

A study on the Economic Growth and composition of GDP in India

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Abstract:

The present study analyzed the economic growth and the changes in the composition of GDP in India.. The study has been made secondary data collected from world development indicator of World Bank. The study covers a period of 26 years from 1990-91 to 2015-16. All the variables required for the study were collected for this period and were expressed in US dollar (\$) for homogeneity in comparison. To analyze the sectoral growth of India, the study applied simple percentage, simple and compound growth measures to analyze the changes in the sectoral share and composition of major variables considered in the study. The study found that the growth of GDP of India was observed to be positive in all the 26 years of study. The study was also found that the service sector is the dominant sector to contributing the GDP of the Indian economy constituting nearly 50 percent of the GDP. Due to the pragmatic change in the policy regime of the country over the past two decades, in the industrial and service sectors showed significant improvement in the Indian economy.

KEY WORDS : Economic growth, GDP, structural transformation, agriculture, industry, service sector

Introduction

In the current scenario, Growth is the critical pointers for nation's improvement. In the way toward accomplishing high rate of development created and creating nations are changing their approaches. India is one of the vital creating nations those accomplish higher rate of development through their approaches change. It is outstanding that (GDP) is the vital pointers of Economic Growth. Economic growth refers to increase in the value of the goods and services produced by an economy over a period of time. Its signifies a consistent raise in the real output of an economy in the long run. The increase in real output raises the income level of people and in turn increases the standard of living of people of the nation. It can be measured in nominal terms. Nominal income includes inflation whereas real income is adjusted for inflation. The growth rate is conventionally measured as the percentage rate of change-increase or decrease in real GDP.

In this study analysed the structural transformation of India, the structural transformation is the defining characteristic of the development process, both cause and effect of economic growth. One of the processes to define the structural transformation is characterised by a shift of predominant share of agriculture to manufacturing activities and a moderate to high level of increase in the share of services both for the national product and the work force

Components of GDP

GDP includes all the economic activity of a nation's 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.

Review literature

Tahir et.al (2015) this study examined the export led growth hypothesis for Sri Lanka on the used the econometric models like unit root test, johanson cointegration test, granger causality test and Vector Auto-Regressive Analysis. The study concluded that no short or long run relation exist between the export and GDP growth of Sri Lanka

Jiang and Luo (2015) The empirical study over the period 1978-2011 found that the relationship between real per capita GDP and financial interrelation ratio structurally broke since 2004. From 1978 to 2003, economic growth and financial development had a long-term co-integration, and it showed one-way supply relationship according to the Granger causality test, the economic growth have a slowly leading function to the development of finance. From 2004 to 2011, there had a long-term co-integration and mutual causality relationship existed between loan and GDP during the whole period.

Agarwal and Ghosh (2015) in this paper performed structural break analyses of several macroeconomic variables for the Indian economy used the data from the 1951-52 to 2012-13. They found that the growth rate of per capita GDP after falling in the decade mid-60s to mid-70s has been accelerating gradually since then. Since 1991 exports have played an important role in this growth.

Mungase (2015) analyzed the growth and structural transformation in the SAARC countries in 21st Century The structural transformation in these countries can be defined in terms of certain common indicators: a declining share of agriculture in GDP and value added in the economy, rural-to urban migration that stimulates the process of urbanization; the rise of a modern industrial and service economy; and a demographic transition from high rates of births and deaths to low rates of births and deaths will be reviewed over a period of last one decades.

Jain et.al (2015) investigated the impact of various macro-economic factors on GDP components used the secondary data covered the period from 2000-2001 to 2011-2012, Multiple regression analysis was used to analysed this study. The study found a significant effect of FDI, Net FII equity and Import on GDP components.. And it was also found that there was no significant effect of Export on GDP (Manufacturing, Industry) components but Service had a Significant affect.

Thomas (2015) aims to estimate the key economic determinants of international trade in India analyzed the post-reform period from 1996-97 to 2011-12 employed the ARDL approach to co-integration. This study found that the income elasticity of India's services exports is quite high and statistically significant in the long run, In case of India's services imports, both the income and price elasticities of demand are found to be positive and statistically significant. Services imports are found to be more responsive to changes in income than relative prices.

Cortuk and Singh (2013) this paper examines the link between structural change and growth in India. It constructs indices of structural change, and performs a panel data analysis used data for India's 16 major states. It finds that there is one-way positive impact from structural change to growth for the period 2000- 2006. This finding emerges only if one assumes that the disturbances are heteroskedastic, contemporaneously cross-sectionally correlated and autocorrelated of type AR.

Afzal (2012) this study investigates the structural transformation and trade liberalisation cause economic growth in Pakistan covered the period from 1972 to 2010 empirical results shows that except industry other variables (agriculture, openness, and financial integration) are not cointegrated. There is long-run relationship between economic growth and structural transformation used of traditional measures of openness and structural transformation suggests that the results are interpreted with care... Trade liberalisation is not necessarily a universal remedy.

Reyes and Villasenor (2011) analysed the long run dynamics of the GDP of Mexico and its 32 states over the period 1940-2006 they found there has been a generalised long run decline in the average growth rates of the output of all states. One implication of the results is that economic policies aiming to promote economic growth can have permanent effects and, therefore, drive output to higher growth rate regimes.

Feijo et al (2009) the aim of the paper is to explained the growth pattern of the Brazilian economy during the period from 1971 to 2005 seen through the changing dynamic relation between investment per employee and productivity, shows that the relatively low GDP performance since the 1980s the Brazilian economy did not experienced more investment as in the 1970s, it did not experienced also a robust growth rate as in that period, and today it is the economy with the lowest rates of growth compared with other emerging economies

Pahlavani and Mosayeb (2005) this paper examines the major sources of economic growth in Iran used annual time series data from 1960 to 2003,ARDL methodology was employed to obtain the short and long-term

determinants of economic growth. The results show that while the effects of gross capital formation and oil exports are highly significant, as expected, non-oil exports and human capital have an even smaller effect than had been anticipated.

Parikh and Stirbu (2004) examines the impact of trade liberalisation on economic growth, investment share of GDP, openness, trade balance and current accounts among 42 developing countries. The study concludes that the liberalisation promotes growth and such output growth in pre-liberalization period is lower than that in post-liberalization period. Liberalization promotes growth but growth itself has negative effect on trade balance for a large majority of countries.

Memedovic and Lapadre working paper reported a quantitative analysis of sectoral trends in the global economy three main findings resulted from the analysis. the long-term rise in the share of services in global value added has been slowing down in the last decade. The upward trend in the global value added share of North America and Asia seems to be partly reverted in favour of other regions. after a setback during the 1980s, structural transformation in the manufacturing sector has been accelerating in the last two decades.

Debs (2001) tested for a structural break in the volatility of real GDP growth in Canada following the methodology of McConnell and Quiros (1998). A break is found in the first quarter of 1991. Three possible explanations are given for the break in the data: a more service-oriented economy, improved inventory management, and a change in monetary policy.

Objectives of the study

1. To analyzed the economic growth and the changes in the composition of GDP in Indian economy
2. To Analyze the trends in the economic growth in India

Methodology

The study has been made only with secondary data collected the official world development indicator of World Bank. These web sites contain economic and trade related variables for a long period of time (since 1961). The study covers a period of 26 years from 1990-91 to 2015-16. All the variables required for the study were collected for this period and were expressed in US dollar (\$) for homogeneity in comparison. To analyze the sectoral growth of India, the study applied simple percentage, simple and compound growth measures to analyze the changes in the sectoral share and composition of major variables considered in the study.

Analysis and Interpretations

This section, to estimates and analyses the economic growth and the changes in the composition of GDP in India. The sectoral composition changes along with growth of economy offered ample scope of analyzing the any countries economic growth process. It becomes all the very important when the economy starts to

develop at faster rates at some point of time. Also it is very useful when there are fluctuations in the growth margins achieved.

TABLE 1.1

Sectoral growth of GDP of India (US Million \$)

Year	Agriculture	Growth	Industry	Growth	Service	Growth	GDP	Growth
1991	157700	--	135600	--	134600	--	23320000	--
1992	168200	6.66	139900	3.17	142700	6.02	24590000	5.45
1993	173800	3.33	147600	5.50	155000	8.62	25760000	4.76
1994	182000	4.72	161200	9.21	163700	5.61	27480000	6.68
1995	180800	-0.66	179400	11.29	183700	12.22	29560000	7.57
1996	198700	9.90	190800	6.35	197700	7.62	31790000	7.54
1997	193600	-2.57	198500	4.04	220200	11.38	33080000	4.06
1998	205900	6.35	206700	4.13	240600	9.26	35120000	6.17
1999	211400	2.67	219000	5.95	274900	14.26	38230000	8.86
2000	211300	-0.05	232300	6.07	290900	5.82	39700000	3.85
2001	224000	6.01	238300	2.58	311600	7.12	41610000	4.81
2002	209200	-6.61	255500	7.22	339100	8.83	43200000	3.82
2003	228200	9.08	274200	7.32	365500	7.79	46590000	7.85
2004	228600	0.18	301100	9.81	399400	9.27	50280000	7.92
2005	240300	5.12	330400	9.73	446300	11.74	54950000	9.29
2006	250300	4.16	370600	12.17	493500	10.58	60040000	9.26
2007	264800	5.79	406400	9.66	546900	10.82	65930000	9.81
2008	265100	0.11	424500	4.45	610200	11.57	68490000	3.88
2009	267200	0.79	463400	9.16	680700	11.55	74300000	8.48
2010	290200	8.61	498400	7.55	748400	9.95	81920000	10.26
2011	304800	5.03	537300	7.80	797800	6.60	87360000	6.64
2012	309300	1.48	554900	3.28	864300	8.34	92130000	5.46
2013	326500	5.56	575900	3.78	930500	7.66	98010000	6.38
2014	325900	-0.18	618900	7.47	1020000	9.62	105400000	7.54
2015	328100	0.68	673100	8.76	1120000	9.80	113800000	7.97
2016	344200	4.91	710800	5.60	1206000	7.68	121900000	7.12
AVERAGE	241926.9	3.24	347873.1	6.88	495546.2	9.19	58251538	6.86
STD	55968.91	3.90	179387	2.66	327742.1	2.22	29951424	1.96
CV	0.23	1.20	0.52	0.39	0.66	0.24	0.51	0.29
LGR	--	3.03	--	7.09	--	9.45	--	6.94

Source: world Bank development indicators

The table 1.1 revealed that the annual average growth of GDP in India during the period from 1991 to 2016. The growth rate of the major components of GDP namely Agriculture, Industry and Service Sector have also been presented in the table. The growth of GDP of India was observed to be positive in all the 26 years of study. The highest growth was recorded at 10.26 percent in 2010 with an average annual increase in the growth of 6.94 percent during the period of 1991 to 2016. The agriculture sector recorded the wide variations in its growth during the study period. The growth was found negative in four years and positive growth in twenty two years considered the study. The annual growth of industrial and service sectors recorded a positive growth in all the years during the period of study. The average growth of agricultural sector was estimated at 3.24 percent and the industrial sector was 6.88 percent and 9.19 percent in service sector was marked.

The average annual growth of GDP of India was estimated at 6.94 percent during the study period. In the case of major sectors of the Indian economy, agricultural sector recorded an increase of 3.03 percent and increase in the industrial and service sectors were estimated at 7.09 percent and 9.45 percent respectively during the period of study. Due to the pragmatic change in the policy regime of the country over the past two decades, in the industrial and service sectors showed significant improvement in the Indian economy.

Table 1.2 reports the trends in the sectorial share of major sectors in the GDP of India from 1991 to 2016. It could be noticed from the table, the average share of agricultural sector was estimated at 22.51 and this sector recorded continues decline during the period of study and the decline was estimated at -2.48 percent per annum. The average share of the Industrial sector was estimated at 31.63 percent during the period from 1991 to 2016. Though the industrial sector improvement in the GDP the growth was too meagre at 0.04 percent per annum in the study period. The average share of the service sector was estimated at 45.86 percent and the share was increased in 1.25 percent per annum during the period of study. The service sector is the dominant sector of the Indian economy constituting nearly 50 percent of the GDP.

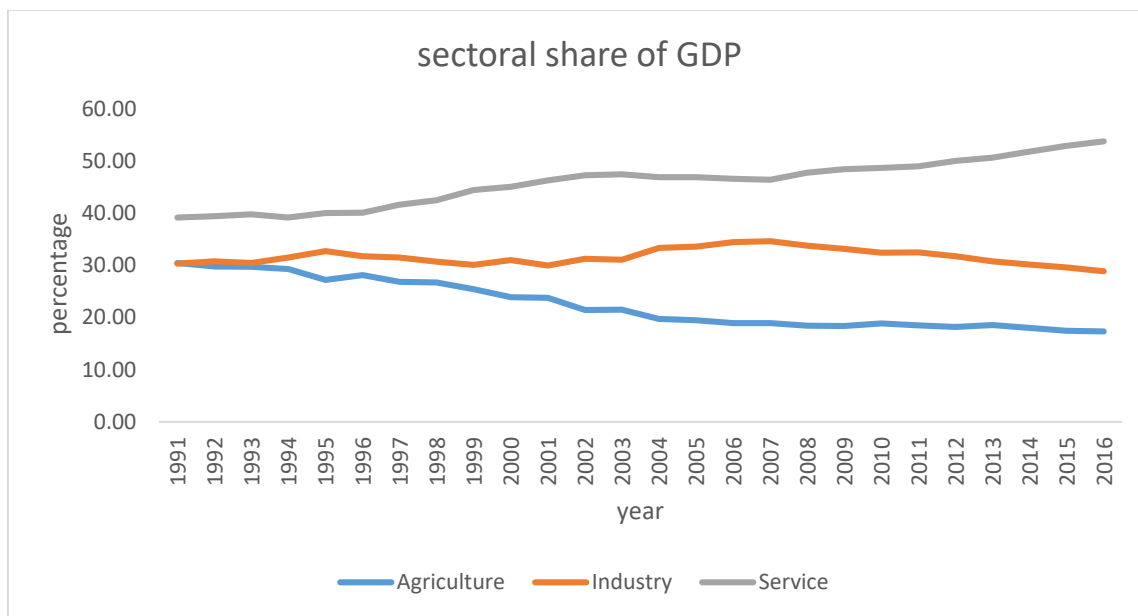
Table1.2

SECTORAL SHARE OF GDP IN INDIA (Values in percentage)

Year	Agriculture	Industry	Service	GDP
1991	30.48	30.33	39.19	100.00
1992	29.80	30.77	39.43	100.00
1993	29.74	30.44	39.81	100.00
1994	29.32	31.53	39.15	100.00
1995	27.23	32.72	40.05	100.00
1996	28.13	31.76	40.11	100.00

1997	26.85	31.53	41.62	100.00
1998	26.75	30.74	42.52	100.00
1999	25.41	30.12	44.47	100.00
2000	23.88	31.04	45.08	100.00
2001	23.77	29.95	46.28	100.00
2002	21.46	31.25	47.29	100.00
2003	21.51	31.06	47.43	100.00
2004	19.73	33.34	46.92	100.00
2005	19.51	33.59	46.90	100.00
2006	18.97	34.44	46.60	100.00
2007	18.93	34.66	46.40	100.00
2008	18.44	33.78	47.78	100.00
2009	18.39	33.15	48.46	100.00
2010	18.88	32.42	48.70	100.00
2011	18.53	32.50	48.97	100.00
2012	18.20	31.77	50.03	100.00
2013	18.59	30.79	50.62	100.00
2014	18.02	30.18	51.80	100.00
2015	17.46	29.61	52.93	100.00
2016	17.35	28.85	53.80	100.00
AVERAGE	22.51	31.63	45.86	100.00
STD	4.61	1.53	4.43	--
CV	0.20	0.05	0.10	--
LGR	-2.48	0.04	1.25	--

Source: world Bank development indicators



Conclusion

The present study analyzed the economic growth and the changes in the composition of GDP in India. The sectorial composition changes along with growth of economy offered ample scope of analyzing the any countries economic growth process. The study has been made secondary data collected from world development indicator of World Bank.. The study covers a period of 26 years from 1990-91 to 2015-16. All the variables required for the study were collected for this period and were expressed in US dollar (\$) for homogeneity in comparison. To analyze the sectoral growth of India, the study applied simple percentage, simple and compound growth measures to analyze the changes in the sectoral share and composition of major variables considered in the study. The study found that the growth of GDP of India was observed to be positive in all the 26 years of study. The average annual growth of GDP of India was estimated at 6.94 percent In the case of major sectors of the Indian economy, agricultural sector recorded an increase of 3.03 percent and increase in the industrial and service sectors were estimated at 7.09 percent and 9.45 percent respectively during the period of study. The study was also found that the service sector is the dominant sector to contributing the GDP of the Indian economy constituting nearly 50 percent of the GDP. Due to the pragmatic change in the policy regime of the country over the past two decades, in the industrial and service sectors showed significant improvement in the Indian economy.

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