IMPACT OF ECONOMIC SLOWDOWN ON SELECTED SECTORS OF INDIA

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Abstract: **Indian economy is characterized by a diverse mix of economic activities related to agriculture sector, industrial sector and service sector. Alternatively, from an economic point of view, the Indian economy can be broadly decomposed into three major sectors, namely primary sector, secondary sector and tertiary sector. The adoption of new Economic policy in 1991 witnessed a paradigm shift in Indian economy as it diluted the mixed economy model. The present research study is aimed at analysing the impact of sectors like agriculture, Agriculture, Manufacturing, Construction, Mining, Public Administration and Utilities sectors, on GDP which future leads to economic slowdown in INDIA. Secondary data is used for the present study. The data has been collected for the period 2015 to 2019. The statistical tools and tests like correlation analysis, and multiple regressions have been used. Finally, the study concludes that-there is a positive correlation between GDP and agriculture, construction, manufacturing, mining, public administration and utilities sector. Which means that the change in the sectors is having an influence on change in GDP (when the sectoral contribution increases, GDP also increases? Similarly when the sectoral contribution decreases, GDP also decreases).From the hypothesis testing, Alternative Hypothesis is accept i.e., There is a significant relationship between correlation values of agriculture, construction, manufacturing, mining, public administration and utilities with GDP. The study also includes Performances of Indian GDP from past 20 years, Major sectors in GDP and Performances of these sectors from past 10 years.**

Keywords: **A**griculture, Economic sector, Manufacturing Sector, Public Administration, Utilities.

Introduction: India is a fast-growing economy but its Economic growth has slowed for 5 consecutive quarters beginning from late 2015-16 onwards. Now growth is slower than it was in the quarter. It could be serious issue for a government that had promised to turn around the economy through implementing various policies.

India's GDP growth has gone down from a high of 9.2% in third Quarter of the year 2016 to 5.7% in current 4thquarter of 2017. GDP of the year 2018 is 7.1 % GDP of current year is recorded as 6.6 %. This shows a severe decline in the GDP. The economic growth rate is probably the slowest in last many years. However, Indian Economy as per global standard is in recessionary stage. The UK and the European Union consider an economy in recession only when real GDP growth actually turns negative over two consecutive quarters and by this criterion, with a positive growth rate of 5.7%.

India's past economic slowdown: The Indian economy has faced a direct impact due to global economic crisis. This global economic crisis which is raised in mid-2007, due to sub-prime lending, showed a greater impact on the world; stock markets and large financial institutions have collapsed.

The following are the factors that show the economy is in slowdown: -

➢ Decline in economic growth rate.
➢ Increase in unemployment.
➢ Failing in prices of assets.
➢ Decline in investments.
➢ Lower inflation rates.
➢ Fall in consumption power of consumer

Current economic slowdown in India: From many news articles and channels we are hearing about economic slowdown in India. For the current period 2019-2020, many economic indicators are flashing the signals for slowdown. This has indirectly affected on GDP growth rate.

Although, India is given a fact as fastest growing developing country from the last 2years.The sudden slowdown as put into shock. As it continuously achieved a minimum growth of 9% from the past 5 years and expected to be the same for next 5 years. But the economic indicators reflect that GDP has fallen down to 5% in the Q1 of 2019-2020.

Major sectors in GDP: India is a vast country, the sectors contributing to the India's GDP is also vast in numbers. Many sectors falling under the India GDP such as, transportation equipment, petroleum, food processing, textiles, agriculture, mining, machinery, chemicals, software steel, cement and many others. But the main sectors are Agriculture sector (it includes agriculture, forestry, fishing and mining & quarrying), Industrial sector (it includes manufacturing, electricity, gas, water supply & other utility services, and construction) and Service sector.

Objectives: To study the major reasons for economic slowdown and the impact of various sectors (Agriculture, Manufacturing, Construction, Mining, Public Administration and Utilities sectors) on Indian GDP. This study also would like to understand the revival measures taken by GOI to improve the market conditions.

Research Methodology: Secondary data is used for the present study. The data has been collected for the period 2015 to 2019. Data is related to contribution of sectors to Indian GDP is considered. GDP is measured by a number of components but in this

study only Agriculture, Manufacturing, Construction, Mining, Public Administration and Utilities sectors, were selected as major components for the period selected for the study.

Company profile

INDIA'S PAST ECONOMIC SLOWDOWN (2008-09): - The Indian economy has faced a direct impact due to global economic crisis. This global economic crisis which is raised in mid-2007, due to sub-prime lending, showed a greater impact on the world; stock markets and large financial institutions have collapsed. The following are the factors that show that economy is in slowdown.

Decline in GDP growth rate: -

Table No.1 Table showing decline in GDP growth rate

Year	Growth rate of GDP in %
2005-06	9.5
2006-07	9.6
2007-08	9.3
2008-09	6.8
2009-10	8.0

Source: World Bank national accounts data, and OECD National Accounts data files

After a long time, the Indian economy has experienced a decline in GDP growth rate. From the above table we can see that in 2006-07 the GDP growth rate was 9.6% which has declined to 9.3% in 2007-08 and further due to the effect of global financial crisis and global recession, the GDP growth rate of Indian economy started declining to a greater extent to 6.8% in 2008-09. This down trend has affected the industrial sector. Majorly, infrastructure, manufacturing and the service sectors especially in the transport, construction, communication, trade, hotels etc. Service export growth has also affected. The financial crisis has also affected the IT sector, banking and may financial institutions. It also resulted in fall in earnings of the workers due to reduction in working hours and job cuts.

CURRENT ECONOMIC SLOWDOWN IN INDIA: -

After 2008-09, from many news articles and channels we are hearing about economic slowdown in India. For the current period 2019-2020, many economic indicators are flashing the signals for slowdown. This has indirectly affected on GDP growth rate. Although, India is given a fact as fastest growing developing country from the last 2years.The sudden slowdown as put into shock. As it continuously achieved a minimum growth of 9% from the past 5 years and expected to be the same for next 5 years. But the economic indicators reflect that GDP has fallen down to 5% in the Q1 of 2019-2020.

Table No: 2 Table showing quarterly growth rate of GDP:

	GDP (% GROWTH)			
YEARS	Q1	Q2	Q3	Q4
2018-19	7.7	7.1	7	6.6
2019-20	5.8	4.5	4.3	-

Source: World Bank national accounts data, and OECD National Accounts data files

From the above table we can see that comparing with the last year the GDP growth is gradually declining. i.e., from 6.6% of Q4 of 2018-19 it has further declined to 5.8% in Q1 of 2019-20. Further there was a decline of GDP more than 3 consecutive quarters .so we can say that India is facing slowdown.

Agriculture, automobile, FMCG, real estate are the major sectors which got affected by Indian economy slowdown. The automobile industry which employees around 3702 people and contributes 12% to the national GDP, is suffering the most by this slowdown. Three lakh jobs were lost and sales were dropped down.

Eight major sectors have registered a negative growth of 2.1% in July compared with 7.3% in the corresponding month of the last year. Unemployment has also increased to 8.2%. FPI'S have also withdrawn net amount of rs.5, 920crores from India.

Data Analysis and interpretations:
TABLE.1: SECTORAL CONTRIBUTION TO GDP FROM 2015-2019

YEAR	MONTH	AGRICULTURE (in billions)	CONSTRUCTION (in billions)	MANUFACTURING (in billions)	MINING (in billions)	PUBLIC ADMINISTRATION (in billions)	UTILITIES (in billions)	GDP (in INR billions)
2015	Jan-Mar	5228.94	2065.58	3898.33	686.63	3157.06	532.21	27837.33
2015	Apr-June	4206.73	2141.8	4481.78	825.47	2976.85	520.46	27282.79
2015	July-Sep	3711.95	2184.98	4647.77	897.28	2917.84	552.42	27680.87
2015	Oct-Dec	3077.22	2060.34	4714.26	657.73	3328.06	578.53	28363.87
2016	Jan-Mar	5111.19	2166.86	4491.99	785.36	3369.26	552.1	30367.38
2016	Apr-June	4251.8	2252.22	5133.88	944.16	3151.94	558.88	29838.18
2016	July-Sep	3882.88	2349.04	5121.35	932.38	3110.47	625.27	30134.89
2016	Oct-Dec	3262.99	2231.7	5090.41	670.51	3543.32	623.53	30504.25
2017	Jan-Mar	5460.08	2327.34	4876.12	823.39	3672.02	608.49	32505.92
2017	Apr-June	4555.09	2164.34	5448.29	1121.4	3669.23	603.96	31625.37
2017	July-Sep	4044.33	2425.88	5036.82	959.28	3572.03	678.76	32874.79
2017	Oct-Dec	3409.06	2337.78	5453.09	743.16	3856.4	680.63	32849.71
2018	Jan-Mar	5709.93	2512.59	5297.31	860.13	4008.45	654.24	35148.84
2018	Apr-June	4555.09	2415.7	5982.01	1094.2	4165.66	663.58	34139.97
2018	July-Sep	4248.69	2659.7	5648.15	963.08	3839.9	724.37	34427.39
2018	Oct-Dec	3577.28	2536.99	5826.72	726.81	4187.92	739.55	35010.2
2019	Jan-Mar	5869.41	2756.19	5638.04	875.89	4310.49	708.31	37198.3
2019	Apr-June	4860.94	2586.14	6167.49	1139.86	4610.2	692.04	35851.75
2019	July-Sep	4335.47	2812.62	5681.04	988.87	4166.28	786.82	35993.34
2019	Oct-Dec	3651.61	2621.49	5765.6	727.76	4674.34	766.25	35813.35

Source: worldbank.org, statista.com
 The above table is the secondary data collected from websites like trending economics, worldbank.org, and statista.com. It refers to the mentioned sectors (i.e., Agriculture, Construction, Manufacturing, Mining, Public administration, Utilities) contribution to Indian GDP from 2015 to 2019.the present data is used for analysis.

CORRELATION:-

		AGRICULTURE	GDP	CONSTRUCTION	MANUFACTURING	MINING	PUBLIC ADMINISTRATION	UTILITIES
AGRICULTURE	Pearson correlation	1						
	Sig.(2-tailed)							
GDP	Pearson correlation	.300	1					
	Sig.(2-tailed)	.198						
CONSTRUCTION	Pearson correlation	.221	.917**	1				
	Sig.(2-tailed)	.349	.000					
MANUFACTURING	Pearson correlation	-.047	.847**	.772**	1			
	Sig.(2-tailed)	.844	.000	.000				
MINING	Pearson correlation	.299	.328	.329	.508*	1		
	Sig.(2-tailed)	.200		.157	.022			
PUBLIC ADMINISTRATION	Pearson correlation	.187	.933**	.794**	.841**	.232	1	
	Sig.(2-tailed)	.430	.000	.000	.000	.326		
UTILITIES	Pearson correlation	-.074	.900**	.910**	.822**	.192	.850**	1
	Sig.(2-tailed)	.756	.000	.000	.000	.417	.000	

Source: Author's calculations

Interpretation: For the above study correlation between the sectors like agriculture, construction, manufacturing, mining, public administration and utilities were considered and the changes in the sectors and its impact on the GDP is studied. From the table it is understood that there is a positive correlation between GDP and agriculture, construction, manufacturing, mining, public administration and utilities which means that the change in the sectors is having an influence on change in GDP. Sectors like agriculture, construction, manufacturing, mining, public administration and utilities is showing a significant positive correlation ship with GDP. This says that the sectors have a high impact on the change in GDP. Thus, it is disproving the hypothesis that there is no relationship among the sectors and the GDP.

MULTIPLE REGRESSIONS:-

MODEL SUMMARY

MODEL	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.994[a]	.988	.983	411.511

ANOVA[b]

Model	df	SS	MS	F	Significance F
Regression	6	184501489.9	30750248.31	181.4006	9.17276E-12
Residual	13	2203704.199	169515.7076		
Total	19	186705194.1			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	1155.115334	1224.432495	0.943388336	0.362686	-1490.110246	3800.340914	-1490.110246	3800.340914
AGRICULTURE(in billions)	1.521462205	0.260119227	5.849095508	5.69E-05	0.95950878	2.083415629	0.95950878	2.083415629
CONSTRUCTION (in billions)	-0.727811456	1.651477814	-0.440703139	0.666668	-4.295612356	2.839989443	-4.295612356	2.839989443
MANUFACTURING (in billions)	2.193726854	0.575026603	3.815000634	0.002145	0.951457407	3.4359963	0.951457407	3.4359963
MINING (in billions)	-2.398570368	1.115112756	-2.150966667	0.050866	-4.807625008	0.010484273	-4.807625008	0.010484273
PUBLIC ADMINISTRATION (in billions)	0.442859913	0.635642201	0.696712573	0.498252	-0.930361572	1.816081399	-0.930361572	1.816081399
UTILITIES (in billions)	23.69415028	5.712091919	4.148068802	0.001145	11.35392596	36.0343746	11.35392596	36.0343746

Source: Author's Calculations

Interpretation: order to find out the relationship between various sectoral changes with GDP. A multiple regression analysis was carried out and a multiple equation has been derived and the equation is as follows $Y=1155.1+1.521A-0.727B+2.1937C-2.398D+0.44E+23.694F$. Were A=agriculture, B=construction, C=manufacturing, D=mining, E=public administration, F=utilities. From the table of the model summary it is understood that "R" which is a multiple regression co-efficient whose value is 0.994 indicates a good level of prediction and showing that about 99.4% of total variation in GDP in India can be explained by independent variables (i.e., Agriculture, construction, manufacturing, mining, public administration, utilities).

"R-SQUARE" which is the proportion of variance in the dependent variable which is explained by the independent variable is 0.998 and is considered to be very good.

The "F-RATIO" in the ANOVA table which tests the overall regression model shows that independent variables like agriculture, construction, manufacturing, mining, public administration and utilities and are statistically significant in predicting the dependent variable GDP.

Coefficient of agriculture parameter is 1.522 that tells dependability of agriculture sector on GDP. If agriculture parameter changes by one unit, then GDP in India will Increase by 1.522%. Coefficient construction of parameter is -0.730, if construction sector parameter changes by one unit, then the GDP will decrease by -0.730%. Simultaneously manufacturing, public administration and utilities have positively dependability on GDP with 2.194, .442 and 23.701 respectively. Whereas mining sector that tells about no dependability of mining sector on GDP, if mining sector parameter changes by one unit, then the GDP will decrease by -2.399.

Findings:

➢ Several reasons attributed for the slowdown of Indian economy. the major reasons for economic slowdown are Sharp fall in overall demand, Sharp decline in consumption, Decline in investments, Demonetization, Impact of GST, Global financial crisis slowdown and poor performance of banking sector.

➢ From the study it has found that Agriculture sector share in the GDP has come down during the last five years' time. It was 18.78% in the financial year 2014-15 which came down to 10.19% during the year 2019.this is because of some reasons like Demonetization, shift from framing to non-framing activities, inadequate use of modern technology, lack of Infrastructure etc.

➢ Construction sector share in the GDP has come down during the last five years' time. It was 7.42% in the financial year 2014-15 which came down to 7.31% during the year 2019.This is because of some reasons like, decline in availability of funds, decline in demand and decline in capital expenditure by the government etc.

➢ Manufacturing sector share in the GDP has gradually increased during the last five years' time. It was 14% in the financial year 2014-15 and increased to 16% i.e., 2% of growth. This is because of some reasons like increase in demand, investments and support by the government etc.

➢ Mining sector share in the GDP has come down during the last five years' time. It was 2.46% in the financial year 2014-15 which came down to 2.03% during the year 2019.This is because of some reasons like banning of mining activity, higher taxation rates etc.

➢ Public Administration sector share in the GDP has gradually increased during the last five years' time. It was 11.34% in the financial year 2014-15 and increased to 13.05%. this is because of some reasons like Generation of Income to the economy, Increase in Gross domestic Capital Formation, Higher Employment opportunities etc.

➢ Utilities sector share in the GDP has gradually increased during the last five years' time. It was1.91 % in the financial year 2014-15 and increased to 2.13 %. This is because of some reasons like increase in demand, support from government etc.

> ➤ From the data analysis it has found that the there is a positive correlation between GDP and agriculture, construction, manufacturing, mining, public administration and utilities sector. Which means that the change in the sectors is having an influence on change in GDP (when the sectorial contribution increases, GDP also increases? Similarly, when the sectorial contribution decreases, GDP also decreases).

> ➤ From the hypothesis testing, Alternative Hypothesis is accepted i.e., There is a significant relationship between correlation values of agriculture, construction, manufacturing, mining, public administration and utilities with GDP.

> ➤ Financial Aid, RODTEP, Electronic Refund System, NIIF, reducing of REPO rate by 135 points etc. are the measures took my government of India to revive the economy.

Conclusion:

From the present study the reasons attributed for the slowdown of Indian economy are mentioned the reason are Sharp fall in overall demand, Sharp decline in consumption, Decline in investments, Demonetisation Impact of GST, Global financial crisis slowdown and poor performance of banking sector.

The present study is an attempt to find the impact of sectoral changes on Indian economy during the period 2015 to 2019 and thereby drawing certain useful inferences. From the study correlation between the sectors like agriculture, construction, manufacturing, mining, public administration and utilities were considered and the changes in the sectors and its impact on the GDP is studied. It is understood that there is a positive correlation between GDP and agriculture, construction, manufacturing, mining, public administration and utilities which means that the change in the sectors is having an influence on change in GDP. Thus, alternative hypothesis is accepted.

Government of India took several measures like MAKE IN INDIA, reduce of REPO rate by 135 base points, various subsides and schemes were implemented to improve the sectoral contribution to GDP.

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