

Gross Domestic Product and its Components in India. Trends and Issues

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Abstract *In this paper focus on the trends of Indian growth in terms of Gross domestic Product and its components. And furthermore analyse the growth are accelerate or decelerate. This paper covers growth performance in India for period 1951-2012. The average annual trend growth of GDP and Its components is higher during the reform phase as compare to the pre-reform phase except Mining & Quarrying and Electricity, Gas & Water Supply. The GDP shows the positive trend with acceleration in overall and sub periods but in case of its components all are positive with acceleration trend except the Electricity, Gas & Water Supply is positive but trend deceleration in overall period. And in case of Mining & Quarrying the results are statistically insignificant. However the structure of GDP and its components in terms of intercepts and slopes are different in post reform phase as compare to the pre reform phase.*

Key words GDP, India, Economic Growth, Pre-Reform and Post-Reform

JEL Codes: N15

1. Introduction

In the recent time, Growth is the important indicators for countries development. In the process of achieving high rate of growth developed and developing countries are changing their policies. India is one of the important developing countries those achieve higher rate of growth through their policies change. It is well known that Gross Domestic Product (GDP) is the important indicators of Economic Growth.

India's growth performance continuously increases time to time but there are a number of debates those provide the significant theoretical debate over the trend break. Bradford Delong (2001) shows, "statistics of the growth performance for the period 1950-51 to 1979-80 and 1980-81 to 2000-2001. The real GDP growth rate in these two periods is 3.5 per cent and 5.5 per cent. And he found that the 1980-81 is most significant trend break in Indian Economy". Panagariya (2004) counter the Delong's view by arguing that in early to mid-1980 India's liberalized their economy in some areas but they are not able to sustain for achieving growth without 1990s.

1.1. Components of Gross Domestic Product

GDP includes all the economic activity of a country within a year. In the economic activity of a country has divided into the three important sectors. These sectors are primary sector, secondary sector and tertiary sector. In the primary sector, including agriculture and allied activities, forestry, mining and quarrying. In the secondary sector, including manufacturing industries, construction and electricity, water and gas supply. And in the last, tertiary sector or service sector including banking, insurance, transport and communication, trade and commerce.

1.2. Objective of study

GDP and its components is one of the important and debated issue among the policy maker and the researcher. In this connection a number of debates among scholar have taken place and it is still going on. In light of this the objective of the present study is as follows: *to find out the trends of Gross Domestic Product and its components in India.*

1.3. Hypothesis of Study

In order to accompany in the above objective, there have been tested the following hypothesis. These are as under:

- The average annual growth in GDP and its components has been higher during pre-reform period as compared to the post reform period.
- The India's growth in terms of GDP and its components were accelerated since independence.

1.4. Source of Data

In the analysis of the above objective and the hypothesis the data are require. The data cover form the period 1951-52 to 2012-13 at the constant price. The selected data is calculated in the base year 2004-05. The data was collected from the Hand Book of Statistics on Indian Economy, Reserve Bank of India. In this analysis there is some econometrics and the statistics tools are needed. The econometrics tools those apply in this analysis is that Semi log linear regression model for Average Annual Trend Analysis and acceleration/ deceleration of growth in GDP and its components. In this paper we have tried focus not only performance and trends as well as acceleration/deceleration in Indian GDP but also the components of it's since 1951-52 to 2013-14. And also focus on the important issues that any significant impact of GDP and Its components after adopting the liberalization policies. The paper consists five parts. The First part explores the idea about the issue, and components of GDP. The Second parts deal the literature and current debate on the GDP and its components. The part three focus on the history of

India's growth since independence. The part four studies modelling on GDP and its components. And last part of this paper summary and conclusion of the study.

2. Literature Review

There are several important work those provide the significant statistical trend break around 1980-81 (DeLong 2001; Rodrik and Subramanian 2004; Wallack 2003; Virmani 2004). But absence of strong theoretical argument to support the significant trend break is 1980-81. The growth rate in 1980s was not sustained continuously because the high growth is caused by the large deficit financing (Srinivasan and Tendulkar 2003).

Another possible argument in favour of the trend break in the 1980s was short term growth because better performance of agriculture sector. Virmani (2004) focused on the agriculture sector cause by the short term break in the growth performance in India during the period 1980-81. Sinha and Tejani (2004) argued that the 1980-81 is most significant trend break in India's growth because the productivity of labour was increases due to technological advancement.

Pangariya (2004), disagree with DeLong argument that the growth in the 1980s was fragile and unsustainable. On the other hand the growth rate of the 1990s was more sustainable and stable. P. Balakrishnan (2005) examined the macroeconomic policy in the economic growth in 1990s. In this purpose the period of study chosen by him was 1980-2000. He was divide the whole period in two sub period (1980-81 to 1989-90 and 1990-91 to 1999-00) for the purpose to show that 1991 identified the real breaks in the Indian economy since 1950. But the test statistics and evidence shows that the 1990s did not acceleration of India's growth. The failure of the secondary sector was main cause to decline India's growth.

M. S. Ahluwalia (2002) analyzed on the economic reforms in India since 1991: has gradualism worked? In his worked also hold the view that the growth of the 1980 is not explicitly attributable to the policy reforms. Rather, it resulted from the fiscal expansion financed through external and internal borrowings during that period. In the first phase 1980s reforms was not systematic as compared to the second phase 1990s reform because of the open market and the greater role of the private sector. In this phase the policy was supporting the foreign investor for investing in our economy. And in the role of government was restructured. India achieved the higher growth after 1990s and also in the East Asian crisis phase and it was one of the leading countries of the world in terms of growth rate.

3. History of India's Growth Since Independence

India got independence in August, 15 1947 and the first five year plan was started on 1st April 1951. In the present time we are entering the 12th five year plan. In this first to the 12th five year plan India's growth journey have many ups and down. In

the historical aspect, the India's growth divided into two phases, the first phase is popularly known as the pre liberalized economy and the second phase known as the free market economy. In the pre liberalized era, the economy was divided into two distinct segments private and public sector. The private sector owned and operated small to medium size businesses and industries protected by the government.

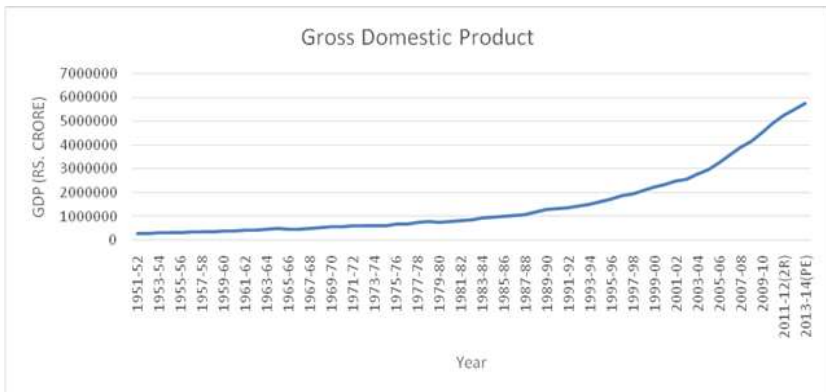
The main role of government to provide the transportation, communication including the postal, telephone, telegraph, radio and television broadcasting. And in the social services two important services including health and education provided by the government sector. The main aim to the government to provide these services in the reasonable cost as well as employment of the citizens. India adopted the five year development plan for the purpose of the improve infrastructure, agriculture production, health care, and education system, but the progress was extremely poor due the domestic reason. The Indian government changed their policy time to time to achieve the targeted growth in different five year plan.

The figure (1) shows the targets and the actual growth in Indian economy during the Five Year Plan. In the first five year plan, fifth five year plan, sixth five year plan, seventh five year plan, and eight five year plan the actual growth was more than the targeted growth. And remaining plan had opposite scenario.



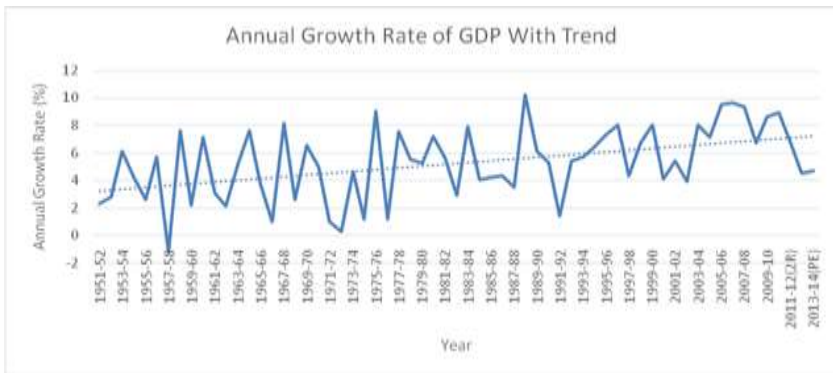
Source: http://mospi.nic.in/Mospi_New/upload/SYB2014/CH7FIVE%20YEAR%20PLAN/Five%20Year%20Plan%20writeup.pdf

Figure 1. Target and Actual Growth Rate



Source: Economic Survey, Government of India, 2013-14.

Figure 2. Gross Domestic Product 1951-52 to 2013-14 (GDP Measured at 2004-05 constant prices)



Source: Economic Survey, Government of India, 2013-14.

Figure 3. Annual Growth Rates of GDP, 1951-52 to 2013-14 (GDP Measured at 2004-05 constant prices)

4. Methodology of Research

This part deals with the issue of econometrics modelling of the trend as well as acceleration/ deceleration of Gross Domestic Product and its components of India.

In this purpose semi-logarithmic regression model is suitable econometrics technique for trend analysis and acceleration/ deceleration.

Average Annual Trend Growth and Trend Acceleration/Deceleration (Kaur, 2007).

The average annual trend growth gives the overall scenario of a countries economic performance. It was important tool to find out the average growth of a country in different time period. And in the comparison of the growth performance in different time period it is provide the sufficient information. The trend growth rates for the different periods are analyses to using the semi-logarithmic linear trend equation for each period. The semi-logarithmic trend model is:

$$\ln(\text{GDP}_t) = \alpha + \beta t + U_t \quad (1)$$

In the above equation the dependent variable is in natural log and α , and β are the parameter and t is time. And β are providing the information about the average annual growth in the specific time period.

The growth performance of a country is acceleration or deceleration with time is one of the significant issues of the policy maker and the researcher. In this purpose the semi-logarithmic non-linear trend equation is apply. The semi-logarithmic non-linear model is:

$$\ln(\text{GDP}_t) = \alpha + \beta t + \gamma t^2 + U_t \quad (2)$$

In the above equation the dependent variable is in natural log and α , β , and γ are the parameter. The coefficient β is the average annual trend growth and the parameter γ gives the rate of acceleration or deceleration in the average growth. If the sign of parameter γ is positive then it shows accelerate the growth and if the sign of parameter is negative then it shows decelerate the growth.

5. Data Analysis

5.1. Average Annual Trend Growth

This part of the work provides the idea about the average annual trend growth of the Indian Economy. The table's given below provide the idea about the trend growth in the entire period and its sub period.

The overall (1951-2012) trend growth in the Indian Economy is given in table 1. In the above table, the regression results of GDP and its components shows the overall growth performance for the period 1951-2012. And the time coefficient is statistically significant at 1% level of significance.

The average annual trend growth for the period 1951-1970 is given in table 2.

Table 1. Regression Results (1951-2012)

GDP AND ITS COMPONENTS	α	β	DW
GDPfc	7.753066 (237.9006)*	4.6420 (51.60301)*	0.058356
Agriculture and Allied Activities	7.241373 (514.0776)*	2.6140 (67.22998)*	1.049009
Agriculture	7.032424 (454.3371)*	2.6921 (63.01065)*	1.110906
Industry	5.721983 (322.4999)*	5.5582 (113.4915)*	0.189260
Mining & Quarrying	3.917921 (179.6701)*	5.1830 (86.10925)*	0.238356
Manufacturing	5.504782 (235.4901)*	5.4398 (84.30786)*	0.160985
Electricity, Gas & Water Supply	2.367264 (59.38457)*	7.7977 (70.86671)*	0.042490
Services	6.650402 (178.7804)*	5.7166 (55.67479)*	0.025203
Construction	4.964681 (119.7982)*	4.9961 (43.67591)*	0.133154
Trade, Hotel, Transport & Communication	5.531432 (138.1677)*	6.0660 (54.89334)*	0.029464
Finance, Insurance, Real Estate & Business Services	4.992929 (86.25075)*	6.1626 (38.56773)*	0.021599
Community, Social & Personal Services	5.468586 (245.9644)*	5.2136 (84.95442)*	0.068760

*Significant at the 1% level **significant at the 5% level ***significant at the 10% level

Source: Own Calculation

Table 2. Regression Results (1951-1970)

GDP AND ITS COMPONENTS	α	β	DW
GDPfc	7.930694 (7.930694)*	3.6625 (0.036625)*	1.786867
Agriculture and Allied Activities	7.314795 (333.6848)*	2.1269 (11.62251)*	1.573943
Agriculture	7.118693 (272.1152)*	2.0836 (9.541135)*	1.502435
Industry	5.724398 (306.4077)*	5.9381 (38.07549)*	0.413178
Mining & Quarrying	3.938753 (148.8237)*	5.2746 (23.87441)*	0.655211

GDP AND ITS COMPONENTS	α	β	DW
Manufacturing	5.516931 (262.4400)*	5.8044 (33.07614)*	0.415366
Electricity, Gas & Water Supply	1.980115 (105.4521)*	10.9834 (70.06932)*	0.618527
Services	6.823842 (815.0206)*	4.9116 (70.27251)*	0.852190
Construction	4.870344 (173.6671)*	6.6592 (28.44486)*	1.460265
Trade, Hotel, Transport & Communication	5.694091 (445.6120)*	5.3840 (50.47330)*	0.414640
Finance, Insurance, Real Estate & Business Services	5.442891 (1357.913)*	3.0990 (92.61640)*	1.276476
Community, Social & Personal Services	5.578151 (475.7154)*	4.6469 (47.47345)*	0.242487

*Significant at the 1% level **significant at the 5% level ***significant at the 10% level

Source: Own Calculation

In the above table, the regression results of GDP and its components shows the growth performance for the period 1951-1970. And the time coefficient is statistically significant at 1% level of significance.

The average annual trend growth for the period 1971-1990 is given in table 3.

Table 3. Regression Results (1971-1990)

GDP AND ITS COMPONENTS	α	β	DW
GDPfc	8.593975 (539.7262)*	4.3027 (32.37030)*	1.021201
Agriculture and Allied Activities	7.714255 (343.2552)*	2.6652 (14.20602)*	2.146810
Agriculture	7.502245 (316.7763)*	2.9198 (14.76888)*	2.334699
Industry	6.787609 (447.7982)*	5.4353 (42.95493)*	0.844740
Mining & Quarrying	4.756164 (184.3721)*	6.5254 (30.30213)*	0.663827
Manufacturing	6.571922 (415.8198)*	5.0007 (37.90291)*	1.073026
Electricity, Gas & Water Supply	4.061446 (255.1990)*	7.5314 (56.68923)*	0.856058
Services	7.701863 (483.3877)*	5.2392 (39.39077)*	0.324767

GDP AND ITS COMPONENTS	α	β	DW
Construction	6.008891 (210.3480)*	3.7040 (15.53268)*	1.059352
Trade, Hotel, Transport & Communication	6.679058 (757.2120)*	5.3895 (73.19358)*	1.231668
Finance, Insurance, Real Estate & Business Services	5.943967 (177.5246)*	6.5264 (23.34962)*	0.213797
Community, Social & Personal Services	6.453598 (355.5134)*	4.9719 (32.80948)*	0.228677

*Significant at the 1% level **significant at the 5% level ***significant at the 10% level

Source: Own Calculation

In the above table, the regression results of GDP and Its components shows the growth performance for the period 1971-1990. And the time coefficient is statistically significant at 1% level of significance.

The average annual trend growth for the period 1991- 2012 is given in table 4.

In the above table, the regression results of GDP and Its components shows the growth performance for the period 1971-1990. And the time coefficient is statistically significant at 1% level of significance.

The average annual trend growth (%) of the 1951-2012, 1951-1970, 1971-1990 and 1991-2012 are given in table 5.

Table 4. Regression Results (1991-2012)

GDP AND ITS COMPONENTS	α	β	DW
GDPfc	9.414986 (631.4873)*	6.7185 (59.18527)*	0.254372
Agriculture and Allied Activities	8.275363 (652.6415)*	2.8910 (29.94578)*	1.903139
Agriculture	8.102061 (560.3214)*	2.9311 (26.62322)*	1.939651
Industry	7.853260 (398.4955)*	6.4892 (43.24749)*	0.529360
Mining & Quarrying	6.128196 (511.1528)	4.2040 (46.05434)*	1.316077
Manufacturing	7.517370 (315.6679)*	6.9907 (38.55513)*	0.537581
Electricity, Gas & Water Supply	5.668093 (415.0701)*	5.7900 (55.68785)*	0.385654
Services	8.702090 (604.1193)*	8.1791 (74.57602)*	0.273541
Construction	6.644302 (199.9699)*	7.8508 (31.03284)*	0.240860

GDP AND ITS COMPONENTS	α	β	DW
Trade, Hotel, Transport & Communication	7.657427 (650.0889)*	9.0383 (100.7789)*	0.612633
Finance, Insurance, Real Estate & Business Services	7.290394 (291.0919)*	8.5292 (44.72847)*	0.210598
Community, Social & Personal Services	7.434345 (464.2109)*	6.5155 (53.43375)*	0.630810

*Significant at the 1% level **significant at the 5% level ***significant at the 10% level

Source: Own Calculation

Table 5. Average Annual Trend Growth (%)

GDP AND ITS COMPONENTS	1951-2012	1951-1970	1971-1990	1991-2012
GDPfc	4.6420	3.6625	4.3027	6.7185
Agriculture and Allied Activities	2.6140	2.1269	2.6652	2.8910
Agriculture	2.6921	2.0836	2.9198	2.9311
Industry	5.5582	5.9381	5.4353	6.4892
Mining & Quarrying	5.1830	5.2746	6.5254	4.2040
Manufacturing	5.4398	5.8044	5.0007	6.9907
Electricity, Gas & Water Supply	7.7977	10.9834	7.5314	5.7900
Services	5.7166	4.9116	5.2392	8.1791
Construction	4.9961	6.6592	3.7040	7.8508
Trade, Hotel, Transport & Communication	6.0660	5.3840	5.3895	9.0383
Finance, Insurance, Real Estate & Business Services	6.1626	3.0990	6.5264	8.5292
Community, Social & Personal Services	5.2136	4.6469	4.9719	6.5155

Source: Table based on the above tables (1-4)

In the above table (5) shows that the average annual growth for the entire period is 4.6420 percent. And for the three different sub period (1951-1970, 1971-1990, and 1990-2012) the average annual growth are 3.6625, 4.3027 and 6.7158. So the growth of GDP in post reform phase is higher than the pre reform phase. The performance of the Agriculture and Allied Activities and Agriculture are growing the consistently in the pre and the post reform phase. In all the other components shows the higher growth in post reform phase as comparison to the pre reform phase except the Mining & Quarrying and Electricity, Gas & Water Supply.

5.2. Average Annual Trend Growth with Acceleration or Deceleration

This part of the work provides the idea about the average annual trend growth and the pattern of the growth (Acceleration or Deceleration) of GDP and Its components. The average annual trend growth with entire period (1951-2012) is given in table 6.

Table 6. Average Annual Trend Growth with Acceleration or Deceleration

GDP & its components	α	β	γ	DW
GDPfc	17.24059 (1068.215)*	2.0433 (17.28546)*	0.000412 (22.68097)*	0.467654
Agriculture and Allied Activities	16.53360 (997.4299)*	1.8463 (15.20749)*	0.000122 (6.523814)*	1.803114
Agriculture	16.32690 (858.2974)*	1.9033 (13.66108)*	0.000125 (5.841006)*	1.752215
Industry	15.03039 (696.2008)*	4.6387 (29.33592)*	0.000146 (5.999045)*	0.304481
Mining & Quarrying	13.14240 (391.3831)*	5.0504 (20.53469)*	2.10E-05 (0.556205)	0.240074
Manufacturing	14.85221 (543.4078)*	4.1546 (20.75407)*	0.000204 (6.623885)*	0.278809
Electricity, Gas & Water Supply	11.24873 (462.7703)*	10.8808 (61.11663)*	-0.000489 (-17.86756)*	0.209323
Services	16.17213 (777.9371)*	2.7973 (18.37166)*	0.000463 (19.78176)*	0.107039
Construction	14.36050 (258.8852)*	3.2573 (8.017255)*	0.000276 (4.415812)*	0.172860
Trade, Hotel, Transport & Communication	15.06310 (543.3870)*	3.0536 (15.03968)*	0.000478 (15.30794)*	0.102551
Finance, Insurance, Real Estate & Business Services	14.70952 (724.6513)*	1.4165 (9.527703)*	0.000753 (32.93649)*	0.187948
Community, Social & Personal Services	14.85935 (1010.811)*	3.5222 (32.71281)*	0.000268 (16.20812)*	0.305010

Source: Own Calculation

The regression results in the above table shows the coefficients of t and t^2 are significant at 1% level of significance of GDP and its components except the Mining and Quarrying. So the GDP and its maximum components follow a positive and accelerating trend. And Electricity, Gas & Water Supply shows the positive and deceleration trend.

The average annual trend growth with acceleration or deceleration for the period 1951-1970 is given in table 7.

Table 7. Average Annual Trend Growth with Acceleration or Deceleration (1951-1970)

*Significant at the 1% level **significant at the 5% level ***significant at the 10% level

GDP & its components	α	β	γ	DW
GDPfc	7.922883(459.0741)*	3.8756 (10.23921)*	-0.000101 (-0.579458)	1.829567
Agriculture and Allied Activities	7.308021 (202.6341)*	2.3116 (2.922507)*	-8.80E-05 (-0.240444)	1.581934
Agriculture	7.102961 (165.8207)*	2.5127 (2.674659)*	-0.0204 (-0.470182)	1.525674
Industry	5.666428 (226.8479)*	7.5191 (13.72535)*	-0.000753 (-2.971062)*	0.597121
Mining & Quarrying	3.922835 (90.52342)*	5.7088 (6.006684)*	-0.000207 (-0.470259)	0.656142
Manufacturing	5.441860 (212.3279)*	7.8518 (13.96877)*	-0.000975 (-3.749856)*	0.721893
Electricity, Gas & Water Supply	1.984569 (64.19574)*	10.8619 (16.02056)*	5.78E-05 (0.184463)	0.617740
Services	6.825251 (494.9003)*	4.8731 (16.11160)*	1.83E-05 (0.130784)	0.851008
Construction	4.851309 (105.8372)*	7.1783 (7.140549)*	-0.000247 (-0.531631)	1.486363
Trade, Hotel, Transport & Communication	5.653133 (336.8000)*	6.5010 (17.66012)*	-0.000532 (-3.123918)*	0.660870
Finance, Insurance, Real Estate & Business Services	5.449680 (870.5231)*	2.9138 (21.22277)*	8.82E-05 (1.388458)*	1.380049
Community, Social & Personal Services	5.625100 (443.4382)*	3.3665 (12.10078)*	0.000610 (4.738255)*	0.367601

Source: Own Calculation

In the above table the regression result shows the GDP and Agriculture and Allied Activities, Agriculture, Mining & Quarrying, Electricity, Gas & Water Supply,

Services, and Construction are statistically insignificant for t^2 coefficient but significant for t coefficients. The Industry, Manufacturing, and Trade, Hotel, Transport & Communication are significant for t and t^2 coefficients. This shows that the positive with deceleration trend. And two components (Finance, Insurance, Real Estate & Business Services and Community, Social & Personal Services) are statistically significant for t and t^2 coefficients. This shows the positive with acceleration trend.

The average annual trend growth with acceleration or deceleration for the period 1971-1990 is given in table 8.

Table 8. Average Annual Trend Growths with Acceleration or Deceleration (1971-1990)

Significant at the 1% level **significant at the 5% level *significant at the 10% level*

GDP & its components	α	β	γ	DW
GDPfc	8.655031 (477.0300)*	2.6375 (6.628373)*	0.000793 (4.308135)*	1.933594
Agriculture and Allied Activities	7.749074 (218.7524)*	1.7156 (2.208197)**	0.000452 (1.258354)	2.317329
Agriculture	7.528828 (197.3627)*	2.1949 (2.623465)**	0.000345 (0.892123)	2.424216
Industry	6.843676 (382.0130)*	3.9062 (9.941939)*	0.000728 (4.006641)*	1.489489
Mining & Quarrying	4.855508 (165.9729)*	3.8160 (5.947637)*	0.001290 (4.347418)	1.233908
Manufacturing	6.617638 (303.0286)*	3.7539 (7.837829)*	0.000594 (2.680031)	1.456327
Electricity, Gas & Water Supply	4.110672 (192.8658)*	6.1889 (13.23990)*	0.000639 (2.956816)*	1.200792
Services	7.777859 (675.2473)*	3.1666 (12.53521)*	0.000987 (8.446486)*	1.045190
Construction	6.062271 (137.5805)*	2.2482 (2.326425)**	0.000693 (1.550920)	1.144610
Trade, Hotel, Transport & Communication	6.695562 (492.2087)*	4.9393 (16.55620)*	0.000214 (1.553297)*	1.361266
Finance, Insurance, Real Estate & Business Services	6.112139 (342.6834)*	1.9399 (4.959077)*	0.002184 (12.07085)*	1.195929
Community, Social & Personal Services	6.546403 (814.3864)*	2.4408 (13.84501)*	0.001205 (14.78034)*	0.305010

Source: Own Calculation

In the above table, the regression results shows the GDP and Industry, Electricity, Gas & Water Supply, Services, Trade, Hotel, Transport & Communication, Finance, Insurance, Real Estate & Business Services and Community, Social & Personal Services are statistically significant for t and t² coefficients and this shows the positive with acceleration trend. In the Agriculture and Allied Activities, Agriculture, Mining & Quarrying, and Construction are statistically insignificant for t² coefficients. The average annual trend growth with acceleration or deceleration for the period 1991-2012 is given in table 9.

Table 9. Average Annual Trend Growths with Acceleration or Deceleration (1991-2012)

*Significant at the 1% level **significant at the 5% level ***significant at the 10% level

GDP & its components	α	β	γ	DW
GDPfc	18.69161 (1287.794)*	5.0613 (17.41002)*	0.000721 (5.870293)*	0.662995
Agriculture and Allied Activities	17.49422 (851.1677)*	2.6781 (6.505630)*	9.26E-05 (0.532549)	1.937917
Agriculture	17.32637 (745.2103)*	2.5818 (5.543980)*	0.000152 (0.772417)	2.008866
Industry	17.09556 (555.5735)*	5.6902 (9.232596)*	0.000347 (1.334998)	0.598696
Mining & Quarrying	15.31060 (862.0713)*	4.9024 (13.78137)*	-0.000304 (-2.021905)***	1.558490
Manufacturing	16.76823 (16.76823)*	5.9777 (0.059777)*	0.000440 (0.000440)	0.613660
Electricity, Gas & Water Supply	14.87719 (667.2360)*	5.8210 (13.03446)*	-1.35E-05 (-0.071478)	0.384503
Services	17.98060 (1471.754)*	6.4749 (26.46070)*	0.000741 (7.171791)*	0.820355
Construction	15.98575 (419.9034)*	4.5731 (5.997398)*	0.001425 (4.426561)*	0.431093
Trade, Hotel, Transport & Communication	16.90883 (1131.440)*	8.0116 (26.76526)*	0.000446 (3.532129)*	0.995691
Finance, Insurance, Real Estate & Business Services	16.62247 (848.3533)*	5.4857 (13.97817)*	0.001323 (7.986247)	0.699922
Community, Social & Personal Services	16.64931 (16.64931)*	6.3998 (12.23434)*	5.03E-05 (0.227817)	0.629955

Source: Own Calculation

In the above table, the regression results shows the GDP and Services, Construction, Trade, Hotel, Transport & Communication, Finance, Insurance, Real Estate & Business Services and Community, Social & Personal Services are statistically significant for t and t^2 coefficients and this shows the positive with acceleration trend. And Mining & Quarrying is statistically significant at 10% level for t and t^2 coefficients. In the Agriculture and Allied Activities, Agriculture, Industry, and Electricity, Gas & Water Supply are statistically insignificant for t^2 coefficient.

6. Conclusions

In the present study mainly concentrated on the India's growth performance since independence in terms of GDP and its components. The performance of the India's growth changes time to time due to changes make by government in its policies. In the early or mid-1980s when Government of India made number of changes in their policy to achieve the higher growth but this growth was not sustain continuously. In the early 1990s India's was faced the several Balance of Payment crisis and lack of foreign capital for fulfil their needs. Due to this reason the systematic policy liberalization was adopted since 1991-92 not only accelerate the overall growth rates but also developed the interest and confidence of the foreign investor in the Indian Economy. In this reason the India's growth performance is one of the leading country of the world.

The objective of this study to find out the trend/patter as well structure of Gross Domestic Product and its components in India. In this purpose the Unit Root Test (ADF Test), Semi Log Linear Model and Dummy Variable Regression Model had been applied. The Unit Root Test results show that the GDP, Industry, Manufacturing, Services, Construction, and Finance, Insurance, Real Estate & Business Services are integrated in the second order. And Mining & Quarrying is integrated in the first order. And in some cases the order of integration is first and second both but Trade, Hotel, Transport & Communications the order of integration is more than the second order in the second model and Community, Social & Personal Services the order of integration is more than second order in first and the second model.

Major Finding of Study

1. The government policy is one of the significant causes for achieving the higher and sustainable growth in Indian Economy.
2. The average annual trend growth of GDP and Its components is higher during the reform phase as compare to the pre-reform phase except Mining & Quarrying and Electricity, Gas & Water Supply.
- 3 The GDP shows the positive trend with acceleration in overall and sub periods but in case of its components all are positive with acceleration trend except the

Electricity, Gas & Water Supply is positive but trend deceleration in overall period. And in case of Mining & Quarrying the results are statistically insignificant.

4. The structure of GDP and its components in terms of intercepts and slopes are different in post reform phase as compare to the pre reform phase.

Policy Implication

1. The government change their policy time to time for sustaining and achieving the higher growth.
2. The agriculture sector shows the very consistent results in terms of growth since independence. So for sustaining the higher growth the reform of this sector is necessary.
3. Encourage the greater FDI inflows due to change the policy of the government for sustaining higher growth.

Direction for Future Research

1. The present study is concentrated on the GDP and its components as a proxy of growth but ignores other indicator like Per Capita Income of growth.
2. The state wise study is also give significant results for achieving higher

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