a survey commissioned by National Restaurant Association of India (NRAI), Which is expected to be (US\$ 1.12 billion)

Finally, service is part of the product. When we buy a consumer durable, such as an automobile, a washing machine, or a solar heating system, a guarantee to service the product accompanies the product itself. Often our decision to buy a product is influenced by the services provided with the product.

In the future, with greater customization and product variety, the service component of the product will increase. It is anticipated that, by the turn of the century a customer will be able to walk into an automobile dealership, order a car based on his or her preferences for colour, style, optional equipment, and the like and arrange all necessary financing using a computer terminal.

In developed countries like USA, UK, Japan, etc... the service sector contributes over 70% GDP, and the share of employment is about 70%. Since India is developing at a faster pace of around 9% economic in the past couple of years, mainly due to the growth in the manufacturing sector and agricultural sector.

Given the experience of developed countries, India's services led growth can be sustainable over a period of time, and in the coming years, the service sector would dominate the economic scene in India. The service's sectors contribution to GDP and to the employment would definitely increase in the coming years. Therefore, it can be concluded that services led growth in India will be sustainable.

### **Challenges before the Tertiary Sector:**

Since the world economy is challenged, India's economy also faces challenges.

- The major challenges of our economy are decreasing economic growth which decreased to 5 % in 2012-13 from 8.5 % in 2010-11
- Rising consumer price inflation and a widening trade deficit which was 4.8 % of GDP for 2012 13.
- These problems have the combined affect of lowering investor confidence as well as value of our rupee.
- Growth is expected to pick only slowly as by year progress. While headline inflation has moderated, high consumer price inflation remains a concern. While recent measures to address exchange rate volatility

have provided a temporary relief, structural reforms are needed to support growth revival and reduce the trade deficit.

### **Conclusion:**

The process of economic growth has led to the emergence and expansion of new services such as advertising, publicity, marketing etc. These sub-sectors provide essential inputs thereby developing strong linkages with rest of the economy. The service sector is a catalyst, inducing growth in other sectors.

In conclusion, I would like to say that Service sector has a very good future in India. It is coming with new types of employment. We can easily find out this sector around us, because it is everywhere in so many forms.

Now, India can be considered as the prototype model of service driven growth where the service sector have high forward linkage and potential productivity gain because service is the input of other sectors too. Recent accelerated growth in the service sector is a big push towards a sustainable development path which is highly a debatable concern.

Again, this development model does not explicitly promote merchandise exports and it is hardly called export led growth model. In this big push in service industry must immediately catch up with the fast growing service sector in which industry must have strong base through associated efficiency and productivity gain. Also, as the forward linkage of modern services stimulate the development of industry which in turn has high backward linkage, virtuous self sustaining cycle of broad based rapid economic expansion may ensure, ultimately resulting in higher incomes and a substantial reduction in poverty

Inspite of the facts and figures stated above, I would like to point out that the service sector will sustain high rates of growth of GDP in future is a misconception. **According to Shankar Acharya, well known economic thinker: "Services are highly important but they cannot by themselves assure rapid and sustained growth of the Indian economy".**

India's history does not support the view that the service sector is the leading sector. During 1950-2000, the growth rate of service sector has averaged around 5.5% which is less than the industrial average of 5.7%. Only in the 1990's the services growth has been 7.6%, much higher than industrial growth of 5.9%. It is only in 1997-2000, the service sector has grown by 8.1% far exceeding industrial growth of 4.8% The high growth registered by the services sector in these four years was due to the massive wage hike by the government and rapid growth of the IT sector from a low base. This may not occur again.

The reliability in the estimation of output from the heterogeneous services sector is questionable unlike the manufacturing sector.

**According to Shankar Acharya, well known economic thinker:** “the long term development of seven fastest growing countries of the world reveal that the growth of service sector in absence of buyout industrial sector is hard to achieve”.

In spite of high growth rate of service sector in the recent five year plans, the overall economic growth was not high due to the slow expansion of agricultural and industrial sector.

Hence the economic growth has to be sustained in the long run, the commodity producing sectors (agricultural and industry) must grow at a fast rate. The fast growth of service sector alone cannot assure high economic growth. There has to be a strong growth of all sectors to maintain the growth of the whole economy. Many economists opine that service – led growth is not sustainable in the long run.

We may be happy to see our service sector is booming but it is in alarming situation in the light of dwindling primary and secondary sectors. It is an indicative of our yet harder days ahead in the coming years. Let us not confuse the service sector is primarily to support of primary and secondary sectors. It does not generate resources by itself. Unless primary and secondary sectors grow, the gains through service sector are disguise.

The decline in the manufacturing activities will negate the gains through services. The country shall loose more than it will gain. Services are welcome, but not at the cost of industries and agriculture. The growth of services without commensurate growths on agriculture and industrial front cannot sustain a large country of our size and its mammoth population.

For support services also call for strong primary and secondary sectors. IT may not be dark horse of long race and may stay but then there is a limit to grow and sustain IT for long global markets alone unless we develop our own market.

Today we may be complacent because of good IT performance and how much and for how long will it be wise for us to depend on it?. This calls for a prudent analysis. A little shake in US economy and it crumbled like a pack of cards and sent a shiver down our spines. **Therefore we must not forget the growth of primary and secondary sectors at the cost of tertiary sector.**

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**Section V**  
**Banking, Finance and Insurance**  
**sector**



# Impact of Insurance Industry on India's Economic Development

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**Abstract :** Life insurance is a commercial contract between the insurance policy proposer and the insurance service provider. However, apart from customized plan of insurance policy and its coverage, there is wide range of insurance policies available in market under different flagship brands. Although the aim of all insurance policies is almost the same, which is providing best quality life coverage and return value of investments in the form of premium, it is extremely essential to learn the basic details about the life insurance plans and the coverage provided by these plans.

Insurance industry contributes to the financial sector of an economy and also provides an important social security net in developing countries. The growth of the insurance sector in India has been phenomenal. The insurance industry has undergone a massive change over the last few years and the metamorphosis has been noteworthy. There are numerous private and government insurance companies in India that have become synonymous with the term insurance over the years. Offering a diversified product portfolio and excellent services many insurance companies in India have managed to make their way into almost every Indian household.

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## Introduction

Insurance is the backbone of a country's risk management system. Risk is an inherent part of our lives. The insurance providers offer a variety of products to businesses and individuals in order to provide protection from risk and to ensure financial security. They are also an important component in the financial intermediation chain of a country and are a source of long-term capital for infrastructure and long-term projects. Through their participation in financial markets, they also provide support in stabilizing the markets by evening out any fluctuations.

The insurance business is broadly divided into life, health, and non-life insurance. Individuals, families, and businesses face risks of premature death, depletion in income because of retirement, health risks, loss of property, risk of legal liability, etc. The insurance companies offer life insurance, pension and retirement income, property insurance, legal liability insurance, etc. to cover these risks. In addition, they offer several specialized products to meet the specific needs and requirements of businesses and individuals. Businesses also depend on these companies for various property and liability covers, employee compensation and marine insurance.

Insurance does influence the growth and development of an economy in several ways. The availability of insurance can mitigate the impacts of risk by providing products which help organizations and individuals to minimize the consequences of risk and has a positive effect on industry growth as entrepreneurs are able to cover their risks. In the absence of a full range of insurance products and/or deficient products in terms of coverage and scope, the risk-taking abilities would be hampered and chances are that the economic activities would turn out to be high-risk activities. The implications of leaving various risks uncovered can be significant and the impact of losses can be devastating creating a huge burden on the governments. Therefore, a

strong and competitive insurance industry is considered imperative for economic development and growth. However, the contribution of the insurance companies is also dependent on the fact that they are able to pool risks effectively. Only then would it be possible to cover these risks at an affordable and reasonable cost as the insurance provider will be able to spread the risks throughout the economy.

The insurance industry is also an integral part of the financial system. For effective functioning of the financial system, it is important that the markets are efficient by ensuring liquidity and transparency in price discovery. The role of the insurance companies as financial intermediaries is also considered significant in making these markets efficient by providing liquidity and credit. This, in turn, helps in lowering down the cost of capital and providing risk-free opportunities to all participants in the market.

Penetration of insurance critically depends on the availability of insurance products and services. Huge untapped market, proliferation of schemes, new product innovations, perception of insurable risks of Indian consumers, competitive pressures arising from integration of bank and insurance, impact of information technology and the role of insurance industry in financial services industry are some of the forces which shape the competitive structure of the insurance industry.

The insurance companies have a pivotal role in offering insurance products which meet the requirements and expectations of the customers and at the same time are affordable. The future growth of this sector will depend on how effectively the insurers are able to come up with product designs suitable to our context and how effectively they are able to change the perceptions of the Indian consumers and make them aware of the insurable risks. The future growth also depends on how service oriented insurers are going to be. On the demand side, the rise in incomes will

trigger the growth of physical and financial assets. With the growth of infrastructure projects the demand for insurance to cover the project and the risks during operations will increase. The other growth trigger is the increase in international trade. However, servicing of the large domestic market in India is a real challenge. Some of these challenges pertain to the demand conditions, competition in the sector, product innovations, delivery and distribution systems, use of technology and regulation.

### **Current scenario**

A growing middle-class segment, rising income, increasing insurance awareness, rising investments and infrastructure spending have laid a strong foundation to extend insurance services in India. The opening up of the insurance sector for private participation global players during the 1990s has resulted in stiff competition among the players with each offering better quality products. This has certainly offered consumers the choice to buy a product that best fits his or her requirements.

The number of players during the decade has increased from four and eight in life and non-life insurance, respectively, in 2000 to 23 in life and 24 in non-life insurance (including 1 in reinsurance industry as in August 2010.)

Most of the private players in the Indian insurance industry are a joint venture between a dominant Indian company and a foreign insurer.

### **Life insurance industry overview**

The life insurance sector grew at an impressive CAGR of 25.8% between FY03 and FY09, and the number of policies issued increased at a CAGR of 12.3% during the same period. As of August 2010, there were 23 players in the sector (1 public and 22 private). The Life Insurance Corporation of India (LIC) is the only public sector player and held almost 65% of the market share in FY10 (based on first-year premiums).

To address the need for highly customized products and ensure prompt service, a large number of private sector players have entered the market. Innovative products, aggressive marketing and effective distribution have enabled fledgling private insurance companies to sign up Indian customers more rapidly than expected. Private sector players are expected to play an increasingly important role in the growth of the insurance sector in the near future.

In a fragmented industry, new players are gnawing away the market share of larger players. The existing smaller players have aggressive plans for network expansion as their foreign partners are keen to capitalize on the enormous potential that is latent in the Indian life insurance market.

ICICI Prudential, Bajaj Allianz and SBI Life collectively account for approximately 50% of the market share in the

private life insurance segment. To tap this opportunity, banks have also started entering alliances with insurance companies to develop underwrite insurance products rather than merely distribute them.

### **Non-life insurance industry overview**

Between FY03 and FY10, the non-life insurance sector grew at a CAGR of 17.05%. Intense competition that followed the de-tariffication and pricing deregulation (which was started during FY07) decelerated the growth momentum.

As of August 2010, the sector had a total of 24 players (6 public insurers, 17 private insurers and 1 re-insurer). The non-life insurance sector offers products such as auto insurance, health insurance, fire insurance and marine insurance. In FY10, the non-life insurance industry had the following product mix. Private sector players have now pivoted their focus on auto and health insurance. Out of the total non-life insurance premiums during FY10, auto insurance accounted for 43.5% of the market share. The health insurance segment has posted the highest growth, with its share in the total non-life insurance portfolio increasing from 12.8% in FY07 to 20.8% in FY10. These two sectors are highly promising, and are expected to increase their share manifold in the coming years.

### **Growth drivers**

#### **Health insurance attracts insurance companies**

The Indian health insurance industry was valued at INR51.2 billion as of FY10. During the period FY03–10, the growth of the industry was recorded at a CAGR of 32.59%. The share of health insurance was 20.8% of the total non-life insurance premiums in FY10. Health insurance premiums are expected to increase to INR300 billion by 2015.

Private sector insurers are more aggressive in this segment. Favorable demographics, fast progression of medical technology as well as the increasing demand for better healthcare have facilitated growth in the health insurance sector. Life insurance companies are expected to target primarily the young population so that they can amortize the risk over the policy term.

#### **Rising focus on the rural market**

Since more than two-thirds of India's population lives in rural areas, micro insurance is seen as the most suitable aid to reach the poor and socially disadvantaged sections of society.

LIC was the first player to offer specialized products with lower premium costs for the rural population. Other private players have also started focusing on the rural market to strengthen their reach.

## **Government tax incentives**

Currently, insurance products enjoy EEE benefits, giving insurance products an advantage over mutual funds. Investors are motivated to purchase insurance products to avail the nearly 30% effective tax benefit on select investments (including life insurance premiums) made every financial year. Life insurance is already the most popular financial product among Indians because of the tax benefits and income protection it offers in a country where there is very little social security. This drives more and more people to come within the insurance ambit.

## **Contribution of the insurance sector to the economy**

Insurance has had a very positive impact on India's economic development. The sector is gradually increasing its contribution to the country's GDP. In addition, insurance is driving the infrastructure sector by increasing investments each year. Further, insurance has boosted the employment scenario in India by providing direct as well as indirect employment opportunities. Due to the healthy performance of the Indian economy, the share of life insurance premiums in the gross domestic savings (GDS) of the households sector has increased.

The increased contribution of the insurance industry from the household GDS has been ploughed back into the economy, generating higher growth. The following factors showcase how the contribution of the insurance industry has strengthened economic growth:

### **Contribution of insurance to infrastructure**

Generally, countries with strong insurance industries have a robust infrastructure and strong capital formation. Insurance generates long-term capital, which is required to build infrastructure projects that have a long gestation period. Concurrently, insurance protects individuals and businesses from sudden unfavorable events. A well developed and evolved insurance sector is needed for economic development as it provides long-term funds for infrastructure development and simultaneously strengthens the risk taking ability.

Although the insurance sector is relatively young in India, its contribution to infrastructural development has been on a visible rise as depicted in the following exhibit.

In FY09, the total investments by the insurance industry increased to INR9, 742 billion, as against INR8, 183 billion in the previous year. Further, investments by both life and non-life insurers increased by 20.2% and 4.6% to INR9,1 63 billion and INR589 billion, respectively, in FY09. However, as outlined in the Eleventh Five Year Plan (2008–2012), there is a significant fund requirement of INR20, 562 billion in the infrastructure sector. Given an expected robust increase in the insurance business and the increasing participation of foreign insurers in India, insurance

companies are well positioned to contribute to infrastructure development in the country.

These investments could further increase with the development of sound debt markets, especially the market for long-term government paper and income tax incentives to attract savings for infrastructural schemes. The direct investment of policyholder funds of life insurers in government bonds is another way in which the industry has helped the development of infrastructure. In addition, IRDA's mandate for insurance companies to invest 15% of their annual sales in infrastructure is expected to boost capital formation.

### **Contribution of insurance to FDI**

The importance of FDI in the development of a capital-deficient country such as India cannot be undermined. This is where the high-growth sectors of an economy play an important role by attracting substantial foreign investments. Currently, the total FDI in the insurance sector, which was INR50.3 billion at the end of FY09, is estimated to increase to approximately INR51 billion in FY10. It is difficult to estimate, but an equal amount of additional foreign investment, can roughly flow into the sector if the government increases the FDI limit from 26% to 49%.

The insurance sector, by virtue of attracting long-term funds, is best placed to channelize long-term funds toward the productive sectors of the economy. Therefore, the growth in their premium collections is expected to translate into higher investments in other key sectors of the economy. Therefore, the liberalization of FDI norms for insurance would not only benefit the sector, but several other critical sectors of the economy.

### **Contribution of insurance to employment**

Insurance helps to create both direct and indirect employment in the economy. Alongside regular jobs in insurance, there is always demand for a range of associated professionals such as brokers, insurance advisors, agents, underwriters, claims managers and actuaries. The increasing insurance business has increased the demand for highly skilled professionals as well as semi skilled and unskilled people.

### **Conclusion**

India's rapid rate of economic growth over the past decade has been one of the most significant developments in the global economy. This growth traces its origin in the introduction of economic liberalization in the early 1990s, which has equipped India to exploit its economic potential and substantially raise the standard of living of its people.

Together with other financial services, insurance services contributed 7% of the country's GDP in 2009. A well developed and evolved insurance sector is a boon for

economic development as it provides long-term funds for infrastructure development and concurrently strengthens the risk-taking ability of the country. Further, insurance has been a notable employment generator, not only for the insurance industry, but has also created significant demand for a range of associated professionals such as brokers, insurance advisors, agents, underwriters, claims managers and actuaries.

By the nature of its business, insurance is closely linked to saving and investing. Life insurance, funded pension systems and non-life insurance have accumulated a significant amount of capital over time, which can be invested productively in the economy. The mutual dependence of insurance and capital markets plays an instrumental role in channelising funds and investment capabilities to augment the development potential of the Indian economy. India's growing consumer class, rising insurance awareness, increasing domestic savings and investments are among the most critical factors that have positively driven the market penetration of the insurance products among its consumer segments. However, there are large untapped areas, which have yet not benefited from the upside of insurance.

To summarize, the Indian Insurance industry is poised for a quantum leap in performance with unprecedented growth opportunities, notwithstanding a temporary sliding growth curve. The stage is now well poised for the real show to commence.

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# Role of Life Insurance Corporation of India in Nation Building

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## Introduction

The mechanism of insurance is very simple. People who are exposed to the same risks come together and agree that if any one of them suffers a loss, the other will share the loss and make good to the person who lost. Insurance is a cooperative and social device. It spreads over loss caused by particular risk, among number of persons, who are exposed to it and who agreed to insure themselves against the risk. Insurance is a cooperative and social device benefited to all i.e. to the insured person and to the society as a whole.

In fastest growing economy and overpopulated country like India, life insurance business has wide market.

In the words of 'D.S. Hansel' " Insurance may be defined as a social device providing financial compensation for the effect of misfortune, the payment being made from the accumulated contribution to all parties participating in the scheme."

In India, insurance business is classified primarily as Life and Non- life (General) insurance.

## Meaning and Definition of Life Insurance

Life Insurance is a contract providing for payment of sum of money to the person assured or failing him to the person entitled to receive the same on the happening of certain event.

'Federation of Insurance Institute Bombay' defines, 'Life insurance is a contract whereby a person agreed for a consideration or a periodical payment called the premium to pay to the insured person or his nominee a stated sum of money on happening of an event dependent on human life'.

## Objectives

1. To understand growth of Life Fund of LIC of India. (LICI)
2. To study the mobilization of life fund of LICI for infrastructural development of national economy.

## Emergence of Life Insurance Corporation of India

In the history of life insurance business in India, 1<sup>st</sup> September 1956 assumed an enormous significance. By 1956, 229 Indian insurers and provident insurance societies and sixteen non-Indian insurers were carrying on life insurance business in India. On 19<sup>th</sup> January, 1956 the life insurance business was nationalised and all 245 private insurers came

under the control and ownership of Central Government. In June, 1956, LIC bill was passed by the Parliament for the establishment of Corporation and then the Act came into force on 1<sup>st</sup> July, 1956 to provide for the regulation and control of the business of corporation.

It will be appropriate to quote here, the words of **Ex Finance Minister Shri. C.D. Deshmukh** from his broadcast to the nation -

He said, "The nationalization of Life Insurance will be another milestone on the road the country had chosen in order to reach its goal of socialistic pattern of society. In the implementation of II five year plan, it is bound to give material assistance into the lives of millions in the rural areas. It will introduce a new sense of awareness of building for the future in the spirit of calm confidence which insurance alone can give. It is a measure conceived in a genuine spirit of service to the people. It will be for the people to respond, confound the doubters and make it a resounding success".

The nationalization of life insurance aims at widening the channels of public savings. It is an important setup towards mobilizing these savings more effectively.

**Former Prime Minister Pandit Jawaharlal Nehru** delivered his view as on 21<sup>st</sup> January 1956, while addressing to National Development Council as, "Inevitably if we are aiming at a socialistic pattern the major things must be in public sector, that is obvious you would have seen in the news paper an important decision of the Government of India as regard of life Insurance. This is a big step as you no doubt realize and it has come after good deal of thinking."

The nationalization of life insurance was justified mainly on three counts:

1. It was perceived that private companies would not promote insurance in rural area.
2. The Government would be in better position to channel resources for saving and investment by taking over the business of life insurance.
3. Bankruptcies of life insurance companies had become a big problem (At the time of takeover, 25 insurance companies were already bankrupt and another 25 were on the verge of bankruptcy.)

Private insurance companies working in land were not fully responsive to the customer needs. Unethical practices had been adopted by some of the players against the interest of the customers.

## Objectives of the nationalization

While piloting the bill for nationalization and the establishment of the LIC of India, the Finance Minister laid down the objectives of nationalization. They are-

1. The business must be conducted with utmost sincerity and with the full realization that the money belongs to policy holders.
2. Act as trustees of the insured public in their individual and collective capacities.
3. Spread life insurance widely and in particular to the rural areas and to the socially, economically backward classes with a view to reaching all insurable persons in the country and providing them adequate financial cover against death at a reasonable cost.
4. Maximise mobilization of people's savings by making insurance linked saving adequately attractive.
5. Promoting amongst all agents and employees of the corporation a sense of participation, pride and job satisfaction through discharge with dedication towards achievement of corporate objective.
6. Deploying the funds to the best advantage of the investors as well as the community as a whole keeping in view national priorities and obligation of attractive return.
7. Meeting various life insurance needs of the community as per changing environment and render prompt and efficient service to its policyholders to make insurance widely popular.
8. The premium must be no higher than warranted by strict actuarial consideration.

## Post privatisation period of Life Insurance

Until 1999 the life insurance business was owned by monolithic institution Life Insurance Corporation of India under state ownership. The process of reopening of the insurance sector had began in the early 1990 and the last decade and more has seen it been opened up substantially. In 1993 the Government set up a committee under chairmanship of R.N.Malhotra, former Governor of RBI. The said committee had recommended comprehensive framework of reforms in the insurance sector in order to improve quality of insurance sector, to innovate new insurance product as per the need of today's customer and wide spread insurance business. It also recommended to establish Insurance Regulatory and Development Authority by passing Insurance Regulatory and Development Act, 2000. As a result of it, twenty one private life insurance and non life insurance companies entered in insurance industry in India between 2000 to 2006. The mission Statement of IRDA :

1. To protect the interest of and secure fair treatment to policyholders.
2. To bring about speedy and orderly growth of the insurance industry (including annuity and superannuation payments) for the benefit funds for accelerating growth of economy.
3. To set, promote, monitor and enforce high standards of integrity, financial soundness, fair dealing and competence of those it regulates.

The Rakesh Mohan Committee, on the aspect of Infrastructural Development Plan for the country, had given emphasis on the development of insurance business that too, life insurance business. The private insurance companies brought about new challenges and also accelerated the business decision process of LIC of India.

## Mobilisation of Funds Towards Economic Development

The LIC develops saving habit amongst policyholders by embedding them with the long term insurance contract. As a result proportion of life insurance fund in financial savings has been increased every year. In the year 2005-06 it was 13.5% and it increased to 14.6% in 2006-07, 18.12% in 2007-08 and 18.71% in 2008-09. The LIC mobilises policyholder's funds (i.e. those accumulated out of premium amount) in sound investment, with discharging responsibilities towards policyholders properly. Consideration of safety is the main motive rather than earning profit.

## Life Insurance Fund

The LIC of India creates Life Insurance Fund every year, after meeting its all expenses and outgo. This fund is raised by keeping some percentage of amount out of total annual income of the Corporation.

This fund is maintained after meeting all kinds of expenses such as payment of claims, surrender amount of policyholders, salaries of staff, commission to agents, taxes, Government's share in surplus, etc.

Hence, Life Insurance Fund is also a significant parameter to evaluate performance of the LIC of India.

The Table No.1 speaks about the growth of Life Insurance Fund. This table shows the amount of the Life Insurance Fund and it also reveals the percentage of growth of this fund over the base year 2000-2001. The amount of the fund was Rs. 1,86,024.75 crores in 2000-01 and it increased to Rs. 9,99,517.59 crores in the year 2009-10. This showed increase in amount by 437% over the last 10 years. During the study period 2000-2001 to 2009-10 it showed constant increase and steady percentage growth over the base year. Overall growth in life fund of LIC of India shows that, the people have faith in investing funds with the LIC



of India. Eventhough the private insurers have opened their shops in Indian market, yet the LIC of India has the dominant position.

**Table No.1**  
**Growth in Life Insurance Fund**

| Year    | Life fund (Rs in Crore) | % Increase /Decrease |
|---------|-------------------------|----------------------|
| 2000-01 | 1,86,024.75<br>(100)    | --                   |
| 2001-02 | 2,27,008.98<br>(122)*   | 22                   |
| 2002-03 | 2,75,391.72<br>(148)*   | 48                   |
| 2003-04 | 3,37,986.12<br>(182)*   | 82                   |
| 2004-05 | 3,85,791.21<br>(207)*   | 107                  |
| 2005-06 | 4,63,147.62<br>(249)*   | 149                  |
| 2006-07 | 5,60,806.33<br>(302)*   | 202                  |
| 2007-08 | 6,86,616.45<br>(369)*   | 269                  |
| 2008-09 | 8,09,824.91<br>(435)*   | 335                  |
| 2009-10 | 9,99,517.59<br>(537)*   | 437                  |

Source : Annual Reports of the concerned years of LIC of India .

Note : \* Indicates % increase/ decrease over base year.

**Role of Life Insurance Corporation Of India In Economic Development:**

The concept of insurance since its beginning has travelled a long distance as to become an effective engine for the development of economy. To quote, the Finance Minister Hon. Dr. C.D.Deshmukh, from his budget speech in 1962, “Life Insurance is yet another source of finance for our development. LIC is a major investor in Government

securities. It also contributes to the development of the private sector. It is making special efforts to popularise insurance in the rural areas and is using panchayat’s and cooperative societies in order to spread insurance in villages’.

The present day economy would be unthinkable without the business of insurance. Following points enlight its prominent role in the economy.

The Insurance Act, 1938 Sec. 27 (A) has laid down some statutory obligations and as per the norms of the Act the Corporation is required to invest amount out of its funds. IRDA also laid down regulations for the same.

As per the norms, LIC has to invest its controlled funds which may provide highest safety but at the same time lowest expected returns. The LIC of India invests its funds by observing two main objectives.

1. Safeguard the interest of policyholders.
2. Investing in future for development of economy of the nation.

**Investment with Social Commitment**

It has been the constant endeavor of the LIC to provide security to as many people as possible and to channelize the savings for the welfare of the people at large. To meet this end, the corporation has been promoting social welfare through investment in infrastructure and social sectors which includes -

- \* Projects / Schemes for generation and transmission of power.
- \* Housing Sector.
- \* Water supply and sewerage projects.
- \* Development of roads, bridges and rail transport.
- \* The investment by way of central, state and other Government guaranteed marketable securities, loans, debentures and equity investment in infrastructure and social sectors. The table no. 2 shows the LIC’s investment in all above sectors for the period 2000-01 to 2009-10.

**Table No.2**

**LIC’s Investment in Various Sectors of India**

**(Central Govt. Scheme, State Govt., Infrastructure and Social Sector)**

| Sr. | Type of Investment                                  | As on            |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|-----|---|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|     |   | 31-3-01          | 31-3-02           | 31-3-03           | 31-3-04           | 31-3-05           | 31-3-06           | 31-3-07           | 31-3-08           | 31-3-09           | 31-3-10           |
| 1   | Central Govt. Sector                                | 85181<br>(60.88) | 109938<br>(65.69) | 137276<br>(64.31) | 166939<br>(65.18) | 199785<br>(63.93) | 236959<br>(66.12) | 272498<br>(66.38) | 297943<br>(63.50) | 318673<br>(60.11) | 360319<br>(55.45) |
| 2   | State Govt. and Other Govt. granted Marketable Sec. | 17877<br>(12.78) | 21463<br>(12.82)  | 28988<br>(13.58%) | 37402<br>(14.60)  | 51283<br>(16.41)  | 58928<br>(16.44)  | 64285<br>(15.66)  | 89234<br>(19.02)  | 110697<br>(20.88) | 141292<br>(21.75) |
| 3   | Infrastructure, Social Sector Investment and Other  |                  |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| a)  | Electricity, SEB and Pvt. Sector                    | 14017            | 17244             | 20613             | 20920             | 25727             | 29740             | 37881             | 41120             | 48090             | 77585             |
| b)  | Housing   | 17998            | 19054             | 19944             | 20694             | 21436             | 19807             | 22451             | 24325             | 34185             | 40232             |
| c)  | Water supply and Irrigation and Severage            | 3657             | 4000              | 4420              | 7111              | 10346             | 8288              | 7500              | 6649              | 6022              | 5241              |
| d)  | State Road TC., Roadways, Port, Railways            | 784              | 893               | 1357              | 1373              | 1387              | 725               | 1516              | 1154              | 7218              | 8066              |
| e)  | Other Investment                                    | 412              | 778               | 878               | 1666              | 2560              | 3954              | 4398              | 8774              | 5274              | 17073             |
| f)  | Total of Col. No. 3                                 | 36868            | 35969             | 47212             | 51764             | 61456             | 62514             | 73746             | 82022             | 100789            | 148149            |
|     |   | -26.35           | -21.49            | -22.12            | -20.21            | -19.66            | -17.44            | -17.96            | -17.48            | -19.01            | -22.8             |
|     | Total   | 139926           | 167370            | 213476            | 256105            | 312524            | 358401            | 410529            | 469199            | 530159            | 649760            |
|     |   | -100             | -100              | -100              | -100              | -100              | -100              | -100              | -100              | -100              | -100              |

**Source :** Annual Reports of the concerned years of the LIC of India.

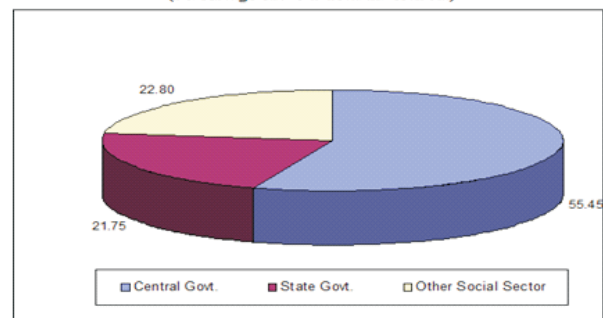
**Note :** Figures in the brackets indicate percentage share to total.

The Table No.2 depicts the investment of LIC in various sectors like Central Government, State Government and other marketable securities, infrastructure, social sector investment and investment in others in terms of loan to industrial estate, sugar cooperatives, Municipal corporation and Development Authority etc. for the period, 2000-01 to 2009-10. In the year 2000-01 total investment was Rs. 1,39,926 crore out of which in central government sector the investment was Rs. 85,181 crore, in State Government and other Government guaranteed marketed securities Rs. 17,877 crore and all infrastructure, social sector investment and other investment in terms of loan to industrial estate was Rs. 36,868 crore which recorded 60.87%, 12.78% and 26.35% share to total. In the year 2009-10 it showed investment in central Government Rs. 3,60,319 crore, in state government Rs. 1,41,292 crore and in infrastructure, social sector and other sector was Rs. 1,48,149 which recorded 55.45%, 21.74% and 22.81% respectively. The total investment in these sectors showed constant growth.

It can be noted that, it has fulfilled all mandatory provisions of the Insurance Act, 1938 and IRDA in each year of the study period. It indicates, that the LIC has been contributing, valuable contribution in the development and growth of economy.

**Graph No. 1**

**LIC's Investment in Various Sectors of India for the year 2009-10  
(Central Govt. Scheme, State Govt., Infrastructure and Social Sector)  
(Percentage Share in Total Investment)**



#### Investment in Future

The policyholder invests their trust along with money. LIC is trust worthy. Life Insurance Investment is just as investment with social commitment. It enables to provide security to the people and the quality life. The Corporation has deployed it's funds, to the best advantage of its policy holders as well as the nation at large, ensuring the national economic development in terms of infrastructure. Securities taken over by the Corporation from the former insurers on 1st September, 1956 were worth of Rs. 307.85 crores. It was proportioned as below and within seven month ended i.e. 31 March, 1957, the Corporation invested Rs. 19.86 crores in

securities. In the year 2009-10 the LIC of India's total investment was Rs. 10,95,841.34 crore out of which the corporation has subscribed an amount of Rs. 52,166.71 crore and Rs. 31,883.20 crore to the securities of Government of India and loan issued to the various State Government's respectively during the year 2009-10.

### **Conclusion**

It indicates that the LIC played pivotal role in the economic development of the nation.

It has done meaningful work of mobilization of public savings for the economic development alongwith insuring their lives and inserting sense of financial security for them. This is the exclusive feature of the LIC being public corporation. The LIC aims at protecting policyholder's interest rather than profitable investment. While investing policyholder's funds in industrial undertakings as growth fund, it balances both an investment and commitment to the policyholders.

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# District Central Co-operative Banks in Maharashtra

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**Abstract :** A co-operative bank is a financial entity which belongs to its members, who are at the same time the owners and the customers of their bank. Co-operative banks in India have primarily been established with the intention of providing agricultural and non-agricultural credit to the farmers, small artisans and other people particularly in rural area.

There are various co-operative credit institutions in India. Of them, District Central Co-operative Banks (DCCBs) in Maharashtra have been chosen in order to study their agricultural and non-agricultural loan recovery performance.

There have been number of studies of the subject carried out by various researchers as on today. Some of them have been reviewed from the point of view of the present study. The study is based on secondary data for the period of ten years from 2001-02 to 2010-11.

From the study, it is revealed that the DCCBs in Maharashtra have achieved increasing trend in all the indicators selected for the study except number of branches. There is also a matter of concern that outstanding loans and over dues of the banks in the state have increased over the period.

It is also found that average recovery percent of non-agricultural loan is higher than the agricultural loan recovery in case of both short term and medium term loans. The study suggests that DCCBs should lay emphasis on recovery of agricultural loan. While distributing loans, viability of each case of loan application should be properly inspected and finalized. As well as, willful and non-willful defaults should also be identified.

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## Introduction

A co-operative bank is a financial entity which belongs to its members, who are at the same time the owners and the customers of their bank. Co-operative banks are often created by persons belonging to the same local or professional community or sharing a common interest. Co-operative banks generally provide their members wide range of banking and financial services such as loans, deposits, safe halts, etc.

Co-operative banks are different comparing with stockholder banks in terms of organization, goals, governance, etc. In most of the countries in the world, they are managed and run on the lines of stockholder banks. Depending on countries, the control and supervision of co-operative banks are implemented directly by state entities or delegated to co-operative federation or central body. Though the organizational rules of co-operative banks are different from country to country, they have common features world over. They are organized according to co-operative principles such as self-help through mutual help and others.

Co-operative banks in India have primarily been established and run with the intention of providing agricultural and non-agricultural credit to the farmers, small artisans and other people particularly in rural area and make them free from clutches of private money lenders. So, co-operative banks play a very dominant role in supply of farm credit. They are also engaged in supply of non-farm credit and other banking services.

The structure of co-operative institutions in India can be divided into two parts as (1) agricultural credit societies

consisting of State Co-operative Bank at state level, Central Co-operative Banks (DCCBs) at district level and Primary Agricultural Credit Societies (PACS) at village level for short term and medium term farm credit and land development banks for long term farm credit and (2) non-agricultural credit societies comprising employees co-operative credit societies, urban co-operative banks, industrial co-operative banks, etc for non-farm credit.

Of the various co-operative credit institutions, DCCBs in Maharashtra have been chosen for the present study in terms of agricultural and non-agricultural loan recovery performance.

## Review of Literature

Many researchers have carried out studies in regard with co-operative banks, their agricultural credit, over dues and loan recovery performance. Some of them have been reviewed as follows:

- Dr. Lakshmanan and A. Dharmendran attempted to study 'Financial Performance of DCCBs in Tamil Nadu' with the help of select indicators, viz., deposits, loans and advances for a period of seven years. The study showed that deposits, loans and advances went up and over dues too.
- R.K. Mishra revealed in his study of 'Banking Sector Reforms and Agricultural Finance' that the over dues position in case of co-operatives was awful and proportion of over dues to total loans advanced was higher than that of any other lending institutions.
- Anil Kumar Soni and Dr. Harjinder Pal Singh Saluja in their research on 'Role of Co-operative Banks in

Agricultural Credit : A Study Based on Chattisgarh' concluded that co-operative banks are providing rural Chattisgarh all round assistance and proved to be an institution where 'Groth with Social Justice' exists. Co-operative banks play a major role in rural credit delivery of the state.

- Rajesh Bhardwaj, Priyanka and Rekha Raheja made a study entitled 'Role of Co-operative Banks in Agricultural Credit : Organization, Growth and Challenges' and reached at the conclusion that the level of NPAs in co-operative banking system is very high as compared with other financial institutions. Therefore, co-operative banks should control their NPAs level for surviving in credit market of India in future.
- Dr. S. Lakshmanan in his study on 'Farm Credit and Non-Farm Credit Recovery Performance of Karatadipulayam Primary Agricultural Co-operative Bank Ltd., Erode District (Tamil Nadu) found that the average percentage of non-farm credit has been higher than the farm credit recovery. Therefore, the society is benefitted out of non-farm credit.
- A.M.S. Ramaswamy and S. Thirumaran carried out a study entitled as 'Growth and Performance of South Arcot District Central Co-operative Banks'. The study came to the conclusion that the bank has performed excellently well in the aspects of share capital, working capital, net profit earned and reserve fund. However, it has to take some more efforts for the mobilization of resources and recovery of the outstanding loans.
- In the study entitled 'Co-operative Agricultural Finance : Utilization and Over Dues' by Pratap Singh, it was concluded that the heavy incidence of over dues is the most depressing feature of the short term agricultural credit in the district of Patiala.
- Dutta Uttam and Basak Amit gave suggestion that co-operative banks have to improve recovery performance and also use new system of computerized monitoring of loans, adopt proper prudential norms and conduct workshops to face the competitive banking environment.

Various committees such as Narsimham, Kapoor, Tarapore, etc. were appointed by the government to present their recommendations in order to strengthen the operations of the banks.

### Objectives of the Study

The following are the objectives of the study :

- To study the progress of the District Central Co-Operative Banks (DCCBs) in Maharashtra with the help of select indicators at two points of time, i.e., 2001-02 and 2010-11.

- To analyze short term and medium term agricultural and non-agricultural loans demanded and recovered during the period of ten years from 2001-02 to 2010-11.
- To make comparison between agricultural and non-agricultural loan recovery in case of both short term and medium term loans and find out in which case recovery performance is better.
- To suggest corrective measures for effectiveness in loan recovery performance of DCCBs.

### Methodology

The Study is based on secondary data drawn from the web site of National Federation of State Co-Operative Banks Ltd. named as [www.nafscob.org](http://www.nafscob.org), reports, papers, books, journals and other web sites relating to co-operative banking. Numerical data were collected for the period of ten years from 2001-02 to 2010-11. Analysis of the data has been made by using growth rate, percentage / index numbers.

### Limitations of the Study

The following are the limitations of the study:

- The requisite data for the year 2003-04 in terms of both short term and medium term agricultural and non-agricultural loans could not be had from the sources tried for.
- The present study covers the performance of average recovery of all DCCBs in Maharashtra. The results of the study may not agree with the study of individual DCCB.

### District Central Co-Operative Banks (DCCBs)

The co-operative banks provide short term, medium term and long term loans to both agriculture and non-agriculture sector. Agricultural co-operatives are classified as (1) Short Term and Medium Term Institutions and (2) Long Term Credit Institutions. State co-operative banks, DCCBs, and PACS are for short term and medium term loans and primary land development banks for long term credit. There are also co-operatives exclusively for non-agricultural loans such as industrial co-operatives, marketing co-operatives, urban co-operatives, etc.

The Primary Agricultural Credit Societies (PACS) in the area of each district when federated, the federation is turned as District Central Co-operative Bank (DCCB). The DCCB may be having persons as members or societies as members or both societies and persons as members. The DCCB is a link between Primary Agricultural Credit Societies and State Co-operative Bank (Apex Bank). The DCCBs in a state when federated, the federation is known as State Co-operative Bank. The DCCBs are formed as per the provisions of The Co-operative Societies Act, 1912. The management of DCCB consists of a board of directors comprising 12 to

15 members. The members of the board are elected in general body meeting by PACS and individual members.

### Functions of DCCBs

The functions of DCCBs are as follows:

1. To provide guidance and technical assistance to PACS.
2. To provide finance to PACS when demanded by them.
3. To provide banking facilities to the members in the area of working.
4. To encourage thrift and collect savings of members and others.
5. To provide facilities for safe investments of the funds of PACS.
6. To attract deposits from public by creating confidence in the mind of people for co-operatives.
7. To act as an intermediary between the primary societies and money market.

### Progress of DCCBs in Maharashtra

Maharashtra plays a dominant role in the economic development of the country. It is the most industrially developed state. The state's consistent contribution of more than 20% in the net value added in the organized manufacturing sector in the country reflects its high level of industrialization. It lags behind the other states in agricultural performance. Still, it has the largest share of 13% in the national income. It is the birth place of co-operative credit movement in the country. It has been a pioneer in the development of co-operative banking. It also ranks top in this field as on today. Shri Vaikunthbhai Mehata and Prof. D.R. Gadgil from Maharashtra were outstanding co-operators in the country. They developed and introduced various co-operative innovations strengthening co-operative movement in the state as well as in the country.

At present, there are 31 DCCBs in the state with the primary object to provide credit requirements to PACS. The first such secondary level co-operative was registered in Mumbai in 1911 under the Government of India Act, 1904.

Table 1 : Progress of the District Central Co-operative Banks in Maharashtra

| Item   | 2001-02 | 2010-11          |
|--|---------|------------------|
| Number of Banks                              | 30      | 31 (3.33)        |
| Number of branches including Head Office     | 3813    | 3715 (-2.57)     |
| Number of Members                            | 111.21  | 125.24 (12.62)   |
| Share Capital                                | 77583   | 164600 (112.16)  |
| Reserve Funds                                | 237689  | 619860 (160.79)  |
| Deposits                                     | 1944947 | 4687366 (141.00) |
| Working Capital                              | 2728563 | 6108458 (123.87) |
| Investments                                  | 819278  | 2359719 (188.02) |
| Loans & Advances                             | 1764427 | 2664923 (51.04)  |
| Outstanding Loans                            | 1602808 | 2816617 (75.73)  |
| Loans Over Dues                              | 372813  | 645960 (73.27)   |
| Percentage of Over Dues to Outstanding Loans | 23.26   | 22.93            |

Note: Figures in the brackets indicate growth rate.

Source :- [www.nafscob.org](http://www.nafscob.org)

An attempt has been made to examine the progress of DCCBs in Maharashtra with the help of some select financial indicators at the two points of time, i.e., 2001-02 and 2010-11 as shown in table 1. There were 30 DCCBs in 2001-02. The number went up to 31 DCCBs in 2010-11 which showed 3.33% growth. Number of branches including Head Office in the year 2001-02 was 3813 and in 2010-11, the number came down to 3715, i.e., a decrease of 2.57% over the period. The number of members of DCCBs increased to 125.24 thousand in 2010-11 from 111.21 thousand in 2001-02. Share capital of all DCCBs showed a growth of 112.16%, reserve

fund 160.79%, deposits 141.00%, working capital 123.87%, investments 188.02%, loans and advances 51.04%. Over the period, outstanding loans of the banks indicated increase of 75.73%, and loans over dues of 73.27%. But percentage of over dues to outstanding loans came down from 23.26% in 2001-02 to 22.93% in 2010-11.

Though, the DCCBs in the state showed progress in almost all indicators but outstanding loans and over dues are serious concerns for them.

## DCCBs Facing Desperate Straits

In the month of April 2012, it was reported under co-operative news that a number of district central co-operative banks in Maharashtra were reported to be in desperate straits and efforts to help them return to a healthy and viable conditions had failed. The crisis of these banks is mainly attributable to a tight stranglehold the unscrupulous politicians have long exercised over them. In addition to this, the banks have seriously been damaged by a series of financial scandals. Because of desperate position, these banks will not get finance from NABARD which, in turn, is passed on to the members of the banks for satisfying the need of agricultural credit. It is speculated that the RBI may soon ask these banks to stop their banking operations. If this happens they will cease to be the banks and become mere co-operative societies. It is suggested that proper steps should be taken to overcome the desperate straits.

## Agricultural and Non-Agricultural Loan recovery of DCCBs in Maharashtra

Co-operative credit system has been developed for satisfying the need of loans for agricultural and non-agricultural purpose particularly in rural areas. DCCBs issue loans for short term and medium term periods. An attempt has been made to analyze agricultural and non-agricultural loans recovery performance of DCCBs in Maharashtra for the period from 2001-02 to 2010-11 as follows.

### Short Term Agricultural Loan Recovery Position

Such loan is issued for 3 to 15 months to meet out expenses of seasonal agricultural operations like purchasing of seeds, fertilizers, pesticides, agricultural implements, payment of

**Table 2 : Short Term Agricultural Loan Recovery**

| Year    | Demand of Loan | Recovered | Index No. |
|---------|----------------|-----------|-----------|
| 2001-02 | 442148         | 182752    | 41.33     |
| 2002-03 | 470883         | 161139    | 34.22     |
| 2003-04 | NA             | NA        | NA        |
| 2004-05 | 519038         | 239225    | 46.09     |
| 2005-06 | 539288         | 221026    | 40.98     |
| 2006-07 | 607416         | 250237    | 41.20     |
| 2007-08 | 765817         | 172648    | 22.54     |
| 2008-09 | 854577         | 324505    | 37.97     |
| 2009-10 | 965091         | 580867    | 60.19     |
| 2010-11 | 1100090        | 632912    | 57.53     |

Source :- [www.nafscob.org](http://www.nafscob.org)

wages, rents and domestic expenses. It is also provided for marketing of crops and others including supply and distribution.

An analysis of the short term agricultural loan recovery as a percentage of demand for loans during the period from 2001-02 to 2010-11 has been shown in the table 2. From the analysis, it is seen that the highest short term agricultural loan recovery was 60.19% in 2009-10 and the lowest recovery was 22.54% in 2007-08. The average recovery in this regard was 42.45% which is less than short term non-agricultural loan recovery of 82.70%.

### Short Term Non- Agricultural Loan Recovery Position:

This type of loan is also provided for the period of 3 to 15 months but the purpose of it is not agricultural. DCCBs' short term non-agricultural loan includes loan to industrial purpose, consumption purpose etc.

Table 3 gives an analysis of the short term non-agricultural loan recovery in terms of percentage of loan recovered to loan demanded. The recovery of the loan was the highest of 92.14% in 2001-02 and the lowest of 73.16% in 2006-07. The average recovery of the loan was 82.70%, being more than short term agricultural loan recovery.

**Table 3 : Short Term Non-agricultural Loan Recovery**

(Rs. In lakh)

| Year    | Demand of Loan | Recovered | Index No. |
|---------|----------------|-----------|-----------|
| 2001-02 | 423278         | 390027    | 92.14     |
| 2002-03 | 330308         | 291262    | 88.18     |
| 2003-04 | NA             | NA        | NA        |
| 2004-05 | 204645         | 153032    | 74.78     |
| 2005-06 | 177241         | 132573    | 74.80     |
| 2006-07 | 200723         | 146852    | 73.16     |
| 2007-08 | 288161         | 223473    | 77.55     |
| 2008-09 | 170040         | 153836    | 90.47     |
| 2009-10 | 245334         | 208393    | 84.94     |
| 2010-11 | 360566         | 318341    | 88.29     |

Source :- [www.nafscob.org](http://www.nafscob.org)**Medium Term Agricultural Loan Recovery Position:**

This kind of loan is granted for the period from 15 months to 5 years. It is provided for development of land, minor irrigation, animal husbandry, etc.

Medium term agricultural loan recovery analysis indicated in the table 4 provides that the highest percentage

of the loan recovery was in the year 2009-10 of 67%. The lowest recovery rate was in the year of 2007-08 of 39.17%. The average recovery of the loan stood at 50.80%. The average recovery of the medium term agricultural loan at 50.80% was less than the average recovery of the medium term non-agricultural loan at 54.38%.

**Table 4 : Medium Term Agricultural Loan Recovery**

(Rs. In lakh)

| Year    | Demand of Loan | Recovered | Index No. |
|---------|----------------|-----------|-----------|
| 2001-02 | 64709          | 29958     | 46.30     |
| 2002-03 | 75727          | 29986     | 39.60     |
| 2003-04 | NA             | NA        | NA        |
| 2004-05 | 101598         | 49823     | 49.04     |
| 2005-06 | 110153         | 53954     | 48.98     |
| 2006-07 | 119150         | 58183     | 48.83     |
| 2007-08 | 167072         | 65442     | 39.17     |
| 2008-09 | 195955         | 116751    | 59.58     |
| 2009-10 | 146226         | 97978     | 67.00     |
| 2010-11 | 140400         | 82458     | 58.73     |

Source :- [www.nafscob.org](http://www.nafscob.org)**Medium Term Non-agricultural Loan Recovery Position:**

It is provided for purchase of shares & debentures and other purposes. Table 5 indicates data analysis regarding medium term non-agricultural loan recovery position for the period from 2001-02 to 2010-11. From the

table, it is observed that the highest percentage of the recovery of the loan was for the year 2010-11 at 62.48% and lowest in the year 2005-06 at 45.60% and average percentage of the recovery was 54.38%.



Table 5 : Medium Term Non-Agricultural Loan Recovery

(Rs. In lakh)

| Year    | Demand of Loan | Recovered | Index No. |
|---------|----------------|-----------|-----------|
| 2001-02 | 53437          | 26028     | 48.71     |
| 2002-03 | 66191          | 38403     | 58.02     |
| 2003-04 | NA             | NA        | NA        |
| 2004-05 | 90656          | 48688     | 53.71     |
| 2005-06 | 90152          | 41113     | 45.60     |
| 2006-07 | 83809          | 41815     | 49.89     |
| 2007-08 | 114214         | 59192     | 51.83     |
| 2008-09 | 130732         | 75355     | 57.64     |
| 2009-10 | 111923         | 68901     | 61.56     |
| 2010-11 | 106994         | 66852     | 62.48     |

Source :- [www.nafscob.org](http://www.nafscob.org)

Non-agricultural loan recovery was higher than the agricultural loan recovery. Non- agricultural loans are generally issued to the persons having a guaranteed source of income. Agricultural loan borrowers don't have guaranteed income from farm due to uncertain natural conditions. For low recovery of agricultural loans, other factors such as willful default, use of loan for unproductive purpose, etc. are also responsible.

#### Conclusion:

From the study, it is found that DCCBs in Maharashtra accomplished progress in each of the indicators chosen for the study except number of branches during the period from 2001-02 to 2010-11. Share capital, reserve funds, deposits, working capital, investments indicated increase above 100% over the period. Number of banks, number of members, loan and advances attained meager growth. There is a matter concern that outstanding loans and over dues went up, being an indication of poor performance.

In case of recovery of loan, average recovery percent of non- agricultural loan is higher than the agricultural loan recovery in terms of both short term and medium term loans. So, DCCBs are more benefitted from non- agricultural loans.

On the basis of the conclusion of the study, it is suggested that emphasis should be laid on the recovery of agricultural loans. For effective regular recovery, the DCCBs should distribute loans to those persons who can repay loans, adopt efficient supervision system for utilization and recovery of loans and also identify willful and non-willful defaulters for proper measures to be taken for recovery.

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# **An Analysis of Non Performing Assets (A Comparative study of NPAs between Priority Sector and Non Priority Sector Lending by Scheduled Commercial Banks in India)**

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**Abstract :** Non Performing Asset indicates the credit risk of the banks. Operational efficiency of the bank is affected by the quality of advances which in turn has an impact on the profitability, liquidity and solvency position of the banks. This is not only due to “Directed Credit Programme” followed by the government, under which Indian banks have to lend 40% of their total credit to priority sector but also lending to the non priority sectors. According to the various reports, the priority sector NPAs has registered higher growth in terms of percentage as compared to non priority sectors. Critical analyses of NPAs in various bank reveals that in addition to priority sectors, advances to large industries also forms part of NPAs. The share of small advances of rural sector is very small compared to the large scale industries. Hence, the present study has its focus on the analysis of priority sectors and non priority sectors NPAs of Indian scheduled commercial banks.

**Keywords :** Non Performing Asset, Priority Sector Lending, Non Priority Sector Lending

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## **1. Introduction**

It has been argued by a number of economists that a well-developed financial system enables smooth flow of savings and investments and hence, supports economic growth (King and Levine, 1993, Goldsmith, 1969). A healthy financial system can help to achieve efficient allocation of resources across the time and space by reducing inefficiencies arising out of market frictions and other socio-economic factors. Amongst the various desirable characteristics of a well-functioning financial system, the maintenance of non-performing assets (NPA) is an important one. NPAs beyond a certain level are definitely a cause of concern for everyone those who involved in banking sector because bank credit is essential for economic growth and NPAs affect the smooth flow of bank credit. Banks raise resources not just on fresh deposit, but also by recycling the funds received from the borrowers. Thus, when a loan becomes non-performing, it affects recycling of bank credit and credit creation. Apart from this, NPAs affects profitability as well, since higher NPAs require higher provisioning, which means a large part of the profits needs to be kept aside as provision against bad loans. Therefore, the problem of NPAs is not the concern of the lenders alone but it is a concern for policy makers as well as those who are involved in putting economic growth on the fast track.

## **2. Research Problem**

According to the various reports, the priority sector NPAs has registered higher growth in terms of percentage as compared to non priority sectors. A critical analysis of NPAs in various banks reveals that in addition to priority sector, advances to large industries also form part of NPAs. The share of advances of rural sector is very small as

compared to the large advances in corporate sector. Priority sector advances, as a percentage of NPAs may be higher, but quantity-wise are not a high in figure. Large advances, as a percentage of NPAs are lower but quantity-wise it is a higher in figure. Against this backdrop, the present study has focused on the analysis of priority sector and non priority sector NPAs of Indian scheduled commercial banks.

## **3. Objectives of Research**

The research is based on following objectives :

1. To study the NPAs in priority sector and non priority sector lending in scheduled commercial banks.
2. To study the factor determinants of NPAs under priority sector and non priority sector lending by scheduled commercial banks.
3. To find out the Comparative analysis of NPA between priority sector and non priority sector lending by scheduled commercial banks.
4. To suggest policy measures to reduce non performing assets in scheduled commercial banks

## **4. Hypothesis of Research**

The research is based on following hypothesis. NPAs in percentage term in priority sector advances may be higher but quantity wise, its contribution to total NPAs is not very significant. Whereas percentage of NPAs in case of non priority sector advances may be lower but it forms the major chunk of the total NPAs.

## **5. Scope of the Study**

The study is based on NPA problem in priority and

non priority sector lending by Indian scheduled commercial banks. The study could give clue to understand the sectoral composition of NPAs in banks. It could also suggest measures for the banks to avoid sectoral NPAs and to reduce existing NPAs. The study may help the government in creating and implementing new strategies for priority sector and non priority sector lending to control NPAs. The study will help to select appropriate techniques suited to manage the NPAs and develop a time bound action plan to arrest the growth of NPAs.

## 6. Methodology Of Research :

For the study, secondary data has been collected using annual reports of Reserve Bank of India publication including Trend & Progress of banking in India, statistical tables related to banks and report on currency and finance. Articles and research papers related to NPAs of scheduled commercial banks published in different business journals, magazines, newspapers, and periodicals were also studied. Major guidelines issued by RBI to recover NPAs from time to time also studied in depth. The study covers a period of 12 years commencing from 2001-02 to 2011-12.

## 7. Overview Of Non Performing Assets :

Nonperforming assets indicate the credit risk of the banks. Operational efficiency of the banks is affected by the quality of advances which in turn has an impact on the profitability, liquidity and solvency position of the banks. According to the RBI notification with effect from March 31, 2004 a Non Performing Asset (NPA) shall be a loan or an advance where; a) Interest and/or installment of principal remains overdue for a period of more than 90 days in respect of a term loan, b) The account remains 'out of order' for a period of more than 90 days, in respect of an Over Draft / Cash Credit, c) The bill remains overdue for a period of more than 90 days in case of bills purchased and discounted, d) Interest and/or installment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purpose, and e) Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts (RBI).

## 8. Overview Of Priority Sector Lending :

Priority sector was first properly announced in 1972; after the National Credit Council emphasized that there should be a larger involvement of the commercial banks in the priority sector. In 1974, the banks were given a target of 33.33 % as share of the priority sector in the total bank credit. This was later revised on the recommendation of the Dr. K S Krishnaswamy committee and raised upto 40%.

### Categories of Priority Sector:

The scope and extent of priority sector advances have undergone a significant change in the post-reform period

with several new areas and sector being brought under its preview. RBI has decided to include only those sectors as part of the priority sector, which has its impact on large segments of population & the weaker sections, and which are employment intensive. Accordingly the broad categories of priority sector for all scheduled commercial banks as per Draft Guidelines of RBI (January 2007) on lending to Priority Sector are as under:

- a) **Agriculture and Allied Activities;** Finance to agriculture shall include short, medium and long term loans given for agriculture and allied activities.
- b) **Micro & Small Enterprises;** The micro and small enterprises shall include small road and water transport operators, small business, professional & self-employed persons.
- c) **Micro Credit;** Credit and other financial services and products of amounts not exceeding Rs.50,000 per borrower.
- d) **Education Loans;** Loans and advances granted to only individuals up to Rs.10 lakh for studies in India and Rs.20 lakh for studies abroad.
- e) **Housing Loans;** Loans up to Rs.25 lakh to individuals for purchase/ construction of dwelling unit and loans given for repairs to the damaged dwelling units of families up to Rs.1 lakh in rural and semi-urban areas and up to Rs.2 lakh in urban and metropolitan areas.
- f) **Loans to Self Help Groups (SHG) / Joint Liability Groups (JLGs);** Loans to SHGs / JLGs up to Rs. 50,000 would be considered as Micro Credit and hence treated as priority Sector Advances.

## 9. Npa's Of Scheduled Commercial Banks In India:

Due to the social banking motto, the problem of bad loans did not receive priority from policy makers initially in India. However, with the reform of the financial sector and the adoption of international banking practices the issue of NPAs received due focus. Since then the trends of overall gross and net NPAs of scheduled commercial banks has started decline. Gross NPAs are the sum total of all loan assets that are classified as NPAs as per RBI guidelines as on Balance Sheet date. Gross NPA reflects the quality of the loans made by banks. It consists of all the nonstandard assets like as sub-standard, doubtful, and loss assets. Net NPAs are those type of NPAs in which the bank has deducted the provision regarding NPAs. Net NPA shows the actual burden of banks. Since in India, bank balance sheets contain a huge amount of NPAs and the process of recovery and write off of loans is very time consuming, the provisions the banks have to make against the NPAs according to the central bank guidelines, are quite significant. Table 1 shows the gross and net NPAs of scheduled commercial banks during study period.

**Table No: 1: Overall Npa's Of Scheduled Commercial Banks In India**

| Years     | Gross NPA's |                                 | Net NPA's |                               |
|-----------|-------------|---------------------------------|-----------|-------------------------------|
|           | Amount      | As A Percentage of Gross Amount | Amount    | As A Percentage of Net Amount |
| 2000-2001 | 637.41      | 11.4                            | 342.61    | 6.2                           |
| 2001-2002 | 708.61      | 10.4                            | 355.54    | 5.5                           |
| 2002-2003 | 687.17      | 8.8                             | 296.92    | 4.0                           |
| 2003-2004 | 648.12      | 7.2                             | 243.96    | 2.8                           |
| 2004-2005 | 593.73      | 5.2                             | 217.54    | 2.0                           |
| 2005-2006 | 510.92      | 3.3                             | 185.43    | 1.2                           |
| 2006-2007 | 504.86      | 2.5                             | 201.01    | 1.0                           |
| 2007-2008 | 563.09      | 2.3                             | 247.30    | 1.0                           |
| 2008-2009 | 683.28      | 2.3                             | 315.64    | 1.1                           |
| 2009-2010 | 846.98      | 2.4                             | 387.23    | 1.1                           |
| 2010-2011 | 979.22      | 2.4                             | 418.13    | 1.0                           |

**Source:** Report on Trend and Progress of Banking in India 2002-11, Reserve Bank of India, India.

As per the above table, it has been absorbed that the gross and net NPAs of scheduled commercial banks declined during study period. In the year of 2000-2001, the gross NPAs of scheduled commercial bank were 11.4 percent which has declined sharply up to 2.4 percent in 2011. In the year of 2000-2001, the gross NPAs of scheduled commercial bank were 6.2 percent which has decline sharply up to 1.0 percent in 2011. This decreasing trend is due to the steps taken by government of India, Reserve Bank of India and various banking associations since reforms period.

#### 10. NPA in Priority and Non Priority Sector lending by Scheduled Commercial Banks

One of the important issues raised in the case of the NPAs of SCBs is that the directed lending policy followed by the Government under social banking motto led to increase in the level of NPAs. To confirm the above issue the researcher has compared priority and non-priority sector NPAs of scheduled commercial banks. The table no. 2 shows that the priority and non priority sector NPAs of scheduled commercial banks from 2003 to 2012.

**Table No. 2: Priority Sector and Non Priority Sector NPA by Commercial Banks (%)**

| Years     | NPA in Priority Sector Lending | NPA in Non Priority Sector Lending |
|-----------|--------------------------------|------------------------------------|
| 2003-2004 | 43.5                           | 56.5                               |
| 2004-2005 | 45.3                           | 54.7                               |
| 2005-2006 | 50.1                           | 49.9                               |
| 2006-2007 | 54.0                           | 46.0                               |
| 2007-2008 | 54.4                           | 45.6                               |
| 2008-2009 | 45.9                           | 54.1                               |
| 2009-2010 | 47.7                           | 52.3                               |
| 2010-2011 | 51.8                           | 48.2                               |
| 2011-2012 | 46.9                           | 53.1                               |

**Source :** Trends and Progress of Commercial Banks in India, Various Issues

As per the above table, it has been observed that the first two year of study period, the priority sector NPAs was less as compared with non priority sector lending. During 2003-04 the share of NPAs in the priority sector to total NPAs of commercial banks was 43.5 percent and share of NPAs in the non priority sector to total NPAs of commercial banks was 56.5 percent. In the year of 2004-05, the share of priority sector NPAs to total NPAs of commercial banks

increased up to 45.5 percent and decreased in non priority sector up to 54.5 percent.

It has also been observed that during 2005-2006 to 2007-2008, the proportion of NPAs in priority sector lending has increased as compared to non priority sector lending. This was mainly due to increase in NPAs in the agriculture sector, while NPAs in the SSI sector declined.

After 2007-2008, the table shows that the NPAs of priority sector lending declined and which of non-priority sector lending rose. The decline trends of NPAs in priority sector lending was contributed by the agricultural sector, partly reflecting the effect of the debt waiver scheme for farmers announced by the Central Government in 2007. The sharp rise in NPAs of non-priority sector was reflective of the slowdown in the economy and stressed financial conditions of corporate.

During 2011-12, total priority sector NPAs increased at a significantly higher rate than the growth rate of credit to the priority sector. However, the share of the priority sector

in total NPAs declined compared with the previous year. Among bank groups, proportion of priority sector in total NPAs was higher for public sector banks.

### 11. Total Priority Sector Npa's Of Scheduled Commercial Banks In India

The sector-wise analysis in priority sector NPAs of scheduled commercial banks includes agriculture sector, micro and small sector and other sectors. Table no 3 shows the total priority sector NPAs of scheduled commercial banks in India from 2004-2005 to 2011-12.

**Table 3: Total Priority Sector NPAs by Scheduled Commercial Banks (%)**

| Years     | Agriculture | Micro and Small sector | Others | Total |
|-----------|-------------|------------------------|--------|-------|
| 2004-2005 | 13.7        | 15.6                   | 16.0   | 45.3  |
| 2005-2006 | 13.6        | 15.7                   | 20.8   | 50.1  |
| 2006-2007 | 15.5        | 13.5                   | 25.0   | 54.0  |
| 2007-2008 | 18.5        | 12.2                   | 23.7   | 54.4  |
| 2008-2009 | 11.7        | 12.6                   | 21.6   | 45.9  |
| 2009-2010 | 13.9        | 17.0                   | 16.9   | 47.8  |
| 2010-2011 | 18.7        | 17.6                   | 15.5   | 51.8  |
| 2011-2012 | 19.0        | 14.9                   | 13.0   | 46.9  |

**Source:** Report on Trend and Progress of Banking in India 2002-11, Reserve Bank of India, India

As per the above table, in 2004-2005, the NPAs in priority sector added up a large proportion 45.3 percent in which agriculture sector NPAs are 13.7 percent, micro and small sector NPAs are 15.6 and other sector NPAs are 16 percent. The sectoral distribution of NPAs showed a growing proportion of priority sector NPAs between 2006 and 2008. Priority sector NPAs, which constituted little over half of the total NPAs of domestic banks up to 2006, had shown a rise in 2007 and 2008.

The sectoral distribution of NPAs showed a growing proportion of priority sector NPAs between 2009 and 2010 but it was less as compared to the previous year. Priority sector NPAs, which constituted little over half of the total NPAs of domestic banks up to 2008, had shown a steep decline in 2009 attributable primarily to the Agricultural Debt Waiver and Debt Relief Scheme of 2008. Between 2009 and 2010, however, the share of priority sector NPAs in general, and small scale industries in particular, went up for domestic banks, partly a reflection of the impact of the financial crisis and the economic slowdown that had set in thereafter.

The sectoral classification of NPAs revealed that, during 2011-12, the share of agriculture in total NPAs increased marginally. However, despite the subdued industrial performance, the share of micro and small enterprises in total NPAs of the banking sector came down as compared with the previous year

### 12. Priority Sector and Non Priority Sector NPA's in Public Sector Banks

Priority sector was regarded as a "People Sector" by policymakers, regulators and banks till 1990. It was one of the prime objectives of nationalization of commercial banks in India. The Public Sector Banks has played a prominent role in Priority Sector Lending. The NPAs of Priority Sector Lending by the Public Sector Banks is increasing year by year. Table no. 4 shows the priority and non priority sector NPAs of public sector banks since 2002-2003.

**Table 4: Composition of NPAs of Public Sector Banks 2003 to 2012**  
(Amount in Billions)

| Years     | Priority sector |                      | Non priority sector |                      |
|-----------|-----------------|----------------------|---------------------|----------------------|
|           | Amount          | NPA Percentage Share | Amount              | NPA Percentage Share |
| 2002-2003 | 249.39          | 47.23                | 267.81              | 50.77                |
| 2003-2004 | 238.41          | 47.54                | 256.98              | 52.46                |
| 2004-2005 | 233.97          | 49.05                | 238.49              | 50.95                |
| 2005-2006 | 223.74          | 54.07                | 180.72              | 45.93                |
| 2006-2007 | 229.54          | 59.46                | 148.61              | 40.54                |
| 2007-2008 | 252.87          | 63.86                | 140.15              | 36.14                |
| 2008-2009 | 241.68          | 55.20                | 193.94              | 44.80                |
| 2009-2010 | 308.46          | 53.80                | 259.23              | 46.20                |
| 2010-2011 | 412.88          | 58.10                | 295.14              | 41.90                |
| 2011-2012 | 562.01          | 49.96                | 552.46              | 49.04                |

**Source:** Report on Trend and Progress of Banking in India 2002-11, Reserve Bank of India, India.

Table 4, reveals the NPAs in priority and non-priority sector by public sector bank groups. It clearly indicates that NPAs in priority sector were more in public sector banks when compared to private and foreign banks. This is because advances by public sector banks to the priority sector were high. In the case of public sector banks, first four years of the study period NPAs in non-priority sector were more than priority sector. From the year 2005-06 onwards NPAs in priority sector were more than non-priority sector. This is due to poor recovery of agricultural advances, which constitutes the major portion of priority sector advances.

### **13. Causes of NPAs in Scheduled Commercial Banking in India**

The banking sector has been facing the serious problems of the rising NPAs. In fact PSBs are facing more problems than the private sector banks and foreign banks. The problem of NPAs is related to several internal and external factors confronting the borrowers (Muniappan, 2002). The internal factors are diversion of funds for expansion/diversification/modernisation, taking up new projects, helping/promoting associate concerns, time/cost overruns during the project implementation stage, business (product, marketing, etc.) failure, inefficient management, strained labour relations, inappropriate technology/technical problems, product obsolescence, etc., while external factors are recession, non-payment in other countries, inputs/power shortage, price escalation, accidents and natural calamities.

### **14. Policy measures to reduce NPA**

In order to bring the problem of NPAs under control, the government of India constituted many committees such as Shri Tiwari Committee (1981), Narasimham Committee (1991), and Andhyarujina Committee (1999) to examine the way and means of recovery of NPAs. Based on Tiwari and Narasimham committee recommendation, the government of India and RBI had taken various measures which include the formation of Debt Recovery Tribunals (DRTs), Lok Adalats (People Forum), Asset Reconstruction Companies (ARCs), Corporate Debt Restructuring (CDR). Settlement Advisory Committees have also been formed at Regional and Head office levels of commercial banks. The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 was passed by Parliament, which is an important step towards elimination or reduction of NPAs.

### **15. Suggestive Measures**

To speed up the process of recovery of NPAs of scheduled commercial banks, some suggestive measures have given which are as follows;

1. The bank should provide proper training to the bank officials in the art of lending to the different categories of priority sector and non priority sector lending.

2. Bank should possess specialized credit rating agency to finalize the borrowing capacity of the potential borrowers before offering credit facility.
3. Steps need to be taken to recover the loans in time by adopting new recovery mechanism. Creation of a separate NPAs recovery department for each category of priority sector to recover the loans in time.
4. Banks may enter into compromise proposals with the chronic defaulters especially when adequate security is not available and accounts have been bad due to extend factors.
5. By enlarging the role of NABARD and SIDBI in monitoring credit offered by SCBs in the area of agriculture and micro and small industry respectively may reduce the growth of NPAs to certain extent.
6. NABARD and SIDBI may jointly set up specialized institutions exclusively to monitor the lending and recovery of priority sector advances SCB.

### 16. Concluding Observation

The problem of NPAs is a live danger to the Indian Scheduled Commercial Banks, because it destroys the healthy financial conditions of them. The people would not keep trust on the banks any more if the banks have higher NPAs. So, the problem of NPAs must be handled in such a manner that would not ruin the financial conditions and affect the image of the SCBs. The RBI and the Government of India have taken number steps to reduce NPAs of the SCBs. The remedial measures taken by Government of India, Reserve Bank of India and Bank management in recent years, helped to reduce NPAs below 3% of total advances (average 2.5%) as recommended by Shri M. Narasimham.

It has been observed that the overall NPAs of scheduled commercial bank declined since post reforms period. As per analysis, researcher found that in percentage wise there is no significant difference between NPAs of priority sector and non priority sector lending by scheduled commercial banks but quantity wise non priority sector NPAs may higher. It is a matter of future study on this issue.

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# Entry of Foreign Banks in India: A non-parametric estimation of the efficiency of Indian Banking Sector

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**Abstract :** Indian economy adopted the New Economic Policy in early 1990s. It started allowing foreign investment in huge proportions. Indian economy became a favored destination of foreign capital flows. The financial sector also underwent sweeping changes in early 1990s following the financial sector reforms undertaken as suggested by the Narasimhan Committee report. Indian banking sector got transformed from a restrictive business model to a very dynamic sector. Although Indian banking sector had presence of foreign banks even before 1990s, the new policy gave more freedom for the foreign banks to perform in Indian economy. They brought with them better technology and human resource management skills. This improved the overall efficiency of Indian banking sector. This study is an attempt to estimate the efficiency gain of Indian banking sector from the entry of foreign banks. The efficiency scores are calculated using DEA model. Further a Tobit model is used to find the causes for inefficiency among Indian banks.

Keywords: *Indian banking sector, Foreign Investment, Liberalisation, Efficiency*

## Introduction

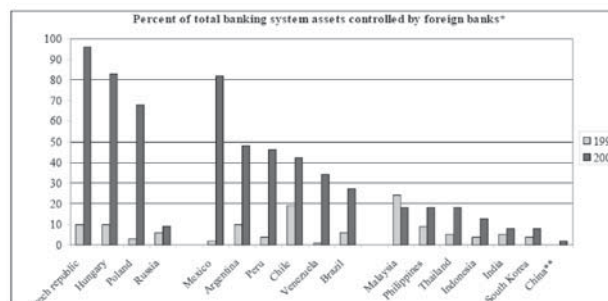
In many developing countries inefficient domestic banks and a lack of competition among lenders result in high borrowing costs and limited financial access for many firms. More developed countries, such as the US, Japan, and those in the European community, argue that developing countries should allow foreign banks to enter into their economies. The entry of foreign banks would increase the competition and would lead to a banking system showing high level of efficiency.

During the 1990s, long-standing barriers to foreign participation in banking fell dramatically in many developing economies, particularly in the middle-income countries of Latin America, East Asia, and Central and Eastern Europe. These countries now allow foreign entry not only through new branches and subsidiaries (also known as *de novo* entry), but also through the acquisition of existing domestic banks. As a result, foreign capital has rushed into these countries, usually through the acquisition of existing domestic banks by foreign investors. The value of financial sector FDI in developing countries ballooned from \$2.5 billion in 1991–95 to \$51.5 billion in 1996–2000 and to \$67.5 billion in 2001–5.

To be sure, the extent of opening and the volumes of banking sector FDI inflows have varied from region to region, as the graph below shows. Foreign participation, measured as the percentage of total banking assets owned by foreign-controlled banks, grew the most in Eastern Europe, with the notable exception of Russia. In Latin America, foreign participation increased from an average of 7 percent in 1990 to 47 percent a decade later. Opening was slower in developing Asia, where foreign participation levels stood at 12 percent in 2002. However, this number understates levels of foreign participation in the region because it shows only

the asset shares held by foreign banks but not foreign nonbank firms, such as hedge funds and private equity firms. These nonbank firms have been particularly active in East Asia, acquiring troubled banks in the hope of restoring them to profitability.

There were varied reasons for the opening of banking sector to foreign players in these countries. Some governments opened their banking markets in the hope that foreign buyers would participate in the privatization of state-owned banks and help push up prices. Others did so in exchange for trade concessions at multilateral trade negotiations or to comply with accession requirements of the WTO. However, the single most important factor behind the opening in East Asia and Latin America was banking shocks. In a wide range of major emerging economies—from South Korea and Indonesia to Mexico and Brazil the need to recapitalize crisis-afflicted banking sectors and sometimes to comply with IMF conditionality led to extensive banking sector opening in key emerging economies. In Central and Eastern Europe, pressure to satisfy European Union accession requirements appears to have been the decisive factor.



Sources: Based on data from John Hawkins and Duvravko Mihaljek, *The Banking Industry in the Emerging Market Economies: Competition, Consolidation, and Systemic Stability: An Overview*, BIS Paper 4 (Basel: Bank for International Settlements, 2001), 25; and Committee on the Global Financial System, *Bank for International Settlements, "Foreign Direct Investment in the Financial Sector of Emerging Market Economies,"* March 2004, 9.  
\* Foreign banks are defined as banks of which foreigners own 50 percent or more of the institution's total equity.  
\*\* The China statistic is for 1999.



Until the beginning of 1990s Indian financial sector could be considered as a classic example of financial repression in the definition of MacKinnon and Shaw. Indian financial sector was characterized by administered interest rates, large pre-emption of resources by the authorities and extensive micro-regulations directing the major portion of the flow of funds to and from financial intermediaries. Compartmentalisation of activities of different types of financial intermediaries eliminated the scope for competition among existing financial intermediaries. In addition, strong entry barriers thwarted competition from new entrants. The end result was low levels of competition, efficiency and productivity in the financial sector, on the one hand, and severe credit constraints for the productive entities, on the other, especially for those in the private sector. The other major drawback of this regime was the scant attention that was placed on the financial health of the intermediaries. Their capitalization levels were low. The lack of commercial considerations in credit planning and weak recovery culture resulted in large accumulation of non-performing loans. This had no impact on the confidence of depositors, however, because of government ownership of banks and financial intermediaries.

Starting from such a position, it is widely recognized that the Indian financial sector over the last two decades has been transformed into a reasonably sophisticated, diverse and resilient system. However, this transformation has been the culmination of extensive, well-sequenced and coordinated policy measures aimed at making the Indian financial sector efficient, competitive and stable.

At the end of June 1991, there were 24 Foreign Banks operating in India with a branch network of 140. At the end of March 2009 it stood at 295 branches. It is learned that under W.T.O (World Trade Organisation) agreement, minimum of 12 licenses every year has to be issued to Foreign Banks or their branches (Batcha, 2002). This will lead to fast spread of Foreign Banks operations in the country. Gradually these banks are spreading their branches to suburbs of metros and to the commercially important semi – urban centres. This policy may have number of long – term implications on the Indian Banking scenario. At the end of June 1991, there were 24 Foreign Banks operating in India with a branch network of 140. At the end of March 2009 it stood with 295 branches. It is learned that under W.T.O (World Trade Organisation) agreement, minimum of 12 licenses every year has to be issued to foreign banks or their branches (Batcha, 2002). This will lead to fast spread of Foreign Banks operations in the country. Gradually these banks are spreading their branches to suburbs of metros

and to the commercially important semi – urban centres. This policy may have number of long – term implications on the Indian Banking scenario.

When deciding on the FDI policy in the banking sector the home country policy makers have to deal with four policy questions.

1. Impact on bank performance and governance
2. Impact on lending patterns
3. Impact on financial stability
4. Impact on capitalization

Indian banking sector allowed foreign entry through the establishment of new branches or subsidiary and not through the mergers and acquisition channel. Former studies have shown that the impact of foreign entry on the competitive nature of banking sector is more through *de novo* than when they are acquiring control of domestic banks. Indian banking sector have shown remarkable progress in the post reform period.

Subsequently with reforms there is a growing talk of profitability in place of equity. There appears to be a shift in emphasis from equity in banking services to profitability. It is important to mention here that strong and efficient banking is no doubt identified with the profits and prima-facie it sounds logical too, but it should not in any case become the be – all and end all. It is possible for banks to make, profits through policy diktat in single activity lending, and show good results (Narasimham, 1994). There cannot be two opinions that banks should be efficient enough to earn profits that enable them to sustain themselves. But at the same time in developing economies role of banks in achievement of socio – economic objectives, i.e., generation of employment and eradication of poverty should also not be undermined.

The present study is aimed at analysing the impact of financial sector liberalization on the efficiency of Indian banking sector<sup>1</sup>. The literature on the efficiency studies of banking sector have increased tremendously in recent times. Berger and Humphrey (1997) give a detailed account of the efficiency studies undertaken and the various techniques used. In the efficiency study the institutions that perform better are separated from the ones that perform poorly. These could be done using a parametric or a non-parametric technique. Parametric approach includes techniques such as Stochastic Frontier Analysis, the Free Disposal Hull, Thick Frontier and the Distribution Free Approaches. The non-parametric approach is the Data Envelopment Analysis (DEA). Recent literature suggests that this technique is

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<sup>1</sup> Analysis is conducted on scheduled commercial banks. Regional Rural Banks are not considered in the analysis as their business model is different from the main stream banks. So, the analysis is on the banking groups of public sector banks (State bank and its associate banks + Nationalised banks), Indian private banks (Old private banks + New private banks) and Foreign banks.

robust and widely used for the efficiency studies. The parametric approach usually involves econometric estimation of a pre-determined stochastic production function. But in the case of Data Envelopment Analysis a pre-determined functional form is not required for the frontier. In this case the frontier is constructed through a piecewise linear combination of the actual input-output observation set that envelopes the data of all the firms in the sample. Due to this advantage, DEA efficiency measure is not bothered of the misspecification of the functional form<sup>2</sup>.

Further, a Tobit regression model is used to evaluate to give an explanation of the efficiency score. A Tobit model is used due to the censored nature of the dependent variable (efficiency score ranges between 0 and 1).

### Banking Sector Reforms

Commercial banking constitutes the largest segment of the Indian financial system. Despite the general approach of the financial sector reform process to establish regulatory convergence among institutions involved in broadly similar activities, given the large systemic implications of the commercial banks, many of the regulatory and supervisory norms were initiated first for commercial banks and were later extended to other types of financial intermediaries

After the nationalization of major banks in two waves, starting in 1969, the Indian banking system became predominantly government owned by the early 1990s. Banking sector reform essentially consisted of a two-pronged approach. While nudging the Indian banking system to better health through the introduction of international best practices in prudential regulation and supervision early in the reform cycle, the idea was to increase competition in the system gradually. The implementation periods for such norms were, however, chosen to suit the Indian situation. Special emphasis was placed on building up the risk management capabilities of the Indian banks. Measures were also initiated to ensure flexibility, operational autonomy and competition in the banking sector. Active steps have been taken to improve the institutional arrangements including the legal framework and technological system within which the financial institutions and markets operate. Keeping in view the crucial role of effective supervision in the creation of an efficient and stable banking system, the supervisory system has been revamped.

Unlike in other emerging market countries, many of which had the presence of government owned banks and financial institutions, banking reform has not involved large scale privatization of such banks. The approach, instead, first involved recapitalization of banks from government resources to bring them up to appropriate capitalization

standards. In the second phase, instead of privatization, increase in capitalization has been done through diversification of ownership to private investors up to a limit of 49 per cent, thereby keeping majority ownership and control with the government. With such widening of ownership most of these banks have been publicly listed; this was designed to introduce greater market discipline in bank management, and greater transparency through enhanced disclosure norms. The phased introduction of new private sector banks and expansion in the number of foreign bank branches provided for new competition in the Indian banking industry.

### Data Envelopment Analysis

The theoretical development of DEA was initiated by Farrell (1957), but the model was proposed by Charnes, Cooper and Rhodes (1978), henceforth the CCR model. DEA is a non-parametric technique used to construct empirical production frontiers and it provides a comprehensive evaluation of the homogenous organizations, processes or decision-making units (DMUs)<sup>3</sup>. DMUs or in this case, banks, typically perform the same function by using multiple inputs to produce multiple outputs. One of the most important features of DEA is its ability to manage the multiple characteristics of a bank, which use several inputs and outputs.

The DEA or CCR model allows each bank to adopt its own set of weights, thus maximizes its own best possible efficiency in comparison to the other banks. Under these circumstances, the efficiency for a bank is determined as a maximum of a ratio of outputs to weighted inputs. The algebraic model for the CCR (input based) ratio form is as follows:

The CCR Model

$$\max h_c = \frac{\sum_{r=1}^s u_r y_{rc}}{\sum_{i=1}^m v_i x_{ic}}$$

$$u_r v_i \geq 0$$

$$r = 1, \dots, s; i = 1, \dots, m \text{ and } j = 1, \dots, n \text{ ————— (1)}$$

where,

- c = a specific bank to be evaluated
- yrj = the amount of output r from bank j
- xij = the amount of input i to bank j
- ur = weight chosen for output r
- vi = weight chosen for input i
- n = number of banks
- s = the number of outputs

<sup>2</sup> The main drawback for the DEA is that the measurement error and statistical noise are assumed to be non-existent. <sup>2</sup> A more detailed reviews of the methodology is presented by Seiford and Thrall (1990)

m = the number of inputs

The objective function defined by  $h_c$  aims to maximize the ratio of weighted outputs to weighted inputs of the bank under scrutiny. This is subject to the constraint that any other bank in the sample cannot exceed unit efficiency by using the same weights. It is important to note that these weights are assumed to be unknown, but obtained through optimization. Such optimization is performed separately for each unit in order to compute the weights and the efficiency measure  $h_c$ .

The problem setting in (1) is a fractional program. This can be converted into linear program (LP) form by restricting the denominator of the objective function  $h_c$  to unity, and adding this as a constraint to the problem. The LP version of the fractional setting is shown here:

Primal

$$\max h_c = \sum_{r=1}^s u_r y_{rc}$$

$$\text{subject to } \sum_{i=1}^m v_i x_{ic} = 1$$

$$\sum_{r=1}^s u_r y_{rc} - \sum_{i=1}^m v_i x_{ic} \leq 0$$

$$u_r, v_i \geq 0 \quad R = 1, \dots, s; i = 1, \dots, m \text{ and } j = 1, \dots, n \quad (2)$$

The maximizing LP setting assumes constant returns to scale technologies. When the formulation constrains the weighted sum of the inputs to unity as in (2), and maximizes the outputs, this becomes an input-based efficiency measurement.<sup>4</sup> That means, given outputs, banks minimise the use of inputs.

One possible solution to the LP (the primal) in (2) is to formulate a dual companion. By denoting the input weights of bank c by  $\hat{e}_c$  and the input and output weights of other banks in the sample by  $\hat{e}_j$  the dual form of the maximizing problem is formalized as follows:

Dual

$$\min h_c = \theta_c$$

$$\text{subject to } \sum_{j=1}^n \lambda_j y_{rj} - s_i^+ = y_{rc}$$

$$\sum_{j=1}^n \lambda_j x_{ij} + s_i^- = \theta_c x_{ic}$$

$$\lambda_j, s_i^+, s_i^- \geq 0$$

$$j = 1, \dots, n \quad (3)$$

The bank c is regarded as efficient if the  $\hat{e}_c$  is equal to one and the slacks ( $s_i^+$  and  $s_i^-$ ) are zero. That is, if and only if,

$$\sum_{j=1}^n \lambda_j = 1; \text{ to eqn (3)}$$

where the asterisk denotes optimal values of the variables in the dual. It is important to note that these conditions are also the conditions for Pareto efficiency. When the bank is fully efficient, it is impossible to improve its observed values of input or output without worsening other input or output values. The bank is regarded as inefficient if the  $\hat{e}_c$  is less than one and/or positive slack variables. For these inefficient banks, the optimal values of  $\hat{e}_j$  construct a hypothetical bank, which is formed by the subset of the efficient banks.

DEA efficiency scores are used as performance indicators to determine whether the banks are operating in a technically efficient way.

Banker, Charnes and Cooper (1984), suggested an extension to the CCR model to account for variable returns to scale. The constant return to scale efficiency score estimated by the CCR model have the scale efficiency measure and hence might be biased. The VRS assumption allows us to calculate technical efficiency score devoid of scale efficiency.

To allow for variable returns to scale, we need to add the convexity condition to the weights  $\lambda_j$  from CCR model. i.e. to add the constraint

$$\sum_{j=1}^n \lambda_j = 1; \text{ to eqn (3)}$$

### Data and specification of variables

The focus of this exercise is on the scheduled commercial banks in India. The sample is an unbalanced panel of all scheduled commercial banks for the study period 1991-2009. There were additions and subtractions all along

<sup>4</sup> An alternative formulation constrains the sum of the weighted output to unity, and minimizes the inputs. This is an output-based efficiency measurement.

the study period as many new banks entered the industry or many left during this period. The choice of variables is very crucial in the study as they influence the outcome of the study. In the case of banking sector the choice of inputs and outputs has been a matter of debate all along. The inclusion of deposits as an input or as bank generated output is a debate still continuing.

Two approaches are widely used to define the bank inputs and outputs. They are: - (i) production approach and (ii) intermediation approaches. In the production approach, banks are viewed as producers of loans and deposits account services using available inputs. Under this approach the outputs are measured by the number of accounts services as opposed to the rupee value and interest expenses are excluded from the total cost. Under the intermediation approach banks are considered as

intermediaries between liability holders and those who receive bank funds and output is measured by the rupee value of earning assets of the bank with inputs being labour, capital and deposits (De, 2004).

For the current study I chose the Intermediation Approach to banks inputs and outputs. Most of the studies undertaken in the Indian context have used intermediation approach. (Das and Gosh, 2006, 2009; Debasish, 2006; Ray 2007)

Bank-wise data for all SCBs was collected from the Statistical Tables Relating to Banks in India publication by the Reserve Bank of India (RBI). The financial year corresponds to first day of April of a particular year to the last day of March the subsequent year. Year 1991 corresponds to 1990-91.

**Table 1: List of inputs and outputs**

| Inputs   | Outputs     |
|--|-------------|
| Demand Deposits                                | Advances    |
| Savings Deposits                               | Investments |
| Fixed Deposits                                 |             |
| Capital Related Operating Expense <sup>5</sup> |             |
| Labour (Employee Expense)                      |             |

### Empirical Results

The Indian banking performance is examined in terms of their ability to provide maximum outputs given the inputs. The computations were using the DEAP 2.1 Program. The technical efficiency score Indian banks are given in table 2. Here constant returns to scale assumptions are used. From the table one can see that the efficiency estimate for Indian banks were always on a high until 2003, although reducing a little bit. One significant exception is 2002 where the efficiency score came down to 0.700. Incidentally this was the same year when Indian banks were suffering from worst

effects of non-performing assets (NPAs) problem. Reserve Bank of India introduced the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI) to tackle the issue of NPAs. This was a successful effort in bringing down the NPA levels to international best practices standard, but many banks which were having huge NPA overhangs were merged with some other banks to make them competitive and efficient.

**Table 2: Average Technical Efficiency Scores 1991-2009**

| Year | No. of banks | No. of efficient banks | Average efficiency | Standard Deviation ( $\sigma$ ) | Minimum |
|------|--------------|------------------------|--------------------|---------------------------------|---------|
| 1991 | 72           | 18                     | 0.869              | 0.127                           | 0.272   |
| 1992 | 73           | 19                     | 0.916              | 0.076                           | 0.702   |
| 1993 | 73           | 21                     | 0.936              | 0.063                           | 0.745   |
| 1994 | 73           | 10                     | 0.766              | 0.14                            | 0.41    |
| 1995 | 76           | 16                     | 0.801              | 0.14                            | 0.49    |

<sup>5</sup> Capital related operating expense include rent, taxes, lighting, printing and stationary, depreciation on bank property repairs and maintenance, and insurance.

|      |    |    |       |       |       |
|------|----|----|-------|-------|-------|
| 1996 | 88 | 18 | 0.779 | 0.164 | 0.339 |
| 1997 | 89 | 16 | 0.762 | 0.175 | 0.27  |
| 1998 | 89 | 19 | 0.799 | 0.178 | 0.272 |
| 1999 | 88 | 22 | 0.829 | 0.154 | 0.473 |
| 2000 | 90 | 21 | 0.797 | 0.176 | 0.235 |
| 2001 | 89 | 15 | 0.799 | 0.154 | 0.383 |
| 2002 | 84 | 16 | 0.700 | 0.202 | 0.296 |
| 2003 | 82 | 15 | 0.776 | 0.191 | 0.155 |
| 2004 | 81 | 12 | 0.738 | 0.184 | 0.148 |
| 2005 | 78 | 11 | 0.567 | 0.216 | 0.121 |
| 2006 | 83 | 09 | 0.642 | 0.191 | 0.155 |
| 2007 | 82 | 10 | 0.621 | 0.204 | 0.08  |
| 2008 | 78 | 07 | 0.587 | 0.179 | 0.115 |
| 2009 | 77 | 09 | 0.558 | 0.215 | 0.085 |

Another important observation is that the efficiency score have decreased continuously. It is also seen that the standard deviation have also increased over this period. This shows the difference in performance between the big banks and smaller players in the industry. Indian banking sector is characterised by very huge players like State Bank of India, Bank of Baroda, ICICI Bank etc. along with many foreign banks who operate with a single branch. In this calculation as constant returns to scale assumptions were considered, the difference in size would be crucial in their efficiency score.

**Table 3: Average Pure Technical Efficiency score of banks 1991-2009**

| Year | No. of banks | No. of efficient banks | Average efficiency | Standard Deviation ( $\sigma$ ) | Minimum |
|------|--------------|------------------------|--------------------|---------------------------------|---------|
| 1991 | 72           | 30                     | 0.919              | 0.098                           | 0.643   |
| 1992 | 73           | 34                     | 0.959              | 0.057                           | 0.708   |
| 1993 | 73           | 32                     | 0.957              | 0.058                           | 0.747   |
| 1994 | 73           | 38                     | 0.913              | 0.119                           | 0.598   |
| 1995 | 76           | 43                     | 0.942              | 0.089                           | 0.682   |
| 1996 | 88           | 49                     | 0.927              | 0.111                           | 0.584   |
| 1997 | 89           | 48                     | 0.919              | 0.123                           | 0.502   |
| 1998 | 89           | 41                     | 0.903              | 0.133                           | 0.410   |
| 1999 | 88           | 49                     | 0.933              | 0.111                           | 0.529   |
| 2000 | 90           | 50                     | 0.933              | 0.110                           | 0.479   |
| 2001 | 89           | 48                     | 0.914              | 0.135                           | 0.402   |
| 2002 | 84           | 25                     | 0.745              | 0.209                           | 0.319   |
| 2003 | 82           | 40                     | 0.899              | 0.147                           | 0.422   |
| 2004 | 81           | 44                     | 0.914              | 0.132                           | 0.455   |
| 2005 | 78           | 20                     | 0.737              | 0.228                           | 0.318   |
| 2006 | 83           | 31                     | 0.796              | 0.196                           | 0.367   |
| 2007 | 82           | 30                     | 0.822              | 0.189                           | 0.399   |
| 2008 | 78           | 31                     | 0.849              | 0.166                           | 0.387   |
| 2009 | 77           | 35                     | 0.874              | 0.171                           | 0.382   |

Here, variable returns to scale assumptions are assumed and average efficiency scores are calculated for the full sample of scheduled commercial banks in India. One can clearly see the difference here between this table and the one above. There is a marked improvement in the efficiency score as was expected. One can see a very high decrease in efficiency for the year 2002. This is due to the very high overhang of NPA that the banks were holding. By the immediate reaction and efforts taken by the central bank in this regard, the banks were able to restructure its balance sheet and back to its efficient performance. It can be clearly seen that the banks gained on efficiency in the post reform period, although there was a slight decrease in start of 2000s,

it has started to show improving trend of efficiency. This confirms the argument assuming, the entry of foreign banks improves the efficiency of banking sector by incorporating more competition and introducing better banking practices. One can also see the increase in the number of efficient banks when variable returns to scale was assumed. For the year 2009, table 4 shows that 35 banks are efficient under the variable returns to scale assumption, whereas only 9 banks were efficient under the constant returns to scale assumption. This meant that the remaining 26 banks failed to reach the CRS frontier due to the scale inefficiencies. This reinforces the argument that scale inefficiency is a serious issue for Indian banking industry.

**Table 4: Average Scale Efficiency score of banks 1991-2009**

| Year | No. of banks | No. of efficient banks | Average efficiency | Standard deviation ( $\sigma$ ) | Minimum |
|------|--------------|------------------------|--------------------|---------------------------------|---------|
| 1991 | 72           | 19                     | 0.840              | 0.143                           | 0.339   |
| 1992 | 73           | 22                     | 0.946              | 0.096                           | 0.272   |
| 1993 | 73           | 23                     | 0.954              | 0.060                           | 0.726   |
| 1994 | 73           | 09                     | 0.976              | 0.032                           | 0.850   |
| 1995 | 76           | 16                     | 0.841              | 0.124                           | 0.562   |
| 1996 | 88           | 19                     | 0.850              | 0.125                           | 0.537   |
| 1997 | 89           | 16                     | 0.830              | 0.155                           | 0.270   |
| 1998 | 89           | 19                     | 0.885              | 0.144                           | 0.272   |
| 1999 | 88           | 22                     | 0.886              | 0.115                           | 0.505   |
| 2000 | 90           | 21                     | 0.853              | 0.152                           | 0.235   |
| 2001 | 89           | 16                     | 0.878              | 0.123                           | 0.481   |
| 2002 | 84           | 18                     | 0.945              | 0.102                           | 0.431   |
| 2003 | 82           | 15                     | 0.863              | 0.149                           | 0.155   |
| 2004 | 81           | 12                     | 0.806              | 0.157                           | 0.148   |
| 2005 | 78           | 11                     | 0.779              | 0.180                           | 0.121   |
| 2006 | 83           | 09                     | 0.816              | 0.153                           | 0.155   |
| 2007 | 82           | 10                     | 0.768              | 0.189                           | 0.080   |
| 2008 | 78           | 07                     | 0.704              | 0.184                           | 0.115   |
| 2009 | 77           | 09                     | 0.648              | 0.212                           | 0.085   |

Scale efficiency = Technical Efficiency (CRS)/Pure Technical Efficiency (VRS). It is clearly seen that here again its validated that the scale inefficiency is a very important area of concern for Indian banking industry.

From this analysis, it is evident that Indian banking sector is still having inefficiency issues in its banking system even after 20 years of its reform measures and have to find ways to improve the numbers as inefficiency would increase the banks' costs and would make it difficult for them to be competitive.

As was evident in the analysis above that scale inefficiency is one of the major determinant of the overall inefficiency score, the next table gives the inefficiency score across different banking groups. This is important in the Indian banking industry, as there is a huge size difference in each banking group. The state bank group banks enjoy a huge size advantage. The same is true about many of the nationalised banks. Apart from few exceptions, most banks in the private and foreign banking segment are very small in terms of size and presence in the Indian banking industry. So, an analysis of banks in its respective bank group is

crucial. Table 6 gives the efficiency score of banks in five different banking groups. It can be clearly seen here that the public sector banks comprising of both state banks group and nationalised banks are performing on a higher efficiency level when compared to the Indian private banks and foreign banks. It is very clear that the foreign banks are the worst performing group. After the liberalisation of banking system in the 1990s, many foreign banks entered Indian banking

industry. Most of these banks were single branch banks and are not yet successful in establishing a stable deposit base, which is one of the reason for which they are having a lower efficiency score. The business model of most of the foreign banks in Indian banking industry is not of an intermediation model. This could also be a reason for the smaller efficiency score for foreign banks.

**Table 5: Technical Efficiency score on bank groups 1991-2009**

| Year/Bank Group | State bank group | Nationalised banks | Old Indian private banks | New Indian private banks | Foreign banks |
|-----------------|------------------|--------------------|--------------------------|--------------------------|---------------|
| 1991            | 1.000            | 0.979              | 0.976                    | -                        | 0.870         |
| 1992            | 0.991            | 0.974              | 0.970                    | -                        | 0.914         |
| 1993            | 0.993            | 0.967              | 0.971                    | -                        | 0.850         |
| 1994            | 1.000            | 0.983              | 0.967                    | -                        | 0.839         |
| 1995            | 1.000            | 0.985              | 0.971                    | -                        | 0.864         |
| 1996            | 1.000            | 0.994              | 0.981                    | -                        | 0.817         |
| 1997            | 0.998            | 0.982              | 0.981                    | 0.996                    | 0.817         |
| 1998            | 0.998            | 0.992              | 0.974                    | 0.959                    | 0.788         |
| 1999            | 0.994            | 0.978              | 0.975                    | 0.999                    | 0.864         |
| 2000            | 0.993            | 0.981              | 0.981                    | 0.991                    | 0.812         |
| 2001            | 0.991            | 0.982              | 0.974                    | 1.000                    | 0.834         |
| 2002            | 0.995            | 0.985              | 0.967                    | 0.670                    | 0.815         |
| 2003            | 0.997            | 0.995              | 0.987                    | 0.895                    | 0.782         |
| 2004            | 0.998            | 0.985              | 0.976                    | 0.907                    | 0.726         |
| 2005            | 1.000            | 0.746              | 0.977                    | 0.957                    | 0.694         |
| 2006            | 0.999            | 0.823              | 0.969                    | 0.970                    | 0.660         |
| 2007            | 0.993            | 0.873              | 0.987                    | 0.964                    | 0.608         |
| 2008            | 0.990            | 0.897              | 0.982                    | 0.948                    | 0.630         |
| 2009            | 1.000            | 0.948              | 0.985                    | 0.966                    | 0.628         |

One other explanation for a lower efficiency score of foreign banks, especially in the 2000s could be because of the growth of new Indian private banks. These are technologically advanced banks, who can provides customers with state of the art service, which is one of the main business area for foreign banks in India. So, it could be due this increased competition from the new Indian private banks, that the foreign banks lost its competitive edge. The inefficiency of foreign banks show that there is huge potential for foreign banks in Indian banking sector.

**Tobit Model**

Having derived the measures of efficiency, we concentrate on investigating the determinants of efficiency for the Indian banks. Here we use a Tobit model. A commonly held view in previous studies is that the use of Tobit model can handle the characteristics of the distribution of efficiency measures and thus provide results that can guide policies to improve performance. DEA efficiency measures obtained in the first stage are the dependent variable in the Tobit model.

Tobit model was first suggested in econometrics literature by Tobin (1958). These models are also known as truncated or censored regression models where expected errors are not equal to zero. Therefore, estimation with an Ordinary Least Squares (OLS) regression would lead to a biased parameter estimate since OLS assumes a normal and homoscedastic distribution of the disturbance and the dependent variable (Maddala, 1983)

Many studies using DEA applications employ a two-stage procedure involving both DEA and Tobit.

The standard Tobit model can be defined as follows for observation (bank)  $i$ :

$$y_i^* = \beta' x_i + \varepsilon_i$$

$$y_i = y_i^* ; \text{ if } y_i^* > 0, \text{ and}$$

$$y_i = 0, \text{ otherwise,}$$

where,  $\varepsilon_i \sim N(0, \sigma^2)$ ,  $x_i$  and  $\beta$  are vectors of explanatory variables and unknown parameters, respectively. The  $y_i^*$  is a latent variable and  $y_i$  is the DEA score.

Here, the variables considered to explain the technical efficiency are bank size, profitability and capital adequacy ratio. Size is measured in two ways, total assets measured in Rs. Crore and the number of branches a bank operates. Bank profitability is net operating income to total assets. The capital adequacy ratio indicates the coverage of banks' assets by owners' funds. This variable is computed as the ratio of shareholders' equity and net income to total deposits and non-deposits funds.

**Table 6: Estimation result – Tobit Model**

|                        | PSBs@         | IPSBs#     | FBs       |
|------------------------|---------------|------------|-----------|
| Constant               | -1.95*        | 0.368      | 0.733**   |
| Number of Branches     | -4.30E - 05** | 7.47E-05*  | 0.0013*   |
| Total Assets           | 4.39E - 08**  | 9.00E-08** | 8.81E-08* |
| Profitability          | 10.942**      | 5.3376**   | 0.03      |
| Capital Adequacy Ratio | -0.0998*      | 0.01       | 0.005     |

@includes both State Bank group banks and Nationalised banks

#includes both old and new private sector banks

PSBs – Public sector banks; IPSBs – Indian-owned private sector banks; FBs – Foreign-owned banks

Table 6 shows the result of Tobit estimation. It is important to note that the dependent variable in the model is the DEA efficiency score. A positive coefficient implies an efficiency increase whereas a negative coefficient means an association with an efficiency decline. The computations were conducted in EViews7.

In the case of Public Sector Banks both bank size and bank profitability have significant positive effects on efficiency, indicating that the larger and more profitable banks have higher technical efficiency. This supports the previous explanation of efficiency score, where it was found that the big banks are enjoying a higher efficiency estimate when compared to the smaller ones. On the other hand, the capital adequacy variable is significantly negatively related to technical efficiency. This adverse effect on performance may reflect a risk-return trade-off in the sector. Banks with low-risk portfolios as measured by a higher capital adequacy ratio are likely to be less efficient. This could be because they rather prefer safer and low-earning portfolios over riskier but high-earning portfolios. The negative coefficient value for number of branches shows that expansion of branch networks to direct services to rural areas may have increased costs and thus have affected efficiency negatively.

In the case of Indian Private Sector Banks, an interesting observation is the positive sign for branches. This shows that these improved its efficiency score with more number of branches showing a good and efficient branching policy for them. This could also be for the fact that they open most of their branches in the urban areas and not much in the rural areas as done by the public sector banks. This shows that the banking policy of most of the new private sector banks who doesn't want to improve on the branch banking system as they feel those are increasing on their expenditure might not be true. They still have a positive incentive on opening more branches. Private Banks also show a positive association with its size. So, there is definitely more to gain and contribute by private banks to Indian banking industry by expanding itself both in terms of its size in terms of assets and its branch network.

In the case of foreign banks again we could see a positive coefficient for branches showing that they improve their efficiency with increase in branch network. This is also a good sign in terms of the banking policies for the foreign banks in India, as it gives a positive addition to its efficiency by increasing the branch network. One could take the example of bigger foreign banks in India like the Citibank or Standard Chartered bank to prove this point that, the banks could improve on its efficiency by having a bigger branch network and reaching out to more customers with a wider range of products.



## Conclusion

This study shows that liberalization of banking sector in India resulted in an improvement in the efficiency of banks. The presence of foreign banks was a positive influence on the other banks operating in the industry. Although it resulted in higher efficiency for public sector banks, the efficiency of foreign banks failed to show a good profile. The analysis reveals that the size of operation of foreign banks is not appropriate. This confirms that branch banking system serves well in the Indian context. This is proved by the fact that the bigger and wide spread public sector banks were showing greater efficiency when compared to the technologically advanced foreign and private banks operating in the Indian banking sector. The entry of foreign banks into Indian banking sector resulted in transforming the Indian banking sector from a sleepy business entity to a dynamic system. Tobit analysis for the Indian-owned private banks and Foreign-owned private banks shows that branches are having a positive effect on efficiency. This is an indication that the private banks could increase their efficiency by increasing their share in the Indian banking industry by opening more branches.

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# “Indian Banks Should Increase Their Global Footprint for Economic Development”

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**ABSTRACT :** Business profile of banks in India has been undergoing a drastic change. Forces of globalization, liberalization of interest rate regime, autonomy to banks and partial privatization of Public Sector Banks have changed the traditional benchmarks of banking. Profitability and transparent banking are hallmarks of today's banking. Technology in banks is playing an increasingly critical role to improve operational efficiency and managerial effectiveness. The changes in international economic scenario have given birth to a new banking milieu in the country. Consequent, new challenges have surfaced for the Indian banking as well as new opportunities have opened up for it. To compete in an economy which is opening up, it is imperative for the Indian Banks to observe the latest technology and modify it to suit their environment. Indian banks should increase their global footprint opportunistically even if they do not get to the top of the league table. But overseas operations is one thing and competing against the global players in the international market is quite another. And Indian banks have a lot of catching up to do before they can emerge as truly global players. The Indian banking sector has taken several steps in the right direction, but much more needs to be done to ascend to commanding heights. The emerging economic environment provides a number of opportunities for the Indian banking sector. Factors like expected positive economic performance, strong savings growth, emphasis on expansion of physical infrastructure and the extent of financial exclusion to be bridged will ensure growth of the banking sector in medium term. To exploit emerging opportunities and to benefit from their strengths, Indian banks need to be globally competitive. From a strategic perspective, competitiveness can be achieved by balancing factors such as scale, scope, prudence and knowledge.

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## 1. Introduction

Across the globe, the banking system is changing very fast. In India too, onset of the financial sector reforms has resulted in enormous developments in the banking industry. It is exactly in this context that the relevant issue has been addressed in the present paper. The past year witnessed a lot of turmoil in the Indian banking industry owing to the global financial crisis. The changes in international economic scenario have forced the Indian policy makers to undertake financial sector reforms which have given birth to a new banking milieu in the country. Consequent upon this, new challenges have surfaced for the Indian banking as well as new opportunities have opened up for it. It is up to the banks to leverage the opportunities to meet the challenges to the best of their abilities.

In this paper an attempt has been made to make a prognosis of these challenges and opportunities in the coming years and suggest some strategies which will help these institutions to survive and thrive in the new economic environment.

With the adoption of new economic policies at the global and the national level, the banking has undergone a sea of change not only in its basic philosophy, structure and working but also in its long and short term objectives committed to the planned economic development of the country and welfare of people. Changes have been fast and swift and the Indian banking industry, has adopted itself appreciably to the fast changing environment. Banks today operate in a buyers' market and not in sellers' market as was the case a decade ago.

## 2. Information Technology in Banking

The Banking sector has been immensely benefited from the implementation of superior technology during the recent past, almost in every nation in the world. Productivity enhancement, innovative products, speedy transactions, seamless transfer of funds, real time information system, and efficient risk management are some of the advantages derived through the technology. Information technology (IT) has also improved the efficiency and robustness of business processes across banking sector.

India's banking sector has made rapid strides in reforming and aligning itself to the new competitive business environment. Indian banking industry is the midst of an IT revolution. Technological infrastructure has become an indispensable part of the reforms process in the banking system, with the gradual development of sophisticated instruments and innovations in market practices.

A combination of regulatory and competitive reasons has led to increasing importance of total banking automation in the Indian Banking Industry. Information Technology has basically been used under two different avenues in Banking. One is Communication and Connectivity and other is Business Process Reengineering. Information technology enables sophisticated product development, better market infrastructure, implementation of reliable techniques for control of risks and helps the financial intermediaries to reach geographically distant and diversified markets.

The bank, which used the right technology to supply timely information will see productivity increase and thereby gain a competitive edge. To compete in an economy which

is opening up, it is imperative for the Indian Banks to observe the latest technology and modify it to suit their environment. Information technology offers a chance for banks to build new systems that address a wide range of customer needs including many that may not be imaginable today. Following are the innovative services offered by the banking industry:

**Electronic Payment Services – E Cheques:** Nowadays we are hearing about e-governance, e-mail, e-commerce etc. In the same manner, a new technology is being developed in US (United States) for introduction of e-cheque (Electronic- cheque), which will eventually replace the conventional paper cheque. India, as harbinger to the introduction of e-cheque, the Negotiable Instruments Act has already been amended to include; Truncated cheque and E-cheque instruments.

**Real Time Gross Settlement (RTGS):** Real Time Gross Settlement system, introduced in India since March 2004, is a system through which electronics instructions can be given by banks to transfer funds from their account to the account of another bank. The RTGS system is maintained and operated by the RBI and provides a means of efficient and faster funds transfer among banks facilitating their financial operations. As the name suggests, funds transfer between banks takes place on a 'Real Time' basis. Therefore, money can reach the beneficiary instantaneously and the beneficiary's bank has the responsibility to credit the beneficiary's account within two hours.

**Electronic Funds Transfer (EFT):** Electronic Funds Transfer (EFT) is a system whereby anyone who wants to make payment to another person/company etc. can approach his bank and make cash payment or give instructions/authorization to transfer funds directly from his own account to the bank account of the receiver/beneficiary. Complete details such as the receiver's name, bank account number, account type (savings or current account), bank name, city, branch name etc. should be furnished to the bank at the time of requesting for such transfers so that the amount reaches the beneficiaries' account correctly and faster. RBI is the service provider of EFT.

**Electronic Clearing Service (ECS):** Electronic Clearing Service is a retail payment system that can be used to make bulk payments/receipts of a similar nature especially where each individual payment is of a repetitive nature and of relatively smaller amount. This facility is meant for companies and government departments to make/receive large volumes of payments rather than for funds transfers by individuals.

**Automated Teller Machine (ATM):** Automated Teller Machine is the most popular device in India, which enables the customers to withdraw their money 24 hours a day 7 days a week. It is a device that allows customer who has an

ATM card to perform routine banking transactions without interacting with a human teller. In addition to cash withdrawal, ATMs can be used for payment of utility bills, funds transfer between accounts, deposit of cheques and cash into accounts, balance enquiry etc.

**Point of Sale Terminal:** Point of Sale Terminal is a computer terminal that is linked online to the computerized customer information files in a bank and magnetically encoded plastic transaction card that identifies the customer to the computer. During a transaction, the customer's account is debited and the retailer's account is credited by the computer for the amount of purchase.

**Tele Banking:** Tele Banking facilitates the customer to do entire non-cash related banking on telephone. Under this device Automatic Voice Recorder is used for simpler queries and transactions. For complicated queries and transactions, manned phone terminals are used.

**Electronic Data Interchange (EDI):** Electronic Data Interchange is the electronic exchange of business documents like purchase order, invoices, shipping notices, receiving advices etc. in a standard, computer processed, universally accepted format between trading partners. EDI can also be used to transmit financial information and payments in electronic form.

The banks have quickly responded to the changes in the industry; especially the new generation banks. The continuance of the trend has re-defined and re-engineered the banking operations as whole with more customization through leveraging technology. As technology makes banking convenient, customers can access banking services and do banking transactions any time and from anywhere. The importance of physical branches is going down.

**3. Challenges and Opportunities:** It is becoming increasingly imperative for banks to assess and ascertain the benefits of technology implementation. The fruits of technology will certainly taste a lot sweeter when the returns can be measured in absolute terms but it needs precautions and the safety nets.

It has not been a smooth sailing for banks keen to jump onto the IT bandwagon. There have been impediments in the path like the obduracy once shown by trade unions who felt that IT could turn out to be a threat to secure employment. Further, the expansion of banks into remote nooks and corners of the country, where logistics continues to be a handicap, proved to be another stumbling stock. Another challenge the banks have had to face concerns the inability of banks to retain the trained and talented personnel, especially those with a good knowledge of IT.

The increasing use of technology in banks has also brought up 'security' concerns. To avoid any pitfalls or mishaps on this account, banks ought to have in place a

well-documented security policy including network security and internal security. The passing of the Information Technology Act has come as a boon to the banking sector, and banks should now ensure to abide strictly by its covenants.

Technology has made tremendous impact in banking. ‘Anywhere banking’ and ‘Anytime banking’ have become a reality. Technology has also thrown new challenges in the banking sector and new issues have started cropping up which is going to pose certain problems in the near future. The new entrants in the banking are with computer background. However, over a period of time they would acquire banking experience. Whereas the middle and senior level people have rich banking experience but their computer literacy is at a low level. Therefore, they feel the handicap in this regard since technology has become an indispensable tool in banking. Foreign banks and the new private sector banks have embraced technology right from the inception of their operations and therefore, they have adapted themselves to the changes in the technology easily. Whereas the Public Sector Banks (PSBs) and the old private sector banks (barring a very few of them) have not been able to keep pace with these developments.

Growing integration of economies and the markets around the world is making global banking a reality. The surge in globalization of finance has also gained momentum with the technological advancements, which have effectively overcome the national borders in the financial services business. Widespread use of Internet banking has widened frontiers of global banking, and it is now possible to market financial products and services on a global basis. In the coming years globalization would spread further on account of the likely opening up of financial services under WTO (World Trade Organization).

The financial sector now operates in a more competitive environment than before and intermediates relatively large volume of international financial flows. In the wake of greater financial deregulation and global financial integration, the biggest challenge before the regulators is of avoiding instability in the financial system. Many big banks operating in the market have made use of the changed regulations (viz., change in Cash Reserve Ratio and interest rate) to provide better options to potential and new customers. Adoption of new practices to cater to the demanding economy situation has enabled the banks to meet the changing customer requirements. Compared to other regional banks, over the last few years, Indian banks have performed favorably on growth, asset quality and profitability.

### **Should Indian Banks increase their Global Footprint for Economic Development?**

On this current issue, most people who put forward

their view have not thought through the costs and benefits analytically; they only see this as an aspiration consistent with India’s growing international profile.

The Narasimham (II) Committee envisaged a three tier structure for the Indian banking sector: 3 or 4 large banks having an international presence on the top, 8-10 mid-sized banks, with a network of branches throughout the country and engaged in universal banking, in the middle, and local banks and regional rural banks operating in smaller regions forming the bottom layer. However, the Indian banking system has not consolidated in the manner envisioned by the Narasimham Committee. The current structure is that India has 81 scheduled commercial banks of which 26 are public sector banks, 21 are private sector banks and 34 are foreign banks. Even a quick review would reveal that there is no segmentation in the banking structure along the lines of Narasimham II.

A natural sequel to this issue of the envisaged structure of the Indian banking system is the Reserve Bank’s position on bank consolidation. Our view on bank consolidation is that the process should be market-driven, based on profitability considerations and brought about through a process of mergers & amalgamations (M&As). The initiative for this has to come from the boards of the banks concerned which have to make a decision based on a judgement of the synergies involved in the business models and the compatibility of the business cultures. The Reserve Bank’s role in the reorganization of the banking system will normally be only that of a facilitator.

It should be noted though that bank consolidation through mergers is not always a totally benign option. On the positive side are a higher exposure threshold, international acceptance and recognition, improved risk management and improvement in financials due to economies of scale and scope. This can be achieved both through organic and inorganic growth. On the negative side, experience shows that consolidation would fail if there are no synergies in the business models and there is no compatibility in the business cultures and technology platforms of the merging banks.

Having given that broad brush position on bank consolidation, let me define two specific questions: (i) can Indian banks aspire to global size?; and (ii) should Indian banks aspire to global size?

On the first question, as per the current global league tables based on the size of assets, our largest bank, the State Bank of India (SBI), together with its subsidiaries, comes in at No.74 followed by ICICI (Industrial Credit Investment Corporation of India) Bank at No.145 and Bank of Baroda at No. 188. It is, therefore, unlikely that any of our banks will jump into the top ten of the global league even after reasonable consolidation.

Then arrives the next question of whether Indian banks should become global. Opinion on this is divided. Those who argue that we must go global contend that the issue is not so much the size of our banks in global rankings but of Indian banks having a strong enough global presence. The main argument is that the increasing global size and influence of Indian corporates warrant a corresponding increase in the global footprint of Indian banks. The opposing view is that Indian banks should look inwards rather than outwards, focus their efforts on financial deepening at home rather than aspiring to global size.

It is possible to take a middle path and argue that looking outwards towards increased global presence and looking inwards towards deeper financial penetration are not mutually exclusive; it should be possible to aim for both.

With the onset of the global financial crisis, there has definitely been a pause to the rapid expansion overseas of our banks. Nevertheless, notwithstanding the risks involved, it will be opportune for some of our larger banks to be looking out for opportunities for consolidation both organically and inorganically. They should look out more actively in regions which hold out a promise of attractive acquisitions.

The banking sector is a key driver of inclusive growth. There are supply side and demand side factors driving inclusive growth. Banks and other financial services players largely are expected to mitigate the supply side processes that prevent poor and disadvantaged social groups from gaining access to the financial system. Banks were advised to ensure close and continuous monitoring of Business Correspondents (BCs). They were also advised to focus, in future, on opening of some form of low cost brick and mortar branches between the base branch and BC locations. Further, banks were required to make efforts to increase the number of transactions in no-frill accounts.

In services the long term, however, the most significant task of the Indian banking sector is to ensure that banking products and are made available to every individual in the country efficiently to achieve total financial inclusion. Going forward, filling the void called 'financial exclusion' is the critical responsibility of banks. Despite all the challenges and issues to be addressed, the banking sector in India can look forward to enormous opportunities in their quest for long term growth. The banking sector needs to focus on growth through inclusion, innovation and diversification while complying with domestic regulations and internalizing international best practices.

Banks play a crucial role in economic development. For the local community, banks provide access to funding and financial services to both local business and citizens, as well as the money banks invest back into the community through employee payroll, business investments, and taxes. On a larger scale, national banks offer similar access to credit

and financial services to larger businesses, local governments, and in some cases international customers. Investments made by national banks are spread widely across the nation, therefore influencing economical development across an entire country or geographic region.

The specific role of banks in economic development varies, depending on scope. Primarily, the participation of banks in economic development focus around providing credit and services to generate revenues, which are then invested back into a local, national, or international community. The specific roles banks play in the economic development of a small community differ from the role banks play in national or international economic development. Although the role can vary, factors such as access to credit and bank investment policies or practices remain constant, no matter the scope of economic development.

International banking influences economic development on a grand scale. A bank that does business internationally plays a much different role than local or national banks in economic development. Providing loans and other financial services to entire countries and national governments gives such banks sweeping influence over the economic growth of a particular country or region. Both positive and negative effects are realized, depending on the actions of international banks toward governments.

To summarize, therefore, is that Indian banks should increase their global footprint opportunistically even if they do not get to the top of the league table.

**4. Future Outlook :** Everyone today is convinced that the technology is going to hold the key to future of banking. The achievements in the banking today would not have make possible without IT revolution. Therefore, the key point is while changing to the current environment the banks has to understand properly the trigger for change and accordingly find out the suitable departure point for the change. Although, the adoption of technology in banks continues at a rapid pace, the concentration is perceptibly more in the metros and urban areas. The benefit of Information Technology is yet to percolate sufficiently to the common man living in his rural hamlet. More and more programs and software in regional languages could be introduced to attract more and more people from the rural segments also.

As per Indian Banks' Association report, there would be greater presence of international players in Indian financial system and some of the Indian banks would become global players in the coming years.

Now against these lofty objectives of Indian banks going global, let us see where we stand. Although, Indian banks have also made their presence overseas, yet it is limited. Only twenty Indian banks including private sector banks appear in the list of "Top 1000 World Banks" as listed

by the London based magazine “The Banker”. Size is increasingly becoming important for the global banks, as it is crucial to improved efficiency. However, India’s largest bank, SBI is not even a 10th in size of the 9th largest bank, Sumitomo Mitsui, which has assets of \$950 billion as against SBI’s assets of \$91 billion.

Therefore, the notion that SBI or ICICI Bank can compete in the international arena seems far-fetched at the moment. The problem is not just one of lacking the necessary size; few Indian banks have the necessary products or human resource capabilities. If anything, the norms of Basel III have raised the bar for Indian banks seeking an international presence. The top international banks can lower their capital requirements through the use of sophisticated risk management techniques and thus compete more aggressively than before. Indian banking sector has already implemented internationally followed prudential accounting norms for classification of assets, income recognition and loan loss provisioning. The scope of disclosure and transparency has also been raised in accordance with international practices. India has complied with almost all the Core Principles of Effective Banking Supervision of the Basel Committee. Some of the Indian banks are also presenting their accounts as per the U.S. GAAP (Generally Accepted Accounting Principles).

All these factors give Indian banks much needed confidence for overseas operations. But overseas operations is one thing and competing against the global players in the international market is quite another. And Indian banks have a lot of catching up to do before they can emerge as truly global players. So, the new mantra for Indian banks is to go global in search of new markets, customers and profits. Let us not forget that the competition is not only on foreign turf but also in the domestic field as well from foreign banks operating in India.

## 5. Conclusion

The banking today is re-defined and re-engineered with the use of Information Technology and it is sure that the future of banking will offer more sophisticated services to the customers with the continuous product and process innovations. I have touched upon certain issues which are critical for Indian banks to become globally competitive. The Indian banking sector has taken several steps in the right direction, but much more needs to be done to ascend to commanding heights. A cautious approach towards increasing efficiency within the framework of overall financial stability can significantly contribute towards Indian banking sector becoming a leading financial force in the world.

We are slowly but surely moving from a regime of “large number of small banks” to “small number of large banks.”

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# Recent Trends in Deposit Mobilisation and Loan Disbursement by Urban Co-operative Banks In India.<sup>1</sup>

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**Abstract ;** A well-developed and sound financial system is a pre-requisite for rapid and balanced development of an economy. In this regard, the role of banking sector is considered vital as the banking service is a backbone of the financial system. Urban Cooperative Banks provide banking and credit facilities to urban and semi urban population. In the wake of rapid urbanization in India, understanding the role and performance of Urban Cooperative banks is important. Hence, the present study tries to analyse performance of Urban Cooperative banks in India by analyzing recent trends in deposit mobilization and loan disbursement.

**Key Words:** Urban Cooperative Banks, Deposit Mobilization, Loan Disbursement, Credit-Deposit Ratio.

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## Introduction

In modern economy, banks play an important role in providing various financial services required for the development of an economy. The strength of an economy of any country basically depends on a sound and solvent banking system.

Bank is a financial institution which deals with deposits and advances and other related services. According to Indian Banking Act, 1949-banking is 'accepting, for the purpose of lending or investment, of deposits from the public, repayable on demand or otherwise, and withdrawable by cheque, draft, order, or otherwise'. Thus, deposit mobilization and loan disbursement are primary functions of banks. The banks act as an intermediary that mobilize savings from surplus sector i.e. households and channelize the same to be used by deficit sector i.e. firms. Thus, as per the circular flow of National Income concept, the part of income that act as a leakage from the circulation in the form savings is injected back in the circulation by the financial system (including Banks) in the form of investment. In this way, mobilization of resources and channelizing the same for productive use is an important function of financial system in general and banks in particular. In this regard, the development of particular region depends on development of banking services available therein. The performance of banks located in particular region determines mobilization and utilization of resources for productive purpose which is necessary for the development of that region. Hence, understanding the role of Urban Cooperative banks on the basis of its primary functions viz; deposit mobilization and loan disbursement is important.

## Objective of study

The present study tries to analyse recent trends in Deposit Mobilisation and Loan Disbursement by Urban Cooperative Banks functioning in India by considering two categories of Urban Cooperatives viz; Scheduled and Non-scheduled. The study also tries to find the differences in performance of both the above categories of Urban Cooperative banks.

## Research Methodology and Data Collection

Keeping in mind above objective, present study analyses recent trends in deposit mobilisation and loan disbursement by Urban Cooperative Banks functioning in India. For the analysis, data pertaining to the recent year 2011-12 (i.e. as on 31<sup>st</sup> March 2012) has been collected from various RBI Publications like Report on Trend and Progress of Banking in India, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, Branch Banking Statistics of Commercial banks, Basic Statistical Returns (BSR) of Commercial Banks etc.. The parameters included for the study are:

1. Number of Urban Cooperative banks functioning in India and its categorisation
2. Deposits and Credit (Loan Disbursement)
3. Credit-Deposit Ratio
4. Deposit mobilised per office
5. Loan Disbursed per office.

## Scenario at all India level

For the analysis of performance of Urban Cooperative banks, an all India level scenario of number of Urban Cooperative present and functioning in India will be of immense help. Following table (Table: 1) will be helpful in this regard.

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<sup>1</sup> This paper is related to on-going PhD research work titled "Comparative Study of Performance of UCBs and Public Sector Banks in Thane District" by the author under the guidance of Dr.S.R.Dastane

**Table 1 Bank Group-Wise Distribution of Banks (All India)**

| Sr. No. | Bank Group               | No. of Banks |
|---------|--------------------------|--------------|
| 1       | SBI and Associates       | 7            |
| 2       | Nationalised Banks       | 20           |
| 3       | Old Private Sector Banks | 15           |
| 4       | New Private Sector Banks | 7            |
| 5       | Foreign Banks            | 32           |
| 6       | Urban Cooperative Banks  | 1618         |
| 7       | Regional Rural Banks     | 82           |
|         | Total                    | 1781         |

Sources: (Compiled from) Report on Trend and Progress of Banking in India, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, Branch Banking Statistics of Commercial banks, Basic Statistical Returns (BSR) of Commercial Banks (for the period 2011-12).

From the above table it is obvious that at all India level, Urban Cooperative Banks are leading with the highest number of banks (1618) followed by Regional Rural Banks (82). Thus, it becomes clear that as a bank group Urban Cooperative banks have good presence in India.

However, for performance analysis it will be important to know the Distribution of Urban Cooperative Banks functioning in India.

#### A. Categorisation of Urban Cooperative

The Urban Cooperative banks in India are divided into two categories:

1. Scheduled Urban Cooperative Banks and 2. Non-scheduled Urban Cooperative Banks<sup>2</sup>

Following table shows category-wise distribution of Urban Cooperative Banks functioning in India.

**Table 2 Categorisation of Urban Cooperative Banks**

| Sr. No. | Category      | No. of banks | % share |
|---------|---------------|--------------|---------|
| 1       | Scheduled     | 52           | 3       |
| 2       | Non-scheduled | 1566         | 97      |
| Total   | All           | 1618         | 100     |

<sup>2</sup> Scheduled Banks in India are those banks which have been included in the Second Schedule of Reserve Bank of India (RBI) Act, 1934. RBI in turn includes only those banks in this schedule which satisfy the criteria laid down vide section 42 (6) (a) of the Act.

<sup>3</sup> N. Desinga Rao, 'Deposit Mobilisation by Co-operative Banks: A Comparison with Scheduled Commercial Banks', Economic and Political Weekly, Vol. 10, No. 29 (Jul. 19, 1975), pp. 1098-1100.

Sources: (Compiled from) Report on Trend and Progress of Banking in India, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, Branch Banking Statistics of Commercial banks, Basic Statistical Returns (BSR) of Commercial Banks (for the period 2011-12).

From above table it becomes clear that though there is a large number of Urban Cooperative Banks functioning in India, the scheduled categories are only 52 and its share to total remains just at 3% as compared to that of Non-scheduled Urban Cooperative Banks.

#### B. Deposits

Deposit mobilisation is an important primary function of any bank. Deposits play the most important role in any banking system, whether co-operative or commercial. Deposits provide limits to the working capital of the bank concerned. The higher the deposits, the higher will be the funds at the disposal of a bank to lend and earn profits<sup>3</sup>.

Following table shows deposit mobilisation by the Scheduled and Non-scheduled Urban Cooperative Banks in India.

**Table 3 Deposits of Urban Cooperative banks in India**

| Sr.No. | Category      | Deposits (in Rs.Cr.) | % share |
|--------|---------------|----------------------|---------|
| 1      | Scheduled     | 11040                | 46      |
| 2      | Non-scheduled | 12810                | 54      |
| Total  | All           | 23850                | 100     |

Source: : (Compiled from) Report on Trend and Progress of Banking in India, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, Branch Banking Statistics of Commercial banks, Basic Statistical Returns (BSR) of Commercial Banks (for the period 2011-12).

From the above table it becomes clear that though the Scheduled Urban Cooperative banks are having only 3% share (as per table no.2) in total number of Urban Cooperative Banks, in deposit mobilisation its share is almost half and remaining share is that of Non-scheduled Urban Cooperative Banks which comprises of 97% share (as per table no.2) in total Urban Cooperative Bank group. Thus, in deposits Scheduled Urban Cooperative Banks have impressive share compared to Non-scheduled Cooperative Banks.



### C. Deposits Per Bank

As seen above, in deposits the Scheduled Urban Cooperative banks are having upper hand but, it would be interesting to understand deposits per bank. Following table shows deposits per bank of Urban Cooperative Banks category-wise.

**Table 4 Deposits Per Bank of Urban Cooperative Banks**

| Sr.No. | Category      | Deposits (in Rs.Cr.) | Deposit per Bank (in Rs.Cr.) |
|--------|---------------|----------------------|------------------------------|
| 1      | Scheduled     | 11040                | (212)                        |
| 2      | Non-scheduled | 12810                | (8)                          |
| Total  | All           | 23850                | (15)                         |

Source: : **(Compiled from)** Report on Trend and Progress of Banking in India, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, Branch Banking Statistics of Commercial banks, Basic Statistical Returns (BSR) of Commercial Banks (for the period 2011-12). [Figures in the parentheses show average value of respective total]

By analysing the bank level performance of Urban Cooperative Banks category-wise, it becomes clear that on an average each bank of each category of Urban Cooperative Banks viz; Scheduled and Non-scheduled has mobilised Rs. 15 cr. of deposits. However, category-wise, the Scheduled Urban Cooperative Banks have outperformed, as each bank in this category on an average has mobilised deposits worth Rs. 212 Cr. while those of Non-scheduled banks stood at only Rs. 8 cr. (around 25 times less of Scheduled Urban Cooperative Banks)

Thus, in deposit mobilisation per bank, Scheduled Urban Cooperative Banks are found more efficient than Non-scheduled Urban Cooperative Banks.

### D. Loan Disbursement

Loans and advances provided by the banks are considered as one of the most important sources of funds for industries. The idle fund mobilised in the form of deposits by the banks are put into use in the form of loan disbursement. The loans and advances provided by the bank are also one of the important sources of earning profits for the banks.

In this regard, thus, the loan disbursement by the both the categories of Urban Cooperative Banks viz; Scheduled and Non-scheduled remains important as discussed below.

**Table 5 Loan Disbursement by Urban Cooperative Banks in India**

| Sr.No. | Category      | Credit (in Rs.Cr.) | % share |
|--------|---------------|--------------------|---------|
| 1      | Scheduled     | 7440               | 47      |
| 2      | Non-scheduled | 8360               | 53      |
| Total  | All           | 15800              | 100     |

Source: : **(Compiled from)** Report on Trend and Progress of Banking in India, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, Branch Banking Statistics of Commercial banks, Basic Statistical Returns (BSR) of Commercial Banks (for the period 2011-12).

Like deposit mobilisation, on Loan disbursement front also the performance of Scheduled Urban Cooperative Banks has remained outstanding as only 3% or 52 Scheduled Urban Cooperative Banks (as per table no.2) have almost half of the share in loan disbursement as compared to 97% or 1566 Non-scheduled Urban Cooperative Banks (as per table no.2).

Thus, in loan disbursement also the Scheduled Urban Cooperative Banks has remained leaders to its counterpart.

### E. Loan disbursement Per Bank

For proper understanding of efficiency in loan disbursement, it is important to understand loan disbursement at micro-level i.e. at per bank level. Hence, the table given below shows loan disbursement performance by each category of Urban Cooperative banks viz; Scheduled and Non-scheduled.

**Table 6 Loan disbursement Per Bank of Urban Cooperative Bank**

| Sr.No. | Category      | Credit (in Rs.Cr.) | Credit per Bank (in Rs.Cr.) |
|--------|---------------|--------------------|-----------------------------|
| 1      | Scheduled     | 7440               | (143)                       |
| 2      | Non-scheduled | 8360               | (5)                         |
| Total  | All           | 15800              | (10)                        |

Source: : **(Compiled from)** Report on Trend and Progress of Banking in India, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, Branch Banking Statistics of Commercial banks, Basic Statistical Returns (BSR) of Commercial Banks (for the period 2011-12). [Figures in the parentheses show average value of respective total]

From the above table it again becomes obvious that the scheduled Urban Cooperative Banks are better than Non-scheduled Urban Cooperative banks as each bank in former

category disbursed credit worth Rs. 143 cr. while the latter disbursed credit worth Rs. 5 cr. only.

Thus, there is an excellent performance in this regard by the Scheduled Urban Cooperative banks as compared to that of Non-scheduled Urban Cooperative banks.

#### F. Credit-Deposit ratio

This ratio depicts the use of deposits for the productive purpose. The excess of deposits above the required limit shows underutilisation of funds and the over utilisation beyond the limit also may prove harmful for bank's performance. Hence, maintaining the balance between the two is important. It is calculated as- Credit – Deposit Ratio (%) = Total Advances/Total Deposits

The table below shows Credit-Deposit ratio of both the categories of Urban Cooperative Banks viz; Scheduled and Non-scheduled.

**Table 7 Credit-Deposit ratio of Urban Cooperative Banks**

| Sr.No. | Category      | Credit (in Rs.Cr.) | Deposits (in Rs.Cr.) | C-D ratio (%) |
|--------|---------------|--------------------|----------------------|---------------|
| 1      | Scheduled     | 7440               | 11040                | 67            |
| 2      | Non-scheduled | 8360               | 12810                | 65            |
| Total  | All           | 15800              | 23850                | 66            |

Source: : **(Compiled from)** *Report on Trend and Progress of Banking in India, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, Branch Banking Statistics of Commercial banks, Basic Statistical Returns (BSR) of Commercial Banks* (for the period 2011-12).

From the above table it is obvious that Scheduled Urban Cooperative Banks have higher Credit-Deposit ratio

than Non-scheduled Urban Cooperative Banks. This indicates that as far as utilisation of funds is concerned, investments are preferred to loans and advancements.

#### Conclusion

There is a large number of Urban Cooperatives Banks in Non-scheduled category.

In Deposit mobilisation and loan disbursement, the performance of scheduled Urban Cooperatives Banks is very impressive as compared to that of Non-scheduled Urban Cooperative Banks.

Performance of Non-scheduled Urban Cooperatives Banks in deposit mobilisation and Loan disbursement per bank is also very low as compared to that of scheduled Urban Cooperative Banks.

In use of funds, loan and advances are not preferred by both the banks as Credit-Deposit ratio of both the categories of Urban Cooperatives Banks is very low.

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**Section V**  
**Financial Innovation and Financial**  
**Engineering**



# Technological Innovations in Public Sector Banks in India

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**Abstract:** The Indian financial system comprising the commercial banks, the financial institutions and the capital market, has undergone a very rapid transformation in the past three decades. The financial sector reforms of the 1990s, as outlined by the Narasimham Committee (1991), liberalized the Indian banking industry and opened it to competition from within and outside. The various innovations in banking and financial sector are ECS, RTGS, EFT, NEFT, ATMs, Retail Banking, Internet Banking, Card based payment system etc. and many more value added services. The major impetus for financial innovation has been globalization of financial system, deregulation, and great advances in technologies. In increasingly integrated financial system facing higher volatilities more competition and wide varieties of risk, financial innovations have become an essence to provide new products and strategies to meet different requirements of participants in financial system. To strengthen the payment system in public sector banks, RTGS, Internet Banking, National Electronic Fund Transfer, Retail Payment System, Card Based Payment System, etc. technologies were introduced by the public sector banks in India.

An attempt has been made in this paper to provide a brief overview of the Technological Innovations in Public sector banks in India.

**Keywords:** Financial Sector Reforms, Technological Innovations, Public Sector Banks in India

## 1. Introduction

The Indian banking functions under the regulatory and supervisory guidelines issued by the Central bank. The Banks in India can be broadly classified into the following three categories: a) public sector banks (State Bank of India and its associates and nationalized banks), b) Private sector banks (old and new), c) foreign banks. The Indian financial system comprising the commercial banks, the financial institutions and the capital market, has undergone a very rapid transformation in the past three decades. The financial sector reforms of the 1990s, as outlined by the Narasimham Committee (1991), liberalized the Indian banking industry and opened it to competition from within and outside. Given the weight of PSBs in the banking sector, it is worthwhile

examining the PSB union response to competition and the push toward mechanization as a cost saving device. At the core of this drive is the development of a sound and efficient payment and settlement system. To strengthen the payment system in public sector banks following technologies were introduced.

### i) Real Time Gross Settlement System

RTGS system leads to optimization of the use of available resources in the banking sector in addition to faster movement of funds and information among the various constituents of financial sector. It is a secured electronic fund transfer system providing real time on-line settlement for inter-bank transactions and customer-based interbank transactions of any amount across the country.

**Table-1**  
**Growth of RTGS in India**

| Item | Volume (000') |         |         | Value (Rs. In Crore) |             |             |
|------|---------------|---------|---------|----------------------|-------------|-------------|
|      | 2007-08       | 2008-09 | 2009-10 | 2007-08              | 2008-09     | 2009-10     |
| RTGS | 5840          | 13366   | 33210   | 27318330             | 3,22,79,881 | 3,94,53,359 |

### ii) National Electronic Fund Transfer System:

It has been in existence since 1997 covering 15 centers where the RBI manages the clearing houses. In order to increase the coverage of the scheme and to provide for funds transfers in a quicker manner, a variant of EFT called the Special EFT was introduced with effect from APRIL, 1 2002. SEFT is available across the branches of banks that are computerized and connected through a network so that

electronic messages can travel to the receiving branch in a straight through manner. In order to broad base the facilities of EFT and to provide for integration with the Structured Financial Massaging Solutions ( SFMS) of the Indian Financial Network (INFINET), it was decided to implement a new variant of the EFT called

**Table-2**  
**Volume and Value of Electronic transactions\* by Scheduled Commercial Banks**  
**(At the end of March 2011)**

| Year       | Volume  |         | % Variation |         | Value      |            | % Variation |         |
|------------|---------|---------|-------------|---------|------------|------------|-------------|---------|
|            | 2009-10 | 2010-11 | 2009-10     | 2010-11 | 2009-10    | 2010-11    | 2009-10     | 2010-11 |
| ECS Credit | 98.1    | 117.3   | 11.0        | 19.5    | 1,17,613   | 1,81,686   | 20.0        | 54.5    |
| ECS Debit  | 149.3   | 156.7   | -6.7        | 5.0     | 69,524     | 73,646     | 3.8         | 5.9     |
| NEFT       | 66.3    | 132.3   | 106.3       | 99.5    | 4,09,507   | 9,39,149   | 62.5        | 129.3   |
| RTGS       | 33.2    | 49.3    | 148.5       | 48.2    | 394,53,359 | 484,87,234 | 22.2        | 22.9    |

Source: Report on Trends and Progress of Banking 2010-11

Note:\* Excluding Transactions carried out through cards

### iii) Card Based Payment System

The popularity of card based transactions, especially debit and credit has increased significantly in recent years. The increased use of cards and their growing share in the

payment system turnover highlights in the need for introduction of suitable regulatory measures. Such measures would have to ensure that rules, regulations, standard and practice of card issue are in alignment with the best customer practice.

**Table-3**  
**Card Based Payment (2004-05)**

| Type         | No of Transactions | Growth in Transactions | Value Rs. crore |
|--------------|--------------------|------------------------|-----------------|
| Credit cards | 129,975            | 29.7                   | 25,682          |
| Debit cards  | 230,480            | 166.8                  | 51,226          |
| Smart cards  | 1585               | 7.7                    | 212             |

### iv) Internet Banking

With technology advancements in computers and communications, banks launched "Internet Banking Product, which is an alternative banking delivery channel. It aims to provide anywhere any time banking. The services such as obtaining account statement, request for issuing cheque book, demand draft, stop payment of a cheque and transfer of funds from one account to another account of the account holder.

### v) Single Window System

Single window concept is a system of delivery of all services offered by the bank, at a single window counter. The single window concept envisages that all the needs of the customer are taken care of at a single point of delivery i.e. at a single window, as compared to the existing system where a customer has to approach different product specific counters completion of his work. The single window system will provide quicker and more efficient customer service.

### vi) Point of Sale

Point of sale terminal is a computer terminal that is linked online to the computerized customer information files in a bank and magnetically encoded plastic transactions card that identified the customer to the computer. During

transactions, the customer's account is debited and the retailer's account is credited by the computer for the amount purchase.

### 2. Conclusion

In the early 21<sup>st</sup> century, the Indian banking system is in the midst of technological revolution. Yet, PSBs have still to cover a lot of ground with respect to implementation of technology in all their branches. PSBs possess some unique advantage over their competition. But it is their use of technology that will enable PSBs to build up their strengths. PSBs also have a vast network of branches within rural and semi-urban India and can effectively employ technology to tap into under served markets with significant social returns.

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# Renewable Energy Market - A New Financial Market for Global Investment: With Special Reference to Developed and Developing Countries

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**ABSTRACT:** Renewable energy now-a-day has become a sophisticated word due to its obligations to reduction in green house gases and investment from developed and developing countries. After the implementation of Kyoto Protocol investment in renewable energy showing wide fluctuations and same is the basic theme of this paper. These fluctuations arise because of high cost of technology, low returns, lack of financial support from government and financial institutions. Developed countries played a pivotal role in renewable energy investment due to technological advancement with them. Renewable energy via Carbon Credit market generates new avenues of investment and new form of financial market.

**KEYWORDS:** Clean Development Mechanism (CDM), Carbon Credits, Renewable Energy, Kyoto Protocol, Annex I and Non-Annex I Parties, Green House Gases (GHG).

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## 1. Introduction

Renewable energy markets, industries and policy frameworks have evolved rapidly in recent years. In 2011, renewable power (excluding large hydro) accounted for 44% of new generation capacity added worldwide, up from 34% in 2010 and just 10.3% back in 2004. Thus, Renewable Energy market emerges as a new market for financial investment. A renewable energy market is a part of Carbon Credit Market. Thus, let's take a short review of carbon credits or Clean Development Mechanism.

**1.1 About Carbon Credits :** Carbon Credits are a key component of national and international emission trading schemes that have been implemented to mitigate global warming. Carbon Credits can be exchanged between businesses or bought and sold in international markets at the prevailing markets price. There are also many companies that sell carbon credits to commercial and individual customers who are interested in lowering their carbon footprint on a voluntary basis under Kyoto Protocol.

**1.2 About Kyoto Protocol:** The Protocol in force, as of 16<sup>th</sup> Feb. 2005, provides the means to monetize the environmental benefits of reducing GHG. Kyoto Protocol is a voluntary treaty signed by the Annex I Party (42 Developed countries) Non-Annex I Parties (153 Developing Countries) for reducing GHG emission by 5.2 % below 1990 levels by 2012. The protocol rules have created a market in which companies and governments that reduce GHG levels can sell the ensuing emissions credits.

**1.3 Projects eligible for carbon credits:** Following projects can get Carbon Credits for the reduction of GHG's - Solar Energy, Wind Energy, Hydro Electricity, Geo-thermal Energy, Bio-mass, Waste Management, Efficient supply of potable drinking water, Zero or less pollutant public transport etc.

## 2. Objectives of the Research

1. To find out the recent investment trends in renewable energy.
2. To find out the factors on which renewable investment is associated.

## 3. Hypothesis

1. Investment in renewable energy has decline in recent period.
2. Investment of developing country in renewable energy is low.

## 4. Data and Research Methodology

**4.1 Data Collection:** The research study has been carried out with the help of secondary data like Reports of UNFCC, Accords of various conferences of UNFCCC from 1997, Reports of REN21, Official Reports of United Nations Environment Programme (UNEP), Annual Reports of Bloomberg New Energy Finance, Report of Multi Commodity Exchange (MCX) Market (Mumbai), etc.

**4.2. Sample Selection:** Researcher considers the Developed Countries (Annex I Party) and Developing Countries (Non-Annex I Parties) as an area of study. The selection of sample is based on Non-probability – Purposive sampling method. Only renewable energy projects are selected for indepth study.

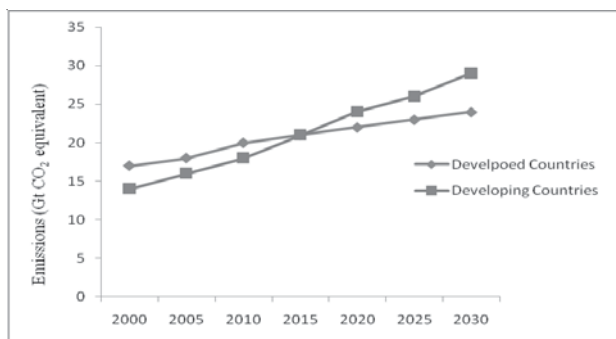
**4.3 Limitation of study:** This research is focused on investment in renewable energy from 2004 to 2011. Only financial part of renewable energy is being observed. Researcher concentrates on renewable power and fuels and does not cover energy-smart technologies such as smart grid, electric vehicles and power storage. These figures are based on annual installation data, provided by industry associations and Renewable Energy for 21<sup>st</sup> Century ( REN21).

## 5. Data Interpretation

**5.1 Total Greenhouse Gas Emission by Region:** Before we start analysis of investment trends in renewable energy, we first take a look on global green house gas emission and emitters.

1Gt = 10<sup>9</sup> metric tons = 1 billion metric tons = 1 petagram (Pg)

**Figure. 1**  
**Greenhouse Gas Emission Trend**



Source : EPA.gov/climatechange/emissions/global.html

**Table 1.**  
**Global Investment in Renewable Energy**

| Year               | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Total |
|--------------------|------|------|------|------|------|------|------|------|-------|
| Investment (\$ bn) | 39   | 61   | 96   | 132  | 167  | 161  | 220  | 257  | 1133  |
| Growth (%)         | -    | 56   | 59   | 37   | 26   | -4   | 37   | 17   | -     |

Source: Bloomberg New Energy Finance

Source: Bloomberg New Energy Finance

The annual growth rate of investment in renewable energy from 2004 to 2011 shows a very gloomy picture. The basic cause of this declining growth rate is that, both Annex I and Non-Annex I parties are not so much confident to invest in renewable energy because of fluctuating prices of carbon credits. Although the renewable energy sector has continued to grow, wider economic problems have had an impact since 2008 and they remain a threat. In late 2011, the Euro area sovereign debt crisis started to have impact on the supply of debt for renewable energy projects in Europe, as banks responded to sharp increases in their cost of funding and upgraded their assessments of the risks involved in lending to borrowers in Italy, Spain and other affected countries.

It is observed from above figure 1 till 2015 developed countries will lead in green house gas emission (GHG) but further future trend shows that developing countries will overtake them in GHG emission. Thus, we can predict that the future market of carbon credit will be located in developing country and investment in CDM project can be seen in this country. Through Renewable Energy investment both - Annex I and Non-Annex I parties will try to mitigate their GHG emission. Therefore, this research focuses on renewable energy which is eligible for CDM projects.

**5.2 Global investment in renewable energy (2004-2011):** Table 1 shows the tough growth of investment in renewable energy since 2004, with expansion continuing through the recession of 2008-09. That growth has been accompanied by a significant rise in the job creation and overall economic contribution, of the renewable energy sector and that looks likely to continue to 2020 as the world seeks to curb emissions from its energy system.

**5.3 Global investment in renewable energy by Developed and Developing countries (2004-2011):** Investment increased in both developed and developing countries. It rose in developed economies by 21% to \$168 billion and in developing economies by 11% to \$89 billion in 2011. Compared to developing economies developed economies invest high amount in renewable energy. But it is observed that developed countries specially in Europe governments struggled to adjust feeds in tariff subsidies for solar power. Inevitably, governments in Europe and elsewhere have responded by cutting subsidies sharply and in the case of Spain, barring subsidies for any new renewable power project not so far approved.



**Table . 2**  
**Investment in Renewable Energy By Region**

| Year         | Developing Countries (\$ bn) | Developed Countries (\$ bn) | Total Investment (\$ bn) |
|--------------|------------------------------|-----------------------------|--------------------------|
| 2004         | 8<br>(21)                    | 31<br>(79)                  | 39<br>(100)              |
| 2005         | 16<br>(26)                   | 45<br>(74)                  | 61<br>(100)              |
| 2006         | 25<br>(26)                   | 71<br>(74)                  | 96<br>(100)              |
| 2007         | 39<br>(30)                   | 93<br>(70)                  | 132<br>(100)             |
| 2008         | 58<br>(35)                   | 109<br>(65)                 | 167<br>(100)             |
| 2009         | 65<br>(40)                   | 96<br>(60)                  | 161<br>(100)             |
| 2010         | 81<br>(37)                   | 139<br>(63)                 | 220<br>(100)             |
| 2011         | 89<br>(35)                   | 168<br>(65)                 | 257<br>(100)             |
| <b>Total</b> | <b>381<br/>(34)</b>          | <b>752<br/>(66)</b>         | <b>1133<br/>(100)</b>    |

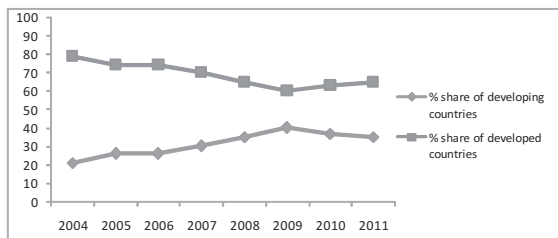
Source: Bloomberg New Energy Finance  
Note : Figures in bracket indicates percentage

Source: Bloomberg New Energy Finance Note : Figures in bracket indicates percentage

More generally, the fact that consumers have found their finances under pressure have made governments more unenthusiastic to wave through measures that would put up energy prices. In the US, support in Congress for clean energy and putting a price on carbon has ebb, in the face of low natural gas prices that have made gas-fired generation look a cost-effective alternative and new concerns about the cost of renewable energy support.

**5.3.1 Trend in share of Developing and Developed Country In Renewable Energy Investment:** If we observe the trends in share in total investment, share of developed economies in renewable energy has declined from 2004 to 2010, the 2008 Subprime crisis and 2010 European Debt Crisis are the major causes of it. But after 2010 share of developed economies started to increase and it is because of recovery of European economies.

**Figure 2**  
**Trends in Investment in Renewable Energy Investment**

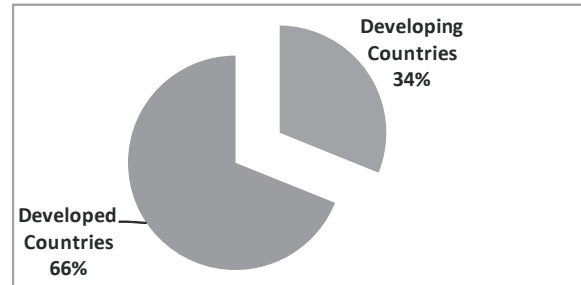


Source : Table No. 2

Whereas the share of developing economies has increased marginally throughout the same period but from 2010 it is showing declining trends. It clearly reveals that developing economies have failed to maintain their greater share in investment in renewable energy.

**5.3.3 Share of Developing and Developed Countries in Renewable Energy Investment:**

**Figure 3**  
**Share of Developing and Developed Countries**



Source : Table no.2

It is also noted that from 2004 to 2011 total investment in renewable energy is \$1133 billion out of which share of developed economies is \$752 billion which is 66 percent whereas share of developing economies is only \$381 billion that is 34% of total investment. From the above data it can be concluded that as per the Kyoto Protocol, developed countries contributed more in clean energy mechanism through renewable energy, but developing economies are lagging behind.

**5.4 Global investment in renewable energy: developed v/s developing countries by Sector 2011:** Developed countries led the way in solar, while developing economies had the upper hand in wind, as table 3 reveals.

**Table – 3**  
**Global investment in renewable energy**

| CDM Project     | Country           |                    | Total Growth-2010 (%) |
|-----------------|-------------------|--------------------|-----------------------|
|                 | Developed (\$ bn) | Developing (\$ bn) |                       |
| Solar           | 117.4             | 30                 | 52                    |
| Wind            | 37.1              | 46.7               | -12                   |
| Biomass & w.t.e | 6.3               | 4.3                | -12                   |
| Biofuels        | 5.0               | 1.8                | -20                   |
| Small Hydro     | 0.3               | 5.5                | 59                    |
| Geothermal      | 1.8               | 1.1                | -5                    |
| Marine          | 0.2               | 0.05               | -5                    |

Source: Bloomberg New Energy Finance, UNEP

Source: Bloomberg New Energy Finance, UNEP

Developed countries having comparatively advanced solar technology invest more in solar energy. The second

most important factor is that developed economies provide subsidies to solar projects, thus investors try to reap out the advantages of subsidy by investing in solar energy. On the other hand developing economies showing their preference in wind energy due to their geographical location, they are having potential for wind energy. Other forms of renewable energy are quite neglected due to their high cost of application and low returns from investment.

**5.5 Global new investment in renewable energy by region, 2011:** Europe is clearly the biggest area for dollars deployed, at \$101 billion in 2011.

**Table. 4**  
**Investment in renewable energy by region**

| Country   | Investment (\$ bn) |
|---|--------------------|
| Europe  | 101                |
| China   | 52                 |
| USA   | 51                 |
| ASOC<br>(Excl. China and India)                                       | 21                 |
| India   | 12                 |
| Brazil  | 7                  |
| AMER<br>(Excl. US and Brazil)   | 7                  |
| Middle East and Africa  | 5                  |
| Source: UNEP, Global trends in renewable energy investment 2012 pp.22 |                    |

Source: UNEP, Global trends in renewable energy investment 2012 pp.22

As in 2010, the US was the biggest investor in renewable energy among individual developed countries. It almost supplanted China for the overall number one spot for investing in renewable energy and indeed it did on the slightly wider measure of clean energy investment including energy-smart technologies.

China was once again by far the heaviest investor of the three developing economy giants. One continuing problem for onshore wind in China is grid connection, with about a quarter of the 2011 projects still not connected by the end of the year. India saw a more spectacular rate of increase in clean energy investment in 2011. Biomass and waste-to-power asset finance in India rose 45% to \$857 million last year, while that for small hydro trebled to \$510 million. The jump in solar asset investment in India was partly driven by the Jawaharlal Nehru National Solar Mission, a programme that aims to aid the development of 20GW of solar power by 2022.

Brazil has seen a major shift in sector momentum over recent years, with biofuels dominant in the 2006-08 periods but then running out of steam as the market struggled to absorb the new capacity built and then wind expanding rapidly in more recent times.

**5.6 Investment in renewable energy by Sector (\$ bn) :** The sector wise breakup of new investment is shown in table 5.

**Table – 5**  
**Investment in renewable energy by Sector**

| CDM Project   | 2004        | 2005        | 2006        | 2007         | 2008         | 2009         | 2010         | 2011         | 2004-2011 (CAGR) |
|---|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|------------------|
| Solar   | 13.8        | 16.4        | 19.5        | 37.7         | 57.4         | 58           | 96.6         | 147.4        | 40               |
| Wind  | 13.3        | 22.9        | 32          | 51.1         | 67.7         | 74.6         | 95.5         | 83.8         | 30               |
| Biofuels  | 3.5         | 8.2         | 26.6        | 24.5         | 19.2         | 9.1          | 8.5          | 6.8          | 10               |
| Biomass & w.t.e   | 6.1         | 7.8         | 10.8        | 11.8         | 13.6         | 12.2         | 12           | 10.6         | 8                |
| Small Hydro   | 1.4         | 4.4         | 5.4         | 5.5          | 6.6          | 4.7          | 3.6          | 5.8          | 22               |
| Geothermal  | 1.4         | 1           | 1.4         | 1.4          | 1.9          | 2            | 3.1          | 2.9          | 12               |
| Marine  | 0           | 0           | 0.9         | 0.7          | 0.2          | 0.3          | 0.3          | 0.2          | 30               |
| <b>Total</b>  | <b>39.5</b> | <b>60.7</b> | <b>96.6</b> | <b>132.7</b> | <b>166.6</b> | <b>160.9</b> | <b>219.6</b> | <b>257.5</b> | <b>-</b>         |
| Source :UNEP, Global trends in renewable energy investment 2012, pp. 15 |             |             |             |              |              |              |              |              |                  |

Solar is the leading sector in renewable energy. Biomass and waste-to-power was the third largest sector for total renewable energy investment in 2010, even though its share fell to \$10.6 billion. Biofuel, which was the second largest sector for investment after wind in 2006, came fourth in 2011 with a total of \$6.8 billion. Other renewable energy sectors showed more modest investment.

## 6. Observations

In this paper we studied the trends of investment in renewable energy. The following are the observations of this paper.

1. Investment in renewable energy from 2004 to 2011 shows a steady growth rate. In quantitative terms investment increases but in percentage terms it shows a very gloomy picture. Especially in 2009 growth rate was minus 4 percent.
2. The other key finding is that a weakening in policy support for renewable energy in many developed countries. This reflected serious pressures, particularly in Europe.
3. The sovereign debt crisis in U.S in 2008 and in Europe in late 2011 hit the ability of banks to provide their usual flow of project finance. It affected the growth rate of investment in renewable energy.
4. China leads among the developing countries in renewable energy investment, whereas Europe leads among the developed countries.
5. Developed countries having upper hand in investment in renewable energy compared to developing economies. Developing economies made up to \$382 billion (31%) of the total investment compared to \$752 billion (69%) of developed economies.
6. Developed countries are always maintained their greater share in renewable energy compared to developing economies.
7. The US crossed China in the race to be the lead investor in renewable energy.
8. Total investment in solar power jumped to \$147 billion in 2011, reaching a figure almost twice as high as that in wind energy. Developed countries prefer to invest in solar and wind energy compared to other form of renewable energy. While developing countries show their interests in wind energy.

9. Renewable energy not very practical in developing countries because of lack of regulatory system and stable market.
10. Solar is the prime sector for renewable investment and it is seen from its CAGR for 2004 to 2011. Second dominant sector for investment is wind energy. Other forms are not so practical for renewable investment.

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# Financial Engineering in Urban Local Bodies for Economic Growth

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**ABSTRACT :** Urban Local Bodies are autonomous bodies and are governed by their respective Acts. Presently, they maintain their accounts on cash based single entry system, where **Balance sheet is not prepared**. In absence of a balance sheet, true and fair position of assets and liabilities of ULB's cannot be ascertained. Keeping in view the increased and diversified responsibilities of ULBs and also the present status of accounts, Government of India took a policy decision to improve the accounting system adopted by the ULBs. This would serve as an effective MIS concerning their financial activities and financial position for more active and timely decision making and greater accountability and transparency.

This paper focuses on the financial engineering that is taking place in Urban Local Bodies in Maharashtra and its usefulness for local government to enter into the capital market by raising their own funds by floating Municipal Bonds. Municipal Bonds have been a grand success in western countries, particularly in United States of America. Municipal Bonds are not a so widely used instrument in India. This paper also discusses the need and benefits of municipal bonds in the growing and maturing Indian economy and the need of support from markets and regulatory authorities for municipal bonds.

*(Key Words : Urban Local Body, Municipal Bonds, Local Government, Cash Based Single Entry System, Accrual Based Double Entry System)*

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## Introduction

The 73rd and 74th Constitutional Amendment Acts envisage a key role for the Panchayati Raj Institutions (PRIs) and the Urban Local Bodies (ULBs) in respect of various functions such as education, health, rural housing and drinking water. The State Governments are required to develop powers and responsibilities upon the ULBs with respect to preparation of plans for economic development and social justice and for the implementation of development schemes as may be required to enable them to function as institutions of self-government. Due to such devolution of powers and responsibilities, the role of the ULBs varies across various States. Under the Urban Reforms Incentive Fund (URIF) which was launched a few years back, 28 States Union Territories agreed to adopt the double entry system of accounting. Further, through the National Urban Renewal Mission, the Government requires Local Self Governments to adopt modern, accrual-based double entry system of accounting. This will enable local governments to publicize their financial statements, which will facilitate inter-corporation comparisons. The local government, thereby attracts public finance through Municipal Bonds.

Municipal Bonds hold good potential in urban infrastructural development and financing. Considering the large involvement of the municipal corporations in the infrastructure development of the country and increasing urbanisation, municipal corporations have failed to raise their own funds from the public.

## Objectives of the study

1. The primary goal of this study is to evaluate the financial reforms implemented in Urban Local Bodies in Maharashtra and its usefulness for local government to enter into the Capital market by raising their own funds by floating Municipal Bonds.

## 2. The secondary objectives are

- a. To study the need for Double Entry Accounting in Local Bodies.
- b. To study need and benefits of municipal bonds in the growing and making Indian economy and the need of support from markets and regulatory authorities for municipal bonds.
- c. To study as to why Municipal Bonds are not common or a success in India
- d. To create awareness amongst various stakeholders such as end users and citizens about the benefits of the Municipal Bonds in the Infrastructural development in India through Local Bodies.

## Limitation

This is a conceptual study. It is supported more by facts than by numerical data. The study is further limited to the discussion of the possibilities of raising the own funds from the public by the Local Authorities for the Infrastructural development in India.

## Hypothesis

Considering the large involvement of the municipal corporations in the infrastructure development of the country and increasing urbanisation, municipal corporations can raise their own funds from the public for speedy infrastructural development.

## Methodology

This study is based on secondary data. The information has been collected from authorities of Local Municipal Corporations, books, journals, magazines, newspaper and websites.

## Statement and Significance

### LOCAL BODY:

The term 'Local Body' may be defined as a local self-government at the third tier of governance in an administrative and geographical vicinity, e.g., a municipal corporation, a municipality or a panchayat. In many cases, the Local Bodies delegate their functions such as building of schools, city roads, parks, running transport services, providing water supply etc., to some other bodies that may or may not be controlled by the Local Bodies, e.g. development authorities, boards, parastatals. Such bodies may be constituted, in partnership with private sector or otherwise, directly or indirectly by or on behalf of a Local Body to promote or carry out some specific objective(s) or function(s) of the Local Bodies. Such bodies may be constituted under a statute. The term 'Local Body' would also encompass such bodies.

### ACCOUNTING REFORM

Presently the Municipal Councils maintain their accounts as per registers and forms prescribed in the Maharashtra Municipal Account Code, 1971 which is based on *cash basis of accounting*. As per this system any sums actually received and payments actually made, are accounted for, by way of a statement of Income and Expenditure.

Keeping in view the increased and diversified responsibilities of Municipal Councils a policy decision has been taken to introduce double entry accrual based accounting system in the Municipal Councils. In view of the above a revised Municipal Account Code was to be prepared with the objective of implementing Accrual Based Double Entry Accounting System in Municipal Councils.

Every Municipal Council shall follow the accrual based double entry system of accounting with effect from 1st April 2007 or such other commencement date as may be notified by Government of Maharashtra. Municipal Councils shall maintain the books of accounts and records as prescribed in these rules in such a manner that will provide information with respect to the state of affairs and daily transactions relating to Income, Expenditure, Assets and Liabilities of the Municipal Council.

Of late, many Local Bodies in the country are shifting to accrual basis of accounting, particularly, after the issuance of the Maharashtra Municipal Accounts Code (MMAC) by the Ministry of Urban Development, Government of Maharashtra, supported by the Comptroller and Auditor General of India, National Institute of Urban Affairs and Indo- US AID FIRE-D Project and the inputs provided by the Institute of Chartered Accountants of India. The MMAC provides guidance to ULBs in preparation of their accounts on accrual basis. Another reason for ULBs adopting accrual basis is that these bodies are also *approaching capital*

*markets for raising funds*. However, these bodies are following diverse accounting policies and practices in preparation of their financial statements. Hence, a need is felt for formulation

of a single set of high quality financial reporting standards for Local Bodies which will set out recognition, measurement, presentation and disclosure requirements dealing with transactions and events in general purpose financial statements of Local Bodies.

### Context of accounting reforms

India is at the crossroads of development and substantial initiatives are required to enhance economic growth rates and improve the living standards of its citizens. For ensuring rapid and planned urban growth, urban infrastructure would necessarily require an element of market financing. The market-based financing will bring in fiscal discipline and create appropriate incentives and disincentives for performance. However, integration of the efficient urban sector financing mechanism with the capital markets demands that urban governance is done on the principle of creditworthiness and would have to be preceded by efforts to ensure that information on the financial health of ULBs is available as per capital market requirements.

### FINANCIAL STATEMENTS

Financial statements prepared by the Municipal Council as per the guidelines of Maharashtra Municipal Accounting Code will now provide information about the financial position, performance and cash flows of the Municipal Council. The financial statements shall comprise of the followings:-

- (1) Balance Sheet;
- (2) Income and Expenditure Statement;
- (3) Statement of Cash Flows
- (4) Receipts and Payments Account
- (5) Notes to Accounts; and
- (6) Disclosure of significant accounting policies and
- (7) Such other statements as may be prescribed under any Law enacted to regulate disclosure of Financial and other information by a Municipal Council.

### Municipal Bonds

A municipal bond is a bond issued by a city or other local government, or their agencies. Potential issuers of municipal bonds include cities, countries, redevelopment agencies, special-purpose districts, school districts, public utility districts, publicly owned airports and seaports, and any other governmental entity (or group of governments). Municipal bonds may be general obligations of the issuer or secured by specified revenues. Interest income received by holders of municipal bonds is often

exempt from the federal income tax and from the income tax of the state in which they are issued, although municipal bonds issued for certain purposes may not be tax exempt. Municipal bonds are debt obligations issued by states, cities, countries and other governmental entities, which use the money for infrastructural development. Municipal Bonds, also known as “*munis*”, (in United States) are attractive to many investors because the interest income is exempt from income tax. In addition, *munis* often represent investments in state and local government projects that have an impact on the daily lives, including schools, highways, hospitals, housing, sewer systems and other important public projects.

### Success in Western Countries

The municipal bond market is a specialised segment of the debt market. In US, most urban infrastructural projects like water supply and sewerage are funded through issue of municipal bonds. Also, the secondary market for municipal bonds is active, with sufficient liquidity. Some municipal bonds are tax exempt, thereby lowering the cost of borrowing of the issuer. The credit rating mechanism of the municipal bonds is very robust, creating a sense of surety and confidence among the investors.

### Municipal Bond Market and India

Municipal Bonds hold good potential in urban infrastructural development and financing. The scenario seems likely to change, given more than 1 lakh crore of urban infrastructure investment estimated over the next five years. In India, a beginning in this direction was made in the late 1990s, but the momentum was not maintained. The Bangalore Municipal Corporation was the first municipal body to raise funds by issuing bonds, backed by state government guarantee in 1997. On the other hand, the Ahmedabad Municipal Corporation came out with bonds in 1998 that were not backed by a similar guarantee. 125 crore issue of eight-year bonds by the Bangalore Municipal Corporation in September, 1997, followed by an 100 crore issue of seven-year bonds by the Ahmedabad Municipal Corporation in January, 1998 were the two Bond issues by municipal corporations. Pune Municipal Corporation (PMC) approached CARE for a credit rating of its proposed 2000 million General Obligation Bond issue and was rated CARE AA.

The Indian federation has a three-tier structure: Government of India comprises the first tier, the state governments and union territories comprise the second, while the urban and rural local self-governments (local bodies) make up the third tier. Of the 3,682 urban local bodies in India, 96 are municipal corporations while the rest are municipalities. Of these 96, seven are in ‘mega cities’ with populations in excess of 4 million, and 28 in cities with populations between 1 million and 4 million. The 35 cities with populations in excess of 1 million are likely to experience

urbanisation growth and infrastructure spending that is significantly in excess of the national average, whereas the others are also likely to see robust growth. Overall economic growth will be the key driver for urbanisation, which must be powered by strong infrastructure. Municipal bonds will be the key enabler in building this infrastructure. With increasing urbanisation, pushing demand for infrastructure and the Government of India’s thrust for infrastructure development, a bonds-backed urban revolution seems a viable route.

By encouraging municipal bodies to approach the capital market to raise funds, the efficiency of these bodies could also be enhanced considerably. Revenue bonds, which naturally are the most popular, will increase awareness about service delivery and its efficiency.

The concept of municipal bonds as an additional mechanism for raising resources for urban infrastructure projects was first discussed in December 1995 at a national seminar. Later, the Rakesh Mohan Committee on the Commercialisation of Infrastructure Projects in India also discussed the possibility of using municipal bonds as a tool for raising finances from markets. Internationally, Municipal Bonds have played a key role in the creation of urban infrastructure assets in United States and Canada. Therefore, it was envisaged that adapting this model to the Indian context would open new vistas for attracting private capital to the urban infrastructure sector.

Why Municipal Bonds Are Not Common or Successful in India?

Considering the large involvement of the municipal corporations in the infrastructure development of the country and increasing urbanisation, municipal corporations have failed to raise their own funds from the public.

The first reason why Municipal Bonds are not common or a success in India, since the very word ‘Municipal / Municipal Corporation’ creates a sense of distrust among the people / investors due to reasons like subtle, slothful, inefficient, bureaucracy, corruption-ridden, political interference, lack of accountability, improper management practices and lack of capable human resources on the boards of local bodies, low productivity, long gestation period, erratic revenue owes etc. Another major reason for lack of trust is lack of reliable credit rating and the difficult methodology involved in the rating. Further is the lack of information of the end use of the funds raised through the issue of municipal bonds. Also there is a fear among investors about not getting the investment back on maturity.

The municipal bond market in India is a minuscule 0.1% of the total corporate bond market. In the last six years, municipalities in India have tapped the bond market only 13 times.

Development of a municipal bond market in India depends on significant improvement in the credit quality of Municipal Corporations.

### Conclusions

Keeping in view the increased and diversified responsibilities of ULBs and also the present status of accounts, Government of India took a policy decision to improve the accounting system adopted by the ULBs. This would serve as an effective MIS concerning their financial activities and financial position for more active and timely decision making and greater accountability and transparency.

There's scope to develop a municipal bond or muni bond market in India because municipalities and corporations that govern urban local areas in the country do not generate enough money from taxes and utility payments to fund their expenditure. Considering the large involvement of the municipal corporations in the infrastructure development of the country and increasing urbanisation, municipal corporations can raise their own funds from the public. In view of the various preconceived reasons it could not be successful in India. The first reason why Municipal Bonds are not common or a success in India, since the very word 'Municipal/ Municipal Corporation' creates a sense of distrust among the people/ investors due to reasons like subtle, slothful, inefficient, bureaucracy, corruption-ridden, political interference, lack of accountability, improper management practices and lack of capable human resources on the boards of local bodies, low productivity, long gestation period, erratic revenue flows, etc. Another major reason for lack of trust is lack of reliable credit rating and the difficult methodology involved in the rating

### *Several others general conclusions can be drawn from the study –*

- There is no source of reliable data on finances of all local bodies in India to estimate their resource gaps. There is also a lack of uniformity in classification and reporting of financial data, which do not allow precise comparison on various parameters.
- Ensuring compliance with the Accounting Standards for Local Bodies is the responsibility of the appropriate authority which approves the financial statements of the Local Body.
- Adoption of better budgeting practices, cost sheet and management information system and providing model accounting, budgeting and cost formats recommended by Task Force will make ULB's financially presentable in the market.
- Recognising the need to harmonise and improve accounting and financial reporting among Local Bodies,

the Institute of Chartered Accountants of India (ICAI) and other stakeholders shall strive hard.

- Development of a municipal bond market in India depends on significant improvement in the credit quality of Municipal Corporations.
- That municipal bodies shall work towards improving their budgeting and accounting systems and the quality of disclosure of information to the public.
- Credit Rating agencies also need to step up to rate the municipal Bond issues.
- Municipal Bonds will also create another good investment avenue for people, if they are given security of repayment through sovereign guarantee or likewise.

In conclusions, though Municipal Bonds have been a grand success in western countries, they are not so widely used instrument in India. If the accounting reforms are implemented properly the Municipal Bonds hold good potential in urban infrastructural development and financing. Municipal Bonds in Indian market can be considered as a viable investment option and an instrument for raising public funds for infrastructural development of the country. With growing infrastructural needs of the country, municipal bonds will prove to be a good fund-raising instrument.

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**Section VII**  
**Saving-Investment flows and Effective**  
**Securities Market**



# Predicting Stock Price Movements : The Role of Emap Model

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**Abstract :** The recent global financial meltdown had affected the world economy in general and Indian economy in particular. The financial market is no exception to this world stock market including Indian stock market. Stock had been badly affected by the global financial meltdown. It is a known fact that stock market reacts to economic or financial news, even if that news is likely to have no real effect on the fundamental value of securities itself. But it will have impact on stock price. The recent development in India i.e. fall in rupee value and rising inflation rate has created fear in the mind of retail investors. The retail investors are hesitating to enter into stock market due to huge fluctuation in stock prices. There are number of traditional stock price prediction models which proved wrong to forecast movement in stock prices during the period of global financial meltdown. The equity research firms, investment consultant, brokers, traders and investors are interested to know and use advanced and modern stock price prediction models for constructing less risky portfolios or obtaining higher return on investment. Hence, there is always a need for good analysis and prediction model. The researchers have developed and tested series of stock price prediction models. The most popular and successful models among these are ARCH, GARCH, stochastic model, EMAP model, candlestick analysis, etc. Limited literature is available in India about application of advanced stock price prediction models. Not much research has been done in India on application of EMAP model to predict movement in stock price. This motivated the researchers to take up the present study. The study revealed that EMAP model failed to prove the movement in the stock price. It is suggested that fundamental as well as technical analysis should be carried simultaneously to assess the movement in stock price.

**Key Words:** Bombay Stock Exchange, Closing Price, Exponential Moving Average Price, Retail Investors, State Bank of India and Infosys Ltd.

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## 1. Introduction

There are two main schools of thought in the stock markets i.e. fundamental analysis and technical analysis. Fundamental analysis attempts to determine a stock's value by focusing on underlying factors that affect a company's actual business and its future prospects. Fundamental analysis can be performed on company or industries or the economy as a whole. Technical analysis, on the other hand, looks at the stock price movement and uses historical data to predict its future price movements. Stock Market prediction has always had a certain appeal for researchers. While numerous scientific attempts have been made, no model has been discovered to accurately predict stock price movement. In this paper, an attempt has been made to predict future price movements of sample companies by adopting modern method of technical analysis i.e. EMAP model. This paper is arranged as follows. Section 2 provides an overview of literature concerning Stock price prediction and EMAP model. Section 3 describes our research objectives. Section 4 outlines research methodology. Section 5 provides an overview of our experimental design. Section 6 presents our experimental findings and their implications. Finally, Section 7 throws a light on how to take a wise investment decision in a volatile market.

## 2. Review of Literature

According to Arifur Rehman Shaikh and Anil B. Kalkundarikar (2011), most of the retail investors' primary objective of investment is to earn regular income and expected rate of return differs from individual to individual based on their level of market knowledge and risk taking

ability. The present paper assesses the behavior of retail investors in Belgaum district of Karnataka state and it reveals that knowledge level significantly leverages the returns on the investments. Gupta L.C. and Jain (2008) pointed out that 'too much volatility', 'too much price manipulation', 'unfair practices of brokers' and 'corporate mismanagement and frauds' as the main worries of investors. Jan Ivar Larsen(2010) in his paper "Predicting Stock Prices Using Technical Analysis and Machine Learning" used a novel two-layer reasoning approach that employs domain knowledge from technical analysis in the first layer of reasoning to guide a second layer of reasoning based on machine learning. The model is supplemented by a money management strategy that uses the historical success of predictions made by the model to determine the amount of capital to invest on future predictions. Based on a number of portfolio simulations with trade signals generated by the model, the author concluded that the prediction model successfully outperforms the Oslo Benchmark Index (OSEBX). Mittal M. and R. K. Vyas (2008) in their research article "Personality Type and Investment Choice: An Empirical Study" observed that investors have certain cognitive and emotional weaknesses which come in the way of their investment decisions. According to them factors such as age, income, education and marital status affect an individual's investment decision. Robert P. Schumaker and Hsinchun Chen conducted a study on "Textual Analysis of Stock Market Prediction Using Financial News". The paper examines the role of financial news articles on three different textual representations: Bag of Words, Noun Phrases and Named Entities and their ability to predict discrete number stock prices twenty minutes after an article release. Using a

Support Vector Machine (SVM) derivative, the researchers proved that the model used by them had a statistically significant impact on predicting future stock prices compared to linear regression. Saptarshi Purkayastha (2008) in his article “Investor Profiling and Investment Planning: An Empirical Study” concluded that people do not take much risk when the question of investment of their hard-earned money comes. Shanmugham R and Muthusamy P (1998) found that education and occupation of the investors had an impact on the use of technical analysis and fundamental analysis respectively. Sara Alatiqi and Shokoofeh Fazell (2008) in their research entitled “Can Money Supply Predict Stock Prices?” argued against a stable causal relation from money supply to stock prices. They used Co-integration and Granger Causality tests to support their argument. However, an explicit model that would be preferred by investors and easy to understand did not yet appear in the literature. This has encouraged the researcher to take up the present study.

### 3. Objectives of study

The objectives of the study include:

- 1) To enumerate how Exponential Moving Average Model can be used in selection of stock.
- 2) To assess the relevance of Exponential Moving Average Model.
- 3) To offer suggestion to retail investors.

### 4. Research Methodology

The data required for the study has been collected from secondary sources i.e. business-line newspaper, SEBI reports and from websites of Bombay Stock exchange and sample companies. The service sector was selected for the purpose of study. Market leaders in information technology and banking sectors were selected, as these two sectors were affected by inflation and fall in rupee value. Exponential Moving Average Model and chart analysis tool were used to analyze data.

### 5. Experimental Design

#### A) Infosys Ltd

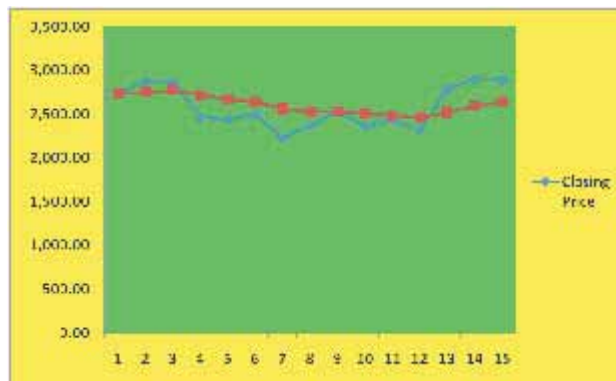
Infosys Ltd is a market leader in Indian IT sector. It is a multinational provider of business consulting, information technology, software engineering and outsourcing services. The stock is available for trading both in NSE (National Stock Exchange) and BSE (Bombay Stock Exchange). Exponential Moving average price of the stock has been calculated based on 10 days moving period and using historical monthly stock prices.

**Table 1: Exponential Moving Average Price of Infosys Ltd**

| Month  | Closing Price | PEMAP    | EMAP     |
|--------|---------------|----------|----------|
| 11-Apr | 2,905.95      |          |          |
| 11-May | 2,791.85      |          |          |
| 11-Jun | 2,907.40      |          |          |
| 11-Jul | 2,766.80      |          |          |
| 11-Aug | 2,342.80      |          |          |
| 11-Sep | 2,533.80      |          |          |
| 11-Oct | 2,875.20      |          |          |
| 11-Nov | 2,607.55      |          |          |
| 11-Dec | 2,765.05      |          |          |
| 12-Jan | 2,743.35      |          | 2,723.98 |
| 12-Feb | 2,875.40      | 2,723.98 | 2751.504 |
| 12-Mar | 2,864.95      | 2751.504 | 2772.129 |
| 12-Apr | 2,462.60      | 2772.129 | 2715.856 |
| 12-May | 2,439.85      | 2715.856 | 2665.678 |
| 12-Jun | 2,502.55      | 2665.678 | 2636.022 |
| 12-Jul | 2,227.40      | 2636.022 | 2561.734 |
| 12-Aug | 2,373.25      | 2561.734 | 2527.468 |
| 12-Sep | 2,534.00      | 2527.468 | 2528.655 |
| 12-Oct | 2,363.50      | 2528.655 | 2498.63  |
| 12-Nov | 2,436.60      | 2498.63  | 2487.353 |
| 12-Dec | 2,318.50      | 2487.353 | 2456.656 |
| 13-Jan | 2,788.75      | 2456.656 | 2517.03  |
| 13-Feb | 2,906.00      | 2517.03  | 2587.745 |
| 13-Mar | 2,889.90      | 2587.745 | 2642.677 |

Source: Bombay Stock Exchange

**Figure No: 1**



It is evident from the figure 1 that the EMAP (Exponential Moving Average Price curve of Infosys Ltd has intersected with closing price curve in January 2013 and started moving in upward direction signaling that the stock price of Infosys Ltd will move in upward direction in the future. The fact is that after intersection the price of Infosys Ltd on BSE has fallen down. The observation of stock price movement in the market revealed that the stock price had actually moved in upward direction and is also expected to move in upward direction in future period i.e. till both curves intersect with each other.

## Investment Strategy

As stock price of Infosys Ltd is expected to move in upward direction therefore, it is recommended that the holder of investors should wait till the stock reaches resistance level and movement it reached resistance level he can dispose of his holding. This strategy will help him to book maximum profit from investment. Whereas, it not a right time for buyers to buy Infosys Ltd.

### Real time movement in Stock Price

**Table 2: Real time movement in Stock Price**

| Month    | Closing Price | Direction of Movement in Stock Price |
|----------|---------------|--------------------------------------|
| 13 April | 2,234.45      | Downward                             |
| 13-May   | 2,407.60      | Downward                             |
| 13-Jun   | 2,493.25      | Downward                             |
| 13-Jul   | 2,495.70      | Downward                             |

It is clear from the table 2 that stock price had fallen down instead of moving in upward direction. The reasons for the same include rumor about fall in profitability for the financial year 2012-13. The EMAP model failed to prove the movement in the stock price. Therefore, fundamental as well as technical analysis should be carried simultaneously to assess the movement in stock price.

### B) State Bank of India

State Bank of India is market leader in Indian banking sector. SBI is a government-owned bank with its headquarters in Mumbai, Maharashtra. As of December 2012, it had assets of US\$501 billion and 15,003 branches, including 157 foreign offices, making it the largest banking and financial services company in India by assets. The stock is available for trading both in NSE and BSE. Exponential Moving average price of the stock has been calculated based on 10 days moving period and using historical monthly stock prices.

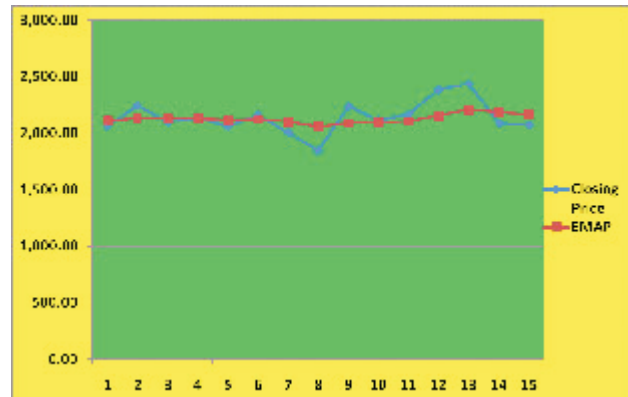
**Table 3: Exponential Moving Average Price of State Bank of India**

| Month  | Closing Price | PEMAP | EMAP |
|--------|---------------|-------|------|
| 11-Apr | 2,805.60      |       |      |
| 11-May | 2,297.80      |       |      |
| 11-Jun | 2,405.95      |       |      |
| 11-Jul | 2,342.00      |       |      |
| 11-Aug | 1,974.50      |       |      |
| 11-Sep | 1,911.10      |       |      |
| 11-Oct | 1,906.70      |       |      |

|        |          |          |          |
|--------|----------|----------|----------|
| 11-Nov | 1,762.85 |          |          |
| 11-Dec | 1,619.50 |          |          |
| 12-Jan | 2,061.05 |          | 2,108.71 |
| 12-Feb | 2,243.40 | 2,108.71 | 2133.193 |
| 12-Mar | 2,095.00 | 2133.193 | 2126.249 |
| 12-Apr | 2,137.95 | 2126.249 | 2128.376 |
| 12-May | 2,055.60 | 2128.376 | 2115.146 |
| 12-Jun | 2,159.15 | 2115.146 | 2123.146 |
| 12-Jul | 2,005.20 | 2123.146 | 2101.703 |
| 12-Aug | 1,845.00 | 2101.703 | 2055.034 |
| 12-Sep | 2,237.90 | 2055.034 | 2088.279 |
| 12-Oct | 2,109.60 | 2088.279 | 2092.156 |
| 12-Nov | 2,170.05 | 2092.156 | 2106.317 |
| 12-Dec | 2,383.75 | 2106.317 | 2156.754 |
| 13-Jan | 2,436.60 | 2156.754 | 2207.63  |
| 13-Feb | 2,085.40 | 2207.63  | 2185.409 |
| 13-Mar | 2,072.75 | 2185.409 | 2164.927 |

Source: Bombay Stock Exchange

**Figure 2**



The figure 2 depicts that the EMA price curve of SBI has intersected with closing price curve in March 2012 and started moving upward. Again the curve intersected with closing price curve in April 2012 and started falling down. The EMAP curve interested with closing price curve in the June 2013 and continued to fall down. The EMAP curve intersected with closing price curve in September 2012 was moving in upward direction. Again both the curves interested each other in February 2013 and EMAP curve started moving in downward direction indicating that the stock price will fall down in the future period. The fact is that after intersection, the prices of SBI stock on BSE in March 2013 has fallen down. In other words, the observation of stock price movement revealed that the stock price had actually moved in downward direction and is also expected to move in downward direction in future period i.e. till both curves intersect with each other.

## Investment Strategy

As the stock price of SBI Ltd is expected to move in downward direction, therefore, it is recommended that investors who want to liquidate their holding in SBI should wait till EMAP curve intersects with closing price and thereafter moves in upward direction. It is a right time to buy SBI stock. However, it is recommended that the investors should monitor support level before buying the stock.

## Real time movement in Stock Price

**TABLE 4: Real time movement in Stock Price**

| Month    | Closing Price | Direction of Movement in Stock Price |
|----------|---------------|--------------------------------------|
| 13 April | 2,264.20      | Upward                               |
| 13-May   | 2,047.70      | Downward                             |
| 13-Jun   | 1,953.60      | Downward                             |
| 13-Jul   | 1,896.35      | Downward                             |

It is clear from the table 4 that stock price had fallen down as per the prediction made by the model except in the Month of April 2013.

## 6. Findings

EMAP model failed to prove the movement in the stock price of Infosys Ltd. EMAP model had predicted that stock price of Infosys Ltd is expected to move in upward direction. But, the fact is that the stock price had fallen down. However, the model was proved correct in predicting the movement in stock price of State Bank of India.

## 7. Suggestions

As the stock price of Infosys Ltd is expected to move in upward direction, it is suggested that investor should liquidate his holding. It is better, if he look for resistance level before liquidating his holding which will maximize the profit from liquidation. It is not a right time to buy stock of Infosys Ltd. The stock price of SBI Ltd is expected to move in downward direction. It is not a right time to sell it. However, it is a right time to buy stock of SBI. It is recommended that investors should monitor support level before buying the stock. The real time stock price movement of SBI was as per the prediction made by the EMAP model except Infosys Ltd. Therefore, it is suggested that the investor should carry out fundamental analysis followed by technical analysis. The combination of fundamental as well as EMAP analysis proved to be a scientific forecasting mechanism for predicting future movement in stock price. This approach is expected to help in maximizing profit but also managing risk. The researchers are of the view that the traditional approach to investor education has failed to yield results and that radical reform is needed in investor education approach. In this regard, it is suggested that SEBI should develop a new approach for educating retail investors. The SEBI in collaboration with Commerce and Management Education

Institutes should conduct training programme in fundamental and technical analysis for retail investors. Research work done in the area of financial literacy proved that a big-bang programme on financial literacy had failed to achieve its pre-determined goals. Therefore, it is suggested that such programme should be revamped and new shape should be given to the programme. The programme should be conducted jointly by broking firms, educational institutions and investor association. It also suggested that retail investors should set up investor's organization in the line of similar organization functioning in USA. Such organizations are expected to play a vital role in Indian stock market in protecting retail investor interest as well as educating them.

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**Section VIII**  
**Finance and Inclusive Development**





# Impact of law on economic growth: With reference to National Food Security Act, 2013

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**Abstract :** Law is one of the social sciences. The French economists Gide speaks, law, ethics and political economy the sister sciences. To do one's duty expresses an ethical conception, to exercise one's right is a legal conception, to provide for one's wants, is an economic conception. To whom does it belong? Is a legal question. To whom ought to belong? Is a question of border land between economics and law. Therefore any classification of the social sciences is always for convenience and therefore artificial. It is the same object studied from different point of view.

With this background this paper intends to study, The Food security Act, 2013, recently passed by our legislation. Right to food is one of the human rights, a right guaranteed under Art.21 of the Indian Constitution, and nevertheless one step ahead towards development and welfare of the people. This is the duty conferred upon the government by the Constitution.

It is a bold initiative taken by the government the Act covers 67% of India's population- 75% in rural areas and 50% in urban areas. Each beneficiary will get 5 kg of rice or wheat or millet a month at a discounted rate of Rs. 3, Rs. 5, and Rs. 1, respectively. The Act also provides for maternity benefits of Rs. 6000/ a month. Children in the age group of 6 months to 14 years will get home ration or hot cooked food. It has many such provisions which will boost the right to food.

This paper will analytically try to investigate the issues and doubts raised, such as cost of implementation, financial relation between centre and states, its impact on agriculture economy, subsidies and many more. At the outset the amendments suggested, accepted and rejected will also be overviewed. In this endeavor the researcher will also take resort to the judicial approach.

This will surely throw more light upon the strong relationship between economics and law, as both personal and property interests which the law recognizes and protects constitute an integral part of development of any sound economy.

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Law is one of the social sciences. The French economists Gide speaks, law, ethics and political economy are the sister sciences. To do one's duty expresses an ethical conception, to exercise one's right is a legal conception, to provide for one's wants is an economic conception. 'To whom does it belong' is a legal question. 'To whom it ought to belong' is a question of border line between economics and law. Therefore any classification of the social sciences is always for convenience and therefore artificial. It is the same object studied from different point of view.<sup>1</sup>

'No carpenter would have attempted to build a wooden house without a hammer.' Yet more than half a century since right to be free from hunger was established in the Universal Declaration of Human Rights in 1948, the world has struggled to end hunger without the similarly crucial tool of strong law.<sup>2</sup>

With this background this paper intends to study, 'The National Food security Act, 2013,' a step towards development and welfare of the people, a step forward to fulfill the duty conferred upon the government by the Directive Principles of the Indian Constitution. In this endeavor the researcher will analytically try to investigate the issues and doubts raised, as implementation cost, its impact on agriculture economy, subsidies and many more. At the outset the amendments suggested, accepted and rejected will also be overviewed. The researcher will also take resort to the judicial approach.

Rome Declaration and Plan of Action came in 1996 stated that the right to adequate food is realized when every man, woman and child alone or in community with others has physical and economic access all the times to adequate food or means for its procurement. FAO of UN stated, State should not distribute free food but provide environment to enable the food. Food security is the precondition to achieve right to food. Article 25 of Universal Declaration of Human Right says that, everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family including food. Thus, right to food is one of the Human Right.<sup>3</sup>

Under Article 21 of Indian constitution Supreme Court of India has interpreted and secured right to food as one of the fundamental right in the year 1996 when the same was defined in Rome Action Plan.<sup>4</sup> In 2001 People's Union for Civil Liberties (PUCL), a NGO has filed a public interest litigation and exposed the excessive amount of food grains rotting in government granaries, while people continue to die of hunger and starvation. It has asked for legal enforcement of right to food. The Court stepped in and ordered the implementation of eight centrally sponsored scheme as legal entitlement. These include the public Distribution System(PDS), Antyodaya Anna Yojana (AAY), the Mid-May Meal scheme and Integrated Child Development Service(ICDS), among others. In 2008, it is the Supreme Court who has taken the initiative and ordered that Below Poverty Line families are entitled to 35 KgS of food grains per month at subsidized prices.

Thus it is the Indian judiciary and not the UPA government who has actually initiated the process of food security. Supreme Court heavily came down on the government and said that the poor storage condition in FCI have caused deterioration of the food grains. The amounts of food being wasted for outweighs the amount needed to assure food security the government continues to pay the expenses of storage instead of distributing it to those in dire need. The case has demonstrated that states cannot escape the responsibility of ensuring the right to food and the case continues –seeking to further strengthen the formulation of food and related social security schemes.<sup>5</sup>

In 2010, 'National Advisory Council' drafted the Bill and it was introduced in Parliament in 2011. Before that, Expert Committee under the Chairmanship of Dr. Rangarajan has been set up to examine the implications of the Bill. The expert committee recommended on four primary issues i.e. food grain entitlement, subsidy, PDS reforms and agency for identification of beneficiaries. Suggestions of the Committee are broadly accepted. The largest scheme anywhere in the world gives right to subsidized grains to two-thirds of India's 1.2 billion populations numbering around 800 million. The Lok Sabha passed the Bill on August 26, while Rajya Sabha cleared it on 2<sup>nd</sup> September, 2013.

The Food security is a bold initiative taken by the government. The Act covers 67% of India's population- 75% in rural areas and 50% in urban areas. Each beneficiary will get 5 kg of rice or wheat or millet a month at a discounted rate of Rs. 3, Rs. 5, and Rs. 1 respectively. The Act also provides for maternity benefits of Rs. 6000/a month. Children in the age group of 6 months to 14 years will get home ration or hot cooked food<sup>6</sup> it has many such provisions which will boost the right to food. But if in the true sense food security is to be achieved the alienated rights, such as right to education, right to information, right to work and other obligations under Directive Principles of the Indian Constitution are to be strictly implemented.<sup>7</sup> Right to give food to lactating mothers under the new law is in tune with Article 12 of Convention on Elimination Against Women under International Human Rights Law.<sup>8</sup> The Act also talks about woman empowerment by giving her the status of head of household, representation of SC and ST.<sup>9</sup> etc. Though with these measures the government wants to satisfy all the sections of society but at the cost of what? This issue is to be addressed carefully.

Hunger is not an individual problem but has its roots in the country's macroeconomics: the nature of employment generation and the terms of trade between agriculture and other sectors. The government through its policies determines these macroeconomic variables.<sup>10</sup>

This will surely throw more light on the strong relationship between economics and law, as both personal and property interests, that law recognizes and protects,

constitute an integral part of development of any sound economy.

Farmers are at the bottom of food security, therefore, if the farmers are secured in all aspects of the life food security will be easy to achieve; but recent suicide cases of farmers show that they are unsecured. Projection says that by 2050 we would have forty percent more population than it is now. With the Food security Act in place, can India produce the required amount of food grain in the backdrop of large number of farmers leaving farming? The answer is 'NO'. Therefore without farmer's security being an inbuilt mechanism in any Food Security programme we can't achieve our target. Thus, to secure farmer, we have to invest in agriculture. To boost the production, farmer should be motivated for diversification, educated about new technology and growth and so on. Agriculture insurance can also be provided to the farmers.<sup>11</sup>

The government would like the world especially Indian voters to believe that the food security bill is the best piece of legislation that the country has ever given. In reality, there is every possibility that it would prove to be a disaster within one year of its functioning especially for small farmers. With this Act the poor farmer would prefer to purchase his food requirement from PDS at Rs.3 or less per kg. This would allow him to sell his own grains at the support price (Rs. 12-13/kg) and get his food at Rs.3. Unfortunately this will not happen because procurement agencies will ignore him as in the past. Worse, distress prices will be more heartbreaking than before. With rice and wheat under the bill being sold at Rs.3/perkg, open market prices will be at around Rs.7-8 compelling the farmers to sell at whopping 50% discount on procurement prices. This will leave small farmers poorer than before.

In fact it will also hurt agriculture because more farmers will focus on growing the standard grade of rice that will be procured by government. They will not focus on better grades or even other grain types, which may affect export and damage the food diversity of country. Similarly, with increase demand for staples like wheat and rice, farmers may choose to invest more in these crops rather than in other (potentially higher value) crops, leading to a decrease in agricultural diversification towards high value agriculture and also to environmental effects. To solve this, procuring the entire produce at support price, ensure proper storage capacities is the solution.<sup>12</sup>

According to Ashok Gulati, the Chairman of the Commission on Agricultural Costs and Prices, to protect the interest of the farmers, risk management strategy like, 'US farm Bill' will be useful, where more than 60% of premium is going to be paid by the state. If the productivity goes down that, or the prices go below that, his net income goes below, what is insured and then the farmer is compensated for the same. These are new tools which are less distorting the production structure.<sup>13</sup>

For the effective implementation of Law, programs like Mahatma Gandhi Rural Employment Guarantee scheme should be linked so that only poor get the employment and food subsidy. Initially the process has to be piloted in certain locations to know the realities. It has to be worked with more investment in storage and distribution capacities. The income level of farmers will also suffer because they will not have more options, therefore the scheme may be brought in a different way by extending support through food vouchers and giving choice to beneficiaries to have their own choice.

The law which is the revision of previous proposals also includes an additional allocation of 6.5 million tonnes of food grains for the welfare schemes such as school feeding programs and additional subsidies for pregnant woman. Overall the law provides 61.2 million tonnes of food grains per year throughout India. Looking into the Chattisgarh meal incident and recent cake incident in Mumbai, to achieve the goal of food security concern should not only on providing food but nutritious food and for that corruption is to be strictly punished. At the same time one should see that students are coming to school to learn and not just to have food.

The cost estimated 0.72 % of India's GDP will not just come from the grain themselves, setting up and maintaining distribution centers and government agencies to monitor the subsidies also creates a big expense. Critics say the money could be better spent on generating employment, improving rural and urban infrastructure, investing in agriculture and number of other competing uses. Household identification system is also not that simple it has changed percentage of people getting benefits as well as price in which they are getting benefit. Analysis shows that of the household covered under the TDPS, 46% will be better off under the current law, 14% will remain in their condition and 40% will actually be worse off. Implementation of this is also a crucial issue both at the central and state level. The law is not clear about how cash transfers and food subsidies could impact each other and India's economy in the future. In all, Food Security Act is a complicated programme that could impact many aspects of India's economy and food security.<sup>14</sup>

The paper authored by Ashok Gulati the Chairman, Commission for Agricultural Costs and Prices (CACP) and six other drawn from various fields including CACP said, given the current trends and volatility in rates of growth in food grain production and yields, the growing pressure on land and water in the wake of climate change, dependence on monsoon, there is a possibility that food grain availability on sustainable and stable basis would require a lot of government efforts in all the concern aspects to meet the commitments of food distribution and this may have several undesirable side effects.<sup>15</sup>

Global rating agency Moody's has given a thumb

down to the food security Bill. (the same has become a law now) It opined the measure is credit negative as it will weaken government finances and deteriorate macroeconomic situation. Its impact on government finance will be less in 2013-2014, but much more in the years to come. It will raise future subsidy expenditure commitments, hindering the government's ability to consolidate its finance. The agency further said, India's fiscal deficits are already higher than those of its emerging market peers.<sup>16</sup> Counter argument is that, if law implemented strictly, the requirement of the storage would decline since food grains would be distributed rather than kept in the open where they rot and that would reduce the subsidy.<sup>17</sup>

T. Nanda kumar, former Agricultural Secretary expressed his worry, that a totally cereal-based kind of intervention could distort the long term objective of giving proteins and nutrition through other means. He further said the Bill (now law) is an expanded PDS as it operates today. Looking into the areas concentrated with the production of food grains and the current logistics situation, distribution of food grains and reaching it out to the places where the people need it the most will be a major challenge. The Bill will also have certain inflationary pressure on the open market as government will procure most of the surpluses and private market will face the scarcity. Therefore the major change he suggested was that the Bill has to give adequate freedom to state governments to procure and to distribute locally produced grains, which will probably take care of a large number of problems and will also boost agriculture.<sup>18</sup>

Government will provide 63mn tonnes of food under the law with the subsidy of \$23bn. The food subsidy will go up from 0.8% of GDP (Gross Domestic Product) to about 1.1% of GDP with limited government resources. The key concern today is the impact of growing food subsidies at a time when the fiscal deficit has already exceeded target. According to Prof. Bhattacharya, more than that India's trade deficit which will be hit hard as the programme will require 70-80 million tonnes of more food every year. India obviously does not produce that much and shortfall will have to be met from import. It will restrict investment in the agricultural sector. The widening gap between the subsidized and open market prices of rice and wheat may also lead to more leakages from the PDS as well as pressure on prices of food for those outside the scheme, which will lead to food inflation. The policy makers say that the government can find resources provided it cuts down or ends the oil subsidy to offset the additional burden arising out of food security. But the government is unlikely to do so as it will not go down among the voters in an election year.<sup>19</sup> It has been countered that there will not be any inflationary pressure as most of the inflation in food sector is from high value commodities.<sup>20</sup>

It has been reported that India failed to convince WTO and agreed under the 'peace clause' that developing

countries will have four years respite from the harsh provisions of the WTO law that limits market distorting farm subsidies at 10% of the aggregate product, which is against the provisions of food law.<sup>21</sup> The G-33 Nations group of emerging countries including India are demanding amendment in WTO, Agreement of Agriculture(AoA) in order to implement Food Security plan without attracting any penalty even after reaching minimum subsidy cap. AOA has entered into in 1995 and to calculate current subsidies WTO uses the prices of 25 years ago. This is ridiculous since food prices have shot up since then. Therefore recent prices should be the reference. But developed countries refuse to agree on it. Most developed countries have shifted towards green box subsidies where there are no limitations or conditions and that are not thought to distort trade at all for agriculture so they continue to provide enormous support to farmers without breaching WTO commitments.<sup>22</sup> With this background U.S. and Canada are raising doubts that India's food security law may distort international trade. Is it not the double standard? This issue needs separate discussion.

The food security has caused much handwringing amongst political pundits, economists, and media, asking if India is already suffering from a budget deficit and struggling with a deprecating currency can afford this extra burden. Perhaps it can. The extra burden starts next year in April that means it will not have an on impact deficit target for this year. The country will have to buy 62mn tonnes of this food every year. It bought 72Mn. tonnes of food grain in 2012-13 and 63.5mn tonne the year before. But the real concern is how much will be siphoned off by greedy hands along the way. Data shows that we have improved on that part too. The amount of rice and wheat lost went down from 55% in 2005 to 35% in 2012. During the period the number of households buying cereal went up from 23 to 50% in the rural India and 31% in urban India.<sup>23</sup>

At the outset, if targeted effectively, the law will surely improve consumption and economic growth, for that government has to take effective measures to keep the supply-chain intact, create an environment which leads to entrepreneurs, business investment, consumption and growth. Amendments also have been suggested such as community kitchen, an expanded and reformed PDS which includes pulses, oil, and decentralized procurement which will contribute to revitalizing agriculture, supportive services such as breastfeeding counseling and supplementary nutrition for mothers. Cost sharing between the centre and states is also to be worked out so that states should not overburdened<sup>24</sup>

An analysis of provisions such as reforms in Targeted Public Distribution System through delivery to the outlets, computerization, grievance redressal mechanism through call centers and help lines, constitution of State Food Commission to review and monitor implementation,

obligation of Central and State Government, disclosure of records to public, conducting social audit, setting up Vigilance Committees and adhering to the strict penalty<sup>25</sup> with the help of strong consumer movement, makes it clear, if implemented effectively law will reach to its success.

If the legislatures in years to come worked on the law in its true sense, the political leaders do the politics in its real sense, the citizens of India, the world and the history will remember India to ignite 'economic engine' nothing else but the health.

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# Finance and Inclusive Development

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**ABSTRACT :** *By financial inclusion, we mean the delivery of financial services, including banking services and credit, at an affordable cost to the vast sections of disadvantaged and low-income groups who tend to be excluded. The various financial services include access to savings, loans, insurance, payments and remittance facilities offered by the formal financial system.*

India is one of the largest and fastest growing economies of the world, but what has been the most disturbing fact about its growth is that its growth has not only been uneven but also discrete. It has been uneven in the sense that there has been no uniformity in its growth performance and it has been discrete and disconnected with regard to growth and distribution of growth benefits to certain sectors of economy.

India needs inclusive growth in order to attain sustainable development and equitable distribution of wealth and prosperity. Achieving inclusive growth is important and one of the biggest challenges for India. The challenge is to take the levels of growth to all sections of the society and to all parts of the country.

Thus the need for inclusive growth comes in the picture of Indian economic development. It plays a very crucial role in the process of economic growth. Therefore, the present study focuses on need for inclusive growth. The main theme of the paper is to evaluate the role and performance of financial inclusion in India.

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## 1. Introduction

India is one of the largest and fastest growing economies of the world, but what has been the most disturbing fact about its growth is that its growth has not only been uneven but also discrete. It has been uneven in the sense that there has been no uniformity in its growth performance and it has been discrete and disconnected with regard to growth and distribution of growth benefits to certain sections of society. As poverty, deprivation and exclusion from the development process are substantially overlapped and correlated with financial exclusion; driving financial inclusion for inclusive growth is extremely meaningful. Therefore, there may be an intricate two-way relationship between financial inclusion and inclusive growth. Since wellbeing of population depends mainly on income, health, education and housing etc; access to financial services can as well be considered as a basic ingredient of human well-being. Without broad and easy access to finance, the adverse consequences can be more intense for the rural farmers, small business sector, urban poor and other poorer sections of the society.

Capital Formation is essential for inclusive and sustainable growth. It can be achieved through credit and financial services. Therefore, well-functioning financial system should create equal opportunities, which enable the socially and economically excluded people to participate in the economy and contribute for the growth. Thus the need for inclusive growth comes in the picture of Indian economic development.

In most developing economies, financial services are only available to a minority of the population, frequently to only a very small minority. Although financial sectors are expanding as these economies grow, financial assets usually

remain highly concentrated in the hands of a few. The majorities of the people in developing countries have no savings accounts, do not receive credit from a formal financial institution, and have no insurance policies. In this connection, Kofi Annan, former United Nations (UN) Secretary General said, *“The stark reality is that most poor people in the world still lack access to sustainable financial services, whether it is savings, credit or insurance. The great challenge before us is to address the constraints that exclude people from full participation in the financial sector... Together; we can and must build inclusive financial sectors that help people improve their lives.”*

## 2. Objectives

In this paper, an effort has been made to understand the financial inclusion as an instrument to attain inclusive growth. The specific objectives of the research paper are as follows.

1. To understand the meaning of financial inclusion.
2. To study the need and role of financial inclusion in inclusive growth.
3. To know the extent of financial inclusion in India.
4. To study the government measures towards financial inclusion

## 3. Meaning and Need for Inclusive Growth

Financial inclusion denotes delivery of financial services at an affordable cost to the vast sections of the disadvantaged and low-income groups. The various financial services include credit, savings, insurance and payments and remittance facilities. The objective of financial inclusion is to extend the scope of activities of the organized

financial system and to include it within ambit of people with low incomes. By financial inclusion, we mean the delivery of financial services, including banking services and credit, at an affordable cost to the vast sections of disadvantaged and low-income groups who tend to be excluded. The various financial services include access to savings, loans, insurance, payments and remittance facilities offered by the formal financial system.

**Rangarajan Committee (2008)** viewed financial inclusion as *“The process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost”*. In simpler terms, financial inclusion is about including the excluded in the financial system of the country, and to ensure that their financial & social security needs are taken care of through appropriate financial service providers.

Reserve Bank of India (RBI) has formulated the policy to provide banking services at an affordable cost to the large sections of the disadvantaged and low income groups. Reserve Bank of India (RBI) defines financial inclusion as *“It is the process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups such as weaker sections and low income groups in particular at affordable cost in a fair and transparent manner by mainstream institutional players”*.

In recent years, India has adopted an approach to establish the basic right of every people to have access to a bank account. This approach is based on fundamental principle of 5A's i.e. **Awareness, Availability, Adequacy, Affordability and Accessibility**. This approach ensures that adequacy and availability of basic financial services to all sections of the society, increasing awareness of such financial services, affordability and accessibility of financial products by all sections of the society.

#### 4. Need of Financial Inclusion

India needs inclusive growth in order to attain rapid and disciplined growth. Inclusive growth is necessary for sustainable development and equitable distribution of wealth and prosperity. Achieving inclusive growth is important and is one of the biggest challenges for India. The challenge is to take the levels of growth to all sections of the society and to all parts of the country. Rapid growth in the rural economy, sustainable urban growth, infrastructure development, reforms in education, health, ensuring future energy needs, a healthy public-private partnership, intent to secure inclusivity, making all sections of society equal stakeholders in growth, and above all good governance will ensure that

India achieves what it deserves. The main thrust areas for need of inclusive growth can be summarized as below:

- i) Removal of poverty and unemployment
- ii) Removal of income inequalities
- iii) Agricultural Development
- iv) Reduction in regional disparity
- v) For social sector development
- vi) Protecting environment

However, for attaining the objectives of inclusive growth there is a need for resources, and for resource generation and mobilization financial inclusion is required. It plays a very crucial role in the process of economic growth. Financial inclusion through appropriate financial services can solve the problem of resource availability, mobilization and allocation particularly for those who do not have any access to such resources.

#### 5. Extent of Financial Inclusion in India

Financial inclusion has always been accorded high importance by the Reserve Bank and Government of India to aid the inclusive growth process for the economy. The history of financial inclusion in India is actually much older than the formal adoption of the objective. The nationalization of banks, Lead Bank Scheme, incorporation of Regional Rural Banks, Service Area Approach and formation of Self-Help Groups all these were initiatives aimed at taking banking services to the masses.

##### a) Expansion of Branches of Scheduled Commercial Banks

Nationalization of commercial banks is a pioneer step in India, which extends the accessibility of banking services to the mass people in the country. At the time of nationalization of commercial banks, in 1969, there were 8,826 bank branches of scheduled commercial banks in India. In November 2005, banks were advised to make available a basic banking ‘no-frills’ account with low or nil minimum stipulated balance as well as charges to expand the outreach of such accounts to vast sections of the population. According to the information available with the Reserve Bank, about five lakh no-frill accounts have been opened until March 31, 2006, of which about two-third are with the public sector and one-third with the private sector banks. Still, majority of the poor people particularly from rural areas in the country do not have access to the banking services. Following table shows number of branches of scheduled commercial banks in rural, semi-urban, urban and metropolitan areas in India.

**Population Group-Wise Number of Branches of  
Scheduled Commercial Banks**

(Number)

| Year | Rural | Semi-Urban | Urban | Metropolitan | Total |
|------|-------|------------|-------|--------------|-------|
| 1995 | 33004 | 13341      | 8868  | 7154         | 62367 |
| 1996 | 32995 | 13561      | 9086  | 7384         | 63026 |
| 1997 | 32915 | 13766      | 9340  | 7529         | 63550 |
| 1998 | 32878 | 13980      | 9597  | 7763         | 64218 |
| 1999 | 32857 | 14168      | 9898  | 8016         | 64939 |
| 2000 | 32734 | 14407      | 10052 | 8219         | 65412 |
| 2001 | 32562 | 14597      | 10293 | 8467         | 65919 |
| 2002 | 32380 | 14747      | 10477 | 8586         | 66190 |
| 2003 | 32303 | 14859      | 10693 | 8680         | 66535 |
| 2004 | 32121 | 15091      | 11000 | 8976         | 67188 |
| 2005 | 32082 | 15403      | 11500 | 9370         | 68355 |
| 2006 | 30106 | 15760      | 12200 | 11800        | 69866 |
| 2007 | 30248 | 16522      | 13070 | 12421        | 72261 |
| 2008 | 30772 | 17768      | 14333 | 13383        | 76256 |
| 2009 | 31453 | 19058      | 15374 | 14332        | 80217 |
| 2010 | 32473 | 20778      | 16810 | 15457        | 85518 |
| 2011 | 33909 | 23053      | 17749 | 16445        | 91156 |
| 2012 | 36428 | 25750      | 18980 | 17439        | 98597 |

**Source:** <http://www.rbi.org.in/scripts/PublicationsView.aspx?id=15187>

It is observed that number of bank branches in rural areas have been increased from 33004 in the year 1995 to 36428 in the year 2012 but per cent with total bank branches is decreased from 52.91 per cent to 36.94 per cent during same period. As on 31<sup>st</sup> March 2013, average population per bank is 12,100.

**b) Co operative Credit Institutions**

In India, cooperative movement was the first experiment towards financial inclusion in India. However, at present, the major concern for the policy makers is about the health of rural co-operative credit institutions in the country. At present, there are 96149 credit co-operatives in India, out of which, 1566 are urban credit co-operatives and 94531 are rural credit co-operatives. Again rural credit co-operatives divided in to four categories as State Co-operative Agriculture and Rural Development Banks (20), Primary Co-operative Agriculture and Rural development Banks (69), District Central Co-operative Banks (370) and Primary Agricultural Co-operatives (93413) Regional Rural

Banks (RRBs) are involved in promoting financial inclusion by opening 'No Frill Accounts, issuing Kisan Credit Cards (KCC).

**c) Total Number of Kisan Credit Cards (KCC) issued in India**

Kisan Credit Card is one of the important instruments of financial inclusion. The total number of

Kisan Credit Cards issued by Co operative Banks, Regional Rural Banks and Commercial Banks are shown in following table.

(Amount in Rs. Bn.)

| Issued By         | Co operative Banks | Regional Rural Banks | Commercial Banks | Total |
|-------------------|--------------------|----------------------|------------------|-------|
| No. of KCC        | 2961               | 1995                 | 6804             | 11760 |
| Amount Sanctioned | 106.4              | 115.2                | 695.1            | 916.8 |

**d) SHG-Bank Linkage Programme**

SHG-Bank Linkage is considered as a tool for alleviating poverty through empowerment of rural poor, especially women. It provides opportunities for the rural poor to participate in the development process. Within a short period of time, it has brought more and more rural people under sustainable development activities in the country. Following table shows the performance of Self-Help Group-Bank Linkage Programme in India.

**Self-Help Group-Bank Linkage Programme  
(Amount in ' Billion)**

| Year(end - March) | No. of SHGs Linked | Bank Loan | Refinance Assistance |
|-------------------|--------------------|-----------|----------------------|
| 1995-96           | 2635               | 0.04      | 0.04                 |
| 1996-97           | 3841               | 0.06      | 0.05                 |
| 1997-98           | 5719               | 0.12      | 0.11                 |
| 1998-99           | 18678              | 0.33      | 0.31                 |
| 1999-00           | 81780              | 1.36      | 0.98                 |
| 2000-01           | 149050             | 2.88      | 2.51                 |
| 2001-02           | 197653             | 5.45      | 3.96                 |
| 2002-03           | 255882             | 10.22     | 6.22                 |
| 2003-04           | 361731             | 18.56     | 7.05                 |
| 2004-05           | 539365             | 29.94     | 9.68                 |
| 2005-06           | 620109             | 44.99     | 10.68                |
| 2006-07           | 1105749            | 65.70     | 12.93                |
| 2007-08           | 1227770            | 88.49     | 16.16                |

|         |         |        |       |
|---------|---------|--------|-------|
| 2008-09 | 1609586 | 122.54 | 26.20 |
| 2009-10 | 1586822 | 144.53 | 31.74 |
| 2010-11 | 1196134 | 145.48 | 31.74 |
| 2011-12 | 1147878 | 165.35 | 30.73 |

Source: <http://www.rbi.org.in/scripts/PublicationsView.aspx?id=15192>,

The above table reveals that number of SHGs. under this programme has been increased rapidly. In the year 1995-96 the number of SHGs was 2635, bank loan and refinance assistance was Rs. 0.04 Bn. In the year 2011-12 the number is increased to 1147878, bank loans increased to Rs. 165.35 Bn. and refinance assistance to Rs. 30.73 Bn.

## 6. Government Measures

To extend the reach of banking to those outside the formal banking system, Government and Reserve Bank of India (RBI) are taking various initiatives from time to time, some of which are enumerated below.

1. Government had issued detailed strategy and guidelines on Financial Inclusion in October 2011, advising banks to open branches in all habitations of 5,000 or more population in under-banked districts.
2. Banks have been advised to ensure service area bank in rural areas and banks assigned the responsibility in specific wards in urban area to ensure that every household has at least one bank account.
3. With the objective of ensuring greater financial inclusion and increasing the outreach of the banking sector, banks were permitted by RBI in 2006 to use the services of intermediaries in providing financial and banking services through the use of Business Facilitators (BFs) and Business Correspondents (BCs).
4. Considering the need for close supervision and mentoring of the Business Correspondent Agents (BCAs) by the respective banks and to ensure that a range of banking services are available to the residents of such villages, Ultra Small Branches (USBs) are being set up in all villages covered through BCAs under Financial Inclusion.
5. All the 129 unbanked blocks (91 in North East States and 38 in other States) identified in the country in July 2009, had been provided with banking facilities by March 2012, either through Brick and Mortar Branch or Business Correspondents or Mobile van. As a next step, it has been advised to cover all those blocks with

BCA and Ultra Small Branch, which have so far been covered by mobile van only.

6. The objective of DBT Scheme is to ensure that money under various developmental schemes reaches beneficiaries directly and without any delay. The scheme has been launched in the country from January, 2013 and has been rolled out in a phased manner, starting with 26 welfare schemes, in 43 districts. The scheme is now being extended to additional 78 districts and additional 3 schemes from 1st July, 2013 and would be extended to the entire country in a phased manner.

## 7. Conclusion

Universal financial inclusion is both a national commitment and a policy priority. The Reserve Bank and the Government of India have taken several initiatives in this direction. The provision of BCs in several villages has created a sense of awareness among villagers about banking. However, major challenges remain as about 40 per cent of our population lacks access to even the simplest kind of formal financial services. In order to ensure that the financial inclusion initiatives fructify, there is a need to enlarge the number and value of transactions in no-frills accounts.

Financial inclusion is a strategy adopted by Reserve Bank of India (RBI) to achieve an inclusive growth in the country. If it is properly implemented and executed in every part of the country, then this can lift the standard of living of the majority of the poor people in the country. In this connection Dr. Y. V. Reddy, Former Governor, Reserve Bank of India said “*Financial inclusion is not a matter of philosophy but can lead to a win-win situation for the banks and the customers... Treat financial inclusion as investment for business. It's the mass movies that make money*”

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# Financial Inclusion by Adoption of New Banking Technologies

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**Abstract:** This article aims to analyze the role of Information Technology enabled Banking services and its impact on Financial Inclusion in the Indian Banking Sector. The study will focus on various delivery channels offered by the Indian Banking System. The Banking sector has experienced a tremendous growth by adopting various innovative techniques. The research will attempt to find how the future banking can cover large number of unbanked rural population in India so as to fulfill the aim of Financial Inclusion.

**Keywords:-** Information Technology in Banking, Innovations in Banking, Delivery Channels in Banking, Financial Inclusion

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## 1. Introduction

RBI has defined Financial Inclusion as “the process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups such as weaker sections and low income groups in particular, at an affordable cost in a fair and transparent manner by regulated mainstream institutional players.”

RBI ex-Governor Duvvuri Subbarao has stated that “Financial Inclusion is important because it is a necessary condition for equitable growth. Just about 40% of the population across the country has bank accounts. Millions of households across the country are thereby denied the opportunity to harness their earning capacity and entrepreneurial talent and are condemned to marginalization and poverty”.

Poverty and financial exclusion are the main features of socio-economic scenario of India in the last six decades after attaining independence. India’s Five year plans and development policies have introduced different anti-poverty plans, employment generation schemes with an aim to bring the poor into the main stream. But it is sad that one-third of world’s poor still live in India.

The banks act as a mobiliser of saving and an agent to allocate credit to manufacturing and service sector for income generation. The banking sector with its new innovative technologies can bring about required change; not hitherto achieved by governmental intervention. The co-operative movement, Regional Rural Banks and nationalized banks have not been able to reduce financial exclusion as desired by RBI.

So this paper intends to study how the banks and their emerging technologies will help the cause of financial inclusion.

## 2. Research Methodology

The researcher has collected information through various websites of banks, RBI website, magazines, journals, data bases like EBSCO, JSTOR and newspapers.

## 3. Literature Review

Minakshi Ramji(2009) defined “Financial inclusion is the timely delivery of financial services to the disadvantaged sections of society and financial exclusion would mean the inability of the disadvantaged to access financial services”. She had studied the process of financial inclusion in Gulbarga (Karnataka) after interviewing 999 respondents. She concluded that combining government programs (eg. NREGP) with the opening of savings account could encourage more unbanked population to first access and then use banking facilities for other purposes.

Eileen Fischer (2012) of York University states that throughout the world the migrant poor consumers are facing financial insecurity and deprivation as it is difficult to fulfill their consumption needs.

Shilpi Khandelwal (2012) stated that “the tremendous advances in technology and aggressive infusion of information technology has brought in a paradigm shift in banking operations”. The recent trends in e-banking have added strength to banking sector to do large scale payments electronically. This has improved the service quality offered by banks resulting in increased customer satisfaction, reduced cost and enhanced productivity. The author has suggested that the application of new technology has brought about a rapid change in banking business. The author has stated that “availability of ATM’s, plastic cards, Electronic Fund Transfer(EFT), Electronic Clearing Services, internet banking, mobile banking and phone banking has provided a wider range of services to customers”.

Alice Allan, Maud Massu and Christine Svarer in the Barclays (Banking for change) Report has extensively dealt on the topics of financial inclusion, financial exclusion and

the methods adopted by the Barclays Bank in the African continent to cover the unbanked population. The report states that “poor people need a range of services not just credit, given that their incomes are low, unpredictable and irregular” (Collins et.al, 2010).The report has quoted an Indian report that has emphasized “the need to accelerate domestic saving to finance capital accumulation and foster higher income and growth” (Tarlok singh, 2010).It further stresses that money saved by poor people can be used to finance the corporates.

The report has identified the barriers to financial inclusion. They can be mentioned as follows:-

- Lack of Financial Literacy
- Gender Discrimination
- Age Discrimination
- Low and unpredictable income
- Mistrust and inappropriate products
- Commercial viability

Olga Morawczynski, David Hutchful, Nimmy Rangaswamy and Edward Cutrell working with Microsoft Research India have dealt with many facets considered with financial inclusion and financial education alongwith contribution to Information Communication Technology Development (ICTD) literature.

The authors expressed that only access to banking channels as a major financial inclusion instrument is not so important. They commented that appropriate usage will have higher impact on creating wider financial inclusion.

The authors have dealt with the extensive role played by technology service providers such as Financial Information Network and Operations Ltd.(FINO) and A Little World (ALW) in financial inclusion. These companies are the provider of the platform to process remote branchless banking. The companies have an authority to handle Government to Person(G2P) payments in some areas by providing no frills savings account to large unbanked population.

The FINO’s Point Of Transaction (POT) is successful on account of following:-

- Extensive usage of widespread mobile network in India
- Consumer trust on fingerprint authentication mechanism.
- Transaction receipts are issued on the spot so as to avoid future disputes.

- Branchless Banking strategy through FINO agents increases the reach of banking in remote areas.
- Transaction costs are low; as operating cost of brick and mortar branches in remote villages is saved.

ALW has introduced a major cost reduction technique by using Near Field Communication (NFC) mobiles having a fingerprint authenticator, a contactless smartcard and a printer to process transactions.

Dr. Roshan Lal and Dr. Rajni Saluja (2012) have studied and analyzed the progress made by Indian banking industry in the field of technology adoption. The parameters considered were branch computerization, Automated Teller Machines, electronic payment methods etc. The authors have analyzed the problems faced by banks in technology adoption.

The authors stated that the e-banking products and services offered by Indian banks are as follows:-

- Automated Teller Machines (ATM)
- Internet banking
- Mobile banking
- Phone banking
- Electronic clearing services (ECS)
- Electronic clearing cards
- Smart cards
- Door step banking
- Electronic Fund Transfer

The authors have recommended that “e-banking services should be customized on the basis of age, gender, occupation etc. so that the needs and requirements of people are met accordingly.”

Thus adoption of new banking technologies can be helpful in financial inclusion.

#### 4. RBI views on adopting Financial Inclusion through adoption of new banking Technologies

RBI is the most important organization that is creating the roadmap to be followed by banks in India to adopt strategies for financial inclusion. Therefore, it is essential to study the views of RBI officials and various committees on this topic.

The RBI Committee on Customer Service (2011) in banks has stated that “rural customers see banks as vehicles of socio-economic development and expect a very pro-active and supportive role in this regard from them”. They further

suggested that the business should utilize mobile banking for delivering financial services at a reduced cost.

K.C.Chakraborty (2013) has quoted the World Bank Findex Survey (2012) report that “only 35% of Indian adults had access to bank account and 8% borrowed formally in the last 12 months”. He has specified that financial literacy makes people aware of new financial products and services leading to demand and use. Financial Stability and Development Council has developed a National Strategy for Financial Education (NSFE) to increase financial literacy of unbanked population.

The IT vision of RBI 2011-2017 states that “the role of IT in Banking needs to focus on

- Introducing technologies that balance 3 C’s Cost, Control and Customer Service.
- Adoption of technology based strategies for financial inclusion”.

5. Technological innovations by Banks to assist Financial Inclusion, using new delivery channels.

Sanjeev Kumar Gupta (RBI IT Department) has commented that Information Technology facilitates financial inclusion by reducing transaction cost for customers as well as making retail banking cheaper, easier and faster.

Technological innovations by Banks to assist financial inclusion can be discussed as follows:-

- Core Banking Solutions (CBS) offered by banking sector has improved effective delivery of services as customers can avail banking services from any branch other than where they have an account.
- ATMs are very useful for withdrawing money at any time.
- National Payment Systems

### **Electronic Payments**

Banks are encouraging customers to utilize electronic mode for various payments and increase paperless transactions.

### **Electronic Clearing Service (ECS)**

ECS is used for repetitive and periodic payments like individual payment of utility bills like electricity, phone, EMI on housing loan etc.. Institutions can use it for periodic bulk payments of salary, dividend, interest etc..

### **National Electronic Funds Transfer (NEFT)**

NEFT is an interbank electronic fund transfer from any bank branch to any other individual or company having account with other participating bank.

Real Time Gross Settlement System (RTGS) is useful as it is almost instantaneous transfer of funds.

### **• Point of Sale (POS) Terminals**

Over 5 lakh POS terminals in India enable customers to use credit/debit cards to settle payments for purchase of goods and services.

### **• Business Correspondent (BC) IT based model.**

Banks have to install offsite Real Time monitoring system by using Global Positioning system (GPS) and General Packet Radio services (GPRS) technologies through use of mobile and communication network.

UID (Adhar) based Micro ATM. Business Correspondent’s (BC’s) will be banker to Rural customers, who can use (POS) after authentication for deposit and withdrawal of funds. This will help in financial inclusion.

### **6. Application of technology- some corporate cases**

Allahabad Bank has 13 Financial literacy and credit counseling centres (FLCC) in Uttar Pradesh, West Bengal and Madhya Pradesh. It has four satellite branches, three mobile branches, covering 22 villages. It has utilized ICT based business correspondent model to 4169 villages. The bank has opened 218 ultra small branches (USB), where one officer visits the village on all working days with laptop having VPN connectivity to render all types of banking solutions.

NABARD- The apex body for rural development has offered smart card based ICT solution to many villages in association with the Aryavat Gramin Bank, for spreading financial inclusion. Further NABARD has established the Financial Inclusion Fund that has sanctioned about Rs 181.64 crores in the current year. The Financial Inclusion technology fund has also contributed Rs 365.49 crores, where by the Regional Rural banks and Cooperative banks are supported for establishing technology driven banking operations for spreading financial literacy.

### **White label ATMs.**

These are ATMs that are neither owned or operated by any bank. RBI has granted permission to non-banking companies to open white label ATMs in unbanked areas. Customers can make use of debit card of any bank to withdraw cash from such ATMs.

Tata Communication Payment Solution has received RBI permission to install 15000 ATMs in next three years. The company has installed 400 such ATMs, till now. It is the first company to operate such ATMs in India.

Other companies like Muthoot Finance, Prism Payments, AGS Transact, SREI Infrastructure are among 12 companies that have achieved in principle RBI approval for

installing White label ATM's to spread financial inclusion.(Economic Times, 31<sup>st</sup> October 2013)

### **HDFC bank's Milk to Money ATM's.**

HDFC bank has shown a new path leading to financial inclusion in the state of Gujarat(India).The bank has brought an Australian machine, that helps in immediate transfer of money to milk producers on delivery of milk.

The machine has an ATM machine, which has links with a 'Tonto' box, which is placed in milk society office. On delivery, farmers' milk is measured for weight as well as fat content. This information is transferred electronically to the society office. The officials authorize the bank for making payment to farmer. The amount is then immediately credited to farmer's account and he can immediately withdraw money from an attached ATM. HDFC Bank has already installed 37 such ATMs and has future plans to increase upto 250 by March 2013.(Business India , Oct 14-27, 2013)

### **Conclusion**

The New RBI Governor has agreed that, if foreign banks change their Indian Units into wholly owned subsidiaries, they will have to open at least 25 % new branches in unbanked rural areas (Tier 5 and Tier 6) as per guidelines given to Indian Banks also. This will enable to achieve RBI's aim of financial inclusion by permitting White label ATM's.

The Financial Literacy program will play an important role in integrating financial inclusion through emerging banking technologies and RBI dream of making available banking facilities to a village population of around 2000 people also will be fulfilled. If the RBI grants a banking license to Indian Post, this will help in achieving the aim of financial inclusion, as the wide spread rural network of postal services would be put to use. if new banking technologies are adopted by them.

RBI has adopted a Bank led model for financial inclusion, that also includes Non banking Finance companies to operate White label ATMs.

Nearly 2,68,000 banking outlets have been set up in villages, as on March 2013 as against 67694 banking outlets in villages in March 2010(RBI Bulletin October 2013).

The banks have to develop technology for increasing reachability to unbanked areas at the same time targeting cost minimization. The banks have to now adopt new Business models and tap various delivery channels like Business Correspondent model, Ultra small Branches, Biometric ATMs, etc.

Banks have to introduce new banking as well as insurance products to overcome Financial Exclusion.

As K.C Chakraborty(2013) has rightly said" For Banks, the focus has to be , on building a sustainable , scalable, and cost efficient Business delivery model by leveraging upon technology".

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# Finance and Inclusive Development of India

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**Abstract:** The ‘inclusive growth’ as a strategy of economic development received attention owing to a rising concern that the benefits of economic growth have not been equitably shared. Growth is inclusive when it creates economic opportunities along with ensuring equal access to them. Apart from addressing the issue of inequality, the inclusive growth may also make the poverty reduction efforts more effective by explicitly creating productive economic opportunities for the poor and vulnerable sections of the society. The inclusive growth by encompassing the hitherto excluded population can bring in several other benefits as well to the economy. The concept “Inclusion” should be seen as a process of including the excluded as agents whose participation is essential in the very design of the development process, and not simply as welfare targets of development programmes. Financial inclusion improved social and economic status of the poor and neglected segment of the society. Micro finance has emerged as one of the important instruments of poverty alleviation and empowering poor. The regulatory environment of micro finance sector is complex one which is also affected by the new policy regime. The private investors see micro finance as attractive commercial investment opportunities since the recovery of loans in SHG based micro financing has been highly satisfactory. Government of India is also promoting financial inclusion through its banking policies and encouraging micro financing through launching of several SHG based micro financing programmes and schemes.

Key Words: Financial, Inclusiveness, Transaction cost, self-help group

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## Introduction

Inclusive growth refers *both* to the pace and pattern of growth, which are considered interlinked and therefore, in need to be addressed together. The idea that both the pace and pattern of growth are critical for achieving a high, sustainable growth record, as well as poverty reduction, is consistent with the findings in the *Growth Report: Strategies for Sustained Growth and Inclusive Development* (Commission on Growth and Development, 2008). The commission notes that inclusiveness – a concept that encompasses equity, equality of opportunity and protection in market and employment transitions – is an essential ingredient of any successful growth strategy. Here we emphasize the idea of equality of opportunity in terms of access to markets, resources and unbiased regulatory environment for businesses and individuals. The inclusive growth approach takes a long term perspective as the focus is on productive employment rather than on direct income redistribution, as a means of increasing incomes for excluded groups. In the short run, governments could use income distribution schemes to attenuate negative impacts on the poor of policies intended to jump start growth but transfer schemes cannot be an answer in the long run and can be problematic also in the short run.<sup>5</sup> In poor countries such schemes can impose significant burdens on already stretched budgets and it is theoretically impossible to reduce poverty through redistribution in countries where average income falls below US\$ 700 per year. According to a recent OECD study, even in developed countries, redistribution schemes cannot be the only response to rising poverty rates in certain segments of the population.

## Financial Inclusion for Inclusive Growth

The challenges of achieving more inclusive growth can be met by policies that encourage easier and affordable access to financial services. Both theoretical and empirical researches highlight the role of financial development in facilitating economic development. At the cross-country level, evidence indicates that various measures of financial development are positively related to economic growth. The cross-country data and evidence from specific policy experiments suggest that more developed financial systems are associated with lower inequality and lower financial exclusion. The impact through the mechanism of financial markets may be more sustainable than the grants and subsidies. Hence, if financial market frictions are not addressed, redistribution approach for equality may have to be endlessly repeated, which could result in damaging incentives to work and save. (World Bank, op cit). The financial development and improved access to banking and related services not only accelerate economic growth but also reduce income inequality and poverty. Without inclusive financial systems, the financially excluded individuals and enterprises with promising opportunities are limited to their own savings and earning. Increased market imperfections further have adverse impact on inclusive growth.

## Financial inclusion

The definitional emphasis of financial inclusion varies across the countries and geographies, depending on the level of social, economic and financial development; the structure of stake holding in the financial sector; socio-economic characteristics of the financially excluded

segments and also the extent of the recognition of the problem by authorities or governments. Rangarajan Committee on Financial Inclusion (2008) defined it as a “The process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost”. Another notable definition is “Financial inclusion is the process of ensuring access to appropriate financial products and services needed by vulnerable groups such as weaker sections and low income groups at an affordable cost in a fair and transparent manner by mainstream Institutional players.” (K.C. Chakrabarty, 2009).

### **Financial inclusion for inclusive growth**

Financial inclusion is necessary for inclusive growth. Growth is inclusive when there is equality of economic opportunities. The seeds of financial inclusion were sown over 35 years ago when rural banks were established throughout the country. The branch network which was just 8000 in 1969 when banks were nationalized now has increased to more than 87000 because of the banking industry coming forward to take up social responsibilities. Still numerous villages do not have any access to the banking facilities.

Financial inclusion is integral to the inclusive growth process and sustainable development of the country. However, the financial inclusion models that banks come up with should be replicable and viable across the country. The Finance Minister said that although the banking network has rapidly expanded over the years, the key challenge would be to extend the banking coverage to include the large population living in 6 lakh villages in the country. Expressing his immense confidence in the Indian banking system to deliver on the plan for financial inclusion, Mr. Mukherjee said that the system which demonstrated its resilience in the face of the recent global financial crisis, should adopt strong and urgent measures to reach the unbanked segment of society and unlock their savings and investment potentials. To tap the fortune at the bottom of the pyramid, he recommended robust electronic transfers between bank branches located in the rural hinterland. This will facilitate the rural customers to transfer their income and conduct financial transactions seamlessly. He urged the private sector to support the designing of physical products including devices, software and financial services, training and capacity building so as to create a large manpower pool including business correspondents and develop a business plan to tap the local talent that exists in the rural areas.

Dr Janmejaya Sinha, Chairman, CII Taskforce on Financial Inclusion and Chairman (Asia Pacific), The Boston Consulting Group said that 135 million of the 204 million households in the country face financial inclusion. Now, with 570 million people in the country being in the 0-25 age

group, a very large segment would be entering the workforce in the coming years. Their financial inclusion at this stage would be of critical importance in the context of inclusive growth process and sustainable development. He further said that financial illiteracy is a key stumbling block in furthering financial inclusion. This has led to the financial illiterate segment making negative savings in many cases. He added that banks need to view the situation as not an obligation to be met but an opportunity that is to be weaved into their business strategies. He felt that a pro-active approach will see the banking network expanding in an all-inclusive manner like the telecom sector did. He also set a five point agenda for financial inclusion, which called for-

- (i) Increasing overall consciousness of the need for financial inclusion;
- (ii) Increase in wireless and broadband connectivity in the rural areas to support rural banking;
- (iii) spread of financial literacy programmes;
- (iv) Greater experimentation for financial inclusion through business correspondents, self-help groups, etc.
- (v) Greater collaboration between the key stakeholders in the banking system.

Ms Chanda Kochhar, Chairperson, CII National Committee on Banking and Managing Director and CEO, ICICI Bank said that with a low ratio of one bank branch for 16,000 people, financial inclusion is far-fetched today. But, the idea of financial inclusion should be broad-based, such that people are able to not only access credit, but also fetch various financial services and products through the banking access point. She also said that at the micro-level, the financial services providers should aim for a holistic approach that meets the different financial needs of the target customers, address not just rural but also large urban excluded segments, reduce cost of transactions with proper technology adoption and support the development of support infrastructure.

In his Budget Speech for the year 2011-12 the Finance Minister stated that the Government has decided to provide appropriate banking facilities to the habitants having population in excess of 2000, as per 2001 census, by March 2012. For this purpose 73000 such habitants all over country have been identified and allocated to public sector banks, regional rural banks, private sector banks and co-operative banks for extending banking services by using the services of business correspondents and other models, with appropriate technology back up by March 2012.

The banks have already covered 29,000 villages by March 2011 and it is hoped that the remaining 44,000 villages would be covered by March 2012. Self help groups are one of the few channels through which financial inclusion can be accelerated. The banks in general can do more bringing

the banking services to the door steps of the under privileged through Financial Inclusion Plan.

### **Inclusive Growth : Role of Financial Sector**

There are supply side and demand side factors driving Inclusive Growth. Banks and other financial services players largely are expected to mitigate the supply side processes that prevent poor and disadvantaged social groups from gaining access to the financial system. Access to financial products is constrained by several factors which include: lack of awareness about the financial products, unaffordable products, high transaction costs and products which are not convenient, inflexible, not customized and of low quality.

Financial Inclusion promotes thrift and develops the culture of saving and also enables efficient payment mechanism strengthening the resource base of the financial institution which benefits the economy as resources become available for efficient payment mechanism and allocation. The empirical evidence shows that countries with large proportion of population excluded from the formal financial system also show higher poverty ratios and higher inequality. If we are talking of financial stability, economic stability and inclusive growth with stability, it is not possible without achieving Financial Inclusion.

Thus, financial inclusion is no longer a policy choice but is a policy compulsion today. And banking is a key driver for inclusive growth. However, we must bear in mind that apart from the supply side factors demand side factors, such as lower income and /or asset holdings also have a significant bearing on inclusive growth. Owing to difficulties in accessing formal sources of credit, poor individuals and small and macro enterprises usually rely on their personal savings or internal sources to invest in health, education, housing and entrepreneurial activities to make use of growth opportunities.

### **Conclusion**

Financial inclusion has improved social and economic status of the poor and neglected segment of the society. Micro finance has emerged as one of the important instruments of poverty alleviation and empowering poor. The regulatory environment of micro finance sector is complex one which is also affected by the new policy regime. The private investors see micro finance as attractive commercial investment opportunities since the recovery of loans in SHG based micro financing has been highly

satisfactory. Government of India is also promoting financial inclusion through its banking policies and encouraging micro financing through launching of several SHG based micro financing programmes and schemes. Some of the important SHG based micro finance programmes and schemes are running with the collaboration of NGOs and other SHG facilitators. The need for capacity building and training of NGOs, micro financial institutions and other service providers is imperative besides formation and strengthening of SHG federations. Therefore, it is imperative to promote thrift and credit societies on SHG patterns and they should be bank linked for availing credit and establishing micro enterprises. The issues and challenges in the growth and success should deal with participatory approach. More emphasis is required to develop and promote micro financing programmes and schemes in eastern and northern India since the geographical outreach of micro financing in these regions is found to be very limited.

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# Inclusive Growth : Role of Financial Sector

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**Abstract:** The paper highlights on the importance of inclusive growth. Growth is inclusive when it creates economic opportunities along with ensuring equal access to them. The paper brings out the role played by financial sector in the financial inclusion efforts in India and the bottlenecks and strategies in achieving financial inclusion.

Financial inclusion has recently been emphasized as an important policy option aimed at alleviating poverty, minimizing social exclusion, and enhancing Economic Growth.

**Key words:** Financial inclusion, inclusive growth.

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## 1) Introduction

Inclusive growth is a part of economic development. It is imperative for achieving the equity objective. It creates new economic opportunities and ensures equal access to all segments of the society, particularly the poor. For increasing welfare and well-being of the society at large; the growth must be sustainable and inclusive i.e. economic growth should benefit all citizens, everyone should have equal access to opportunity. From an annual average growth rate of 3.5 percent during 1950 to 1980, the growth rate of Indian economy accelerated to around 6.0 percent in the 1980's and 1990's. In 2006-07 the Indian economy grew at a higher rate of 9.6 percent. Along with growth; the per capita income of the country also increased substantially in the recent years. But despite the impressive numbers; growth has failed to be sufficiently inclusive. Agriculture sector which provides employment to around 60 percent of the population lost its growth momentum from that point, apprehension is that even additional investment in agriculture may add only 0.24 percentage point to GDP which is very less. The approach paper to the eleventh plan indicated that the absolute number of poor is estimated to be approximately 300 million in 2004-05.

All this suggests that to pursue the objectives of providing its citizens with the capabilities, opportunities and also to enable them to exercise their rights, rapid and inclusive growth is a must.

The challenges of achieving more inclusive growth can be met by policies that encourage easier access to financial services. Inclusive growth needs financial institution to be strong and efficient and access to be provided to formal financial services to the bottom of the pyramid and help in improving their standard of living. Taking banking services to the common man increases their saving capacity and leads to overall economic growth. The paper highlights on role of financial sector in promoting inclusive growth; various strategies, policy initiatives and efforts of authorities to improve access to affordable financial services.

## Objectives

- 1) To highlight the importance of inclusive growth.
- 2) To highlight the role of financial services vis-a-vis inclusive grow.
- 3) To identify the main challenges for banks to achieve inclusive growth.
- 4) To analyse various strategies of government towards financial inclusion.

Research methodology:-

The study is based on secondary data collected mainly from books, journals, reports and electronic media.

## 2) Financial Inclusion

Financial inclusion helps the sustainable development of the country, through the available financial services to the unreached people with the help of financial institutions. Financial inclusion can be defined as an easy access to formal financial services and their usages by all members of the economy. The committee of financial institution of government of India has defined financial inclusion as "the process of ensuring timely access to financial services and adequate credit where needed by vulnerable groups such as the weaker sections and low income groups at an affordable costs. Access to financial services promotes social inclusion and builds self-confidence and empowerment.

Financial institutions have a vital role to play in promoting inclusive growth. Efforts are seen at domestic and global levels to encourage financial institutions to take up larger responsibilities in including the financially excluded lot. Financial institutions can promote inclusive growth through financial inclusion. Financial inclusion is an inclusive development and poverty reduction strategy. [Table-1 in Annexure-1]

Financial inclusion is intended to connect people to banks with consequential benefits. Ensuring that the financial system plays its due role in promoting inclusive growth is one of the biggest challenges facing the emerging



economics. Financial development creates enabling conditions for growth by providing access to easy and affordable credit and other financial services to the poor and vulnerable section of society.

### **2.1 Initiatives for financial inclusion in India**

The broad strategy for financial inclusion in India in recent years comprises the following:

- 1) An expanded bank branch network and new organizational forms like RRB's.
- 2) A greater focus on credit.
- 3) Lending targets directed at a range of priority sectors such as agriculture, weaker sections of the population etc.
- 4) Interest rate ceilings for vulnerable sections.
- 5) Advising banks to open a basic banking 'no frills' account.
- 6) Using technology for furthering financial inclusion.
- 7) Emphasis on financial literacy and credit counseling.
- 8) A dominant perspective that finance for rural and poor people was a social obligation and not a potential business opportunity.

### **3) Financial Inclusion and Inclusive growth in India**

While India has witnessed unprecedented economic growth in the recent past, the benefits of economic growth have not equitably reached to different parts of our society. India being a socialist democratic republic, the government policies should ensure equitable growth of all sections of the economy. If policies that bring about economic growth do not benefit the people in a wide and inclusive manner they will not be sustainable. Inclusive growth is the only just and equitable way with which any society can grow. With only 34% of population engaged in formal banking, India has 135 million financially excluded households, the second highest number after China. In India, the financially excluded section comprises largely rural masses, comprising marginal farmers, landless laborers, self-employed and unorganized sector enterprises, urban slum dweller, migrants, ethnic minorities and socially excluded groups, senior citizens and women. The situation assessment survey of farmers conducted in the year 2003, indicated that 51.4% of the farmer households were financially excluded. The world bank-NCAER RFAS 2003 (RFAS – rural finance access survey) reveals that rural banks serve primarily the needs of the richer rural borrowers; 66% of larger farmers have a deposit account and 44% have access to credit.

Meanwhile the rural poor faces severe difficulties in accessing savings and credit from the formal sector; 70% of marginal / landless farmers do not have a bank account and 87% have no access to credit from a formal sector.

In the Draft approach paper to the eleventh five year plan the planning commission has emphasized the need for faster and greater inclusive growth during the 11<sup>th</sup> five year plan period. It is in this context that financial inclusion should be aimed at inclusive growth in the Indian context. Select macro economic and financial indicators of Indian Economy are presented here below in Table-2 [Annexure-2]

### **4) Issues and challenges**

India currently faces several issues and challenges in the area of financial inclusion for inclusive growth. Salient among them are stated as below.

#### **1) Insufficient distribution of banking services**

Though after nationalization of major banks in 1969, there was a greater thrust to branch expansion in the rural and semi-urban areas, but compared to 70% of population living in rural areas; only 52% of banks branches are in these areas.

#### **2) Regional distribution of banking services**

The study of distribution of banking services shows that there are certain under-banked states such as Bihar, Odissa, Rajasthan, U.P., Chhattisgarh, Jharkhand, West Bengal and large number of north eastern states, where the average population per branch office continues to be quite high compared to national average of 15000 people per bank branch.

#### **3) Poverty levels**

Poverty levels are having direct relationship with the progress of financial inclusion. It is observed that financial inclusion increases with the reduction in poverty levels. So a multifold strategic approach for financial inclusion should be adopted in poverty dominated areas.

#### **4) Demand side barriers**

They include

- (i) Low literacy levels, lack of awareness and / or knowledge / understanding of financial products.
- (ii) Irregular income, frequent micro-transactions.
- (iii) Lack of trust in formal banking institutions, Cultural obstacles.

#### **5) Supply side barriers**

- (i) Outreach (low density areas attractive and low income population are not attractive for the provision of financial services and are not

financially sustainable under traditional banking business models.)

- (ii) Regulation (frameworks are not always adopted to local contexts)
- (iii) Age factor (financial service providers usually target the economically active population, often overlooking the design of appropriate products for older or younger potential customers. banks do not see any business from them).
- (iv) Bank charges also have a disproportionate effect on people with low income.

Though a lot has been done to bridge the gap between the formal financial institutions and the rural people needs, still creation of public awareness is warranted for making people (particularly poor) realize about the availability of financial services and products. Banks are gaining momentum in areas like opening up of new banking outlets in rural area, deploying new business correspondents (BC's), opening of new frill accounts, granting of more credit through GCC and KCC. This is shown in Table-3 (Annexure-3).

## **5) Strategies to achieve the target of complete financial inclusion**

### **(1) Change in the approach of banks**

Only access to credit or banking is not the financial inclusion. Banks must genuinely strive to provide the directed services under the category or scheme of financial inclusion to the rural population. Financial inclusion does not mean merely opening of saving account but it should aim at creation of awareness about the financial products, education and advice on money management, offering debt – counseling etc. by banks.

Bankers should view financial inclusion as a viable business proposition and adopt innovative methods to reach out to the poor.

### **(2) Relaxation in regulatory framework**

The RBI, initially in November 2005, set the population bench mark for taking its financial inclusion drive to the next level mandating all banks to reach out the villages, all habitations, with population in excess of 2000, as per the 2001 census. However, since 2011-12, the population bench mark is reduced to 1600 and above. On 11<sup>th</sup> august, 2012 the RBI asked banks to drop the 'No-frills' tag from the basic savings accounts. The RBI asked banks to provide the Zero—balance facility in the basic banking accounts along with ATM-cum-Debit cards without extra charge.

The finance ministry, very recently directed all banks to ensure that every household has at least one saving bank account by end of June 2012, a more seen as a precursor

to direct transfer of benefits under the government's financial inclusion plan.

### **(3) Steps taken by RBI**

- (a) The general purpose credit cards (GCC) are issued in the rural and semi-urban banks, which provide to the card holders revolving credit up to Rs. 25000 based on their income. The interest is charged at a reasonable rate.
- (b) Know your customer (KYC) process initiated by the RBI simplifies the procedure of opening accounts with balance less than Rs. 50,000. Similarly, the process to avail credit less than Rs. 1, 00,000 has also been simplified.
- (c) The RBI has introduced pilot projects in one district of each state to attain 100% financial inclusion.
- (d) The RBI is taking steps to improve financial literacy in the country.

### **(4) Self- help group – Bank linkage Programme (SBLP)**

For expanding financial access and usage for the poor a major institutional innovation in India has been the SBLP.

It helps in providing financial services to the poor. The basic tenet of SHGs being savings led credit product, credit discipline becomes a norm for providing financial services to the poor.

### **(5) Liberalization of Business correspondents model**

In January 2006 RBI permitted banks to engage as business facilitator and business correspondent (BC) as intermediaries for providing financial and banking services. The (BC) model allows banks to provide door step delivery of services specially 'Cash-in –cash – out transaction' at a location much closer to the rural population. As on March 31<sup>st</sup> 2011, domestic commercial banks have reported deploying 58,361 BC's providing banking services in 76,081 villages .

### **(6) Use of technology and micro credit**

Banks have been advised to make effective use of information and communication technology (ICT) to provide door step banking services through the BC model where the accounts can be operated by illiterate customer by using bio-metrics, thus ensuring the security of transaction and enhancing confidence in the banking system.

### **(7) Creation of funds for financial inclusion**

Financial inclusion fund and financial inclusion technology development fund were created by central government for meeting the cost of development and promotional and technology interventions. A fund of Rs.

5,000 crores in NABARD was also created to enhance its refinance operations to short term co-operative credit institutions.

#### **(8) NGO's and MFI's can be roped in**

For furthering Financial Inclusion process, help of select NGO's and MFI's can be sought to accelerate the process of Financial Inclusion especially in rural areas. Some specific incentives can be given to them in getting their support.

#### **(9) Involvement of Education Sector for furthering Financial Inclusion**

Efforts must be made to involve educational institutions, particularly college students through NSS programmes to take a Financial Inclusion drive and try to create public awareness about various financial products.

#### **(10) Adequate Publicity of Financial Inclusion Drive**

In a country like India where masses are ignorant about various financial services available to them, it becomes the duty of all the concerned to publicize the concept of Financial Inclusion, various benefits associated with it and how this process will result in accelerating economic growth, which will be sustainable and inclusive.

#### **Conclusion**

Financial inclusion is the road which India needs to travel towards becoming a global player. An inclusive growth will act as a source of empowerment and allow people to participate more effectively in the economic and social process. Financial access will also attract global market players to our country that will result in increasing employment and business opportunities. If the government is advocating inclusive growth and sustainable development, it is not possible to attain without delivering financial inclusion. Empirical evidences have shown that countries with large proportion of population excluded from financial system have shown higher poverty ratios. Thus, financial inclusion is no more a policy choice, but a policy compulsion to attain inclusive growth.

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### Annexure-1

**Table-1 Financial Inclusion and Development Indicators**

| Country         | Composite Index of Financial Inclusion (Percentage of population with access to Financial services) | Poverty (Percentage of population below poverty line) | Unemployment during 2000-2004. | Gini Index    |
|-----------------|---|---|--------------------------------|---------------|
| India           | 48  | 28.6(1999-00)   | 4.3                            | 32.5(1999-00) |
| Bangladesh      | 32  | 49.8(2000)  | 3.3                            | 31.8(2000)    |
| Brazil          | 43  | 22.00(1998)   | 4.7                            | 58.0(2003)    |
| China           | 42  | 4.6(1998)   | 4.0                            | 44.7(2001)    |
| Indonesia       | 40  | 27.1(1999)  | 9.9                            | 34.3(2002)    |
| Korean Republic | 63  | --  | 3.5                            | 31.6(1998)    |
| Malaysia        | 60  | 15.5(1989)  | 3.5                            | 49.2(1997)    |
| Philippines     | 26  | 36.8(1997)  | 9.8                            | 46.1(2000)    |
| Sri Lanka       | 59  | 25.00(1995-96)  | 9.0                            | 33.2(1999-00) |
| Thailand        | 59  | 13.10(1992)   | 1.5                            | 42.8(2002)    |

Source : World Bank (2006) and (2008)

### Annexure-2

**Table-2 : India's Position Compared With Other Countries.**

| SI. No. | Country     | Number of Branches | Number of ATMs | Bank Credit | Bank Deposits |
|---------|-------------|--------------------|----------------|-------------|---------------|
| 1       | India       | 10.91              | 5.44           | 43.62       | 60.11         |
| 2       | Austria     | 11.81              | 48.16          | 35.26       | 32.57         |
| 3       | Brazil      | 13.76              | 120.62         | 29.04       | 47.51         |
| 4       | France      | 43.11              | 110.07         | 56.03       | 39.15         |
| 5       | Mexico      | 15.22              | 47.28          | 16.19       | 20.91         |
| 6       | U.K.        | 25.51              | 64.28          | 467.97      | 427.49        |
| 7       | US          | 35.74              | 173.75         | 46.04       | 53.14         |
| 8       | Korea       | 18.63              | 250.29         | 84.17       | 74.51         |
| 9       | Philippines | 7.69               | 14.88          | 27.57       | 53.02         |

Source : World Bank, Financial Access survey (2010).

Annexure-3

Table 3 : Progress of Financial Inclusion Plan As On March 31<sup>st</sup>,2012.

| SL. NO. | Banking Outlets                                     | Amount              |
|---------|---|---------------------|
| 1       | Rural Branches                                      | 24,701              |
| 2       | BC Outlets  | 1,20,355            |
| 3       | Other Modes   | 2,478               |
| 4       | Total   | 1,47,534            |
| 5       | Total Number of “No Frill Accounts”                 | 103.21 million      |
| 6       | Operations in NFA(2011-12)                          | (increase of 39.6%) |
| 7       | Outstanding Balance                                 | Rs.932.89 billion   |
| 8       | Overdrafts  | Rs. 3.39 billion    |
| 9       | Transactions Through ICT based BC outlets (2011-12) | 119.77 million      |
| 10      | KCC Credit  | Rs.2.15 million     |
| 11      | GCC Credit  | Rs.0.22 million     |

# A Perspective on all facets of Financial Inclusion

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**ABSTRACT :** Access to financial services not only supports economic efficiency and distributional equity but also contributes to financial stability and social cohesion. It is acknowledged that access to financial resources enhances the welfare of both producers and consumers.

Inclusion through State-driven interventions by way of statutory enactments and RFIs by a voluntary effort through the design and implementation of various strategies to bring hitherto financially excluded population. It is acknowledged that access to financial resources enhances the welfare of both producers and consumers. Access to the financial services helps individuals apply their skills in engaging in small entrepreneurial activities and thereby providing them enhanced opportunities to improve their income.

“Financial Inclusion” was formally articulated by Dr YV Reddy the then Governor RBI in the annual Policy Statement of 2005-06, Governor while recognizing the concerns in regard to the banking practices that tend to exclude rather than attract vast sections of population, urged banks to review their existing practices to align them with the objective of financial inclusion.

Financial inclusion refers to a process that ensures the ease of access, availability and usage of the formal financial system for all members of an economy. It facilitates efficient allocation of productive resources and thus can potentially reduce the cost of capital.

The RBI, In order to promote Financial Inclusion in an orderly manner, advised commercial banks including RRBs broad guidelines and expects formulating action plan so as to significantly accelerate the process of Financial Inclusion.

The Financial Inclusion 2020 Project of the **Center for Financial Inclusion** posts a global goal of full inclusion by the year 2020 as a challenging project.

This paper throws light on -all the aspects of **Financial Inclusion**, what **Financial Inclusion**, what are Financial Inclusion Plans- Progress Need for focused attention Financial Inclusion etc.

**KEY WORDS: Financial Inclusion, Process, MFIs, Initiative and Policy**

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## Full Paper

Developing countries of late have been attaching greater importance to finance in the pursuit of an effective means in capitalizing economic opportunities and addressing poverty. Access to financial services not only supports economic efficiency and distributional equity but also contributes to financial stability and social cohesion. It is acknowledged that access to financial resources enhances the welfare of both producers and consumers. Access to the financial services helps individuals apply their skills in engaging in small entrepreneurial activities and thereby providing them enhanced opportunities to improve their income. Easy, reliable and timely access to the finance reduces poverty through increased income and hence positively contributes to reduce the income inequality. In developing countries and transitional economies, experience, however, suggests that large numbers of households that are not considered poor or even low income by local standards, as well as most **Small And Medium Size Enterprises [SMEs]** are excluded at least from their access to credit. Most entrepreneurs working in the SME sector may have personal access to some financial services, but are often excluded from availing working and investment capital from **Rural Financial Institutions.( RFIs)**

Unrestrained access to public goods and services is considered to be *sine qua non* for an open and efficient society. Since financial services possess basic features of the public good, it is necessary that Governments can ensure Financial Inclusion through State-driven interventions by way of statutory enactments and RFIs by a voluntary effort through the design and implementation of various strategies to bring hitherto financially excluded population.

“Financial Inclusion” was formally articulated by Dr YV Reddy the then Governor RBI in the annual Policy Statement of 2005-06, Governor while recognizing the concerns in regard to the banking practices that tend to exclude rather than attract vast sections of population, urged banks to review their existing practices to align them with the objective of financial inclusion. The main features of the approach involve ‘connecting’ people with the banking system and not just credit.

Financial inclusion refers to a process that ensures the ease of access, availability and usage of the formal financial system for all members of an economy. It facilitates efficient allocation of productive resources and thus can potentially reduce the cost of capital.

An inclusive financial system can help reduce the role of informal sources of credit (such as money lenders) which are often found to be exploitative.

The importance of an inclusive financial system is widely recognized in the policy circle and become a policy priority in many countries including India.

The Financial Inclusion 2020 Project of the **Center for Financial Inclusion** posts a global goal of full inclusion by the year 2020 as a challenging project.

The Financial Inclusion perspective defines scale among **four core** dimensions, viz.

- [i] **What is provided:** A full range of services which includes a basic product in each of the four main areas, Savings, Credit, Insurance and Payments
- [ii] **How it is provided:** With quality, i.e. convenience, affordability, safety and dignity of treatment, and client protection
- [iii] **Who receives it:** Everyone who can use the services, including the poor, rural, informal and groups that are often discriminated against [women, ethnic, minorities, disabled] and
- [iv] **Who provides it:** A range of providers led by mainstream financial institutions, but also including organizations from the private, social and Government sectors.

These four dimensions together form the vision of a time when everyone will enjoy the benefits of financial services to make the most of their economic opportunities, protect themselves against vulnerability and improve the quality of their lives.

Thus, Financial inclusion refers to the policy goal of responsibly delivering a full range of formal financial services [savings, credit, insurance, remittance etc.] to all financially excluded households without discrimination, prioritizing vulnerable groups, such as weaker sections and low income groups... Affordable price, delivery with dignity, convenience, reliability, flexibility and continuity determine the quality of financial access.

Financial Inclusion connects the banked and unbanked sectors and enables the unbanked to become vibrant and productive participants in the economic and inclusive growth process. Financial Inclusion can unlock the vast hidden potential of savings, consumption and investment propensities of the poor households. Increasing Financial Inclusion would reduce the economic vulnerability of poor, alleviate poverty, improve the quality of life and promote inclusive growth. Studies show that access to financial services helps poor and low-income people use their labor and skill optimally, improve productivity of resources and income, smooth consumption flows, enlarge

and diversify enterprises and generate employment. Besides, it has positive spillover effects on their education and health. Consequences of financial exclusion compel poor to secure credit from informal sources at exorbitant rates, lead to general decline in investment, increased unemployment and according to some researchers financial exclusion lead to social exclusion and higher incidence of crime.

Financial Inclusion providing access to financial services for all, has gained prominence in the past few years as a policy objective in all countries. A cross-country analysis using Financial Access 2010 data indicates that a 1% change in GDP per capita is associated with a change of around 0.3% to 0.6% in the number of deposit accounts per 1000 adults. Commercial banks play a pivotal role in Financial Inclusion initiatives. The World Bank survey carried out in 142 economies reveals that commercial banks held 85% of total deposit volume and 96% of all deposit accounts. But in a number of economies, non-banking institutions play an important role in providing basic deposit services. For example, in countries like Chile, Spain and France, cooperatives or specialized State financial institutions hold more deposit accounts than commercial banks. Similarly, in a number of West African countries, such as Benin, Burkina-Faso, Ivory Coast and Niger, deposit-taking MFIs have more depositors than commercial banks, suggesting that non-banking institutions can play an important role in providing basic deposit services. The percentage of total volume of deposits held by banks and non-banking institutions on a global scale is individual deposits in commercial banks [62%] and business deposits in commercial banks [23%] whereas individual deposits and business deposits in non-banking institutions was 13% and 2% respectively. This suggests that MFIs in India can play important role in providing basic deposit services if appropriate regulatory framework and enabling environment is established

The ultimate goal of RFIs in promoting the financial inclusion through different approaches and business models would be to

- [i] progressively expand the coverage to those who have hitherto remained financially excluded
- [ii] deepen the integration of micro-finance with the formal financial sector through broader participation of commercial banks and expanded access to capital markets and
- [iii] encourage the use of technology and continued innovation

According to the survey report of the **Center for Financial Inclusion [2011]**, micro-finance professionals across the world have cited Client Financial Education as the top opportunity and limited financial literacy as the biggest obstacle in the path of achieving Financial Inclusion. A key finding of the survey was that MFIs should listen

and respond to clients with more demand-driven products. Service providers perceived the cost of establishing branches as the obstacle whereas investors, donors and support organizations were concerned about inadequacy of client protection than are service providers. Investors also perceived credit bureau as one of the top opportunities. Many respondents of the survey expected more and better regulation of MFIs but few wanted Government to be a provider of micro-finance. Mobile and agent banking were important and exciting opportunities. Low-income people needed more than credit and more demand-driven products. Expanding the product range along with improved demand-side information was an opportunity. MFI's single product approach and limited understanding of client needs were among the top obstacles. Mono-product approach, inadequate client protection, poor business practices and political interference were factors reported to contribute to crisis.

Literature on FI describes six important policy solutions to promote Financial Inclusion, such as

- [i] Financial identity
- [ii] Reforms of public sector banks
- [iii] Agent banking
- [iv] m-banking
- [v] Diverse service providers and
- [vi] Consumer protection.

Financial identity, among six policy solutions for expanding financial access, has implications for both supply and demand sides of the micro-finance sector whereas other five are primarily supply-side initiatives, viz, regulatory, technological or managerial.

#### **Basic Objectives:**

- i. To study all the aspects of Financial Inclusion
- ii. To analyse what Financial Inclusion is
- iii. To look into the India's Initiative and Policy
- iv. To know what are Financial Inclusion Plans-Progress
- v. To make Recommendations to Need for focused attention Financial Inclusion

#### **Methodology:**

This paper is based on desk research. Hence the information provided is based on thorough and voracious reading of various standard books and articles on the subject, a brief reference of which is provided at end of the paper.

#### **Micro-Finance and Financial Inclusion**

The Microcredit Summit claims that MFIs reach 154 million clients. The Financial Access Initiative estimates that

53% of world's adults do not use any formal or semi-formal financial services. The estimated unserved market is more than two billion people. Sometimes Financial Inclusion is used almost as a synonym for micro-finance, while FI in a comprehensive way is defined as, ' Full Financial Inclusion is a state in which all people have access to a full suite of quality financial services provided at affordable prices, in a convenient manner, and with dignity for the clients. Financial services are delivered by a range of providers, most of them private and reach everyone who can use them, including disabled, poor, rural and other excluded populations'. Ultimate goal of FI is universal financial access. MF can significantly contribute to Financial Inclusion by 2020 assigning priority to following critical aspects.

#### **Full-inclusion MFIs**

A full-inclusion financial institution addresses all the dimensions of Financial Inclusion. It is committed to serve the poor and offers full product suite along with ever-improving level of quality. It would strive to expand its frontiers through new product development and technologies so as to make services more affordable, more valuable and become capable of reaching excluded population. Only a few full-inclusion financial institutions exist today. Among them are Equity Bank of Kenya, BancoSol of Bolivia, Mibanco of Peru, Aceda Bank of Cambodia and Bank Rakyat Indonesia, all licensed commercial banks. These institutions are especially important for the future of Financial Inclusion because they participate in both the micro-finance industry and the mainstream financial sector. By their dedication to their target market these institutions continually demonstrate to the mainstream the viability of financial services for the poor. Because they pursue social aims in a commercial setting, they are well placed to be laboratories, not necessarily for the most extreme untested products, but for the kind of commercial R&D that develops viable business models around new products and technologies. Each of these institutions demonstrates what a truly double-bottom-line approach can do when commitment to clients is combined with financial discipline.

#### **India's Initiative and Policy**

India has a population of 1.21 billion but with less than one-quarter of adults having access to basic formal financial services. Over the past century, a range of innovative approaches to expanding access to finance for poor people has been pursued. Besides cooperatives, nationalized commercial banks and RRBs, in the 1980s social entrepreneurs conceptualized the concept of Self-Help-Groups [SHG] and operationalized the SHG-bank linkage program, under which commercial banks lend funds to groups of 10 to 20 women. Commercial banks should strengthen rural credit delivery system to achieve financial inclusion is today "*no longer an option but a compulsion*".



Government's policy has been to include at least 55.7 million hitherto financially excluded households by 2014. The remaining households, with such shifts as they may occur in the rural and urban populations, would be covered by 2015. Government has proposed to extend around Rs.700 crore to banks to put in place the necessary infrastructure. The IBA has drafted a manual for training the **Business Correspondents [BCs]** Indian Institute of Banking and Finance is engaged in training the BCs to responsibly perform the task. CRISIL is preparing a Financial Inclusion index, which would be used to review the performance of banks implementing the program and is to be used in the statement of intent by the Government to fix targets.

The RBI, In order to promote Financial Inclusion in an orderly manner, advised commercial banks including RRBs broad guidelines and expects formulating action plan so as to significantly accelerate the process of Financial Inclusion. The plan should emphasize

- [i] Implementation of the National Mission on Financial inclusion to facilitate people getting connected with banking system and avail a range of financial services.
- [ii] Credit delivery in rural areas to focus implementation of Service Area Credit Plans, provision of Kisan/General Purpose Credit Cards, simplification of KYC norms, opening 'no-frills' accounts with small overdrafts, using services of BCs and financing SHGs and MFIs .
- [iii] Banks to ensure continuity in the operation of 75 million no-frill accounts already opened with hardly any transactions in them.
- [iv] Addition of at least 250 rural household accounts every year in each of their rural and semi-urban branches.
- [v] RRBs to have separate exclusive targets for micro finance and financial inclusion.
- [vi] Banks to have a banking correspondent touch points in each of six lakh villages.
- [vii] Adoption of appropriate technology to enable the branch to go where the customer is present instead of the other way round.
- [viii] To designate at least one branch of the Lead Bank at block level as a nodal branch to address the issue of financially excluded. These branches should be adequately strengthened with technical staff for providing development service in the farm and non-farm sectors. All banks could make use of the services provided by such branches.
- [ix] RBI has identified 139 districts in 15 States as inadequately served by the banking system. Commercial banks to open branches in districts where the population of each branch is higher than the national average.
- [x] Services should move much closer to the customer either through mobile branches, satellite offices, extension- counters, SHGs or through Business Correspondents using technology to increase scale, access and reduce cost.
- [xi] The credit products have to be simple and cover all the needs of small borrowers.
- [xii] Formulating the Financial Inclusion Plan [FIP] aimed at providing appropriate banking services, including a savings-cum-overdraft account, a pure savings product [recurring or variable recurring deposits], remittance and payment services, insurance and entrepreneurial credit to the underprivileged inhabitations having population in excess of 2000 by March 2012 by either opening branches or through BCs and technologies that facilitate branchless banking at doorstep in the rural hinterland.
- [xiii] Unbanked villages numbering 72,950 across the country have been allotted to different commercial banks for coverage under the FIP.

#### **Banks' Response**

Acknowledging the importance of Financial Inclusion public sector banks in particular have significantly responded with regard to

- [i] opening 50.6 million 'no-frills' accounts [now 75 million] with overdrafts of Rs.27.54 crore as on March 2010.
- [ii] appointing and training BCs
- [iii] using FIF & FITF to extend benefit to 50,255 villages as on March 2010
- [iv] Identifying 431 districts in 18 States and five UTs for 100% FI coverage of which 204 districts already covered by March 2009
- [v] reaching 29,569 unbanked villages [against allotted 27,425] above 2000 population each and preparing roadmap to provide banking services under FIP and Planned to cover additional 43,381 in 2012. Banks are covering adjoining villages with population between 1000 and 2000 to optimally utilize Financial Inclusion infrastructure created by investing in technology, manpower, and BCs. Financial Inclusion plans include strategy adopted for enrolling and training BCs, rural branch managers, technology plans, awareness generation plans and suitable monitoring mechanism.
- [vi] reaching 160 remote unbanked villages for 100% FI under RBI's 'outreach program of financial inclusion & financial literacy'.

## Financial Inclusion Plans- Progress

As seen in the tables below the banks have been able to perform well and have increased their presence in all the areas. Total banking outlets in villages has increased by 200,760 in the three year period. The KCC (Kisan Credit Cards) has also increased by 9.48 million. The GCC (General Purpose Credit Card) has increased by 2.24 million. The

encouraging trend is that the Basic Savings Bank Deposit Accounts through BC (Business Correspondents) is more (68.00 million) than the Basic Savings Bank Deposit Accounts through branches of banks (40.61 million). This indicates that the BC concept has caught the imagination of the public and they are responding positively to this initiative of financial inclusion.

**Table – 1**  
**Financial Inclusion – Progress in Three Years**

| SR | Particulars  | Year ended Mar 10 | Year ended Mar 11 | Year ended Mar 12 | Year ended March 13 | Progress April 10- March 13 |
|----|--|-------------------|-------------------|-------------------|---------------------|-----------------------------|
| 1  | Banking Outlets in Villages - Branches                                   | 33,378            | 34,811            | 37,471            | 40,837              | 7,459                       |
| 2  | Banking Outlets in Villages - BCs  | 34,174            | 80,802            | 141,136           | 221,341             | 187,167                     |
| 3  | Banking Outlets in Villages - Other Modes                                | 142               | 595               | 3,146             | 6,276               | 6,134                       |
| 4  | Banking Outlets in Villages -TOTAL                                       | 67,694            | 116,208           | 181,753           | 268,454             | 200,760                     |
| 5  | Urban Locations covered through BCs                                      | 447               | 3771              | 5,891             | 27,143              | 26,696                      |
| 6  | Basic Savings Bank Deposit A/c through branches (No. In millions)        | 60.19             | 73.13             | 81.20             | 100.80              | 40.61                       |
| 7  | Basic Savings Bank Deposit A/c through branches (Amt. In billions)       | 44.33             | 57.89             | 109.87            | 164.69              | 120.36                      |
| 8  | Basic Savings Bank Deposit A/c through BCs (No. in millions)             | 13.27             | 31.63             | 57.30             | 81.27               | 68.00                       |
| 9  | Basic Savings Bank Deposit A/c through BCs (Amt. in billions)            | 10.69             | 18.23             | 10.54             | 18.22               | 7.53                        |
| 10 | BSBDA Total (in millions)  | 73.45             | 104.76            | 138.50            | 182.06              | 108.61                      |
| 11 | BSBDA Total Amt. (in billions)   | 55.02             | 76.12             | 120.41            | 182.92              | 127.90                      |
| 12 | OD facility availed in Basic Savings Bank Deposit A/c (No. In millions)  | 0.18              | 0.61              | 2.71              | 3.95                | 3.77                        |
| 13 | OD facility availed in Basic Savings Bank Deposit A/c (Amt. in billions) | 0.10              | 0.26              | 1.08              | 1.55                | 1.45                        |
| 14 | KCCs - (No. in millions)   | 24.31             | 27.11             | 30.24             | 33.79               | 9.48                        |
| 15 | KCCs - (Amt In billions)   | 1,240.07          | 1,600.05          | 2,068.39          | 2,622.98            | 1,382.91                    |
| 16 | GCCs - (No. in millions)   | 1.39              | 1.70              | 2.11              | 3.63                | 2.24                        |
| 17 | GCCs - (Amt In billions)   | 35.11             | 35.07             | 41.84             | 76.34               | 41.23                       |
| 18 | ICT A/Cs-BC- Transaction -No. in millions                                | 26.52             | 84.16             | 155.87            | 250.46              | 490.49                      |
| 19 | ICT A/Cs-BC- Transactions -Amt in billions                               | 6.92              | 58.00             | 97.09             | 233.88              | 388.97                      |

\*Source: Speech delivered by Dr. (Smt.) Deepali Pant Joshi, Executive Director, Reserve Bank of India at the Mint Conclave on Financial Inclusion, Mumbai on November 28, 2013.

### Need for focused attention

In order to create facilitating environment to significantly promote FI by 2015 focused attention should be paid to measures, viz.

[i] Rural households need to be linked to banking by first

allowing them a taste of technology that allows hassle free money transfer. Then it can try biometric ATM cards in rural areas where literacy reigns on a large scale after roping in rural customers to banks located in vantage points in rural areas or points bordering on them. Approach should necessarily be calibrated and gradual.

- [ii] Banks among them should share the experiences of pilot projects and those proved successful need to be replicated.
- [iii] Financial Inclusion Plan should be integrated with PLP of NABARD and DCP/AAP under Lead Bank Scheme at district level. FIPs include strategy adopted for enrolling and training BCs, rural branch managers, technology plans, publicity awareness generation plans, and suitable monitoring mechanism [iv] Minimum infrastructure support, viz. adequate road, rail, power, digital connectivity etc. are prerequisites for operation of a banking outlet.
- [v] Products that cater to the needs of the masses should be simple, flexible and affordable for the poor and low-income population.
- [vi] Efforts are needed to identify best delivery models/business models for Financial Inclusion. Banks have to adopt and experiment with several delivery models like satellite branches, mobile branches, business correspondents/POS, and mobile telephony services. The BC model coupled with ICT solutions has the potential to reach out to the hitherto unreachable.
- [vii] There is need to effectively implement Government sponsored programs to substantially increase income that can improve cash flow of poor and low income households and motivate them to operate their bank accounts on continuing basis.
- [viii] Currently the focus of the Financial Inclusion is mostly confined to ensuring a bare minimum access to a savings bank account, no-frill account to ensure access to credit. However, internationally financial exclusion has been viewed in a much wider perspective. Having a current/saving account on its own is not considered an accurate indicator of Financial Inclusion. There could be multiple levels of financial inclusion and exclusion. At one extreme, it is possible to identify the 'super-included' i.e. those customers who are actively and persistently courted by financial services and who have at their disposal a wide range of financial services and products. At the other extreme, there are financially excluded, who are denied access to even the most basic of financial products. In between these two are those who use financial services only for deposits and withdrawals of money and access to credit services. But these persons have only restricted access to financial system and may not have enjoyed flexibility of access as offered to more affluent customers.
- [ix] The adoption of comprehensive Financial Inclusion approach requires a clear national policy framework and a strategy on Financial Inclusion formulated through a broad consultative process and a thorough diagnostic of the status of financial exclusion issues in the respective geographical regions and districts. In general, a comprehensive policy and a strategy on Financial Inclusion should focus on promoting sustainable services through a range of public and private sector institutions.
- [x] Policy to use public resources to subsidize interest rate should be reconsidered in order to reduce market distortions and reallocate the resources to build and strengthen financial infrastructure for Financial Inclusion. The experience in most countries suggests that interest rate subsidies have not worked for the benefit of the poor as intended. And 'smart subsidies' can play a better role in developing inclusive financial systems.
- [xi] Regulations related to branch licensing, use of agents/intermediaries to deliver financial services to the excluded people in remote areas, KYC requirements on opening of new accounts need adaptations to be in line with the requirements for Financial Inclusion.
- [xii] In general, regulatory framework should
  - [a] open up opportunities for sustainable expansion through a diverse range of institutions.
  - [b] allow adequate room for product and service diversity.
  - [c] create a conducive environment in particular for savings mobilization by a wider range of institutions.
  - [d] create sufficient space for integration of existing and emerging new ICT into the financial services industry to accelerate the process of Financial Inclusion and
  - [e] include measures to improve price transparency and consumer protection.
- [xiii] In order to promote Financial Inclusion, the RFIs need to appreciate that aggressive competition policy and social inclusion are mutually exclusive. Basically, financial services need to be 'marketed' to connect with large population segments and these may justify promotional costs. Rural India offers plenty of opportunities that can be exploited through research and development, setting industry standards, business expansion, partnership promotion, private sector participation, using potentials of SHGs, expansion of remittance services, use of technology and development of financial infrastructure.
- [xiv] For RFIs implementation of programs on Financial Inclusion is not easy. In order to sustain the growth and development of RFIs there is need to address the challenges facing the sector, such as ensuring financial viability and sustainability, improving governance and management, enforcing regulation and supervision

system, reducing cost of fund, increasing capacity of human resources, promoting the use of technologies, improving portfolio quality, addressing competition in accessible areas, reaching the hard core poor, client protection, geographical remoteness and resolving the issue of multiple borrowing and creating indebtedness beyond repair.

[xv] Financial sector is gradually becoming competitive. Though, healthy competition is expected to enhance client-friendly quality and efficiency in services but cut-throat competition is not at all desirable. Competition among RFIs can be encouraged to bring down the interest rate on loans and improve credit availability with ease. Cut-throat competition among RFIs including MFIs spoils clients' attitude and undermines credit discipline. Experience suggests that undue competition is increasing chances of overlapping and duplication of services among the clients. This results in the concentration of financial services in areas close to market places that helps staff meeting the assigned business targets and chances of clients racketing. Unhealthy competition also promotes over indebtedness causing misuse of loan funds making it difficult to understand the clients' prime objectives. This helps clever clients to play one RFI against the other ultimately resulting in rampant default in loan repayments. Target setting of outreach for the staff is necessary for sound planning of the business. However, in absence of realistic survey and determining business potential, it can result in a situation of unhealthy competition among RFIs trying to work in more accessible areas. In the process, the RFIs would not try for widening and deepening their services among the downtrodden and poorer households but concentrate in providing financial services to less needy or non-target people in the densely populated close by markets. While this consumes much of their resources, the deserving poor in remote corners are left out from access to finance. Besides, In their enthusiasm of good performance and attract more clients, the RFIs most often forget their social values, ethics and regulatory requirements, which in turn create problems for their sustainable operations.

[xvi] Implementing programs on Financial Inclusion to achieve the expected objectives is an arduous task. Addressing financial exclusion requires a holistic approach focusing on critical areas, such as creating awareness, financial education, technical advice on different dimensions of money management, debt counseling, saving mobilization, provision of affordable credit services, research and development effort.

[xvii] For promoting Financial Inclusion, RFIs need to develop and apply area based specific strategies [rather than

one-fits-all] to expand outreach of their services using combination of lending methodologies, market led research to develop new products, fostering linkages with local communities and promoting the use of appropriate technologies.

[xviii] For RFIs, when significant progress is achieved, the challenging task is maintaining the continuity and sustainability of the achievements. This calls for evolving policy measures that can continue the financial sector as vibrant and dynamic as it could be.

[xix] For RFIs the future work in Financial Inclusion should revolve around conducting access to finance survey, creating systematic client profile, reaching the unreached, linking clients with non-financial service providers, mainstreaming the operation of RFIs, capacity development of RFIs towards industry needs, introducing innovation for new product development and diversification, mainstreaming revolving fund facility and promoting the adoption of technology by RFIs.

[xx] RFIs need to redesign their business strategies to incorporate specific plans for promoting access of their services to low income group treating it both a business opportunity as well as a corporate social responsibility. RFIs need to use available resources including technology and expertise to promote the cause of Financial Inclusion. Apparently, taking financial services to the sections constituting '*the bottom of the pyramid*' may not be profitable but RFIs should consider capitalizing the fact that even the relatively low margins on high volumes of low value transactions can be a profitable proposition in a medium and long term. Rural India presents enormous opportunities out of which RI can emerge as commercial and profitable business proposition for RFIs but this requires that RFIs should think access to rural finance outside the conventional thinking and in an innovative way.

While ingenuity and technology has led to the development of impressive delivery platforms, viz. **Financial Information Network & Operations [FINO]** for users of financial services through the BC channel or other innovative methods, there have been issues with technology and processes that include

- [i] Biometric reader devices reject finger prints of the customer.
- [ii] Text messages sent from mobile phones do not reach the server of the BC/bank, thereby delaying or aborting the transaction.
- [iii] Liquidity problems at the BC agent outlet results customers not able to withdraw cash when needed and

[iv] Selection, management and quality of BC agents pose serious problems. All the participative stakeholders, viz. banks, State Governments, technology providers, regulators and other developmental agencies need to work together in tandem to resolve these issues and drive the efforts towards achieving total Financial Inclusion.

### **Conclusion**

An inclusive financial system will be immensely beneficial in the context of increasing transfer payments being made by both the Union and State governments such as pension for aged, freedom fighters, and financial assistance to widows, destitute, pregnant women, girl children in poor families to pursue education, dole for unemployed youth, etc. There are chances for leakages in these programmes. Financial inclusion will ensure that the transfer payments reach the identified beneficiaries in full. Further, this should largely reduce the cost of making transfer payments. Therefore, inclusive financial system should go hand in hand with inclusive development.

As the present Governor of RBI, Dr. Raghuram Rajan, states “We have to reach everyone, however remote or small, with financial services. Financial inclusion does not just mean credit for productive purposes; it means credit for healthcare emergencies or to pay lumpy school or college fees. It means a safe means of remunerated savings, and an easy way to make payments and remittances. It means insurance and pensions. It means financial literacy and consumer protection”.

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**Section IX**  
**Finance and Foreign Trade**





# An Empirical Investigation of Relation between Exchange Rate and Export

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**Abstract:** The current exchange rate fluctuation with a more depreciating trend of rupee is creating concern in the minds of traders. Theoretical studies suggest a negative impact of exchange rate fluctuation on trade. However, the empirical studies are showing mixed results with some studies showing positive results, some other negative results and many other no effects. This paper is an attempt to analyze empirically the impact of exchange rate fluctuation on India's export for the period 1985-2012. The empirical analysis on basis of OLS method suggests that there is a positive effect of depreciating rupee on India's export. However, there are many other factors such as foreign income, relative prices etc. which have effect on export. Thus, in order to avoid the problem of spurious regression, Johansen co-integration test is conducted to confirm long run relationship between exchange rate and export. The unit root test clarified that both exchange rate and export were found to be integrated of order I(2) using ADF, PP test and KPSS test. The co-integration test confirmed an existence of long run relationship between exchange rate and export. Thus based on these results, it is clear that India need to focus its policy targeting exchange rate stability and thereby foster export.

**Keywords:** co-integration, spurious regression, unit root test.

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## 1. Introduction

The paper is organized as follows: The following section reviews the theory and some empirical studies on central bank intervention. Section III deals with the specific objectives and database used in this study. Section IV discusses the empirical findings and finally Section V contains the conclusions.

### 1.1 Literature review

**Hooper and Kohlhagen (1978)** in his article titled "**Impact of Exchange Rate Volatility on Export**" studied the effect of exchange rate volatility on export trade by framing an export model based on bilateral trade data for Germany, Japan, United Kingdom, United States, Canada, France for the period 1965–1975. The study observed insignificant relationship between exchange rate volatility and export in 26 equations, significant negative relationship in 2 equations, and significant positive relationship in 4 equations.

**International Monetary Fund (IMF), (1984)** working paper titled "**Exchange Rate Volatility and World Trade**" studied the effect of exchange rate volatility on trade using bilateral trade data of United States, United Kingdom, France, Germany, Italy, Canada, and Japan for the period 1965–1982. with the help of export model the study observed significant negative relationship in 3 equations, significant positive relationship in 11 equations and insignificant in 28 equations.

**Vergil (2002)** in his paper titled "**Exchange Rate Volatility in Turkey and Its Effect on TradeFlows**" investigated bilateral trade flows of Turkey with the United States, France, Italy and Germany. The study indicates that real exchange rate shows a significant impact (+2.24) on real exports of Turkey to the United States. However, bilateral real exchange rate shows very small influence on real exports to France (+0.31), Italy (+0.65) and Germany (+0.72).

**Srinivasan (1998)** in his paper titled "**India's Export Performance: A Comparative Analysis**" using a non-structural eclectic model for the period 1963-94 have reported relative prices as a significant export determinant in India.

**Veeramani (2008)** in his paper titled "**Impact of Exchange Rate Appreciation on India's Exports**", using a longer time period from 1960-2007, have found a negative relation between REER and export. However studies made by Nayyar (1988), Ghosh (1990), Sarkar (1994), and Sinha Roy (2001) have shown the opposite result. These studies analysed significance of relative prices in determination of export performance and argue that Indian exports are not necessarily price responsive. Their findings suggest that turning points in India's export performance were not often led by the movements in exchange rate (Bhattacharyya and Mukherjee 2011).

The article titled "**Exchange-Rate Volatility and Foreign Trade: Evidence from Thirteen LDC's**" by **Arize, Osang and Slottje (Jan., 2000)** investigates empirically the impact of real exchange-rate volatility on the export flows of 13 less developed countries (LDC's) over the quarterly period 1973-1996. The study estimated the short run and long run relation between exchange rate volatility and export with the help of ECM and Johansen co-integration. The major results show that increases in the volatility of the real effective exchange rate, approximating exchange- rate uncertainty, exert a significant negative effect on export demand in both the short-run and the long-run in each of the 13 LDC's.

**Patnaik and Pauly (Feb 2001)** in their paper titled "**The Indian Foreign Exchange Market and the Equilibrium Real Exchange Rate of the Rupee**" find a positive correlation between RBI's intervention in forex market (measured by net purchase of foreign currency) and a movement of the exchange rate.

## 2.1 Objective of the Study

- 1) To study exchange rate movement over the period of time
- 2) To study the impact of exchange rate volatility on India's export to USA.
- 3) To study role of RBI in mitigating the issue of exchange rate volatility.

## 2.2 Hypothesis

Exchange rate volatility adversely affects India's export to USA.

## 2.3 Research Methodology

Earlier studies on India's export have used relatively short time series data and simple econometric methods. We propose to use longer time series data and advanced econometric methodology. We believe, therefore, that the present study may shed some new light on the relation between exchange rate and export. Simple regression, Standard deviation, Unit root test, Johansen co-integration test are used for empirical analysis.

### 2.3.1 Data Collection

Secondary data is collected from various websites. Data on exchange rate of Dollar/INR is collected from the website (<http://fxtop.com/en/historical-exchange-rates>). Data on India's export to USA is collected from UN comrade website. Data on RBI sale and purchase of foreign exchange is collected from RBI website.

### 2.3.2 Scope of the study

The study is confined to India's export to USA. The time span of the study is 1985-2012 (based on data availability). The time span of the study is covering recent past i.e. 2012 as annual data on India export to USA for 2013 is not available. The time span of data on RBI sale and purchase is from 1995- 2008 as data before it, is not published online.

### 2.3.3 Limitations of the study

Export of a country is influenced by many factors such as foreign income, relative prices, exchange rate, foreign trade policy, taxes etc. The present study cannot focus on all these factors. Thus the present study limits its focus on exchange rate volatility.

The Study is based on the Government declared and published statistics, as well as statistics published by UN com trade, facts and figures and available resources and do not contain primary data.

## 3.1 Exchange Rate Volatility

The exchange rate is a key financial variable that affects decisions made by foreign exchange investors, exporters, importers, bankers, businesses, financial institutions, policymakers and tourists in the developed as well as developing world. With the breakdown of Bretton wood system, exchange rate is determined in foreign exchange market by forces of demand and supply. India follows a system of 'managed float'. The adoption of flexible exchange rate on one hand and growing international transaction after 1990 on the other hand has resulted in volatility of exchange rate. In the following table no. 3.1, standard deviation of exchange rate is calculated to show volatility in exchange rate for the period 1985-2012.

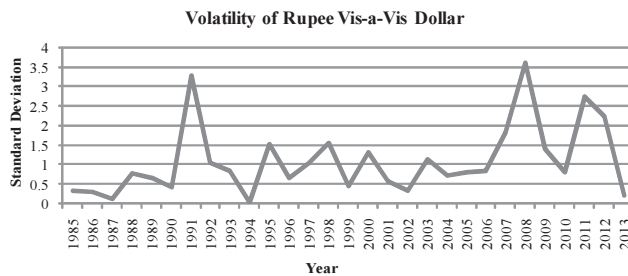
**Table No.3.1: Volatility of Rupee-Dollar Exchange Rate**

| Year | Real Average Exchange Rate | Standard Deviation (SD) |
|------|----------------------------|-------------------------|
| 1985 | 3.079988206                | 0.335084                |
| 1986 | 3.356461903                | 0.291472                |
| 1987 | 3.622395472                | 0.120906                |
| 1988 | 4.087193283                | 0.777665                |
| 1989 | 4.828242655                | 0.66928                 |
| 1990 | 5.388106436                | 0.428801                |
| 1991 | 7.654262763                | 3.281515                |
| 1992 | 10.27001715                | 1.053216                |
| 1993 | 11.78648535                | 0.835208                |
| 1994 | 12.71358819                | 0.028551                |
| 1995 | 14.08005501                | 1.506538                |
| 1996 | 16.31745285                | 0.648696                |
| 1997 | 17.54321113                | 1.048081                |
| 1998 | 22.23863075                | 1.539005                |
| 1999 | 23.75351613                | 0.439815                |
| 2000 | 24.92054404                | 1.303011                |
| 2001 | 26.41104453                | 0.552465                |
| 2002 | 27.86337127                | 0.313615                |
| 2003 | 27.14838169                | 1.123603                |
| 2004 | 26.64885897                | 0.723164                |
| 2005 | 26.09114961                | 0.814795                |
| 2006 | 27.59584345                | 0.836927                |
| 2007 | 25.98683429                | 1.832683                |
| 2008 | 28.6036937                 | 3.609875                |
| 2009 | 35.40601916                | 1.394193                |
| 2010 | 36.87352852                | 0.817869                |
| 2011 | 39.7234589                 | 2.751477                |
| 2012 | 48.91732075                | 2.246971                |

Source: Calculated by Researcher.

Exchange rate volatility is represented graphically in graph no.1 on the basis of the data on standard deviation of exchange rate in the above table.

**Graph No.3.1: Exchange Rate Volatility of Rupee vis-à-vis US Dollar**



Source: Calculated by researcher.

As can be observed from the above graph and table no. 3.1, except for the year 1987 and 1994, rupee value of dollar has been showing high deviation from its average level. Exchange rate was less volatile before 1990. After 1991 exchange rate volatility was too high with a standard deviation value reaching to between 3 - 3.5 and rather still higher level of deviation is experienced in the 2008. Between 1991-2008, the volatility do exists but at a level between 0.5-1.5.

In more recent times rupee has generally shown a rising tendency against the dollar mainly on account of significant increase in foreign portfolio investment in the Indian stock market.

### 3.2 Impact of Exchange Rate Volatility on Export

According to data reported by the Indian government to the International Monetary Fund (IMF), in value terms, U.S. exports to India and India's exports to the United States are comparatively low in value and flat until the mid-1980s. However, since the mid-1980s, U.S. imports from India have steadily increased in value while India's exports to the United States have shot up dramatically. United States was India's largest export market in 2006, and it is third largest source of imports of U.S. and has till today retained its position.

However, exchange rate changes as well as economic down turn in USA has its adverse effect on India's export to USA. The effect of exchange rate fluctuation on India's export to USA is analysed empirically by using simple regression method. However the result of regression analysis shows no effect of exchange rate volatility on India's export to USA.

It is important to note that in time series analysis, forecasting is difficult if two variables are having non-stationary properties. Both Exchange rate and export of India to USA are non-stationary and hence regression results are

spurious. In order to avoid this, author has conducted Johansen co-integration test to find long run relation between exchange rate volatility and export. The necessary condition for co-integration between two variables is that they should be integrated of same order. Thus before conducting co-integration test, it is necessary to conduct unit root test of exchange rate and export. After conducting ADF, PP and KPSS test, it is clear that both exchange rate and export are non-stationary or unit root process with drift and both are integrated of same order i.e. I(2). Thus data on exchange rate and export is 2<sup>nd</sup> differenced stationary. From this result, one can expect to have co-integration between exchange rate volatility and export. The present study proceeds with the conduct of Johansen co-integration test. This test conducted by imposing restriction on trend parameter and with selected lag of one period. There are two test in Johansen co-integration test viz., LR lamda max test and LR trace test. LR lamda max test tests the null hypothesis that the cointegration rank is equal to  $r$  against the alternative that the co-integration rank is equal to  $r+1$ . LR trace test tests the null hypothesis that the co-integration rank is equal to  $r$  against the alternative that the co-integration rank is  $k$ .

The following table shows the result of Johansen co-integration test .

**Table No.3.2: Johansen Co-integration Test Result.**

| Test              | Result                                       |
|-------------------|--|
| LR lamda max test | H0: Reject<br>H1: Accept                     |
| LR trace test     | H1: Accept<br>H0: Reject<br>Conclusion: r =2 |

Source: Calculated by author

The above result clearly denotes  $r = 2$  co-integrating vectors. This means that exchange rate volatility and export data is (trend) stationary. This implies that exchange rate volatility does have effect on India's export to USA. Given this fact, RBI has an important role to play in mitigating exchange rate volatility. This will ensure rise in export.

**3.3 RBI Monetary Management for Exchange Rate Stability:** Studies in the Indian context have observed a positive response of direct intervention activity by RBI during exchange rate volatility (Kohli, 2000). To support this statement, author has studied RBI forex reserve management from 1995 to 2008. It is clear from the position of sale and purchase of forex that it is done as response to control exchange rate volatility.

**Table no.: 3.3 Reserve Bank's Intervention in the Foreign Exchange Market**

| Year | Real exchange rate | S.D      | Purchase* | Sale* |
|------|--------------------|----------|-----------|-------|
| 1995 | 14.08005501        | 1.506538 | 3.6       | 3.9   |
| 1996 | 16.31745285        | 0.648696 | 11.2      | 3.4   |
| 1997 | 17.54321113        | 1.048081 | 15.1      | 11.2  |
| 1998 | 22.23863075        | 1.539005 | 28.7      | 26.9  |
| 1999 | 23.75351613        | 0.439815 | 24.1      | 20.8  |
| 2000 | 24.92054404        | 1.303011 | 28.2      | 25.8  |
| 2001 | 26.41104453        | 0.552465 | 22.8      | 15.8  |
| 2002 | 27.86337127        | 0.313615 | 30.6      | 14.9  |
| 2003 | 27.14838169        | 1.123603 | 55.4      | 24.9  |
| 2004 | 26.64885897        | 0.723164 | 31.4      | 10.6  |
| 2005 | 26.09114961        | 0.814795 | 15.2      | 7.1   |
| 2006 | 27.59584345        | 0.836927 | 26.8      | 0     |
| 2007 | 25.98683429        | 1.832683 | 79.7      | 1.5   |
| 2008 | 28.6036937         | 3.609875 | 26.6      | 61.5  |
| 2009 | 35.40601916        | 1.394193 | -         | -     |
| 2010 | 36.87352852        | 0.817869 | -         | -     |
| 2011 | 39.7234589         | 2.751477 | -         | -     |
| 2012 | 48.91732075        | 2.246971 | -         | -     |

Source: RBI

\*Data on purchase and sale of Dollar is in (US\$ billion)

Sales in the foreign exchange market are generally guided by excess demand conditions that may arise due to several factors. Similarly, the Reserve Bank purchases dollars from the market when there is an excess supply pressure in market due to capital in flows. It is clear from above table that every appreciation of rupee is immediately reacted by RBI by the purchase of dollar and depreciation is reacted by sale of dollar. Thus RBI is active in controlling exchange rate volatility.

#### 4. Suggestions

With the wave of globalisation moving all around the world, international trade and transactions are increasing.

Thus exchange rate stability is violated every time. Controlling volatility all time is a tedious job for RBI. It is better to let participant be able to avoid the risk and losses from volatility of exchange rate by entering into derivative market.

**5. Conclusion:** Exchange rate volatility is unavoidable under the system of free trade. From findings mention above, volatility is hampering the export growth and thus India need active monetary policy along with developed financial derivative market for trader to participate. This will reduce the risk of volatility in international trade and thereby foster India's foreign trade.

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# The flipside of currency depreciation in BRICS: Who won and who lost, and future implications of the jittery economy on trade

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**ABSTRACT :** In the past few months, Emerging Market Economies (EMEs) have faced a massive crisis due to the weakening of their respective currencies. The aim of this research paper is to investigate the sectors in the BRICS (Brazil, Russia, India, China and South Africa) that potentially benefitted from the crisis in each country. Topics that are to be covered:

A) the sectors that faced a surge in production and export, increased volume of exports and the effect on the Current Account Deficit (CAD)

B) the effect on the real growth of the country

C) future of the stimulus of demand - economic, political, sociological and ecological factors contributing to the scenario.

**JEL Classification:** F1- Trade. **Keywords:** Foreign exchange, foreign trade.

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## Introduction

In the June meeting of the Federal Reserve's Open Market Committee, Ben Bernanke, the Chairman of Fed, announced that there would be a 'tapering' of the Fed's quantitative easing (QE3) policy, which was estimated at that time to be close to \$85 million a month. While this move was keeping conservatism in light, it was construed to be self-interested and narrow. And for good measure, since the ripple effect that it created in the emerging market economies (EMEs) was a little short of catastrophic. The USD, being the global transaction currency, has high demand and the tapering stripped off the "easy" liquidity, thus sending the EMEs in a downward spiral.

Another cause behind the havoc in the EMEs was the slowing real growth which adversely affected the commodity market - imports and exports.

### As a result

- The Brazilian Real, which was going at a steadfast average of 2.15 BRL per USD in May 2013, registered a record low on 22nd August 2013, of 2.45 BRL to the USD.
- The Russian Ruble bought 1 USD at an average 31.76 RUB in May 2013, registered a record low of 33.51 RUB per USD on 6th September.
- The Indian Rupee which was 57.50 INR per USD on an average in May 2013, registered a record low of 68.83 INR per USD on 29th August 2013.
- Contrarily, the Chinese Yuan which a constant 6.11 CNY per USD in May 2013, steadily strengthened to 6.08 in the recent times.
- The South African Rand which was an average of 9.96 ZAR per USD in May 2013, recorded a low at 10.39 ZAR to USD on 28th August 2013.

This freefall of currencies caused crises in the Current Account Deficit (CAD), Foreign Direct Investment (FDI) and interests of the Foreign Institutional Investors (FIIs). In India, there was a massive sell-out of bonds valued at \$1 billion, leading to further foreign exchange harm.

However, weakening of the currency led to the exports becoming competitive in the global market. There has been some correction in the dismal situation due to this fact, and will be explored in the further sections.

## Section A: Exports of the BRICS Countries, Recent Fluctuations in Volume and Market Prices and Effect on CAD

### Brazil

#### I. Brazil's main exports[1]

- Iron ores and concentrates, which constitute 14.71% of the total exports.
- Petroleum and crudes, 8.31% share of the total exports.
- Raw sugar cane, 6.29% share of total exports.
- Soya beans, 5.45% of the total exports.
- Poultry, 2.89% of the total exports.

#### II. Fluctuations in volume in the June-October 2013 period[6]

The June volume of exports from Brazil fell by 3.16% to \$21.13 billion, due to the weakening of the currency and deficit in supply. It fell further by 1.56% in August, gained 2.88% in September, fell again by 2% in October 2013. This fluctuation can be attributed to the slow economic growth and inflation in the economy (elaborated further in Section B).

### **The sector-wise break-up of the exports is as follows**

- Iron ore: Brazil's largest iron ore exporting company, Vale, registered a net income of \$30 billion, up from the last year's July-September quarter of \$24 billion. However, Brazil lost most of its market share to Australia, whose currency stability proved to be a winning factor.
- Petroleum and crudes: Brazil's oil exports skyrocketed in July 2013, at 9.2 million barrels exported [7]. There has been a slight deterioration in the boom, but it continues to be above average.
- Sugar, Soya-beans and poultry: Brazil reported a \$4.8 billion revenue in October 2013 from poultry exports, mainly beef, making it the leading exporter in this sector. Sugar exports were on an all time high in September 2013, but the trend slowed due to loss of inventory in a fire in the port. Soya-bean export grew to 3.5 million tons in September 2013, up from 1.68 million tons a year earlier.

### **III. Effect on Current Account Deficit (CAD)**

The CAD in June 2013 was \$6.42 billion, lesser by 22.31% as compared to the May 2013 figure. The figure declined further to \$3.95 billion in July 2013. However, as a result of stagflation, the figure shot up to \$9.01 billion in August 2013. Investor sentiments were revived in September and October, leading to a gradual decline of the figure. October marked a low of \$2.62 billion CAD.

### **Russia**

#### **I. Russia's main exports [2]**

- Crude petroleum oils which constitute 36.34% of the total exports.
- Refined petroleum oils, 16.05% of the total exports.
- Petroleum gases, 11.91 % of the total exports.
- Briguette coal, 2.63% of total exports.
- Semi-finished coal products, 1.83% of total exports.

#### **II. Fluctuations in volume in the June-October 2013 period**

The Russian export economy followed the fluctuating trend with respect to total volume. There was not a marked difference in June 2013, but in July 2013 the exports increased by 4.5% to \$43.45 billion. The graph slumped in August 2013, when exports hit \$42.15 billion but increased by 5.6% in the September-October 2013 period to \$44.53 billion.

### **The sector-wise break-up of the exports is as follows**

- Petroleum and crude oils: There was a fall in oil exports in July-October 2013 quarter by 8.1% to 4.9 million barrels, attributing to the rising shipping costs.

- Coal and coal products: There was an increase coal exports by 8% in the quarter and the main buyers were Asian countries like China and Japan.

### **III. Effect on Current Account Surplus (CAS)**

The Russian economy had a strong surplus of \$25.02 billion in the early quarter of 2013. However, strong devaluation of the currency led to the surplus being valued at \$11 billion in the July-October 2013 quarter. The wavering demand for exports had a contributing effect in the current situation.

### **India**

#### **I. India's main exports [3]**

- Refined petroleum oils, constituting 15.40% of the exports.
- Diamonds, 11.71% of the exports.
- Iron ores and concentrates, 3.57% of the exports.
- Precious metal jewellery, 3.28% of the exports.
- Packaged medicines, 2.96% of the exports.

#### **II. Fluctuations in volume in the June-October 2013 period**

There was a double digit rise in exports from India in the month of July 2013, registering a 11.64% growth. The trend continued and October registered a growth rate of 14%. Contributing factors to this upward curve were the favourable government policies and opening of new havens such as Latin America and Africa.

### **The sector-wise break-up of the exports is as follows**

- Petroleum: There was a staggering 124% increase in petroleum exports from India in July 2013. However, as the market price became competitive, the trend receded, but it is still rendered to be above average.
- Diamonds: There was 11% increase to the tune of \$606 million in diamonds exports in September 2013 and the trend continues.
- Iron ore: Iron ore exports faced a 54% slump due to the new stringent mining laws. The total volume being 6.8 million tonnes.
- Precious metals: There was 21% increase in the gold exported by India in August 2013 when it exported \$561 million worth of it. However, there was a slump in the trend in October 2013.
- Pharmacy: There has been a 25% surge in pharmacy exports in 2012-13, the total revenue being \$14.7 billion.

### III. Effect on Current Account Deficit (CAD)

The CAD grew upto 20% as compared to \$18.17 billion in February-May 2013 to \$21.8 billion in June-August 2013. The main reasons for this is the sharp devaluation of the currency as well as increase in imports. The general increase in exports had little corrective effect.

#### China

##### I. China's main exports[4]

- Automatic data processing machines, constituting 8.87% total exports.
- Telephones, 4.12% of total exports.
- Transmission apparatus, 3.80% of total exports.
- Accessories for office machines, 2.63% of total exports.
- Printers and copying machines, 2.01% of the total exports.

##### II. Fluctuations in volume in the June-October 2013 period

The strengthening of the Chinese Yuan did not have much effect on the volume of exports from China, given their competitive pricing in the international market. There was a dip of 4.5% in June-July 2013, owing to the currency depreciation of competing countries. It rose to \$190.6 billion in August-September 2013 but fell again to \$185.4 billion in September-October 2013. However, there is a consistency maintained.

The electronics and IT sector itself generated \$50.49 billion of the total exports.

### III. Effect on Current Account Surplus (CAS)

There has been a reduction of 22% in the Current Account Surplus of China, dropping from \$50.9 billion to \$39.7 billion. This can be attributed to the strengthening of the Yuan against the US dollar, as well as increase in imports from Asian countries as well as America.

#### South Africa

##### I. South Africa's main exports[5]

- Basic iron and steel, 15.51% of total exports.
- Motor vehicles, 12.93% of total exports.
- Precious and non-ferrous metals, 12.12% of total exports.
- Basic chemicals, 6.13% of total exports.
- Refined petroleum products, 3.47% of total exports.

### II. Fluctuations in volume in the June-October 2013 period

The South African export economy follows the same fluctuation trend as Brazil, Russia and India. The exports consistently grew over June-September 2013, peaking at \$75687 million in July-August 2013. There has been a decline but the amount is still above average.

### III. Effect on Current Account Deficit (CAD)

The dramatic devaluation of the South African Rand led to the widening of the CAD. The CAD is upto 21% from \$19200 million in Feb-May 2013 to \$21620 million in June-September 2013. The wavering export graph has little corrective effect on the CAD.

### Section B: Is There Real Growth In The Economies?

There has been much debate about the substantial growth of the economy in BRICS. Indicators show that there has been subpar growth in all countries except China. Brazil registered a 0.9% GDP growth rate (2012), Russia has registered 3.4%, India has registered a 3.2% and South Africa, 2.5%. The dismal scenario wanes further when compared to the whopping 7.8% growth rate in China.

It can thus be concluded that the inflation in the economies is a direct result of demand overshoot supply. This is causing havoc in the domestic and international economy to equal measure.

China has emerged as a frontrunner in this debacle because of its effective (albeit stringent) labour laws and monitoring governance. 56% of the entire population of China was employed in factories (72% of India's population is in agriculture). This has opened massive opportunities in foreign markets for Chinese products. This has also ensured that inflation or stagflation will be quickly absorbed into the production system itself and not produce tremors in the economy.

Another reason for inflation in the EMEs is the massive liquidity injections into the economy without any substantiating development. The money supply increases, thereby causing problems such as increased WPI (Wholesale Price Index) and CPI (Consumer Price Index). This is relevant to foreign trade because the quantity of goods that are to be exported are now diverted to the domestic economy in order to control the inflation.

Thus, China is the only exception to the inflated emerging market economies.

### Section C: Future of The Export Economy of The Brics

The Fed recently announced that it would restart its bond-buying policy. This is good news for the EMEs as there are prospects of currency stabilisation. However, the effect on the import-export economy is ambiguous since the extent of stability solely depends on investor sentiments.

A generic pattern of slowing of the export boom is seen in the recent figures. The net devaluation of the currency in the long run will determine the position of the country in the international market. However, forging of new alliances, exploring new import destinations and advent of technology can become solidifying factors to trade. The biggest boost that the country will have is that of real growth, which will not only improve the trade, but also correct inflation, boost productivity and reaffirm the country's potential in the global diaspora.

## CONCLUSION

It is said that the one with key to all answers is the king and it has been proven that China is the clear winner in the race to become the next economic stronghold. The export sector has proven to be its ace, as there is a universal demand for all of its goods. It is the country with the largest US dollar reserves, and this has been strategically achieved by selling more and buying less. The next big step that will favour China in all spheres - export, import, alliances, diplomatic relations, economic dominance, leadership in Asian countries - is the internationalisation of the Renminbi/ Yuan, a step that the International Monetary Fund (IMF) has been paving way for.

The remainder of the BRICS have many economic, legal and political measures to take to be considered in the same league as China. India especially has a long way to go.

Reforming trade laws would be a starting step; radically changing perspective on international trade would be the final one.

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# वित्ताचे व्यवसायातील महत्त्व आणि भारताच्या विदेशी व्यापाराची दिशा

(Importance Of Business Finance & Direction Of Foreign Trade Of India)

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## सारांश : (Abstract)

२१ व्या शतकातील आव्हाने पेलवून स्पर्धेच्या युगात यशस्वीपणाचा ठसा उमटवण्यासाठी आज उत्पादनाचा दर्जा उंचावण्याची काळाची गरज आहे. कारण जागतिकीकरणाच्या प्रक्रियेत मोठे शहर एक छोटे खेडे झाले आहे. गतिमान वाहतूक, दळणवळण, संदेशवहन, प्रशासन, उत्कृष्ट व्यवस्थापन, संगणकीकरण, आधुनिक तंत्रज्ञान, जाहिरातदूत, दूरदर्शन, इंटरनेट, बाजारपेठ, संशोधन, बाजारपेठ विस्तार, बाजारपेठ निर्मिती, आंतरराष्ट्रीय बाजार, वित्तीय साक्षरता, तुल्यबळ स्पर्धक, चिकित्सक ग्राहक, प्रशिक्षित कर्मचारी, कुशल कामगार, वीज, पाणी, उत्पादनासाठी आवश्यक कच्चा माल, यंत्रसामुग्री, यांत्रिकीकरण, औद्योगीकरण, यांच्या जोडीला विद्युत, पेट्रोकेमिकल्स, इलेक्ट्रॉनिक्स, कॉम्प्युटर्स माहिती, तंत्रज्ञान, जैव तंत्रज्ञान, अशा विविध क्षेत्रातील जगातील प्रगतीने माणसाचे जीवन समृद्ध तर केलेच प्रत्येक माणसाच्या अंगात नवनिर्मितीचे वारे वाहू लागली. इच्छा शक्ती वाढली. काहीतरी करण्याची नवी उमेद तरूणांमध्ये निर्माण झाली. संगणक प्रगतीमुळे लहान मुलांचा संपर्क सर्व जगाशी होऊ लागला. शिक्षणाचा प्रसार झाला. यातून माणसातील उद्योजकता ही वाढविली. उद्योजकतेसाठी आवश्यक असतात दोन गोष्टी एक भांडवल आणि दुसरी म्हणजे जोखीम स्वीकारण्याची क्षमता !

व्यवसायातील उत्पादन, विक्री, वितरण व इतर पुरक कार्ये वित्त पुरवठावरच अवलंबून असतात. व्यवसायात योग्य वित्त रचना व व्यवस्थेमुळे आवश्यक उत्पादन करता येते. त्यासाठी कच्चा माल, यंत्रे , कुशल कामगार उभे करता येते. तसेच बाजारात मागणीनुसार ग्राहकांच्या आवडी निवडीनुसार उत्पादन उपलब्ध करून देता येते. कर्मचारी, कामगार यांना आकर्षक पगार, बोनस देता येतो. कंपनीचे मालक भागधारक असतात यांना लाभांश देता येतो. वरिल सर्व यंत्रणा व्यवसायात वापरण्याची आज काळाची गरज आहे. त्यासाठी वेळेवर वित्त पुरवठा व्यवसायासाठी होणे गरजेचे आहे. यावरून एकच निष्कर्ष निघतो तो म्हणजे वित्त पुरवठा हा व्यवसायाचा आत्मा आहे.

देशातील उत्पादन क्षमता वाढविल्याशिवाय अर्थव्यवस्थेचा जलद आर्थिक विकास होत नाही. त्यासाठी मोठ्या प्रमाणावर भांडवल, यंत्रसामुग्री, यांत्रिक आणि तांत्रिक ज्ञानाची आवश्यकता असते. या बाबी विकसनशील देशांजवळ पुरेशा

प्रमाणात उपलब्ध नसतात. त्यामुळे त्यांना अशा वस्तुची मोठ्या प्रमाणावर आयात करावी लागते. यातून उद्योगधंदे वाढ, रोजगार निर्मिती होऊन बेकारी दूर होण्यास मदत होते. म्हणजे विदेशी व्यापार हा विकासाचा केंद्र बिंदू मानावा लागेल.

पूर्वी भारताचा विदेशी व्यापार फक्त इंग्लंड आणि अमेरिका गटाशीच होत होता. परंतु सध्या त्यात विविधता आली आहे. आर्थिक आणि सामाजिक दृष्ट्या हा बदल महत्त्वपूर्ण आहे. भारताच्या विदेशी व्यापारात सुरुवातीला इंग्लंडला महत्वाचे स्थान होते. भारताच्या एकूण आयातीपैकी ३०% आयात आणि एकूण निर्यातीपैकी ३४% निर्यात इंग्लंडमध्ये होत असे. नियोजन काळात भारताच्या विदेशी व्यापारातून इंग्लंडचे महत्त्व कमी होऊन अमेरिका, रशिया, जर्मनी, जपान, आखातीदेश, इत्यादी देशांचे महत्त्व वाढले.

भारताने स्वातंत्र्योत्तर काळात विविध देशांशी व्यापार करून निर्यातीत ५९% वाढ केली आहे. सध्या जास्त देशांशी भारताचा व्यापार वाढत आहे. भौगोलिक विविधतेमुळे उद्योगांमध्ये विविधीकरण होत आहे. भारत काही वस्तुचे विशेषीकरण करू शकला आहे. अनेक नवीन बाजारपेठांची भारताला उपलब्धी झाली आहे.

भारतात नियोजनाला सुरुवात झाल्याने विविध वस्तुंच्या आयातीत मोठ्या प्रमाणात वाढ करण्याची गरज आहे. त्यासाठी लागणारे प्रचंड भांडवल, यंत्रसामुग्री केवळ इंग्लंड, अमेरिका, देऊ शकत नव्हते. त्यामुळे भारताने रशियाशी व्दिपक्षीय करार करून रशियाशी व्यापारी संबंध प्रस्थापित केलेत. भारताचे आफ्रिका आणि आफ्रिका गटाशी अजूनही व्यापारी संबंध कमीच आहेत. या गटातील देश श्रीमंत असून तेथे मागणी देखील बरीच आहे. आफ्रिका गटात भारताची निर्यात वाढविण्यास चांगला वाव आहे.

इ.स. १९६६ पासून भारतात हरितक्रांतीला सुरुवात झाली. तेव्हापासून रासायनिक खतांच्या आयातीत वाढ झाली आहे. निर्यात माध्यमातून परकीय चलन प्राप्त होते. त्यातून गरज असलेल्या वस्तुची आयात करणे शक्य होते. यातून दोन्ही देशांच्या समस्या पुर्ण होण्यास मदत होते.

बिज शब्द : (Key Words)

१) बाजारपेठ संशोधन २) बाजारपेठ विस्तार ३) बाजार निर्मिती ४) आंतरराष्ट्रीय बाजार ५) चिकित्सक ग्राहक ६) विद्युत ७) पेट्रोकेमिकल्स ८) इलेक्ट्रॉनिक्स ९) कॉम्प्युटर्स १०) माहिती तंत्रज्ञान ११) आर्थिक विकास १२) भांडवल १३) यंत्रसामुग्री १४) यांत्रिक आणि तांत्रिक ज्ञान १५) रोजगार निर्मिती १६) कुशल कामगार १७) सेवाची निर्मिती १८) वित्त हा व्यवसायाचा आत्मा १९) विदेशी व्यापार विकासाचा केंद्र बिंदू २०) संगणकीकरण

## १) प्रस्तावना : (Introduction)

२१ व्या शतकातील आढ्याने पेलवून स्पर्धेच्या जगात टिकून राहण्यासाठी व्यावसायिकाने उत्पादनाचा दर्जा उंचावणे आवश्यक झाले आहे. यासाठी जुने तंत्रज्ञान, मुनष्यबळ बदलणे गरजेचे झाले आहे. बाजारपेठ,संशोधन,बाजारपेठ विस्तार, बाजारपेठ निर्मिती, जाहिरातदूत, दूरदर्शन,इंटरनेट, अशी नवी तंत्रे व जुनी तंत्रे यांचे मिश्रण करून जाहिराती देण्याची गरज आहे. तसेच संगणकीकरण, प्रशिक्षण इ.साठी निधीची गरज आहे. वितरण यंत्रणा कार्यक्षम ठेवणे, गतिमान वाहतूक,दळणवळण, संदेश वहन, आधुनिक गोडाऊन, साठवण, निवड, प्रतवारी, निर्जलीकरण, उच्च प्रशासन, आदर्श व्यवस्थापन, प्रशिक्षित कर्मचारी, कामगार नेमणुकीची गरज यासाठी जास्तीचे वेतन व सुविधा पुरवण्याची गरज यासाठी निधीची आवश्यकता, पाणी, वीज, कच्चा माल, तंत्रज्ञान, भांडवल, यंत्रामुग्री, यांत्रिक आणि तांत्रिक ज्ञानाची आवश्यकता इत्यादी अनेक घटकांची व्यवसायात आज गरज निर्माण झाली आहे. यासाठी वित्त पुरवठा महत्वाचा आहे. हा वित्त पुरवठा व्यसायांना वेळेवर उपलब्ध झाला तर स्पर्धेच्या युगात व्यावसायिक यशस्वी होऊ शकतो. म्हणजेच व्यवसायात वित्तपुरवठाचे अत्यंत महत्वाचे योगदान आहे.

इ.स. १९४७ पूर्वी भारत पारतंत्र्यात होता. भारत ब्रिटनची एक वसाहत होता. भारतातून इतर देशांना आणि विशेषतः इंग्लंडला अन्नधान्य आणि कच्चा माल यांची निर्यात केली जात होती. त्याबदल्यात कापडासारख्या वस्तूची आयात केली जात होती. उत्पादित वस्तूसाठी इतर देशांवर अवलंबून असल्याने स्वातंत्र्यपूर्व काळात भारताचे औद्योगिकरण झाले नाही. ब्रिटनमधील उत्पादित वस्तूंच्या तीव्र स्पर्धेमुळे भारताची हस्तकला उद्योग नष्ट झाले.

स्वातंत्र्यप्राप्तीनंतर भारताने आर्थिक नियोजनाद्वारे जलद आर्थिक विकास साध्य करण्याच्या उद्दिष्टाला अग्रक्रम दिला. उत्पादन वेगाने वाढण्यासाठी अर्थव्यवस्थेचे वेगाने ओद्योगीकरण होणे आवश्यक होते. तसेच शेतीक्षेत्राचा विकास होऊन उत्पादनात वाढ होणे आवश्यक होते.

विदेशी व्यापारामुळे आपल्या देशात नसणाऱ्या वस्तू, कच्चा माल आयात करून नवीन उद्योग स्थापून नव्याने उत्पादनक्षमता निर्माण करणे शक्य होते. तसेच परकीय तंत्रज्ञान, तांत्रिक व यांत्रिक तंत्रज्ञान, आयात करून उत्पादन क्षमतेत वाढ करता येते. आयातीतून देशात नवीन उद्योगाची स्थापना करून रोजगार निर्मिती करता येते. त्यातून देशातील बेकारी दूर होण्यास मदत होते. आपल्या देशात दर्जेदार मालाचे उत्पादन करून परदेशात निर्यात करता येते. यामुळे परकीय चलन उपलब्ध होते. विकसनशील देशाच्या सर्वांगीण विकासासाठी विदेशी व्यापार महत्वाचा आहे.

प्रस्तुत शोध निबंधाच्या अभ्यासाचे दोन भागात थोडक्यात वर्गीकरण करण्यात आलेले आहे.

अ) वित्ताचे व्यवसायातील महत्त्व : ब) भारताच्या विदेशी व्यापाराची दिशा :

## २) अभ्यासाची उद्दिष्टे : (Objectives of the study)

१) व्यवसाय वित्ताचा अर्थ जाणून घेणे

- २) वित्ताचे व्यवसायातील महत्त्व समजून घेणे
- ३) वित्तीय साक्षरता अर्थ जाणून घेणे
- ४) विदेशी व्यापार संकल्पना जाणून घेणे
- ५) भारताच्या विदेशी व्यापाराची दिशा इ.चा अभ्यास करणे.

### ३) संशोधन पध्दती : (Research Methodolgy)

प्रस्तुत शोधनिबंध हा प्रामुख्याने दुय्यम साधनसामग्रीवर आधारित असून त्यासाठी विविध दुय्यम स्तोत्रांचा वापर केला आहे. त्यात आर बी आय बँकेचे बुलेटीन, मासिके, पुस्तके, ग्रंथ, जर्नल, इंटरनेट प्रणाली, अहवाल व नोंदी प्रसिध्द आणि अप्रसिध्द माहितीचा वापर, वर्तमानपत्र इ.चा वापर तसेच शासकीय व व्यापारी संकेत स्थळे यांच्या साह्याने प्रस्तुत शोधनिबंध तयार केला आहे.

### ४) अभ्यासाची मर्यादा : (Limitations of Study)

प्रस्तुत शोधनिबंधासाठी वित्ताचे व्यवसायातील महत्त्व आणि भारताच्या विदेशी व्यापाराची दिशा अभ्यासली असून हा शोधनिबंध फक्त दुय्यम स्वरूपाची संकलित माहिती आणि संकलित तथ्ये ह्यांच्या आधारे पुर्ण केला आहे.

### ५) अभ्यासाचे महत्त्व : (Importance of the Study)

२१ व्या शतकाची आव्हाने पेलवून स्पर्धेच्या युगात कोणत्याही व्यावसायिकाला टिकून राहण्याचे असेल तर परिस्थितीनुसार उत्पादनात बदल केला पाहिजे. कारण नवीन Product, पर्यायी वस्तू बाजारात येत आहे. तसेच ग्राहकांच्या वर्तनातील बदल, आवडी निवडी, कामगार, कर्मचारी, यांना आकर्षक पगार, बोनस, भागधारकांना लाभांश, सुविधा इ. सर्व बाबी पुर्ण करण्यासाठी उत्पादन दर्जेदार करण्यावर भर देणे आज काळाची गरज आहे. यासाठी दर्जेदार कच्चा मालाचा पुरवठा, आधुनिक यंत्रसामुग्रीचा वापर, सुयोग्य व्यवस्थापन, कुशल कामगार, जाहिराती, इत्यादी अत्यावश्यक गरजा पुर्ण करण्यासाठी व्यवसायात यशस्वी होण्यासाठी भांडवल आणि जोखीम हे दोन अत्यंत महत्त्वाचे घटक आहेत. यासाठीच वित्त ह्या विषयाचा अभ्यास करण्याची इच्छा झाली.

विकसनशील देशाची उत्पादन क्षमता वाढविल्याशिवाय अर्थव्यवस्थेचा जलद आर्थिक विकास होणे शक्य नसते. यासाठी त्या देशातील उत्पादन क्षमता वाढविण्याची मोठ्या प्रमाणावर गरज असते. त्यासाठी भांडवल, यंत्रसामुग्री, यांत्रिक आणि तांत्रिक ज्ञानाची आवश्यकता असते. ह्या महत्त्वाच्या बाबी विकसनशील देशांजवळ पुरेशा प्रमाणात उपलब्ध नसतात. त्यामुळे त्यांना अशा वस्तुंची मोठ्या प्रमाणावर आयात करावी लागते. अशा आयातीला विकासात्मक आयात असे म्हणतात.

देशात विकासाची प्रक्रिया सुरू झाल्यानंतर देशातील उपलब्ध क्षमतेचा पुर्णपणे उपयोग करता यावा यासाठी कच्चा माल, मध्यम स्वरूपाच्या वस्तू इ. ची आयात करावी लागते. या आयातीला भरणपोषण आयात म्हणतात.

देशात विकासाची प्रक्रिया सुरू झाल्यानंतर किंमत पातळीत वाढ होणे अपरिहार्य असते. किंमत पातळी कमी ठेवण्यासाठी देशाला उपभोग्य वस्तुंची आयात करावी लागते.

वरिल सर्व आयातीबाबत अभ्यास केला तर विकसनशील देशाचा सर्वांगीण विकास साध्य करावयाचा असेल तर विदेशी व्यापाराशिवाय तरणोपाय नाही हे सिध्द होते.

६) अभ्यासाचे विश्लेषण : (Analysis of the study)

अ) वित्ताचे व्यवसायातील महत्त्व (Importance Of Business Finance)

ब) भारताच्या विदेशी व्यापाराची दिशा (Direction Of Foreign Trade Of India)

अ) वित्ताचे व्यवसायातील महत्त्व (Importance Of Business Finance)

१) व्यवसाय वित्ताचा अर्थ : (Meaning of Business Finance)

पॉल हेसिंग्ज च्या मते :

कंपनीच्या आर्थिक बाजूंचे व्यवस्थापन म्हणजे वित्त व्यवस्थापन होय. उपलब्ध अटीमधून शक्य त्या चांगल्या अटीवर भांडवल उभे करतांना त्यासाठी किती मोबदला द्यावा आणि उपलब्ध निधी उत्तम उपयोगासाठी कसा वापरावा याचे निर्णय यात समाविष्ट असतात.

उपलब्ध निर्धींचा पर्याप्त वापर व उत्तम व्यवस्थापन म्हणजे वित्त नियमन होय.

वित्त शास्त्र म्हणजे पैशांचा किंवा निर्धींचा अभ्यास होय. निर्धींचे स्वरूप, वापर, त्यातील समस्या, त्यांचे व्यवस्थापन या सर्वांचा समावेश वित्त शास्त्र या संज्ञेत होतो.

२) वित्ताचे व्यवसायातील महत्त्व : (Importance of Finance)

व्यवसायातील उत्पादन, विक्री, वितरण किंवा अन्य सर्व कार्ये ही मुख्यतः योग्य वित्तपुरवठ्यावरच अवलंबून असतात.

योग्य वित्त रचना व व्यवस्थेमुळे योग्यवेळी आवश्यक ते उत्पादन करणे उत्पादन संस्थांना शक्य होते. उत्पादनासाठी आवश्यक ती साधने सामुग्री, उदा. यंत्रे, कच्चा माल, कामगार इत्यादी उभे करणे वित्तपुरवठ्यामुळे शक्य होते. वितरण व्यवसायासाठीही वित्तपुरवठा आवश्यक असतो. सेवा व्यवसायात सेवा निर्मितीसाठी साधने लागतात. तसेच मनुष्यबळ, तंत्रज्ञान लागते. ते सर्व आयोजित करण्यासाठी वित्तपुरवठा व त्याचे नियोजन, व्यवस्थापन आवश्यक असते. व्यवसाय विस्तारासाठी वित्त आवश्यक असते. योग्य वित्त उपलब्धतेमुळे व्यवसाय वाढविता येतो. किंवा व्यवसायाची स्पर्धा क्षमता वाढविता येतो. व्यवसायातील बाजारपेठ संशोधन, वस्तुविकास व नियोजन यासारख्या कार्यांसाठी वित्त उपलब्ध असणे आवश्यक असते. वित्त उपलब्धतेमुळे व्यवसाय संस्था बाजारपेठ विस्तारू शकते. व अधिक भक्कम करू शकते.

व्यवसाय संस्थेत वित्त योग्य प्रमाणात उपलब्ध असेल तर कर्मचारी व ग्राहक समाधानी असतात. आद्योगिक आणि व्यापारी शांतता टिकविली गेल्यामुळे सामाजिक फायदे होतात. आवश्यक तेवढे वित्त उपलब्ध नसल्यास कर्मचाऱ्यांना त्यांचे वेतन व वेतनेतर फायदे मिळत नाहीत व ते असंतुष्ट बनतात. वित्त उपलब्ध नसल्यास विपणन कार्यावर अनिष्ट परिणाम होतो. योग्यवेळी

बाजारपेठेत माल पोहोचत नसल्यामुळे मालाची टंचाई निर्माण होऊन त्याची झळ ग्राहकांना बसते. ग्राहक हैराण होतात. उदा. वीज, अत्यावश्यक औषधे, गॅस, वित्त उपलब्धतेमुळे पुरवठादारांना योग्य वेळी त्यांचे पैसे देता येतात व ते समाधानी राहतात. तसेच वित्त उपलब्धतेमुळे भागधारकांना लाभांश देता येतो व त्यामुळे भागधारक समाधानी राहतात.

### ३) वित्त कार्य : (Finance Function)

व्यवस्थापनातील वित्तविषयक कार्याची उद्दिष्टे : अ) व्यवसाय संस्थेसाठी आवश्यक तेवढा पैसा अगर निधी उभा करणे ब) भक्कम वित्तीय धोरण व कार्यक्रम या आधारावर निधीची गुंतवणूक करून निधीचे पालन करणे, त्यात वृद्धी घडवून आणणे क) व्यवसायासाठी नफा मिळविणे, उत्पन्न मिळविणे.

वरिल उद्दिष्टांच्या पूर्तीसाठी व्यवस्थापनाला पुढील वित्तविषयक कार्ये करावी लागतात. १) निधीची आवक व जावक कशी असेल याचा अंदाज घेणे, त्याचेपत्रक (Cash Flow Statement) तयार करणे २) वित्तीय नियोजन करणे ३) निधी उभारण्याचे विविध मार्ग शोधणे, त्यांची तुलना व विश्लेषण करणे आणि त्यापैकी कोणता मार्ग व्यवसाय संस्थेसाठी योग्य ठरेल ते ठरविणे. ४) प्रत्यक्ष निधी उभारणे, त्यासाठी अनुषंगिक सर्व कार्ये करणे. उदा. भांडवल उभारणी वेळापत्रक ठरविणे, विमेकरी नेमणे, विविध अर्ज छापणे, विक्री इत्यादी ५) उपलब्ध निधीचे व्यवस्थापन करणे, निधीचे विविध कामांसाठी विभाजन व वापर करणे.

### ४) आधुनिक व्यवसायाच्या वित्तीय गरजा : (Financial Needs of Modern Business)

जागतिकीकरणामुळे व खुलेकरणामुळे व्यवसायात स्पर्धा वाढली. परदेशी व्यवसाय संस्था भारतीय बाजारपेठेत आल्यामुळे जुने तंत्रज्ञान, मनुष्यबळ बदलून उत्पादनाचा दर्जा उंचावणे देशांतील व्यावसायांना आवश्यक झाले आहे.

आधुनिक व्यावसायांना बाजारपेठ विस्तार करणे आवश्यक बनले आहे. बाजारपेठ संशोधन, बाजारपेठ विस्तार, बाजारपेठ निर्मिती यांवर करावा लागणारा खर्च देशांतर्गत न राहता आंतरराष्ट्रीय बनला आहे. जाहिरातीचे तंत्रज्ञान प्रगत झाल्यामुळे त्यावरचा खर्च वाढला आहे. जाहिरातदूत, दूरदर्शन, इंटरनेट अशी नवी तंत्रे व जुनी तंत्रे यांचे मिश्रण जाहिरातीसाठी वापरावे लागते.

व्यापार आंतरराष्ट्रीय बनल्याने आंतरराष्ट्रीय चलनाची निर्माण झालेली गरज चलनातील दरातील बदलांमुळे उद्भवणारे धोके गरज यामुळे विदेशी चलन उभे करणे आवश्यक बनले आहे. व्यवसायाला त्या दृष्टीनेही नियोजन करावे लागते. आधुनिकीकरणामुळे जुनी यंत्रे व तंत्रज्ञान कालबाह्य होणे, त्याच्या जागी नवी यंत्रे व नवीन तंत्रज्ञान आणण्यासाठी मोठा निधी उभा करावा लागतो. संगणकीकरणासाठी मोठा निधी व प्रशिक्षण खर्च आवश्यक बनला आहे.

कर्मचारांना चांगले वेतन द्यावे लागते. तसेच वस्तूंचा दर्जा उंचावणाची गरज आहे. आधुनिक यंत्र सामुग्रीचा वापर, नवे तंत्रज्ञान इ. गरजा आज व्यवसायात पूर्ण करण्याची गरज आहे. त्यासाठी व्यवसायात वित्त विषयक गरजा वाढत आहे.

वित्त पुरवठ्याबाबत अभ्यास केल्यावर असे निदर्शनास आले कि, हे जग स्पर्धेचे झाले आहे. यात टिकून राहण्यासाठी व्यवसायात ग्राहकांच्या आवडीनिवडी नुसार उत्पादनात बदल करण्याची गरज आहे. यासाठी वित्त पुरवठ्याशिवाय पर्याय नाही.

#### ५) वित्तीय साक्षरता अर्थ : (Meaning of Financial Literacy)

वित्तीय व्यवहार समजण्यासाठी क्षमता म्हणजे वित्तीय साक्षरता असे म्हणता येईल. वित्तच्या आकलनातून माहिती आधारित आणि अधिक परिणामकारक निर्णय घेण्याची शक्यता निर्माण करणाऱ्या ज्ञानाचा व कौशल्याचा संच वित्तीय साक्षरतेतून उत्पन्न होतो. मर्यादा वित्तीय संसाधनांचा पर्याप्त वापर, त्यांची वृद्धी आणि माणसाच्या कल्याणासाठी त्यांचे उपयोजन करण्याचे ज्ञान, कौशल्य प्राप्त करणे म्हणजे वित्तीय साक्षरता होय.

वित्तीय साक्षरतेसाठी शिक्षणाचा उपयोग होऊ शकतो. शाळा, महाविद्यालये यांच्या अभ्यासक्रमात वित्तीय साक्षरतेचा समावेश केला जात आहे. काही वित्तीय संस्था, बँका व वित्तीय नियामक वित्तीय साक्षरतेसाठी छोटे-मोठे अभ्यासक्रम चालवत आहेत. कार्यशाळा, प्रदर्शने, चर्चासत्रे, अधिवेशने याद्वारेही साक्षरता वाढीसाठी प्रयत्न केले जातात. वित्तीय साक्षरतेसाठी माहितीपत्रके, पुस्तिका, पुस्तिके, लेख, मुलाखती, भाषणे, प्रयोग ही माध्यमे वापरली जातत. शाळा, महाविद्यालये, कामाच्या जागा येथील प्रत्यक्ष संपर्कातून अथवा दूर शिक्षण पध्दतीने किंवा वित्तीय साक्षरता साधण्याचे प्रयत्न करता येतात.

वित्तीय साक्षरतेमुळे स्वतःचे कुटुंबाचे, धंद्याचे योग्य वित्तीय नियोजन करणे शक्य होते. वित्तीय व्यवहारातील जोखमींचा अंदाज घेता येतो. व ती जोखीम स्वीकारण्यासंबंधी निर्णय घेता येतो. तिचे व्यवस्थापन करता येते. कर्ज घेणे-देणे, कर्जाचे व्यवस्थापन, खर्चाचे नियोजन, गहाण-तारण संबंधी व्यवहार, निवृत्तीनंतरचे वित्तीय नियोजन, बचत आणि गुंतवणूक, जीवन विमा आणि मालमत्ता विमा, उपभोक्ता अगर ग्राहक म्हणून अधिकार, अंदाजपत्रकाचा उपयोग व पध्दती, बँकेचे व्यवहार, घराची खरेदी किंवा भाड्याने घेणे, स्वतःचे नक्त मूल्य वाढविणे, वित्तीय लक्ष्य निश्चिती धंद्याचे यशस्वी नियोजन, वित्तीय संस्था, विदेशी चलन व्यवहार, विनिमयदर, प्रत्यक्ष अप्रत्यक्ष कर दायित्व इत्यादी बाबींची माहिती वित्तीय साक्षरतेमुळे मिळते. विश्लेषण करून निर्णय घेण्याची क्षमता विकसित होते.

शासनाची धोरणे (राजस्व धोरण, नाणेविषयक धोरण, शेतीविषयक धोरण, विदेशी व्यापार धोरण इ.) यांची माहिती, त्यांचे परिणाम यांचा अभ्यास वित्तीय साक्षरतेत अंतर्भूत असतो. वित्तीय क्षेत्रातील आंतरराष्ट्रीय घडामोडींचीही माहिती वित्तीय साक्षरतेतून मिळते.

#### ६) भारतातील स्थिती : (Position Of India)

कृषी कर्ज व व्यक्तिगत कर्जामुळे अडचणीत आलेल्या कर्जदारांची वाढती चिंताजनक परिस्थिती पाहून रिझर्व्ह बँकेने २००९ साली बँकामार्फत पत सल्ला केंद्राची योजना राबविली. तिला पाहिजे तसे यश आले नाही. म्हणून पत सल्ला केंद्राऐवजी वित्तीय साक्षरता केंद्रे सुरू करायला सांगितली आहेत. देशात ६३० पेक्षा जास्त जिल्हा ठिकाणी केंद्रे सुरू होतील. तसेच व्यापारी बँकांच्या ग्रामीण शाखा आणि प्रादेशिक ग्रामीण बँका यांच्यामार्फतही वित्तीय साक्षरतेचा प्रसार होणार आहे.

वित्तीय साक्षरतेसाठी रिझर्व्ह बँक स्वतः त्यासाठी अभ्यास साहित्य तयार करून वाटप करणार आहे. याशिवाय मुंबई शेअर बाजार, मच्युअल फंड संस्था, विद्यापीठे इ. मार्फत वित्तीय साक्षरतेचे अभ्यासक्रम राबविले जात आहेत.

विमा, गुंतवणूक विषयक सल्लागारांना प्रशिक्षण देऊन पदवी पदविका/ प्रमाणपत्रे दिली जात आहेत.

आज जोखीम कमी करत वित्तीय संसाधनांचा पुरेसा उपभोग घेण्यासाठी वित्तीय साक्षरतेची गरज भागविणे आवश्यक आहे.

## ब) भारताचा परकीय / विदेशी व्यापार (India's Foreign Trade)

### १) प्रस्तावना : (Introduction)

वस्तू आणि सेवांच्या खरेदी विक्रीला व्यापार असे म्हणतात. असा व्यापार जेव्हा एकाच देशातील जनतेमध्ये होतो त्याला देशी व्यापार असे म्हणतात. याउलट दोन देशांतील जनतेमध्ये जेव्हा वस्तुंची देवाण -घेवाण होते त्याला विदेशी व्यापार असे म्हणतात. अशा प्रकारे एक देश इतर अनेक देशांशी करीत असलेल्या वस्तुंच्या देवाण घेवाणीला विदेशी व्यापार असे म्हणतात. विदेशी व्यापार पुढील तीन प्रकारचा असतो.

### १) आयात व्यापार : (Import Trade)

एक देश दुसऱ्या देशाकडून वस्तुंची खरेदी करीत असेल तर त्याला आयात व्यापार असे म्हणतात.

### २) निर्यात व्यापार : (Export Trade)

आपल्या देशात तयार झालेल्या वस्तुंची एक देश दुसऱ्या देशाला विक्री करीत असेल तर त्याला निर्यात व्यापार असे म्हणतात.

### ३) पुननिर्यात व्यापार : (Re Export Trade)

एखादा देश एका देशातून वस्तुंची आयात करून नंतर त्या वस्तू दुसऱ्या देशात निर्यात करीत असेल तर त्या व्यापाराला पुननिर्यात व्यापार असे म्हणतात.

अशा व्यापारांमुळे इतर देशांच्या गरजा पूर्ण होऊन परकीय चलन उपलब्ध होते. व आपल्याला गरज असलेल्या वस्तु खरेदी करणे सोयीचे होते.

### २) विकसनशील देशांच्या दृष्टीने विदेशी व्यापाराचे महत्त्व :

#### (Importance of Foreign Trade in Respect of Developing Countries)

विकसनशील देशांची उत्पादनक्षमता वाढविल्याशिवाय अर्थव्यवस्थेचा जलद आर्थिक विकास होणे शक्य नसते. उत्पादन क्षमता वाढविण्यासाठी मोठ्या प्रमाणावर भांडवल, यंत्रसामुग्री, यांत्रिक आणि तांत्रिक ज्ञानाची आवश्यकता असते. विकसनशील देशांजवळ या गोष्टी पुरेशा प्रमाणात उपलब्ध नसतात. त्यामुळे त्यांना अशा वस्तुंची मोठ्या प्रमाणावर आयात करावी लागते. अशा आयातीला विकासात्मक किंवा विकासाभिमुख आयात (Development Import) असे म्हणतात.

विकासाची प्रक्रिया सुरू केल्यानंतर देशातील उपलब्ध उत्पादन क्षमतेचा पूर्णपणे उपयोग करता यावा यासाठी कच्चा माल, मध्यम स्वरूपाच्या वस्तू इत्यादींची आयात करावी लागते. या आयातीला देखभाल किंवा भरणपोषण (Maintenance Import) आयात असे म्हणतात.

देशात विकासाची प्रक्रिया सुरू झाल्यानंतर किंमत पातळीत वाढ होणे अपरिहार्य असते. किंमत पातळी कमी ठेवण्यासाठी देशाला सेवनीय किंवा उपभोग्य वस्तुंची देखील आयात करावी लागते. स्वातंत्र्योत्तर काळात भारताने अन्नधान्याची केलेली आयात उपभोग्य आयात होती.



१) पहिल्या योजनेचा काळ : (१९५१-५२ ते १९५५-५६)

या योजनेच्या काळात भारताची एकूण आयात ३६५१ कोटी तर निर्यात ३१०९ कोटी रू होती. त्यामुळे व्यापार शेषात ५४२ कोटी रू.ची तूट होती. या काळात नियोजनाची सुरुवात झाल्याने मोठ्या प्रमाणावर यंत्रसामुग्री आणि भांडवली वस्तू आयात केल्या गेल्यात.

२) दुसऱ्या योजनेचा काळ (१९५५-५६ ते १९६०-६१)

या योजनेच्या काळात आयात ५४०२ कोटी रू. आणि निर्यात ३०६३ कोटी रू. त्यामुळे व्यापार शेष २२६९ कोटी रू. प्रतिकूल होता. या काळात पोलादी संयंत्रे, रेल्वे उद्योग अशा अनेक उद्योगांच्या आधुनिकीकरणामुळे भारताला प्रचंड प्रमाणावर आयात करावी लागली.

३) तिसऱ्या योजनेचा काळ (१९६०-६१ ते १९६५-६६) या योजनेच्या कालावधीत व्यापार शेषातील तूट २३८४ कोटी रू. झाली. या कालावधीत देशांच्या संरक्षणासाठी आवश्यक वस्तुंची आणि अन्नधान्याची आयात करावी लागली. तसेच १९६५-६६ च्या दुष्काळामुळे भारताला मोठ्या प्रमाणात अन्नधान्याची आयात करावी लागली.

४) तीन वार्षिक योजना आणि चवथ्या योजनेचा काळ (१९६६-६७ ते १९७३-७४)

या कालावधीत भारताच्या व्यापार शेषाची प्रतिकूलता बरीच वाढली होती. म्हणून जून १९५५ मध्ये रूपयाचे ३६.५% ने अवमूल्यन करण्यात आले. त्यामुळे १९६६-६७ आणि १९६७-६८ या वर्षामध्ये निर्यात वाढली. परंतु भारताला अन्नधान्याची आयात करावी लागल्याने पुन्हा व्यापारशेष प्रतिकूल झाला.

इ.स. १९७२-७३ मध्ये व्यापार शेष १०४ कोटी रूपयांनी अधिक्याचा झाला.परंतु पेट्रोलियमच्या किंमतीत वाढ, खते आणि कागद महाग झाल्यामुळे पुन्हा व्यापारशेष ४३२ कोटी रूपयांनी तुटीचा झाला.

चवथ्या योजना काळातव्यापार शेष ८१३ कोटी रूपयांनी तुटीचा झाला तरी तीन वार्षिक योजनांच्या कालावधीपेक्षा ही तूट बरीच कमी होती.

५) पाचव्या योजनेचा काळ (१९७४-७५ ते १९७८-७९)

या योजनेच्या काळात पेट्रोलियम व अन्नधान्याच्या आयातीमुळे आयात २७,६९७ कोटी रूपये तर निर्यात २३६४७ कोटी रूपये झाले. याचे कारण म्हणजे ऑक्टोबर १९७३ मध्ये खनिज तेलाच्या किंमतीत मोठ्या प्रमाणात वाढ झाली. त्यामुळे व्यापार शेष ४०४९ कोटी रूपयांनी प्रतिकूल झाला.

६) सहाव्या आणि सातव्या योजनेचा काळ (१९८०-८१ ते १९८९-९०) सहाव्या योजना काळात व्यापार शेषाची प्रतिकूलता जास्तच वाढली. ती २९६७५ कोटी रू. झाली. या काळात पेट्रोलियम पदार्थाची किंमत बरीच वाढल्याने योजनेच्या कालावधी आयाती संबंधीच्या उदारीकरण धोरणामुळे तर आयातीत खूपच वाढ झाली. त्यामानाने निर्यात वाढू शकलो नाही. त्यामुळे सातव्या योजनेत व्यापार शेषात ५४२०४ कोटी रू.ची तूटनिर्माण झाली.

७) आठव्या योजनेचा काळ (१९९१-९२ ते १९९६-९७)

या योजना काळात भारताचा व्यापार शेष ५५९७८ कोटी रूपयांनी प्रतिकूल होता. या कालावधीत आयात उदारीकरण धोरण, पेट्रोलियमच्या पदार्थाच्या आयातीत वाढ, १९९१ चे रूपयाचे अवमूल्यन जागतिक मंदी, विदेशी बाजारपेठेतील भारतीय वस्तुची कमी मागणी इत्यादी कारणामुळे व्यापार शेषात मोठ्या प्रमाणावर तूट निर्माण झाली.

८) नववी व दहावी योजना (१९९७-२००२ व २००२ ते २००७)

१) पहिल्या योजनेचा काळ : (१९५१-५२ ते १९५५-५६)

या योजनेच्या काळात भारताची एकूण आयात ३६५१ कोटी तर निर्यात ३१०९ कोटी रू होती. त्यामुळे व्यापार शेषात ५४२ कोटी रू.ची तूट होती. या काळात नियोजनाची सुरुवात झाल्याने मोठ्या प्रमाणावर यंत्रसामुग्री आणि भांडवली वस्तू आयात केल्या गेल्यात.

२) दुसऱ्या योजनेचा काळ (१९५५-५६ ते १९६०-६१)

या योजनेच्या काळात आयात ५४०२ कोटी रू. आणि निर्यात ३०६३ कोटी रू. त्यामुळे व्यापार शेष २२६९ कोटी रू. प्रतिकूल होता. या काळात पोलादी संयंत्रे, रेल्वे उद्योग अशा अनेक उद्योगांच्या आधुनिकीकरणामुळे भारताला प्रचंड प्रमाणावर आयात करावी लागली.

३) तिसऱ्या योजनेचा काळ (१९६०-६१ ते १९६५-६६) या योजनेच्या कालावधीत व्यापार शेषातील तूट २३८४ कोटी रू. झाली. या कालावधीत देशांच्या संरक्षणासाठी आवश्यक वस्तुंची आणि अन्नधान्याची आयात करावी लागली. तसेच १९६५-६६ च्या दुष्काळामुळे भारताला मोठ्या प्रमाणात अन्नधान्याची आयात करावी लागली.

४) तीन वार्षिक योजना आणि चवथ्या योजनेचा काळ (१९६६-६७ ते १९७३-७४)

या कालावधीत भारताच्या व्यापार शेषाची प्रतिकूलता बरीच वाढली होती. म्हणून जून १९५५ मध्ये रूपयाचे ३६.५% ने अवमूल्यन करण्यात आले. त्यामुळे १९६६-६७ आणि १९६७-६८ या वर्षांमध्ये निर्यात वाढली. परंतु भारताला अन्नधान्याची आयात करावी लागल्याने पुन्हा व्यापारशेष प्रतिकूल झाला.

इ.स. १९७२-७३ मध्ये व्यापार शेष १०४ कोटी रूपयांनी अधिक्याचा झाला.परंतु पेट्रोलियमच्या किंमतीत वाढ, खते आणि कागद महाग झाल्यामुळे पुन्हा व्यापारशेष ४३२ कोटी रूपयांनी तुटीचा झाला.

चवथ्या योजना काळातव्यापार शेष ८१३ कोटी रूपयांनी तुटीचा झाला तरी तीन वार्षिक योजनांच्या कालावधीपेक्षा ही तूट बरीच कमी होती.

५) पाचव्या योजनेचा काळ (१९७४-७५ ते १९७८-७९)

या योजनेच्या काळात पेट्रोलियम व अन्नधान्याच्या आयातीमुळे आयात २७,६९७ कोटी रूपये तर निर्यात २३६४७ कोटी रूपये झाले. याचे कारण म्हणजे ऑक्टोबर १९७३ मध्ये खनिज तेलाच्या किंमतीत मोठ्या प्रमाणात वाढ झाली. त्यामुळे व्यापार शेष ४०४९ कोटी रूपयांनी प्रतिकूल झाला.

६) सहाव्या आणि सातव्या योजनेचा काळ (१९८०-८१ ते १९८९-९०) सहाव्या योजना काळात व्यापार शेषाची प्रतिकूलता जास्तच वाढली. ती २९६७५ कोटी रू. झाली. या काळात पेट्रोलियम पदार्थाची किंमत बरीच वाढल्याने योजनेच्या कालावधी आयाती संबंधीच्या उदारीकरण धोरणामुळे तर आयातीत खूपच वाढ झाली. त्यामानाने निर्यात वाढू शकलो नाही. त्यामुळे सातव्या योजनेत व्यापार शेषात ५४२०४ कोटी रू.ची तूटनिर्माण झाली.

७) आठव्या योजनेचा काळ (१९९१-९२ ते १९९६-९७)

या योजना काळात भारताचा व्यापार शेष ५५९७८ कोटी रूपयांनी प्रतिकूल होता. या कालावधीत आयात उदारीकरण धोरण, पेट्रोलियमच्या पदार्थाच्या आयातीत वाढ, १९९१ चे रूपयाचे अवमूल्यन जागतिक मंदी, विदेशी बाजारपेठेतील भारतीय वस्तुची कमी मागणी इत्यादी कारणांमुळे व्यापार शेषात मोठ्या प्रमाणावर तूट निर्माण झाली.

८) नववी व दहावी योजना (१९९७-२००२ व २००२ ते २००७)

नवव्या योजनेच्या काळात भारताचा व्यापार शेष ३६१८२ रूपयांनी प्रतिकूल होता. तर दहाव्या योजनेत मोठ्या प्रमाणावर वाढ होऊन तो रूपये २६८७२७ एवढा झाला. या काळात निर्यातीत मोठ्या प्रमाणावर वाढ झाली.परंतु जागतिक व्यापार संघाच्या दबावामुळे आयात देखील मोठ्या प्रमाणावर करावी लागली. त्यामुळे भारताच्या व्यापार शेषामध्ये वाढ झाली..

१) अकरावी योजना : (२००७ ते २०१२) : सध्या अकरावी योजना सुरू असून २००९-२०१० मध्ये भारताचा शेष हा रूपये ५१८२०२ एवढा आहे. परंतु त्याच बरोबर निर्यातीत देखील वाढ झाल्याचे स्पष्ट होते.

#### ४) भारताच्या विदेशी व्यापाराची दिशा : (Direction of Foreign Trade of India)

एखाद्या देशाचा व्यापार इतर कोणकोणत्या देशांशी होतो. त्यावरून त्या देशाच्या विदेशी व्यापाराची दिशा लक्षात येते. स्वातंत्र्यपूर्वी भारताचा विदेशी व्यापार इंग्लंड आणि इंग्लंडचे मित्र देश यांच्याशीच होत असे. त्यामुळे भारताचा विदेशी व्यापार संकुचित होता. स्वातंत्र्य प्राप्तीनंतर भारताने अनेक देशांशी व्यापार सुरू केला. आता भारताचा विदेशी व्यापार बराच व्यापक झाला असून भारताचे अनेक देशाशी व्यापारी संबंध प्रस्थापित झाले आहेत. या देशांचे चार गटात वर्गीकरण करता येते.

१) अमेरिका गट २) युरोपीय गट ३) आशिया गट ४) आफ्रिका गट

भारताच्या विदेशी व्यापाराची दिशा दोन प्रकारे वर्गीकृत करता येते.

१) आयात व्यापाराची दिशा :

भारताच्या आयात व्यापारात विविध देशांचा वाटा किती आहे. त्यावरून आयात व्यापाराची दिशा समजते. इ.स. १९५१-५२ ते २००९-१० पर्यंत भारताच्या आयात व्यापारात विविध देशांचा वाटा किती होता ते पुढील सारणीवरून लक्षात येईल.

सारणी क्रमांक २

भारताच्या आयात व्यापाराची दिशा

| गट देश        | १९५१-५२<br>(प्रतिशत प्रमाण) | १९९३-९४<br>(प्रतिशत प्रमाण) | २००९-१०<br>(प्रतिशत प्रमाण) |
|---------------|-----------------------------|-----------------------------|-----------------------------|
| १) अमेरिका गट | ३६.३                        | १७.४                        | ३२.४                        |
| २) युरोपीय गट | ३१.५                        | ३२.३                        | ३३.२                        |
| ३) आशिया गट   | २२.७                        | ४७.७                        | ३२.६                        |
| ४) आफ्रिका गट | ९.५                         | २.६                         | १.८                         |
| एकूण          | १००.००                      | १००.००                      | १००.००                      |

वरील सारणीवरून पुढील बाबी स्पष्ट होतात.

१) भारतात नियोजनपूर्वी आयात व्यापार अमेरिका गटाकडून जास्त होता. इ.स. १९५१-५२ मध्ये अमेरिका गटाकडून ३६.३% आयात होती. त्यात घट होऊन ती इ.स. १९९३-९४ मध्ये १७.४% आयात झाली. अमेरिकेने भारतीय अर्थव्यवस्थेत अनेकदा हस्तक्षेप करण्याचा प्रयत्न केला. त्यामुळे भारताने अमेरिकेवरील आपले अवलंबित्व कमी केले. परंतु २००९-१० मध्ये त्यात वाढ होऊन ती आयात ३२.४ % एवढी झाली.

२) भारताची युरोपीय गटाकडून होणारी आयात स्थिर आहे. इ.स. १९५१-५२ मध्ये युरोपीय गटाकडून होणारी आयात ३१.५ % होती. ती १९९३-९४ मध्ये ३२.३% झाली. तर २००९-१० मध्ये ती ३३.२ एवढी झाली.

३) भारताची आशिया गटातून होणारी आयात प्रचंड प्रमाणात वाढली आहे. इ.स. १९५१-५२ मध्ये आशिया गटातून फक्त २२.७ % आयात होत असे. ती वाढून १९९३-९४ मध्ये ४७.७% एवढी झाली. इ.स.२००९-१० मध्ये ही आयात कमी होऊन ती ३२.६% एवढी झाली.

४) भारताच्या आयात व्यापारात आफ्रिका गटाकडून होणारी आयात पूर्वीपासूनच कमी होती. इ.स. १९५१-५२ मध्ये आफ्रिका गटाकडून होणारी आयात ९.५% होती. त्यात घट होऊन १९९३-९४ मध्ये ती फक्त २.६%एवढीच झाली. २००९-१० मध्ये त्यात आणकी घट होऊन ती १.८% एवढी झाली.

२) निर्यात व्यापाराची दिशा :

भारत कोणकोणत्या देशांशी निर्यात व्यापार करतो त्यावरून भारताच्या निर्यात व्यापाराची दिशा लक्षात येते. भारत इ.स. १९५१-५२ ते २००९-१० या कालावधीत कोणकोणत्या देशांशी निर्यात व्यापार करतो हे पुढील सारणीवरून स्पष्ट होईल.

सारणी क्र. ३

भारताच्या निर्यात व्यापाराची दिशा

| गट देश        | १९५१-५२<br>(प्रतिशत प्रमाण) | १९९३-९४<br>(प्रतिशत प्रमाण) | २००९-१०<br>(प्रतिशत प्रमाण) |
|---------------|-----------------------------|-----------------------------|-----------------------------|
| १) अमेरिका गट | २८.२                        | २०.९                        | ३६.९                        |
| २) युरोपीय गट | ३६.८                        | ३०.४                        | २२.१                        |
| ३) आशिया गट   | २७.८                        | ४५.७                        | ३९.३                        |
| ४) आफ्रिका गट | ७.२                         | ३.०                         | १.७                         |
| एकूण          | १००.००                      | १००.००                      | १००.००                      |

वरील सारणी वरून पुढील बाबी स्पष्ट होतात.

१) भारताची निर्यात अमेरिका गटाला इ.स. १९५१-५२ मध्ये २८.२ %होती. त्यात घट होऊन १९९३-९४ मध्ये २०.९% झाली. अमेरिकेसोबत भारताच्या राजकीय संबंधात बिघाड निर्माण झाल्याने भारताची अमेरिकेतील निर्यात कमी झाली. परंतु पुन्हा २००९-१० मध्ये त्यात वाढ होऊन ती ३६.९% एवढी झाली.

२) भारताची युरोपीय गटात १९५०-५१ मध्ये ३६.८ % निर्यात होती. ती १९९३-९४ मध्ये ३०.४% झाली. युरोपीय गटात होणाऱ्या निर्यातीत फारसा बदल झाला नाही. परंतु २००९-१० मध्ये ती २२.१ % एवढी कमी झाली.

३) भारताच्या आशिया गटात होणाऱ्या निर्यातीत प्रचंड प्रमाणावर वाढ झाली आहे. इ.स. १९५१-५२ मध्ये आशिया गटाला २७.८% निर्यात होत असे. इ.स. १९९३-९४ मध्ये ४५.७% एवढी निर्यात होत असे. त्यात घट होऊन इ.स. १९९३-९४ मध्ये ती फक्त ३% निर्यात झाली. तर त्यात घट होऊन ती २००९-१० मध्ये फक्त १.७% एवढी आहे.

५) भारताच्या आयात व्यापाराची रचना : (Composition Of Import Trade)

भारताच्या आयात व्यापारात खालील वस्तुंचे प्रतिशत प्रमाण पुढील सारणीवरून स्पष्ट होईल.

सारणी क्र. १४

| गट वस्तू                      | १९७०-७१<br>(प्रतिशत प्रमाण) | १९९६-९७<br>(प्रतिशत प्रमाण) | २००९-१०<br>(प्रतिशत प्रमाण) |
|-------------------------------|-----------------------------|-----------------------------|-----------------------------|
| १) उपभोग्य वस्तू व अन्नधान्ये | २०.०                        | २.१                         | १६.८                        |

|                            |        |        |        |
|----------------------------|--------|--------|--------|
| २) भांडवली वस्तू           | २४.७   | २३.१   | २९.९   |
| ३) कच्चा माल आणि इतर वस्तू | ४६.९   | ५४.३   | २८.५   |
| ४) पेट्रोलियम पदार्थ       | ८.४    | २०.५   | २४.८   |
| एकूण                       | १००.०० | १००.०० | १००.०० |

वरील सारणीवरून भारताच्या आयात व्यापाराची रचना पुढील प्रमाणे

- १) भारतात भांडवली वस्तुंची आयात इ.स. १९७०-७१ मध्ये २४.७ % होती. १९९६-९७ मध्ये २३.१% झाली. २००९-१० मध्ये ती २९.९% एवढी होती. भारतात अजूनही विकासाची प्रक्रिया सुरूच आहे.
  - २) भारतात इ.स.१९७०-७१मध्ये उपभोग्य वस्तू आणि अन्नधान्याची आयात २०% होती. ती १९९६-९७ मध्ये २% झाली. परंतु पुन्हा २००९-१० मध्ये त्यात वाढ होऊन ती १६.८% एवढी झाली. या काळात झालेल्या विकासापुढे भारतात उपभोग्य वस्तू आणि अन्नधान्याचे उत्पादन भरपूर प्रमाणात होत आहे.
  - ३) भारतात कच्चा माल आणि इतर वस्तूंच्या आयातीत वाढ होत आहे. रासायनिक खते, द्रव्ये, लोखंड, पोलाद, मोती, जडजवाहीर यांचा त्यात समावेश होतो.
  - ४) भारताची पेट्रोलियम पदार्थांची आयात प्रचंड वाढली आहे. वाढत्या औद्योगिकरणामुळे आणि शहरीकरणामुळे पदार्थ जास्त वापरले जातात. त्यामुळे या पदार्थांची आयात बरीच वाढली आहे.
- ६) निर्यात व्यापाराची रचना : (Composition of Export Trade)

निर्यात व्यापाराच्या रचनेचा अभ्यास करण्यासाठी भारतातून निर्यात होणाऱ्या वस्तुंचे वर्गीकरण आणि कोणत्या वस्तुंची किती निर्यात आहे. याची माहिती पुढील सारणीत दिली आहे.

सारणी क्रमांक ५

भारताच्या निर्यात व्यापाराची रचना

| वस्तू गट                 | १९७०-७१<br>(प्रतिशत प्रमाण) | १९९६-९७<br>(प्रतिशत प्रमाण) | २००९-१०<br>(प्रतिशत प्रमाण) |
|--------------------------|-----------------------------|-----------------------------|-----------------------------|
| १) शेतकी व संबंधित वस्तू | ३१.७                        | १९.९                        | ९.६                         |
| २) पक्का माल             | ५०.३                        | ७५.४                        | ६७.४                        |
| ३) खनिजे                 | १०.७                        | २.९                         | ४.३                         |
| ४) पेट्रोलियम पदार्थ     | ०.८                         | १.६                         | १४.३                        |
| ५) इतर वस्तू             | ६.५                         | ०.२                         | ४.०                         |
| एकूण                     | १००.००                      | १००.००                      | १००.००                      |

वरील सारणीवरून भारताच्या निर्यातीबाबत पुढील बाबी स्पष्ट होतात.

- १) भारताच्या शेतकी आणि संबंधित वस्तुंच्या निर्यातीत घट झाली आहे. या गटात चहा, कॉफी, टेप, तंबाखू, साखर, मसाले, कापूस, तांदूळ, मांस, मासे, वनस्पती, तेल, फळे, भाजीपाला, डाळी इत्यादी वस्तुंचा समावेश होतो.
- २) पक्का मालात सुती कापड, तयार कपडे, तागाचे कापड, कातडे, ऊनी गालीचे, पादत्राणे, हस्तकलेच्या वस्तू, रसायने, इंजिनियरींगच्या वस्तू, लोखंड आणि पोलद या वस्तू समाविष्ट होतात.
- ३) खनिज तेलात अशुध्द मँगनीज, कच्चे लोखंड आणि अभ्रकाचा समावेश होतो.

४) भारतात पेट्रोलियम पदार्थांची निर्यात १९७०-७१ मध्ये ०.८%, १९९५-९६ मध्ये १.६% तर २००९-१० मध्ये प्रचंड वाढ होऊन ती १४.७% एवढी झाली.

५) वरील चार गटात समाविष्ट न होणाऱ्या सर्व वस्तुंचा इतर वस्तुंच्या गटात समावेश होतो.

७) भारतातील प्रमुख वस्तुंची निर्यात : (Export of Main Goods)

भारताच्या प्रमुख निर्यात वस्तुंचे प्रमाण पुढील सारणीवरून लक्षात येते.

सारणी क्रमांक ६ (रूपये कोटी रूपयांत)

| विवरण                  | १९९०-९१ | २००१-२००२ | २००९-२०१० |
|------------------------|---------|-----------|-----------|
| १. चहा                 | १०७०    | १७८९      | २९४४      |
| २. कापड व सूत          | २१००    | १५८१९     | १७४७९     |
| ३. कातडे व कातडी वस्तू | २५६६    | ८८८३      | १५९४६     |
| ४. इंजिनिअरींग वस्तू   | ३८७७    | ३११५०     | १८१०७३    |
| ५. तयार कपडे           | ४०१२    | २५४४१     | ५०७९१     |
| ६. लघु उद्योग          | ६१६७    | ३६७५६     | १४२०७६    |
| ७. रासायनिक उत्पादने   | ३५५८    | २६८८९     | १०८६८७    |

वरिल सारणीवरून इ.स. १९९०-९१ ते २००९-१० कालावधीत भारताच्या प्रमुख निर्यात वस्तुंचे प्रमाणात झालेली वाढ अगर घट दिसून येते.

८) भारताचे विदेशी व्यापार धोरण (Foreign Trade Policy of India)

भारताला स्वातंत्र्य मिळण्यापूर्वी म्हणजे ब्रिटिश राजवटीत इ.स. १९२१ पर्यंत मुक्त व्यापाराचे धोरण होते. हे धोरण भारतासाठी हानीकारक आणि इंग्लंडसाठी हितकारक होते. त्यामुळे भारतात पहिल्या महायुद्धापर्यंत आधुनिक उद्योगाची उभारणी होऊ शकली नाही. इ.स. १९२१ मध्ये स्थापन झालेल्या राजकोषीय समितीने भारतासाठी विभेदात्मक संरक्षणाची शिफारस केली होती. या शिफारशीनुसार सर्व उद्योगांसाठी संरक्षणाचे धोरण सारखे न ठेवता निवडक उद्योगांनाच संरक्षण दिले गेले. त्यामुळे त्या उद्योगांचा चांगला विकास झाला. भारत स्वतंत्र झाल्यानंतर इ.स. १९२१ चा अनुभव लक्षात घेऊन भारताने संरक्षण धोरणाचा स्विकार केला आहे.

९) भारताचे आयात-निर्यात धोरण (२००४ ते २००९) (Export - Import Policy of India (2004-2009))

२००४ च्या लोकसभा निवडणुकीत राष्ट्रीय लोकशाही आघाडी सरकार पराभूत झाले आणि त्यामुळे २००२ ते २००६ चे आयात निर्यात धोरणाची पूर्णपणे अंमलबजावणी होऊ शकली नाही. त्यानंतर २००४ मध्ये श्री.कमलनाथ यांनी २००४-२००९ या पाच वर्षांच्या कालावधीसाठी पुढील आयात -निर्यात धोरण जाहीर केले

उद्दिष्टे : (Objectives)

१) निर्यातीत ३०० अब्ज डॉलर्सपर्यंत वाढ करण्यासाठी वार्षिक २०% दराने पाच वर्षांपर्यंत निर्यात वाढविणे

२) जागतिक व्यापारात भारताचा वाटा १.५ % एवढा वाढविणे

वरील उद्दिष्टांची पूर्तता करण्यासाठी या धोरणात पुढील बाबी निश्चित करण्यात आल्या.

१) देशाच्या निर्यात उद्योगांना रोजगाराभिमुख बनविणे.

२) कृषीवर आधारीत उत्पादनांच्या निर्यातीला प्रोत्साहन देण्यासाठी विशेष कृषी योजना जाहीर करणे.

३) कृषी उत्पादनांवर सवलती देणे व भांडवली वस्तुंच्या आयातीला करमुक्त करणे.

- ४) EPCG योजनेमध्ये घरगुती उद्योगांच्या तांत्रिक प्रगतीला प्रोत्साहन देणे.
- ५) निर्यात उद्योगांना अधिक सुविधा पुरविणे
- ६) निर्यातीतून प्राप्त संपूर्ण रकम विदेशी मुद्रा खात्यात जमा करण्याची सवलत देणे.
- ७) निर्यातीच्या आधारावर एन स्टार ते फाईव्ह स्टार घराण्यांचा दर्जा निश्चित करणे. त्यासाठी १५ कोटी. रू.ची निर्यात मर्यादा निश्चित करणे.
- ८) निर्यातीला प्रोत्साहन देण्यासाठी निर्यातीवर कर पूर्णपणे मुक्त करणे.
- ९) फ्री ट्रेड आणि वेअर हाऊसिंगची स्थापना करणे व त्यात १०० % विदेशी गुंतवणूकीला प्रोत्साहन देणे.
- १०) सेवा निर्यातीसाठी बोर्ड ऑफ ट्रेडची पुनर्रचना करणे व सेवा निर्यात प्रोत्साहन परिषदेची स्थापना करणे.
- ११) जुन्या यंत्राच्या आयातीवरील प्रतिबंध समाप्त करणे.
- १२) निर्यात क्षेत्राला सेवा करातून मुक्त करणे व वस्तुंचा उत्पादन खर्च कमी करणे.

श्री. कमलनाथ यांनी जाहीर केलेले हे आयात निर्यात धोरण देशाच्या विकासासाठी उपयुक्त असून रोजगार व उत्पन्नात वाढ होण्यास या धोरणामुळे हातभर लागेल हे निश्चित असा माझा विश्वास आहे.

#### ७) सूचना : (Suggestions)

- १) विकसनशील देशांची उत्पादन क्षमता वाढविल्याशिवाय आर्थिक विकास होणे शक्य नसते. त्यासाठी आवश्यक बाबींची आयात करणे गरजेचे आहे.
- २) किंमत पातळी कमी ठेवण्यासाठी उपभोग्य वस्तूंची आयात करावी लागते.
- ३) आयातीच्या तुलनेत निर्यातीचे प्रमाण कमी असू नये.
- ४) निर्यात उद्योगांना जास्तीत जास्त सुविधा पुरविणे.
- ५) निर्यातीला प्रोत्साहन देण्यासाठी कर पूर्णपणे मुक्त करणे. अशा उद्योगांना सुविधा उपलब्ध करून देणे.
- ६) देशातील निर्यात उद्योगांना रोजगाराभिमुख बनविणे.
- ७) कुटीर आणि हस्तउद्योगांना प्रोत्साहन देणे.
- ८) निर्यात प्रोत्साहनासाठी उद्योगांना जास्तीत जास्त सवलती देणे
- ९) कृषीवर आधारित वस्तुंच्या निर्यातीवर विशेष लक्ष देणे
- १०) उपभोक्त्यांना योग्य किंमतीत दर्जेदार वस्तू उपलब्ध करून देणे
- ११) भांडवली वस्तुंच्या निर्यातीला प्रोत्साहन देणे
- १२) निर्यातीतून रोजगाराच्या नवीन संधी निर्माण करणे.
- १३) जागतिक दर्जाची गुणवत्ता असलेल्या वस्तुंना प्रोत्साहन देणे.
- १४) देशाच्या अर्थव्यवस्थेत गतीशीलता आणण्यासाठी जागतिक बाजारपेठेत आपले स्थान निश्चित करणे.
- १५) देशातील आर्थिक विकासाचा वेग वाढविण्यासाठी कच्चा माल, मध्यम स्वरूपाच्या वस्तू, यंत्रसामुग्री उपकरणे, उपभोग्य आणि भांडवली वस्तुंची उपलब्धता निश्चित करणे. इ.
- १६) देशातील बेकारी कमी होईल यासाठी रोजगार निर्मिती, बचतीची सवय, देशांत शांतता नांदेल, राष्ट्रीय विकासाला हातभार लागेल अशा योजनाची अंमलबजावणी करावी.
- १७) ग्रामीण विकास योजना राबवावे.
- १८) सवलतीच्या दरात व्यवसायांना शासनाकडून वेळेवर वित्तपुरवठा करण्यात यावे.

१९) व्यवसाय विस्तारासाठी वित्त आवश्यक असते.

२०) योग्य वित्त रचना व व्यवस्थेमुळे आवश्यक उत्पादन करणे शक्य होते.

२१) वित्त उपलब्ध नसल्यास विपणन कार्यावर अनिष्ट परिणाम होतो. म्हणून वित्त पुरवठा वेळेवर उपलब्धतेची गरज आहे.

#### ८) समारोप : (Conclusion)

व्यवसायात वित्तपुरवठा हा आत्मा आहे. तसेच विकसनशील देशाचा विकास करण्यासाठी भांडवल, यंत्रसामुग्री, यांत्रिक आणि तांत्रिक ज्ञानाची आवश्यकता असते. हे विकसनशील देशात ह्या बाबी पुरेशा प्रमाणात उपलब्ध नसतात. अशा वस्तुंची आयात करावी लागते. त्यातून देशाचा सर्वांगीण विकास साध्य होतो असा माझा दृढ विश्वास आहे.

#### ९) संदर्भ : (Reference Book)

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