Role of Capital Markets in the growth and Development of Indian Economy

Mr. Sandeep Kumar S. *
Mr. Manjunath S M. **

Abstract

India is a growing economy in the world with stable growth rate in the past two decade. It is ranked second in the growth rate giving tough competition to closest counterpart china. Capital market acts as an integral part of financial system in any country and it assumes the major role in the development of such economy and the businesses in it. Capital market in Indian financial system is broadly divided into two parts namely primary market and secondary market. Both these markets contributes to the growth of the economy in its own and unique ways.

The main object of this study is to find out the impact of capital markets on the growth and development of Indian economy and this article is focused on analyzing the statistical impact of independent variables such as market capitalization, total turnover of the market and exchange rate on depended variable called as nominal GDP growth rate of Indian economy for last 20 years starting from 1998. Data required for the study has been extracted from secondary sources and examined using statistical tools. Methodology of this study mainly includes the regression model, Karl Pearson's coefficient of correlation model along with other statistical tools.

From the study, we found that the capital markets variables shares moderate level correlation with the Indian economy indicator and these markets plays very important role in developing economy. These markets are contributing to the development of the economy not only in monitory terms but also in non-monetary aspects.

Key words: *Economic development, capital market, GDP, market capitalization, turmover.*

Introduction:

Capital market is an effective network for the companies and financial institutions to interact with public for mobilizing funds and allocating it for the effective use to generate wealth to economy. This market offers space for the companies, government and other financial institutions to sell their stocks and bonds to raise funds they need

Mr. Sandeep Kumar S., Team Leader, Ocwen Financial Solutions Pvt Ltd.
Email: Sandeepmadival@outlook.com

Mr. Manjunath S. M., Assistant Professor, R V Institute of Management, Bangalore

in a very specialized and organized environment. This feature of the market makes it an essential agent of economic growth. Capital market contributes to the growth of the economy in many ways, directly or indirectly through specific services that it performs. Few notable tasks or services includes mobilization of savings and converting it as investments, diversifying the risk, liquidity, enhanced incentives for the corporate control and improved assimilation and dissemination of information.

The importance of the capital market as an effective and efficient channel of economic growth and financial intermediation has been well recognized and appreciated by researchers, academicians and policy makers. It is referred as primary determinant of economic growth in developing countries. Hence it is very important for us to know the role that capital market plays in Indian economy and its business.

Knowingly, Indian economy is doing well from past two and half decades and considered to be a most happening economy in the world. It is difficult for us to identify all the factors contributing for successful run of this economy and quantify the role played by each of those factor to the success of this economy. Hence, in the study we have considered one of the top most contributor to the growth of Indian economy and trying to quantify the relations that these two factors share with each other with a motive of finding the impact that capital market has on Indian economy.

Introduction to Indian Economy:

Today, India is emerged as a fastest growing economy in the world with high growth rate recorded as per the surveys conducted by major institutions in the world. It beats its close counterpart China to become number one in growth numbers in the year 2015-16 and showed the confidence in continuing the same in the near future. India's growth rate is considered to be stabilized in long term and expected to grow at a rate of ~7% year on year till FY2020. Even though country saw sudden dip in the numbers in past few quarters, initiatives taken by the government and economic outlook seems to be favoring the nation to reclaim its number to continue its successful run as a fastest growing economy.

India which is considered to be a mixed economy with a balanced approach towards spending and savings has saw the major improvements in the area of poverty level of the people, keeping control on inflation, generating employment and repayment of debt. Real GDP rate of the country dropped to 7.1% in the year 2016-17 from 8% in the financial year 2015-16 and to 5.7% in first quarter of 2017-18, many factors contributed for this slowdown including the demonetization of major currency note of the country which resulted in slowdown of economy. Output growth experienced downtrend except agricultural sector in the current financial year as compared to previous year and that led to the weak overall demand for

the public and private consumption and investments.

In the recent past, the country had witnessed a major boost in terms of increased confidence showed by major rating agencies in the world and long term initiatives taken by the government to empower the nation. Steps taken by the government in recent past shown positive results in all the fundamental areas but that fail to showcase the same in its economic growth rate, baring all the short term hurdles, we can expect the country to grow faster with increase in real time GDP and other economic parameters such as inflation, employment growth, repayment of debt, reserves, etc.

Road ahead:

This developing mixed economy is currently ranked at sixth position in largest economies list and expected to become the third largest economy in absolute terms in a decade by doubling its size to US$ 4–5 trillion. Long term prospects of the country remain positive considering the young population, increase in investment rate, reduction in dependency ratio, increased foreign investments coming to the country, etc.

Capital Market:

Capital market is a most important and integral part of financial system of any country and it offers the support of capitalism to the county. It acts as a channel in movement of funds from the source of surplus funds to the source in need of money. Share market has gained lot of scope and importance in this country but debt market is still needs to be developed a lot to attract the funds from all the sources.

Capital market is a place for exchanging the long term securities, securities here represent the bundle of rights to person holds it in his name which are sold by companies, institutions and government authorities. There are different types of securities in the market with bundle of rights and there are mainly two levels of markets namely primary markets and secondary markets which deals with both stocks and bonds of the companies and the securities of the financial institutions of the country and government. Primary markets mainly deals with first time issue of financial instruments of long term nature to the public and private institutes and it consists of IPO, FPO and private placement whereas the secondary markets deals with the trading of those securities which are already issued to the public. Companies in need of funds will be benefited mainly from primary markets as it will help them to source the money required for their business but secondary markets will help the companies to increase the worth of the company. Country will gain benefit from both primary and secondary market; smooth functioning of both.

Indian capital market has its existence from long back and gained its importance post liberalization era. Indian economy undergone significant changes over the

period of time, from the closed economy in 1980s to liberalized economy post 1990 and unprecedented growth after 2000. Its growth rate has increased tremendously in this era and today it has gained the top position as destination for investments by both domestic and foreign players. India's capital market shown tremendous strength to bounce back in stability and sustainability backing by strong reforms and governance of the controllers which can be evidenced by the major incidences affecting capital market.

Stock markets considered to be an integral part of capital market has its existence from long back and Indian stock market considered to be one of the oldest in Asia with a history of more than 200 years. India has 23 stock markets which spread across the country but Bombay stock exchange and National stock exchange gain more importance among all and witness the large volume trading in any day compare to other markets in the country.

Role of capital market in economic Development:

Capital markets plays vital role in development of any country and gains importance in promoting sustainable growth of the country. It acts as an imperative channel for mobilization of savings and converting it as investment with a view of enhancing long term growth prospects of the country. Thus, it acts as a major promoter in transforming country's economy into more efficient, competitive and innovative market place in the global amphitheater.

In India, capital market helped economy in many ways, by generating employment, mobilizing savings, keeping control on spending, eradicating poverty level and helping country to increase the consumption power of its private players. With a strong governance and regulation by SEBI, it is improving the efficiency of capital allocation through the enhanced mechanism called as competitive pricing.

It is also playing supporting role of developing financial institution and generating foreign capital by acting as a bridge between institutions and the players for exchange of funds, it helps the companies to source the money from public at ease and at low cost of transaction. It also helps in valuation of financial instruments and companies listed.

Literature Review:

We can hardly find any analytical research done on this subject matter. However, this topic is not new to research circle. Below mentioned researches conducted on other market were taken as reference while reviewing the literature for this study.

- Briggs Atebu, Patricia member of department of business education at Isaac Jasper Boro College at Nigeria conducted a study on capital market and economic growth of Nigeria during 2005. The research was taken up as an analytical study

with an object of finding the impact of stock market and its variable on the Nigerian economy. He took market capitalization, new issue of shares and value of transaction as the stock market variable; applied multi regression and covariant model to test the data collected and concluded saying positive impact of stock market on Nigerian economy

- Omoruyi (1991), CBN (2004) had conducted the survey on the financial markets and its role in developing the economy. They also ended up giving the thumps up for the positive impact that financial market has on economy.
- Oke, Michael OJO, member of department of banking and finance at management science conducted a study on impact of capital market on Nigerian economy with an object of testing the relationship shared between the capital market of Nigeria with its economy and it ended concluding the moderate level of correlation towards the positive side.
- Catalyst institute had conducted a research to find out the role of capital market in economic development of the country in India. It was taken up as empirical study with a motive of explaining how capital market variables influence any country and its economy. It explained the impact of each components in detail and ended up with a conclusion that capital markets plays very important role in developing economy.

Research Problem:

India has witnessed the rapid and sustainable growth in last two and half decade and continuing to be a better performing economy in the world. Many factors contributes for the success of this economy in its own and specialized manners and capital market is also one among that. Many researchers and academicians proved that capital markets contributes to the success of the economy but, they fail to quantify the impact that capital market has on Indian economy leading the way for this research article.

In recent times, the concerns have been growing among policy makers to adjust for the capital markets while forming the economic policies, even though many research have been conducted over the period of time to quantify the results, fundamental weakness of most of those studies remains considerable which doesn't accounts for the validity of the time series data they have considered in their studies. Even there are instances that studies have been limited to the co-relation and simple regression models making way for a research accounting most recent data with enhanced statistical models.

This study tries to address the problem of quantifiable role of capital market on Indian economy with the use of recent data on Indian economy and capital

market though advanced statistical model.

Objectives:

The primary objective of this study is to find out the quantifiable impact of capital market on Indian economy with the following secondary objectives.

- To find out the correlation between Indian GDP and major components of capital market.
- To analyze the trend of growth rate in GDP, market capitalization, turnover and exchange rate.

Research Methodology:

a. Data collection and sources:

This study is mainly based on the secondary data sourced for last twenty years starting from 1997-98. Data required for the study is real time GDP growth rates, various capital market parameters such as market capitalization, exchange rates and turnover of the market which is sourced through official websites of ministry of commerce, National stock exchange. NSE Nifty is considered as the representatives of Indian capital market while sourcing exchange rates.

b. Analytical tools and techniques:

Data collected from various sources mentioned above is analyzed using the advanced statistical models such as multi co-variant regression model and Karl Pearson's correlation of co-efficient models along with the basic tools such as mean, standard deviation and correlation model.

c. Model specification:

The link between capital market variables and Indian economy is examined using the regression model, below is the functional representation of the model.

GDP = f (Mktcap, Exgrate, Mktturn)

$GDP = \beta_0 + \beta_1$ Mktcap + β_2 Exgrate + β_3 Mktturn

Where: **GDP** is Real time Gross Domestic Product of Indian Economy.

Mktcap is Market capitalization of leading Indian stock markets.

Exgrate is Exchange rate of leading indices of Indian stock market

Mktturn is Market turnover of leading Indian stock markets

d. Hypothesis:

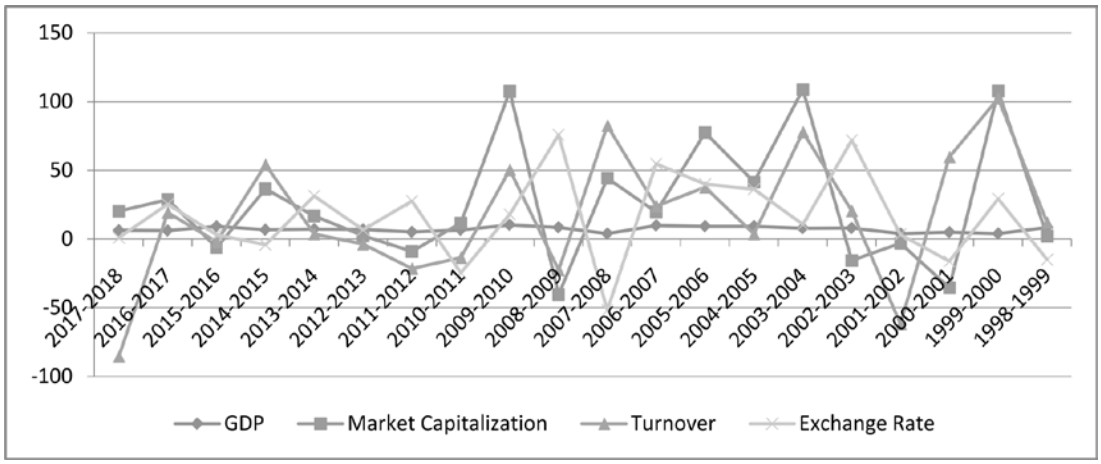
H_0: Indian Capital market and its variables does not have significant impact on the economic growth rate

H_1: Indian Capital market and its variables have significant impact on the economic growth rate.

DATA ANALYSIS:

Below table shows the Gross Domestic Product growth rate of India, market capitalization, turnover and exchange rate of national stock exchange of India.

Year	GDP rate (%)	Market capitalization (in INR cr.)	Market Turnover (in INR cr.)	Exchange rate
2017-2018*	6.3	14392501	735187	10363.65
2016-2017	6.1	11978421	5055913	10265.65
2015-2016	9.2	9310471	4236983	8185.8
2014-2015	6.7	9930122	4329655	7946.35
2013-2014	7.168	7277720	2808488	8282.7
2012-2013	6.899	6239035	2708279	6304
2011-2012	5.081	6096518	2810893	5905.1
2010-2011	6.638	6702616	3577412	4624.3
2009-2010	10.26	6009173	4138024	6134.5
2008-2009	8.48	2896194	2752023	5201.05
2007-2008	3.891	4858122	3551038	2959.15
2006-2007	9.801	3367350	1945285	6138.6
2005-2006	9.264	2813201	1569556	3966.4
2004-2005	9.285	1585585	1140071	2836.55
2003-2004	7.849	1120976	1099535	2080.5
2002-2003	7.944	537133	617989	1879.75
2001-2002	3.907	636861	513167	1093.5
2000-2001	4.944	657847	1339510	1059.05
1999-2000	3.975	1020426	839052	1263.55
1998-1999	8.463	491175	414474	977.24
1997-1998	6.184	481503	370193	1150.1



In the above table and graph, we can see the fluctuation in the GDP rate of India between 3.891 and 10.26 with an average growth rate of around 7% for last twenty years. We can observe that the economy saw the dip in numbers only during the world crisis time and except that it is posting the more than decent growth numbers. Market capitalization and turnover of the leading stock exchange of India was in uptrend for most of the years and it was growing at good rate from year to year. Average growth rate of the market capitalization was around 25% for last twenty years with 17% growth rate in turnover for the same period.

Exchange rate of the Nifty index was remained fluctuating during the period of study where it started from 1150.1 and ended at 10363. Baring few major dips caused due to global factored, this index fetched average year on year return of 16% for last 20 years.

Test results:

Below are the key descriptive statistics of the Indian GDP and capital market variables.

From the above table we can observe that Indian capital market variables have different level of correlation with Indian GDP. Market capitalization has the positive correlation with GDP whereas market turnover has negligible correlation with the dependent variable whereas exchange rate shares the considerable level of correlation with GDP at 0.45 levels. In simple terms we can term that market capitalization has weak uphill linear relation with GDP, turnover has no relationship with GDP and exchange rate has moderate level of uphill linear relation with GDP.

Regression Statistics	Values
Multiple R	0.491137362
R Square	0.241215908
Adjusted R Square	0.098943891
Standard Error	1.913709161
Observations	20

Above table shows the summary of regression statistics of the test. Multiple R represents the regression value of the test which stood at 0.49. This value suggests the proportion of the variance

Correlation	GDP	Market capitalization	Turnover	Exchange Rate
GDP	1			
Market capitalization	0.12336627	1		
Turnover	0.039738518	0.576663227	1	
Exchange Rate	0.45874414	-0.065266677	-0.127529435	1

in the dependent variable which can be explained by independent variables and, it measures the strength of the association. Study results shows that the regression level of the test is at 0.49 which suggest that these variables shares good relation or higher amount of association with each other. R square is the combined correlation between the variables used in the study and it stands at moderate level towards the positive side.

	df	SS	MS	F	Significance F
Regression	3	18.62771492	6.209238308	1.695455739	0.208050439
Residual	16	58.59652403	3.662282752		
Total	19	77.22423895			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 99.0%	Upper 99.0%
Intercept	6.4638	0.5536	11.6769	0.0000	5.2903	7.6373	4.8470	8.0806
Market capitalization	0.0096	0.0120	0.8008	0.4350	-0.0158	0.0351	-0.0255	0.0447
Turnover	-0.0045	0.0115	-0.3887	0.7026	-0.0289	0.0199	-0.0381	0.0291
Exchange Rate	0.0292	0.0139	2.0921	0.0527	-0.0004	0.0587	-0.0116	0.0699

In the above tables, we can observe that the statistical significance of the relationship shared by the variables. F values in the table is the resulted number arrived through the test which falls beyond the critical rezone for 20 variables run under 3,16 degrees of freedom. Hence, we fail to accept the null hypothesis. In order to prove insignificance of the movement the test result needed to be between the limits given in the table which is 5.29 to 7.63 but the test result is 1.69 which is much lesser than the table values.

P value is another significant factor deciding the acceptance level of the test and it also suggests that null hypothesis should be rejected. P value should not be greater than 0.05 to reject the null hypothesis but study suggest that the variables have the P value of 0.00. so we can conclude saying that capital market variables has the significant impact on the economic development of India.

Findings and Conclusion:

Many observations were made during the study with few core findings which includes the below.

- From the study we came to know that Indian capital markets have major influence and contribution on the performance of the Indian

GDP. Considering the GDP growth rate as the representative of Indian economic performance and market capitalization, turnover and exchange rates as capital market representatives , we found that these variables share the moderate level of correlation (0.24) with each other. Regression level between these variables is at 0.49 and that can be referred as high level of association that is being shared between the variables considered in the research article. We can also observe the high level of statistical testing significance for supporting the numbers posted by correlation and regression model through the gap in the F tested value and F critical value.

- The other major findings we observed during the research was the increasing trend in the number of shares listed in the stock market where the listed numbers was at 12 during 1997 and it reached 1851 in 2017 which is more than 2 times compared to beginning year considered in the study. It was also observed the increasing trend market capitalization and turnover where they posted the year on year growth rate of 25% and 17% respectively.

Along with the above mentioned core findings, we also made few noticeable observations during the research which are as below.

- During the study, it was observed that India is one of the top growing economies ranked at top 2 in terms of growth rate, 3rd in overall economy size in terms of PPP and 6th in terms of nominal GDP size.
- Based on the current growth rate and the initiatives taken by the government of the country, it is being forecasted that Indian economy will be part of top 3 economies in the world by 2020 in terms of nominal GDP.
- During the study, it was observed that the Indian capital market has witnessed a drastic change which led it to be one of the top capital markets with high yield rate and secured transaction platform.
- From the study we found out that the Indian capital market is contributing to the economic growth in non-quantifiable ways to in the ways of employment generation, eradicating poverty level.

India is considered to be one of the most growing economies in the world and growing at a rapid pace to take part in the developed counties list. Keeping health economy is very important for any nation for that matter and it holds critically obligatory for India considering the population density and growing pressure from counterpart countries. Capital market is a most important and integral part of financial system of any country and it offers the support of capitalism to the

county. It acts as a channel in movement of funds from the source of surplus funds to the source in need of money

After the critical analysis conducted on the various capital market factors affecting Indian economy and its significant contribution we can conclude saying that capital market has significant contribution for the success of the Indian economy.

Suggestions:

- Indian capital market is mainly concentrated on few region and exchanges; it is advisable to expand the market beyond those regions and exchanges. Effectiveness of the market will be improved when it has extended market coverage all over India.
- Equity market in this financial system has gained considerable importance and remained effective in contributing to the economy but the debt market of this emerging economy is lags in gaining importance that it dues. It is recommended to bring some reforms in this area to increase the trustworthiness of the debt instruments. Also it is suggested to introduce some lucrative debt instruments in the market to attack the savings.
- There is a slow shift from traditional GDP method to integral market analysis for checking the pulse of the economy, in this changing era it is better to keep the market free from biased and influential trading. It is recommended to enhance the trading mechanism and transaction level transparencies.

References

Journals:

- "The Impact of Capital Market on Economic Growth: A Malaysian Outlook" by Sabariah Nordin and Norhafiza Nordin, published at International Soft Science Conference (ISSC 2016) Vol 6 • Special Issue (S7) • 2016
- "THE IMPACT OF CAPITAL MARKET ON THE GROWTH OF THE NIGERIAN ECONOMY UNDER DEMOCRATIC RULE" by Echekoba Felix Nwaolisa, Ezu Gideon Kasie, Egbunike, Chinedu Francis published at Arabian Journal of Business and Management Review (OMAN Chapter) Vol. 3, No.2;Sep. 2013
- The Impact of Capital Market on Economic Growth in Nigeria by Edame, Greg Ekpung & Okoro, Uchenna, published at Journal of Poverty, Investment and Development - An Open Access International Journal Vol.1 2013.
- The impact of capital market on economic growth: the Nigerian Perspective by Emeh

Yadirichukwu*, E.E. Chigbu published at International Journal of Development and Sustainability Volume 3 Number 4 (2014): Pages 838-864

Websites:

- https://www.nseindia.com/products/content/equities/indices/historical_index_data.htm
- https://www.nseindia.com/products/content/equities/equities/historical_equity_businessgrowth.htm
- https://tradingeconomics.com/india/gdp-growth-annual
- https://www.ibef.org/economy/indiasnapshot/facts-about-indian-economy
- https://www.investopedia.com/terms/c/capitalmarkets.asp
- https://www.proshareng.com/news/Capital-Market/The-Role-of-the-Capital-Market-in-the-Economy/28259
- • https://faculty.fuqua.duke.edu/~charvey/Research/Chapters/ C6_The_role_of .pdf & ved=0ahUKEwidopT5xoHYAhWHMo8KHZMeAZwQFghZMAc&usg=AOvVaw1cVtLGIpPwdrzWBHrKAMVI
- http://citeseerx.ist.psu.edu/viewdoc/ download%3Fdoi%3D10.1.1.893.2798%26rep%3 Drep1%26type%3Dpdf&ved=0ahUKEwiJ076ox4HYAhWHq48KHdldAzAQFggkMAA&usg=AOvVaw3mi7eDhGWkj2z5kk_xuT2I
- http://iiste.org/Journals/index.php/RJFA/article/download/325/214&ved=0ahUKEwiJ076ox4HYAhWHq48KHdldAzAQFgg8MAQ & usg=AOvVaw0o03v-hM4e75A6EvXUJxqq
- http://www.ccsenet.org/journal/index.php/ibr/article/viewFile/19050/12586&ved=0ahUKEwiJ076ox4HYAhWHq 48KHdldAzAQFghOMAc&usg=AOvVaw0dhu3Zv40PTJjYCPu5c8oo