MACRO ECONOMIC PERFORMANCE IN INDIA THROUGH NATIONAL INCOME –SINCE LIBERALIZATION

R. SHANTHI

Assistant Professor, Department of Economics, Annamalai University

Abstract

The national income in terms of various sectors and the periodical variations in them. To make projections about the future development trend of the economy. To help government formulate suitable development plans and policies to increase growth rates. To help businesses to forecast future demand for their products.To make international comparison of people's living standards.GDP refers to total income from goods and services produced in a country in a year.GDP is calculated bythree ways I) expenditure approach II) income approach III) value added approach.The following are eight macroeconomic variables to be discussed in this article. Gross Domestic Product (GDP), NDP at factor cost, GDP at market price, NDP at market price, GNP at factor costis, NNP at factor cost, GNP at market price and NNP at market price. These secondary data collected from the RBI Report from the Year 1989 – 90 to 2013-14. To develop the National Income the government politics should be easy for the people to understand. The government should remove all kinds of restriction for the entrepreneurs in there business initiation. To motivate entrepreneurs and engorge experts.

Keywords: Gross Domestic Product(GDP),NDP at factor cost,GDP at market price,NDP at market price,GNP at factor costis,NNP at factor cost,GNP at market price and NNP at market price.

Introduction

Measuring national income is crucial for various purposes:The measurement of the size of the economy and level of country's economic performance;To trace the trend or the speed of the economic growth in relation to previous year(s) also in other countries; To know the composition and structure of the national income in terms of various sectors and the periodical variations in them. To make projections about the future development trend of the economy.To help government formulate suitable development plans and policies to increase growth rates.To fix various development targets for different sectors of the economy on the basis of the earlier performance.To help businesses to forecast future demand for their products.To make international comparison of people's living standards.

GDP refers to total income from goods and services produced in a country in a year.

GDP is calculated bythree ways

I)   expenditure approach

II)   II) income approach

III)   III) value added approach.

Expenditure Approach

Grossdomestic product is calculated as the sum of all expenditure incurred in the country during the year. The following formula expressed that

GDP = E = C + I + G

GDPrefers Gross Domestic Product, E refers Total Expenditure, C refers Consumption Expenditure, I refers Domestic Investment, G refers Government Expenditure.

Income Approach

Domestic Product is calculated by a country during the year adding up all the income earned by the factors of production like wagesand salaries ,interestand profit.

Value Added Approach or Product Approach

GDP is the production of a country in a particular year and this calculated with the goods and services involved in the production process. This method of value added approach is also having its own difficulties in calculation. One of the major difficulty in calculating national income through value added approach is one industry output is input for other industries. In India the calculation of value added approach is arrived from many sectors such as manufacturing, electricity , construction , water supply, gas, mining transport,trade and communication, insurance and banking, real estate ,business services, Public Administration and other services like government services.

Hence the above all three approaches give us result is expenditure approach equal to Income approach equal to value added approach. India follows Value Added approach otherwise called product method. The following are eight macroeconomic variables to be discussed in this article.

GDP at factor cost:

Gross Domestic Product (GDP) at factor cost is calculated asproduction of a country in a particular year and this calculated with the goods and services involved in the production process. GDP at market price minus indirect tax and subsidies. Thus following formula calculated as

GDP at factor cost = GDP at market price - indirect tax + subsidies.

NDP at Factor Cost :

NDP at factor cost is Net Domestic Product at factor cost is net output of a domestic economy. The following formula calculate or thus

NDP at factor cost = GDP at factor cost – depreciation.

GDP at Market Price:

GDP at market price is Gross Domestic Product at market price. GDP at market price is equal to GDP at factor cost added to indirect tax and subsidies. Thus we can write

GDP at market price =   GDP at factor cost + indirect tax + subsidies.

NDP at market price:

NDP at market priceis Net Domestic Product at market price.   NDP at market price is equal to NDP at factor cost added to indirect tax and subsidies.   Thus we can write NDP at market price = NDP at factor cost + indirect tax + subsidiaries.

GNP at factor cost:

GNP at factor costisGrass National Product at factor cost. GDP at factor cost is equal to GDP at factor cost added to (export – import).   Then the explained equation is GNP at factor cost = GDP at factor cost +[EX– IM]

Where EX is export, IM is the import.

NNP at factor cost:

NNP at factor cost is Net National Product at factor cost. NNP at factor cost is equal to GNP at factor cost minus depreciation. Thus we can write.

 NNP at factor cost = GNP at factor cost – depreciation.

 GNP at market price:

GNP at market price is Grass National Product at market price. GNP at market price is equal to GNP at factor cost added to indirect taxes and subsidies.   Thus we can write, GNP at market price = GNP at factor cost + indirect tax + subsidies.

NNP at market price:

NNP at market price is Net National Product at market price. NNP at market price is equal to NNP at factor cost added to indirect taxes and subsidies. Thus we can write, NNP at market price = NNP at factor cost + indirect tax + subsidies.

TABLE 1; MACROECONOMIC INDICATORS

YEAR	Population (Crore)	percent	GDP at Factor Cost	percent	NDP at Factor Cost	percent	GDP at Market Prices	percent	NDP at Market Prices	percent
1989-90	82		456540		411292		501928		456680	
1990-91	84	2.1	531813	16.5	479163	16.5	586212	16.8	533562	16.8
1991-92	86	2.0	613528	15.4	548901	14.6	673875	15.0	609248	14.2
1992-93	87	1.9	703723	14.7	629585	14.7	774545	14.9	700407	15.0
1993-94	89	2.3	817961	16.2	735104	16.8	891355	15.1	808498	15.4
1994-95	91	2.0	955385	16.8	858637	16.8	1045590	17.3	948842	17.4
1995-96	93	2.0	1118586	17.1	1006000	17.2	1226725	17.3	1114139	17.4
1996-97	95	1.9	1301788	16.4	1171940	16.5	1419277	15.7	1289429	15.7
1997-98	96	1.9	1447613	11.2	1300346	11.0	1572394	10.8	1425127	10.5
1998-99	98	2.0	1668739	15.3	1504998	15.7	1803378	14.7	1639637	15.1
1999-00	100	1.8	1858205	11.4	1671733	11.1	2023130	12.2	1836658	12.0
2000-01	102	1.8	2000743	7.7	1793851	7.3	2177413	7.6	1970521	7.3
2001-02	104	2.1	2175260	8.7	1946411	8.5	2355845	8.2	2126996	7.9
2002-03	106	1.5	2343864	7.8	2097683	7.8	2536327	7.7	2290146	7.7
2003-04	107	1.5	2625819	12.0	2353664	12.2	2841503	12.0	2569348	12.2
2004-05	109	1.6	2971464	13.2	2651573	12.7	3242209	14.1	2922318	13.7
2005-06	111	1.6	3390503	14.1	3026782	14.2	3693369	13.9	3329648	13.9
2006-07	112	1.4	3953276	16.6	3534547	16.8	4294706	16.3	3875977	16.4
2007-08	114	1.4	4582086	15.9	4097390	15.9	4987090	16.1	4502394	16.2
2008-09	115	1.4	5303567	15.7	4738370	15.6	5630063	12.9	5064866	12.5
2009-10	117	1.4	6108903	15.2	5449104	15.0	6477827	15.1	5818028	14.9
2010-11	119	1.4	7248860	18.7	6488641	19.1	7784115	20.2	7023896	20.7
2011-12	120	1.3	8391691	15.8	7511795	15.8	9009722	15.7	8129826	15.7
2012-13	122	1.2	9388876	11.9	8372744	11.5	10113281	12.2	9097149	11.9
2013-14	123	1.3	10472807	11.5	9299345	11.1	11355073	12.3	10147001	11.5

TABLE 1; MACROECONOMIC INDICATORS

YEAR	GNP at Factor Cost	percent	NNP at Factor Cost	percent	GNP at Market Prices	percent	NNP at Market Prices	percent
1989-90	450809		405561		496197		450949	
1990-91	524268	16.3	471618	16.3	578667	16.6	526017	16.6
1991-92	603451	15.1	538824	14.3	663798	14.7	599171	13.9
1992-93	692078	14.7	617940	14.7	762900	14.9	688762	15.0
1993-94	805881	16.4	723024	17.0	879275	15.3	796418	15.6
1994-95	942302	16.9	845554	16.9	1032507	17.4	935759	17.5
1995-96	1105102	17.3	992516	17.4	1213241	17.5	1100655	17.6
1996-97	1288706	16.6	1158858	16.8	1406195	15.9	1276347	16.0
1997-98	1434408	11.3	1287141	11.1	1559189	10.9	1411922	10.6
1998-99	1653771	15.3	1490030	15.8	1788410	14.7	1624669	15.1
1999-00	1842774	11.4	1656302	11.2	2007699	12.3	1821227	12.1
2000-01	1978010	7.3	1771118	6.9	2154680	7.3	1947784	6.9
2001-02	2155192	9.0	1926343	8.8	2335777	8.4	2106928	8.2
2002-03	2371774	10.0	2080993	8.0	2519637	7.9	2273456	7.9
2003-04	2605111	9.8	2332956	12.1	2820795	12.0	2548640	12.1
2004-05	2949089	13.2	2629198	12.7	3219834	14.1	2899943	13.8
2005-06	3364387	14.1	3000666	14.1	3667253	13.9	3303532	13.9
2006-07	3920042	16.5	3501313	16.7	4261472	16.2	3842743	16.3
2007-08	4561574	16.4	4076878	16.4	4966578	16.5	4481882	16.6
2008-09	5270644	15.5	4705447	15.4	5597140	12.7	5031943	12.3
2009-10	6070903	15.2	5411104	15.0	6439827	15.1	5780028	14.9
2010-11	7167053	18.1	6406834	18.4	7702308	19.6	6942089	20.1
2011-12	8314861	16.0	7434965	16.0	8932892	16.0	8052996	16.0
2012-13	9272110	11.5	8255978	11.0	9996515	11.9	8980383	11.5
2013-14	10344507	11.57	9171045	11.1	11191963	12.0	10018501	11.6

The above table shows population, growth of population, Gross Domestic Product (GDP) at factor cost, growth rate of Gross Domestic Product (GDP) at factor cost,Net Domestic Product (NDP) at factor cost, growth rate of Net Domestic Product (NDP) at factor cost, Gross Domestic Product (GDP) at market price, growth rate of Gross Domestic Product (GDP) at market price, Net Domestic Product (NDP) at market price, growth rate of Net Domestic Product (NDP) at market price, Gross National Product(GNP) at factor cost, growth rate of Gross National Product (GNP) at factor cost,Net National Product (NNP) at factor cost, growth rate of Net National Product (NNP) at factor cost ,Gross National Product (GNP) at market price, growth rate of Gross National Product (GNP) at market price , Net National Product (NNP) at market price, growth rate of Net National Product (NNP) at market price .The year of study is from 1990 - 90 to 2013-14 that is for 24 years.

Population growth from 1990- 91 to 2001 - 02 was more compare to population growth from 2002-03 till 2013-14. From the year 1990 - 91 to 2001- 02 population growth is fluctuatingbut after 2001 -02 till 2013-14 the population growth comes down reasonably well from 2.06 percentage to 1.25 percentage.The reason behind it must be substantial growth in Indian economy from 2001 – 02 till2013-14.

GDP at factor cost

Of the 24 years, in 2010-11 the percentage growth of GDP at factor costwas maximum at 18. 66 percentageand the growth was lowest at 7.67 percentage in the year 2000 –01.

From 2000-01 up to 2010-11 the growth of GDP at factor cost has increased.The increase in growth of GDP at factor cost is almost three fold from 2000-01 to 2010-11. After 2010-11 the growth of GDP at factor cost has started decliningup to 2013-14.

The GDP at factor cost has increased from 2000- 01 to 2010- 11 at the same time the population growth have started declining, in the same period.   This shows that the country has progressed from 2000-01 till 2010-11 in terms of national income and per capita income of the country.

NDP at factor cost

Of the 24 years, in 2010-11 the percentage growth of GDP at factor cost was maximum at 19.07 percentage and the growth was lowest at 7.30 percentage in the year 2000- 01.

From 1990 - 91 up to 2002-03 the growth of NDP at factor cost is fluctuating but after 2000-01 till 2000 -03 growth of NDP factor cost comes down. From 2003 -04 up to 2010- 11 the growth of NDP at factor cost has continuously increased. After 2011-12 the growth of NDP at factor cost started decline up to 2013-14.

The NDP at factor cost increased from 2003-04 upto 2010-11 due to the reason that the capital depreciation decline but after,the year 2010-11 growth of NDP at factor cost declining up to 2013-14 because of both decrease in NDP at factor cost and increase in depreciation of capital.

GDP at market price

Ofthe 24 years, in 2010-11 the percentage growth of GDP at market priceswas maximum at 20.17 percentage and the growth was lowest at 7.63 percentage in the year 2000 – 01.

From 2000-01 up to 2010- 11 the growth of GDP at market price has increased. The increase in growth of GDP at market price is almost three fold from 2000-02 to 2010-11.After 2010-11 the growth of GDP at market price has started declining up to 2013-14.

The GDP market price has increased from 2000 - 01 to 2010- 11 at the same time the indirect taxes and subsidies started to increase.

In the same period this shows that the country progress from2000- 01 till 2010-11 in termsof growth of GDP at market price.

When we compare the variables GDP at market price and GDP at factor cost we come to know that for the study period of 24 years there is no huge different in the growth of both the variables, which means that there is no much change in the growth of indirect taxes and subsidies.

NDP at market price

Of the 24 years, in 2010-11 the percentage growth of NDP at market price was maximum at 20. 73 percentage and growth was lowest at 7.29 percentage in the year 2000- 01.

From 2000 -01 up to 2010 -11 the growth of NDP at market price has increased. Theincrease in growth of NDPat market price is almost three fold from 2000 -01 to 2010- 11. After 2010-11 the growth of NDP at market price has started to decline up to 2013-14.

The NDP at market price has increased from 2000 - 01 to 2010- 11 at the same time the population growth have started declining in the same period which made the country progress from 2000-01 till 2010-11 in terms of national income increase and indirect tax increase of the country.

When we compare the variables NDP at market price and NDP at factor cost we come to know that for the study period of 24 years there is no huge difference in the growth of both variable, which means that there is no much change in the growth of indirect taxes and subsidies.

GNP at factor cost

Of the 24 years, in 2010-11 the percentage growth of GNP at factor cost was maximum at 18.06 percentage and growth was lowest at 7.34 percentage in the year 2000- 01.

From 2000- 01 up to 2010 -11 the growth of GNP at factor cost has increased. The increasein growth of GNP at factor cost is almost three fold from 2000- 01. After 2010 -11 the growth of GNP at factor cost has started to decline after 2013-14.

NNP at factor cost

Of the 24 years, in 2010-11 the percentage growth of NNP at factor cost was maximum at 18.40 percentage and growth was lowest at 6.93 percentage in the year 2000- 01

From 2000- 01 up to 2010- 11 the growth of NNP at factor cost has increased. The increase in growth of NNP at factor cost is almost three fold from 2000- 01 to 2010- 11. After 2010-11 the growth of NNP at factor cost has started to decline up to 2013-14.

The NNP at factor cost increased from 2003- 04 up to 2010 -11 due to the reason that the capital declined but after, the year 2010-11 growth of NNP at factor cost declining up to 2013-14 because of increaseddepreciationof capital.

GNP at market price

Of the 24 years, in2010-11 the percentage growth of GNP at market price was maximum at 19.60percentage and the growth was lowest at 7.32 percentage in the year 2000 -01.

From 2000 -01 up to 2010 -11 the growth of GNP at market price has increased.   The increase in growth of GNP at market price is almost three fold from 2000- 01 to 2010 -11.   After 2010-11 the growth of GNP at market price has started to decline till 2013-14.

The GNP at market price has increased from 2000 -01 to 2010 -11 at the same time the indirect tax and subsidy started to increase.

In the same period this shows that the country progress from 2000-01 till 2010-11 in terms growth of GNP at market price.

When compare the variables GNP at market price and GNP at factor cost we come to know that for the study period of 24 years there is no huge difference in the growth of both variables, which means that there is no much change in the growth of indirect taxes and subsidies.

NNP at market price

Of the 24 years, in 2010-11 the percentage growth of NNP at market price was maximum at 20.10 percentage and the growth was lowest at 6.95 percentage in the year 2000 -01.

From 2000-01 up to 2010-11 the growth of NNP at market price has increased. The increase in growth of NNP at market price is almost three fold from 2000- 01 to 2010 -11.   After 2010-11 the growth of NNP at market price has started to decline up to 2013-14.

The NNP at market price has increased from 2000 -01 to 2010- 11 at the same time the indirect taxes and subsidies started to increase.

In the same period this shows that the country progress from 2000-01 till 2010-11 in terms growth of NNP at market price.

When we compare the variables NNP at market price and NNP at factor cost we come to know that for the study period of 24 years there is no huge difference in the growth of both variablesWhich means that there is no much change in the growth of indirect taxes and subsidies.

Policy implications:

National income data from the basis of national policies. Like employment policy focus on investment, saving, industrial output, income from abroad ,increasing circular flow of money. Population growth from 1990- 91 to 2001 - 02 was more compare to population growth from 2002-03 till 2013-14. From the year 1990 - 91 to 2001- 02 population growth is fluctuatingbut after 2001 -02 till 2013-14 the population growth comes down reasonably well from 2.06 percentage to 1.25 percentage.The reason behind it must be substantial growth in Indian economy from 2001 – 02 till2013-14. The GDP at factor cost has increased from 2000- 01 to 2010- 11 at the same time the population growth have started declining, in the same period.Ofthe 24 years, in 2010-11 the percentage growth of GDP at market priceswas maximum at 20.17 percentage and the growth was lowest at 7.63 percentage in the year 2000 – 01.   In the same period this shows that the

country progress from 2000- 01 till 2010-11 in termsof growth of GDP at market price. When we compare the variables NDP at market price and NDP at factor cost we come to know that for the study period of 24 years there is no huge difference in the growth of both variable, which means that there is no much change in the growth of indirect taxes and subsidies. To develop the National Income the government politics should be easy for the people to understand. The government should remove all kinds of restriction for the entrepreneurs in there businessinitiation.   To motivate entrepreneurs and engorge experts.

Reference:

http://mospi.nic.in/statistical-year-book-india/2015/172

https://www.britannica.com/topic/gross-domestic-product

https://www.investopedia.com/terms/g/gdp.asp

http://66.39.87.11/gk/economy/national-income-inflation.php

https://competitiondigest.com/concept-national-income-gdp-ndp-gnp-nnp/

https://m.jagranjosh.com/general-knowledge/new-economic-policy-of-1991-objectives-features-and-impacts-1448348633-1