

## A STUDY OF NON-PERFORMING LOANS IN BRICS ECONOMIES

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### ABSTRACT

*A healthy banking sector of any country indicates the good economic health of that country. If banking sector suffers then the overall economic growth also get affected. Among various criteria for determining health of banking sector there is one important criteria i.e. Non-Performing Loans. And this NPL also affects the growth of Trading Blocs with which that country is associated. Trading Blocs are the entities in which various countries get together for various economic & social reasons. Here we are taking the BRICS trading bloc in context. In 2009 BRIC was firstly formed by association of four countries (viz. Brazil, Russia, India and China). Then in 2010 a new country i.e. South Africa also entered in this trading bloc. From then this trading bloc is being called as BRICS. The purpose of this study is to explore the concept & structure of Non-Performing Loans in these BRICS economies. Furthermore this paper also analyzed the pattern of NPLs in BRICS. For analyzing the pattern of NPLs the Regression tool & Trend Analysis Method are used. This study reveals the result that the criteria, for determining any Asset or Loan as Non Performing one, do not vary much from country to country & among all BRICS Economies , Russia is measured lowest in NPL level as its credit deployment is lower than other BRICS economies.*

**KEYWORDS:** BRICS, NPL, Trading Bloc, BRICS Economies, Non-Performing Loans.

**JEL Codes:** G21, F02

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### Introduction

For economic growth of any country, the growth of its banking system is must. If banking sector growth suffers then it affects the overall credit facility as well as money supply in the country. When money supply hampers then the aggregate demand and business growth got badly affected. Thus the overall economy performs severely.

### Non Performing Loan

Non-Performing loan is one of the important factor for analyzing the performance of banks. Any credit facility in banking sectors involves loan and advances. These are considered as performing assets to the banking institution if borrowers properly pay its interest, fees etc. [charged on particular loan]. When this process breaks these loans become the non-performing loans for the banks. These NPA directly hampers the profitability of banks. Higher NPA ratio shakes the confidence of investors, depositors, lenders etc. It also causes poor recycling of funds, which in turn will have deleterious effect on the deployment of credit. The non-recovery of loans also affects financial soundness of organization. *Kumar and Singh (2012).*

### BRICS

BRICS is the association of the five emerging economies i.e. Brazil, Russia, India, China and South Africa. Firstly it was formed with four member countries [Brazil, Russia, India and China] In 2010 South Africa merged in this group. Monica Herman Caggiano (2013), The BRICS as an informal bloc is most appropriate for intra bloc interaction, which have the potential to deliver good results for the

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participants, while maintaining their respective socioeconomic and political structures and maintaining seamlessness at the margins for smoother interaction and better agreements which may recognize genuine concerns of the members on merit.

Now-a-days NPA is the most prominent factor to analyze the health of the banking sector. The criteria for determining any asset as Non-Performing Asset varies from country to country. Such as in India and almost all other countries except China among BRICS, any asset is considered as NPA when loan remains due for 90 days, while in China a loan becomes more than 3 months past due but it will termed as NPL only when its bank will expect a loss.

As per the data of World Bank, the ranking of BRICS countries based on their total NPL percentage can be summarized as described ahead. Russia is on 32<sup>nd</sup> rank on the basis of its NPL percentage while other BRICS countries follow Russia i.e. India has its ranking equal to 44<sup>th</sup>, Brazil is staying on 71<sup>st</sup> rank while South Africa is following this country by being on 73<sup>rd</sup> rank and last China is in a poor condition as China is on 104<sup>th</sup> rank. (As per Data available for year 2015).

#### **Review of Literature**

**Laveena and Guleria (2016)**, studied the NPA problems and understanding the causes of it and also discuss about magnitude and causes of NPA problem over the last 3 years and discuss about its effect on economy. They concluded that the growth in NPA level increases the levels you have to set for provisions which overall decreases the shareholders' value and profits too Whole economies are being affected by this problem of NPA.

**Mwakajumilo Stephen Laurent Isaac (2014)**, studied the impact of non-performing assets on the growth of banking industry in Tanzania specifically NMB Bank. Furthermore it explored and identified specific steps that bank officers have to deal with the problems. The findings revealed that the impact of non-performing assets facilitated by non-recovery of loans, hence caused great harm to the economic framework and structure, loss of trust of dishonest, reduced customer ability in buying, legal issues, lack of aggressive credit collection policy, poor credit assessment. The study recommended that the bank management have to provide enough education on loan management to their clients as well as their workers.

**Impavido Gregorio, Christoph A. Klingen and Yan Sun (2012)**, suggested that suggests that "growing out of the NPL problem" is probably not a realistic option for the region. Instead, a more proactive and cooperative approach to NPL resolution is needed. This holds the promise of improved growth performance, with positive knock-on effects on banks' asset quality and credit demand.

#### **Need of the Study**

A number of the studies have conducted on the non-performing assets in banking sector. Mostly researches focused on the causes or reasons for increasing NPAs in banks and control measurements for managing NPAs. Some researchers also analyzed the impact of NPAs on number of the predefined factors like information index, legal right index, credit expansion, economic growth etc. in BRICS nation. Why overall banking growth is measured by its NPA level? To overview the solution of this question, this study is processed.

#### **Research Methodology**

For achieving the purpose of my study i.e. *To Study Non-Performing Assets & analyze its pattern in BRICS nations*, The data are collected from secondary sources- journals, annual reports, working papers and official websites of World Bank and the global economy. For analysis purpose last seven years data [2010-2016] of NPL (%) are taken. Trend analysis method and Regression tool are used with the help of MS Excel and SPSS software. This study has also taken a brief look in banking system of all the members of BRICS trade bloc. Further in this paper the conditions for declaring any asset as a non performing one in all countries.

#### **Analysis & Interpretation**

The percentage of Non-Performing Loans in any bank reflects the health of banking system. Higher NPL percentage informs about difficulty in collecting interests and EMIs. Bank nonperforming loans to total gross loans are the value of nonperforming loans divided by the total value of the loan portfolio (including nonperforming loans before the deduction of specific loan-loss provisions). The loan amount recorded as nonperforming should be the gross value of the loan as recorded on the balance sheet, not just the amount that is overdue. The pattern of NPL (%) in BRICS nations are given in Table 1(given in annexure). From the above table, it is concluded that the percentage of NPL in all the five countries of BRICS trade bloc has increased by the time. Among these five countries NPL percentage of India & China is in continuously

increasing order, while in Brazil & Russia firstly this NPL percentage has decreased but after that it has increased continuously. But in South Africa this percentage of NPL is exceptionally in decreasing order.

### **Brazil**

The introduction of new legislation in September 1988, the Brazilian banking system expanded at such a pace that the number of institutions more than doubled, totaling 244 by December 1994. The present Brazilian banking structure was developed on the basis of Law No. 4595, of December 31, 1994 (the "Banking Reform Law"), which formed the domestic financial system fully according to the specialization of the financial institutions. Financial Institutes, which are operating in Brazil, have to classify their assets in nine levels that are from level 'AA' to level 'H' based on associated risk of Borrower, Guarantor and the nature of operation. This criteria of classification were defined in National Monetary Resolutions n. 2682, of 12.21.1999 and n. 2697, of 2.24.2000. The nine levels on the basis of arrear of days and their required loan loss provisions are following:

- AA- No Arrears at all.
- A- Arrears for 15 days & Provision – 0.5%
- B- Arrears for 15-30 days & Provision -1.5 %
- C- Arrears for 31-60 days & Provision- 3.0 %
- D- Arrears for 61-90 days & Provision- 10%
- E- Arrears for 91-120 days & Provision – 30 %
- F- Arrears for 121-150 days & Provision- 50%
- G- Arrears for 151-180 days & Provision- 70%
- H- Arrears for 180- 360 days & Provision- 100%

Graph1 shows that in 2016, there is highest NPL in Brazil in comparison to last six years. Rising loan impairment charges are reducing profitability in Brazil's banking sector and this will affect banks' ability to generate capital internally, says Fitch Ratings. If Brazilian banks strengthened their capacity to absorb unexpected losses, this would mitigate the impact of the country's deep recession, which is forcing up non-performing loans (NPL). The Brazilian NPL market has been very active in 2015 and 2016. As per Moody's analyst Farooq Khan that it expect that ongoing deterioration in Brazilian economy will continue through 2016, pressuring corporate and consumer repayment capacity, fuelling a further rise in NPLs. While asset quality is expected to deteriorate, the rating agency noted that, the extent to which this will translate in to rising 90 days NPL ratios will depend in large measure on whether banks continue to renegotiate loan with troubled borrowers, and how many potential NPLs are written off.

### **Russia**

In Russia the number of commercial banks increased sharply in the early 1990's due to the lack of banking supervision, ease to obtain bank's licenses and low financing opportunities in the market after the collapse of the USSR. The number of banks went up to 2 700 banks in 1995. However, to control this situation, after appointment of Elvira Nabiullina, as head of the CBR in 2013 a new chapter in the Russian banking system began. Under her administration banking regulation became stricter as a number of bank licenses were withdrawn and resolution processes took place in many commercial banks. Depending on their access to the interbank market, rating and exposure to risks Russian banks can be grouped into three tiers:

- The first group is comprised of large banks which have high credit ratings and therefore have low funding costs, which rely mainly on the FX swap market for wholesale ruble liquidity and which have access to both secured and unsecured interbank markets.
- The second group is characterized by mid-sized banks which are heavily depend on CBR facilities for their funding as they have no access to unsecured interbank markets.
- The third tier is mainly dominated by small banks with low credit ratings, little or no access to interbank markets and often non-transparent ownership structures and lending practices.

### **Non-Performing Loans in Russia**

All loans are classified on the basis of professional judgment (except for loans grouped in a portfolio of similar loans) into one of five quality categories:

- **Quality category I (standard loans):** In this category, the loans having no credit risk fall. (the probability of losses due to non-performance by the borrower equals zero);

- **Quality category II (non-standard loans):** In this category, loans have moderate credit risk (the probability of losses due to non-performance by the borrower dictates its depreciation by 1 to 20 per cent);
- **Quality category III (doubtful loans):** The loans with considerable credit risk come in this category.(probability of financial losses due to non-performance by the borrower dictates its depreciation by 21 to 50 per cent);
- **Quality category IV (non-performing loans):** This category contains the loans having high credit risk (probability of financial losses due to non-performance by the borrower dictates its depreciation by 51 to 100 per cent);
- **Quality category V (bad loans):** In this category there is no possibility of loan repayment due to the borrower's inability or refusal to meet loan commitments, which dictates complete (100 per cent) depreciation of the loan.

Graph 2 shows that in 2016 Russia has highest level of NPL i.e.9.2%. And in 2013 it has lesser percentage of NPL. Over the last two years there was an accelerated deterioration of credit risk among Russian banks. This was the result of a number of internal and external factors which translated in lower internal demand, higher prices and negative economic growth. However, as a result of loans roll-over and regulatory forbearance, overall NPLs were stable during 2H 2015. The low figures, similar to those observed during the 2008 financial crisis, can be explained by different factors. While net interest margins declined as a consequence of slower asset growth and higher policy rates, net fees and commissions reduced in line with net interest income. Additionally, non-interest expenses declined at a slower pace than net interest income and provisions have risen following the deterioration of the loan portfolio. Russian non-performing loans also soared after the financial crisis in 2008, but things got better for the economy thanks to government bailouts and as commodity prices soared. The government has had to step in to help banks again since the ruble began this latest plunge. With government coffers now looking leaner, it's unclear whether that helping hand will be extended once more.

#### India

The first ever classification system for assets of Indian Banking System was introduced by A. Ghosh Committee in 1985. Before that until mid-eighties NPA was being managed by banks themselves and auditors. This system of classification was named as Health Code System (HCS). This system involved the classification of assets in to Eight categories i.e. Category 1 (Satisfactory) to Category 8 (Bad & Doubtful Assets). After some time in 1991, the Narsimhan Committee of Financial Systems felt that the system provided by A. Ghosh Committee for classification of assets was not in accordance with international standards and further suggested that for provisions, banks should classify their assets into four broad categories, viz. (i) standard assets; (ii) substandard assets; (iii) doubtful assets; (iv) Loss assets. Norms for NPA in India- in India any asset is classified as Non-Performing Assets, when:

- In Term Loan Accounts, interest and/ or installment of principal remain overdue for a period of more than 90 days.
- In case of CC/OD Accounts, the account remains 'out of order'.
- In case of bills, Bills remain overdue for more than 90 days,
- In case of crop loans, the installment of principal or interest thereon remains overdue for two crop seasons for short duration crops and the installment of principal or interest thereon remains overdue for one crop season for long duration crops etc.

As per graph 3, in India percentage of NPL shows an increasing pattern from 2010 to 2016. The overhang of bad debts has not only hit the profitability of banks but also their ability to grow their loan book. This has serious repercussions on India's overall credit growth as state owned banks account for two third of the overall credit disbursed by scheduled commercial banks. The former RBI governor Raghuram Rajan had argued in a speech earlier this year that "The slowdown in credit growth has been largely because of stress in the public sector banking and not because of high interest rates." The Reserve Bank of India had announced the Strategic Debt Restructuring (SDR) scheme and subsequently conducted an asset quality review (AQR), forcing lenders to recognize more loans as non-performing and set aside more funds as provisions, leading to some nasty surprises.

#### China

There are several categories of banks operating in China, with different ownership structures and serving different functions (viz. State-owned banks, Equitized commercial banks, local banks, and

Chinese Joint Stock Commercial Banks). The first category includes wholly state-owned banks. The second category consists of Equitized commercial banks – Those banks which were previously wholly state-owned, but were transformed into joint-stock companies, in which the Chinese central government is usually the largest stockholder. The third category encompasses a variety of local banks, with provincial or municipal governments as major stockholders and the fourth category is composed of Chinese joint stock commercial banks that were created after the start of China's banking reforms and have comparatively low levels of government ownership. After the creation of the People's Republic of China in 1949, the Chinese government nationalized all the banks under the People's Bank of China or the PBOC. During 1949 and 1978, the PBOC was administratively under the authority of the Ministry of Finance. In 1979, the PBOC became a separate entity, which will report directly to the State Council. In addition to this the banking functions of the PBOC were transferred to three state-owned policy banks—The Agricultural Bank of China, The Bank of China and The People's Construction Bank of China (which was later renamed China Construction Bank). Apart from these above stated three state-owned policy bank, a fourth state-owned policy bank, the Industrial and Commercial Bank of China was formed in 1984. Initially, these four state-owned policy banks were under the direct authority of the PBOC. Starting in 2005, China began a process of transforming them into joint-stock commercial banks—a process it calls “equalization”. All of the four policy banks—ABC, BOC, CCB, and ICBC—have been equitized.

### Regulations for NPL

The loan classification system described here follows a risk-based approach, whereby loans are divided into following five categories - pass, special-mention, substandard, doubtful and loss - with the last three categories recognized as NPLs.

- **Pass:** In this category, borrowers can honor the terms of the contracts, and there is not any reason to doubt their ability to repay principal and interest of loans in full and on a timely basis.
- **Special-mention:** In this second category, borrowers are still able to service the loans currently, although the repayment of loans might be adversely affected by some factors.
- **Substandard:** This category indicates that borrowers' ability to service loans is apparently in question, cannot depend on their normal business revenues to pay back the principal and interest of loans and certain losses might incur even when guarantees are executed.
- **Doubtful:** This category tells that borrowers cannot pay back principal and interest of loans in full and significant losses will incur even when guarantees are executed.
- **Loss:** In this Category principal and interest of loans cannot be recovered or only a small portion can be recovered after taking all possible measures and resorting to necessary legal procedures.

In graph 4, we can clearly see the pattern of NPL percentage in China during these years i.e. 2010 to 2016. This graph shows that till 2012 NPL percentage was decreasing but after that it went on increasing year by year. The official percentage, according to China Banking Regulatory Commission (CBRC) stood at 1.4 trillion Yuan, or 1.75% of the total loan book at the end of Q1-2016. Bank in China are just one reservoir of bad debts waiting to be purged by the next state led initiative, and NPLs are merely one category of debt. In this respect China announced an initiative i.e. NPL to Equity. The reason of its formation is to clear debt without obliging banks to the kind of asset write down implied by bundling and selling the impaired assets.

### South Africa

In present there are 38 registered banks in South Africa. Among the 38 registered banks there are 15 South African controlled banks, 6 non-resident controlled banks (subsidiaries), 15 local branches of international banks, and two mutual banks. In addition to this there are also 44 international banks have authorized representative offices in South Africa. Representative offices, however, may not take deposits. There are five major groups which mainly dominate the South African banking sector. These groups are the Absa group, the Standard Bank group, the FirstRand Bank group, Investec and Nedcor. During the year 1994, these groups represented 83.8 per cent of the total assets of the banking sector which increased to 87.4 per cent of the banking sector currently. The remaining 12.6 per cent of assets in the banking sector are currently held by the other 31 banks, excluding the two mutual banks. South Africa's banks are regulated in accordance with the principles set by the Basel Committee on Banking Supervision.

**NPL in South Africa:** Non-performing Loans (NPLs) generally are the loans which for a long period of time do not generate income. In the context of the Central Bank of West African States, *Banque*

*Centrale des Etats de l'Afrique de l'Ouest* (BCEAO), the lead time from the status of standard to substandard loans (including doubtful and loss loans) is much longer. In South Africa Substandard loans are the loans which have been unpaid for six months at least and whose repayments cannot be undertaken by the debtor. While at some places a different definition is also being used as by the Central Bank of "Central African States", in this definition nonperforming loans are the loans for which interest and/or principal have been left unpaid for a period of at least three months. Among the graphs of all BRICS countries only the graph of South Africa shows decreasing percentage of NPL. It clearly indicates that South Africa put on strict efforts for restricting its NPL percentage.

### Conclusion

All the countries have somewhat resemblance in its rules and conditions for NPL in their respective banking system. In which most common conditions is of 90 days overdue condition. It means that if any loan or advance remain overdue for 90 days then it will be declared as NPL. The result of regression tool and trend analysis is concluded that among all BRICS Economies, Russia is measured lowest in NPL level as its credit deployment is lower than other BRICS economies. Further in this paper, the light has also been thrown on various determinants of NPL in various countries. Similarly as conditions for declaring NPL, the reasons of NPL in BRICS nations are alike. These reasons can be divided into two parts i.e. Macroeconomics reasons and second is Bank specific reasons (micro economics reasons). Macroeconomics reasons includes Inflation rate, Real interest rate and unemployment. While Bank specific reasons are rapid loan growth rate, high interest rate, lenient credit terms, credit orientation, bank size, poor risk assessment. The important cause is poor loan follow up or we can say that bad monitoring of loan. Thus bank should specifically focus on the well management of whole loan process so that properly these loans can be controlled.

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### ANNEXURE

**Table 1: Non Performing Loan %**

Years	Brazil	Russia	India	China	South Africa
2010	3.11	8.23	2.39	1.13	5.79
2011	3.47	6.59	2.67	0.96	4.68
2012	3.45	6.03	3.37	0.95	4.04
2013	2.86	6	4.03	1	3.64
2014	2.85	6.73	4.35	1.1	3.24
2015	3.31	8.35	5.88	1.5	3.12
2016	3.8	9.2	7.6	1.7	3.2

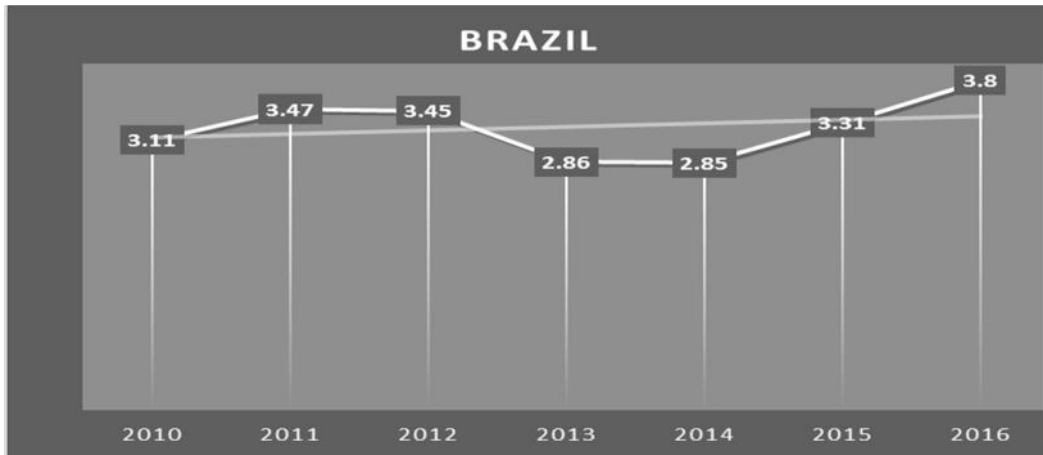
[Source: The World Bank (Measure: percent)]

**Table 2: Results of Regression Tool**

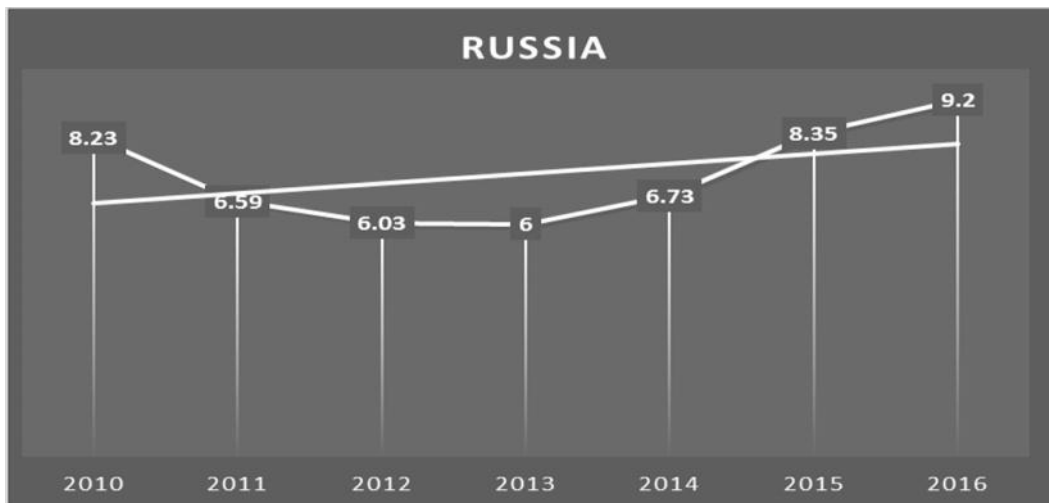
	Brazil	Russia	India	China	South Africa
Mean	3.24	7.30	4.327	1.19	3.958
R <sup>2</sup>	0.065	0.187	0.918	0.60	0.845
Beta	0.255	0.432	0.958	0.775	-0.919
Slope	0.041	0.255	0.822	0.105	-0.417

(Above table is concise on the basis of Regression results on SPSS)

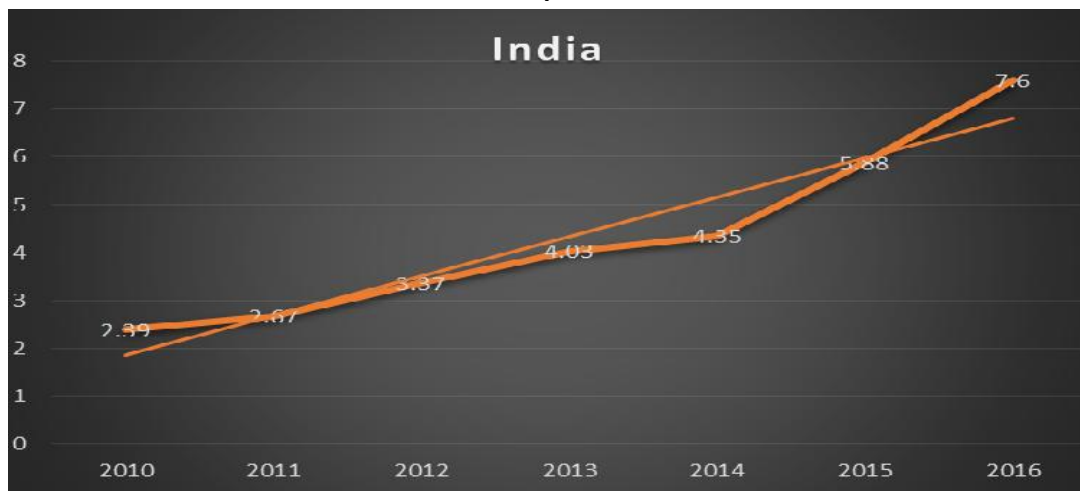
**Graph 1**



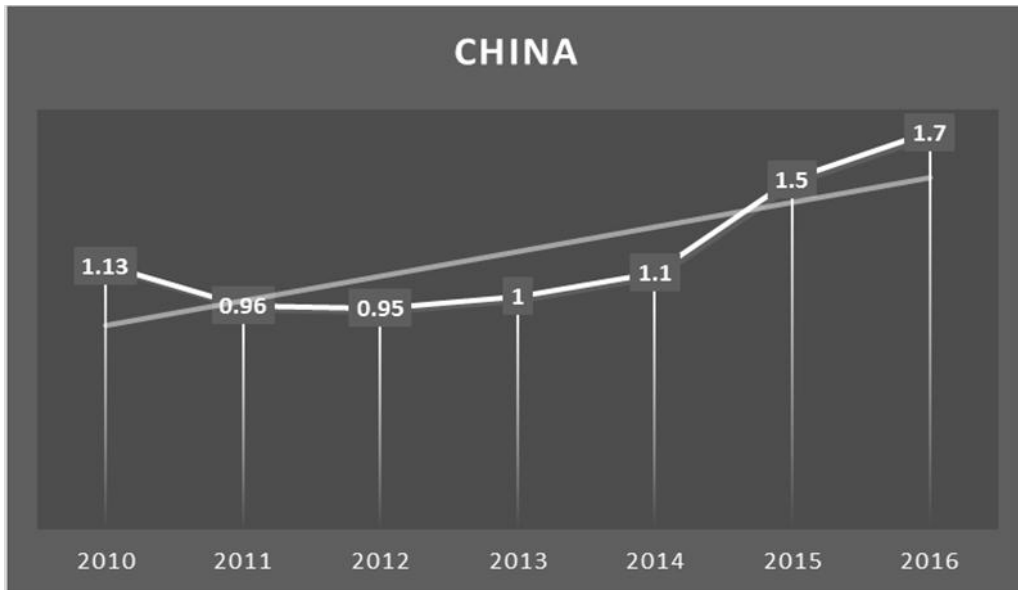
**Graph 2**



**Graph 3**



Graph 4



Graph 5

