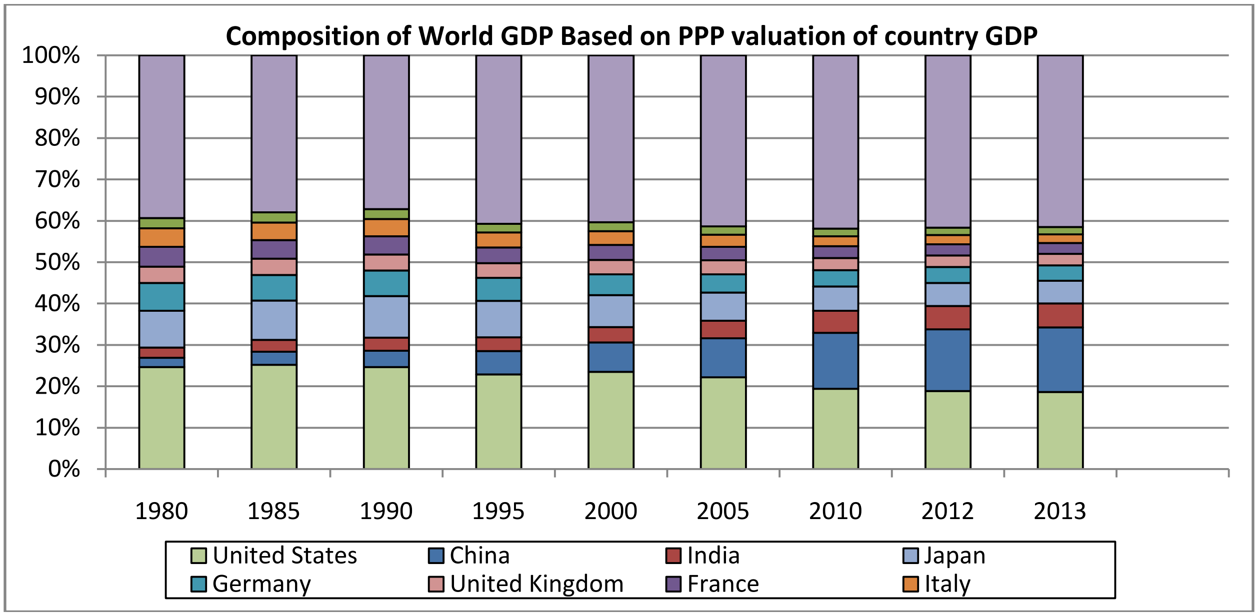
Chapter -3
National Income And Related Aggregates

3.1 Background : Performance of an economy depends on the amount of goods and services produced in that economy. In monetary terms its measure is the Gross Domestic Product (GDP), Gross National Income (GNI), and Net National Income (NNI). Apart from these macro-economic aggregates, the other important indicators to measure health of economy are capital formation and savings. Thus, measurement of these macro-economic indicators is an extremely important exercise, which requires collection and analysis of large volume of data. The conceptual framework guiding such an exercise has to be robust and evolve with the time to keep pace with the dynamics of the manifested world.

3.2 System of National Accounts (SNA): The System of National accounts (SNA) was developed by United Nations with an aim to provide a comprehensive conceptual and accounting framework for compiling and reporting macroeconomic statistics for analysing and evaluating the performance of an economy. The origins of the SNA trace back to the 1947 Report of the Sub-Committee on National Income Statistics of the League of Nations Committee of Statistical Experts. The 1953 SNA was published under the auspices of the UNSC. It consisted of a set of six standard accounts and a set of 12 standard tables presenting detail and alternative classifications of the flows in the economy. The concepts and definitions of the accounts were widely applicable for most countries, including developing countries. Two slightly modified editions of the 1953 SNA were published. SNA was revised in 1960, 1964 and 1968 in view of country experiences in implementing SNA 1953, to improve consistency with IMFs Balance of Payments manual and to extend the scope by adding input output tables, balance sheets and to bring it closer to Material Product System (MPS) respectively . 1993 SNA represented major advance in national income accounting and SNA 2008 is the latest version in the series with different degree of implementation across countries. In India, a National Income Committee to work out a system for reliable estimation of national income was appointed in 1949; and in 1954, the National Income Unit was transferred from Ministry of Finance to the Central Statistics Office which is presently responsible for bringing out the estimates.

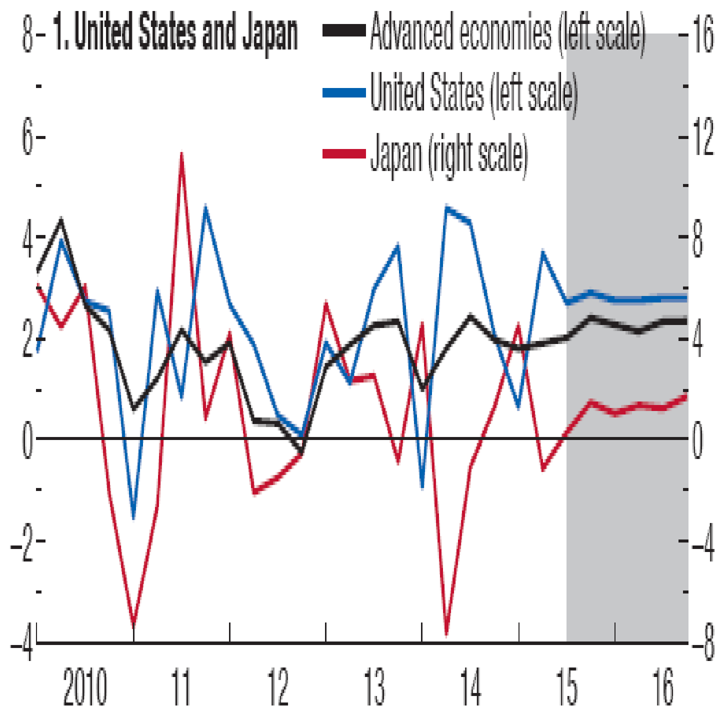
3.3 Economic Growth - World Scenario : Comparison of real GDP growth rates since 1980, on the basis of International Monetary Fund, World Economic Outlook Database, October, 2014 (Charts as Annexure 3 A & 3B), reveals much higher growth rates in case of Developing Asia (generally in the range of 5-10 %) followed by that of emerging markets and developing economies with both these categories usually achieving a higher growth rate as compared to world average . The advanced economies, on the other hand, usually had lower growth rate than the world average, during the period (1980 onwards). Country wise comparison amongst some of the leading economies (China, USA, Japan, India, Brazil, Russia & South Africa) conforms to the same. China followed by India (with exceptions during a few years) grew at more rapid pace compared to USA & Japan. Similar is the case with South Africa & Russia (except for year 2009) as they grew at a faster pace since 2000 than US & Japan. Consequently composition of world GDP, based on purchasing power parity (PPP) valuation of country GDP, has altered significantly during the last three decades. Share of China and India, which accounted for merely about 5% of world GDP during 1980 , has increased to more than 20 % in 2012-13 while most advanced economies included in G-7 have seen a decline.

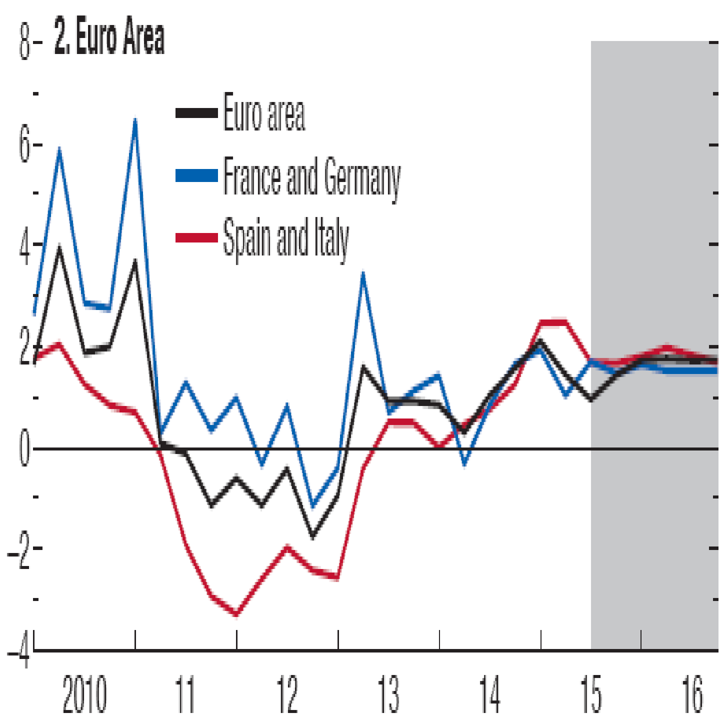


GDP Growth Forecasts: In advanced economies, growth is expected to remain robust and above trend through 2016 and contribute to narrowing the output gap. The growth recovery in the euro area is projected to be broad based. Growth in India is expected to rise above the rates in other major emerging market economies. In Latin America and the Caribbean, activity is expected to rebound in 2016 after a recession in 2015.

Economic Outlook for Individual Countries and Regions

- The recovery is expected to continue in the *United States*, supported by lower energy prices, reduced fiscal drag, strengthened balance sheets, and an improving housing market. These forces are expected to more than offset the drag on net exports coming from the strengthening of the dollar. As a result, growth is projected to reach 2.6 percent in 2015 and 2.8 percent in 2016. However, longer term growth prospects are weaker, with potential growth estimated to be only about 2 percent, weighed down by an aging population and low total factor productivity growth (which recent revisions to national accounts suggest was lower than previously thought during 2012–14).
- The moderate *euro area* recovery is projected to continue in 2015–16, sustained by lower oil prices, monetary easing, and the euro depreciation   At the same time, potential growth remains weak—a result of crisis legacies, but also of demographics and a slowdown in total factor productivity that predates the crisis Hence the outlook is for moderate growth and subdued inflation. Growth is expected to increase from 0.9 percent in 2014 to 1.5 percent in 2015 and 1.6 percent in 2016, in line with the forecast of last April. Growth is forecast to pick up for 2015 and 2016 in France (1.2 percent in 2015 and 1.5 percent in 2016), Italy (0.8 percent in 2015 and 1.3 percent in 2016), and especially Spain (3.1 percent in 2015 and 2.5 percent in 2016). In Germany, growth is expected to remain at about 1½ percent (1.5 percent in 2015 and 1.6 percent in 2016). The outlook for Greece is markedly more difficult following the protracted period of uncertainty earlier in the year.
- In *Japan,* GDP growth is





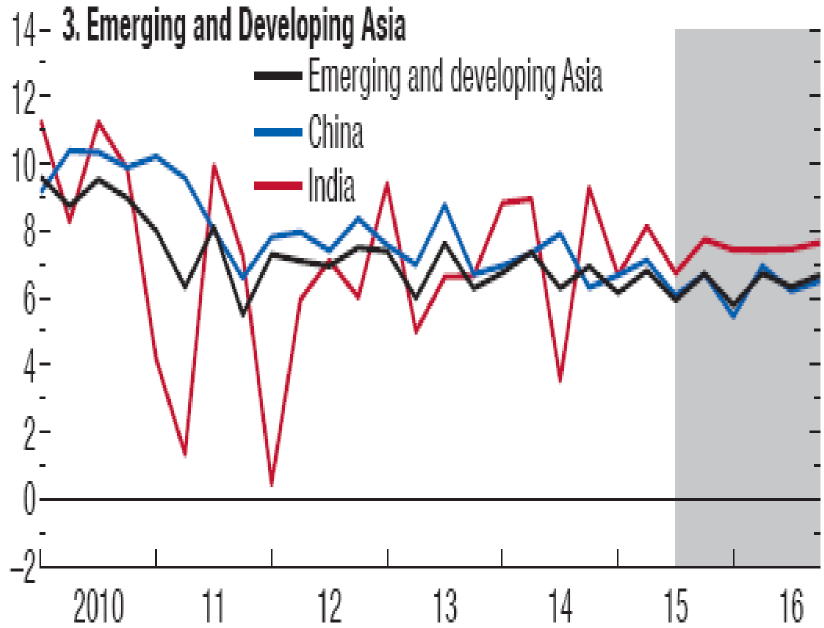
projected to rise from –0.1 percent in 2014 to 0.6 percent in 2015 and1.0 percent in 2016 . The gradual pickup reflects support from higher real compensation and higher equity prices due to the Bank of Japan's additional quantitative and qualitative easing, as well as lower oil and commodity prices.

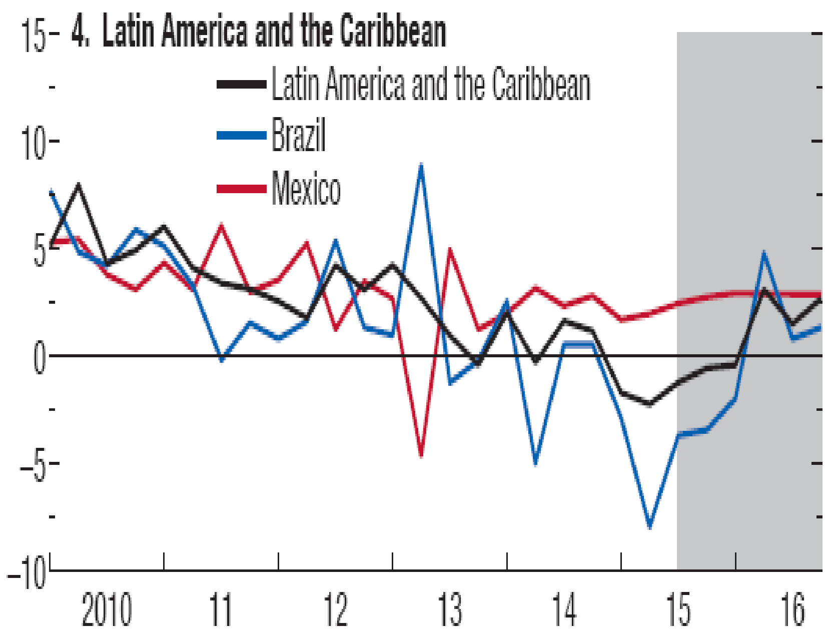
•• In other advanced economies, growth is generally expected to be solid, but weaker than in 2014. In the *United Kingdom*, continued steady growth is expected (2.5 percent in 2015 and 2.2 percent in 2016), supported by lower oil prices and continued recovery in wage growth. The recovery in *Sweden* (2.8 percent growth projected in 2015) is supported by consumption and double-digit housing investment.

In *Switzerland*, the sharp exchange rate appreciation earlier in the year is projected to depress growth in the near term (1.0 percent in 2015).

In commodity exporters, lower commodity prices weigh on the outlook through reduced disposable income and a decline in resource-related investment.

The latter mechanism has been particularly sharply felt in *Canada*, where growth is now projected to be about 1 percent in 2015, 1.2 percentage points lower than forecast in April. *Australia*'s projected growth of 2.4 percent in 2015, a bit weaker than predicted in April, also reflects the impact of lower commodity prices and resource-related investment—partly offset by supportive monetary policy and a weaker exchange rate. In *Norway* GDP is projected to grow by 0.9 percent this year as the fall in oil prices is reflected in stalling investment and weakening consumption. Among Asian advanced economies, growth is generally weaker than in 2014, reflecting domestic shocks and slower exports. The decline in growth relative to last year is particularly noticeable for *Taiwan*





Province of China (from 3.8 percent to 2.2 percent), where exports have been slowing especially sharply. •• Growth in *China* is expected to decline to 6.8 percent this year and 6.3 percent in 2016—unchanged projections relative to April . Previous excesses in real estate, credit, and investment continued to unwind, with a further moderation in the growth rate of investment, especially that in residential real estate. The forecast assumes that policy action will be consistent with reducing vulnerabilities from recent rapid credit and investment growth and hence not an act fully offsetting the underlying moderation in activity. Ongoing implementation of structural reforms in low oil and other commodity prices are expected to expand consumer oriented activities, partly buffering the slow down. The decline in stock market valuations is assumed to have only a modest effect on consumption and the correct episode of financial market vitality is assumed to unwind without sizeable microeconomic disruption. Elsewhere in emerging and developing Asia, *India*'s growth is expected to strengthen from 7.3 percent this year (i.e. 2015) and last year to 7.5 percent next year (i.e. 2016). Growth will benefit from recent policy reforms, a consequent pickup in investment, and lower commodity prices. Among the ASEAN-5 economies (*Indonesia*, *Malaysia*, *Philippines*, *Thailand*, *Vietnam*), Malaysia and to a lesser extent Indonesia are expected to slow this year, affected by weaker terms of trade. Growth is on the other hand projected to pick up in Thailand, as a result of reduced policy uncertainty, to remain broadly stable at around 6 percent in the Philippines, and to strengthen to 6.5 percent in Vietnam, which is benefiting from the oil price windfall. •• Economic activity in *Latin*	

America and the Caribbean continues to slow sharply, with a small contraction in activity in 2015 . A modest recovery is projected for 2016, but with growth at 0.8 percent, still well below trend.

Growth projections have been revised downward by more than 1 percentage point in both 2015 and 2016 relative to the April 2015 WEO. In *Brazil*, business and consumer confidence continue to retreat in large part because of deteriorating political conditions, investment is declining rapidly, and the needed tightening in the macroeconomic policy stance is putting downward pressure on domestic demand. Output is now projected to contract by 3 percent in 2015 and by 1 percent in 2016 (for both years, a forecast 2 percentage points lower than in April), with negative spillovers on other parts of the region, especially Brazil's trading partners in Mercosur. *Venezuela* is projected to experience a deep recession in 2015 and 2016 (–10 percent and –6 percent, respectively), because the oil price decline since mid-June 2014 has exacerbated domestic macroeconomic imbalances and balance of payments pressure.

Source: IMF Staff Estimates

Economic Growth History of India :

3.4 As per some studies, The Indian economy grew at 1.5% per annum during 1900 to 1913 and at an average rate of growth of 0.7% per annum during the 30 year period from 1917 to 1946. (Back series for National Accounts Statistics based on 1993-94 prices brought out by CSO is available from 1950 onwards).

3.5 Phase 1 (1950-51 to 1979-80) : As per conventional wisdom, Indian economy was stuck since independence in the '*Hindu rate of growth*,'(also referred to as *socialist rate of growth* as the period of 30 years from 1950–51 to 1979–80 was the phase of socialist experimentation in India) of about 3.5% per annum. In this phase, the economy had accelerated rate of growth compared to preceding colonial period and average income, measured by per capita GDP, grew at 1.3% per annum. Growth during this period was fairly volatile, with a co-efficient of variation of 1. There was structural change in economy with increase in share of non agriculture , mainly led by industry. The period of mid 60's (through 70's) to 1980 saw pronounced decline in GDP with slackening of industrial growth .The 1970s interregnum (in otherwise continuously increasing GDP over sub phases as per the table below) was also marked by the severe deceleration in agricultural growth. This period of slower growth is referred to as second sub phase within the first phase.

3.6 Phase 2 (1980-81 to 2001-02) : The slowdown of growth witnessed during the 1970s was reversed during the 1980s; the pick-up benefited from the initiation of some reform measures aimed at increasing domestic competitiveness. A significant experiment with coalition government ended in 1979–80 and the Congress (I) party returned to power in 1980–81. The recognition that the controls and subsidies introduced by the Congress governments during the earlier phase were not serving their intended purpose had gradually dawned on the establishment during the late seventies. The new government gradually initiated a new approach to economic management. During the 80's, there was shift towards the ascendancy of services relative to industry in growth. The rising share of public sector was the main source of increasing share of services in GDP.

3.7 Since the early 1990s, growth impulses appeared to have gathered further momentum in the aftermath of comprehensive reforms introduced by enactment of radical new economic policy framework in 1991-92 coupled with the macroeconomic response to the BOP crisis. This marked the beginning of second sub phase within the second phase of economic growth. During this sub phase, private organized sector grew rapidly relative to the public sector, increasingly shifted towards services relative to industry, and led the decisive reinforcement of a services dominated growth trajectory.

	Phase I (1951-52 to 1979-80)			Phase II (1980-81 to 2001-02)		
		Sub-phase I A I B			***Sub-phase***	
	Phase I	*(1951-64)*	*(1965-79)*	***Phase II***	*(1980-91)*	*(1992-2001)*
Growth rate (%)						
GDP (market prices)	3.6%	4.4%	2.9%	5.7%	5.5%	6.0%
GDP (factor cost)	3.5%	4.1%	2.9%	5.2%	5.5%	6.1%
GDP at factor cost (HP filtered)	3.7%	3.9%	3.5%	5.5%	5.2%	5.8%
Per capita GDP at market prices	1.4%	2.3%	0.6%	3.6%	3.3%	3.9%
Per capita GDP at factor cost	1.3%	2.0%	0.6%	3.6%	3.2%	4.1%
Private consumption (PFCE)	3.2%	3.7%	2.8%	4.7%	4.5%	4.9%
Government consumption (GFCE)	5.8%	6.6%	5.1%	6.3%	6.0%	6.6%
Investment (GDCF)	6.1%	7.9%	4.5%	6.3%	5.0%	7.8%
Machinery & equipment	6.6%	9.7%	3.7%	8.9%	9.9%	7.9%
Private GFCF	3.6%	3.5%	3.8%	8.5%	8.4%	8.6%
Goods and Services Export	3.8%	0%	10.2%	9.5%	8.4%	10.8%
Oil Import			37.1%	9.8%	6.9%	13.2%
Coefficient of Variation (Std/mean)						
GDP at Market prices	0.9	0.5	1.4	0.3	0.4	0.2
GDP at Factor cost	1.0	0.6	1.5	0.3	0.5	0.2

Sources: CSO (Series at 1993-94 prices); RBI (Series converted using implicit price deflator for GDP).

3.8 There was some loss of the growth momentum in the latter half of the 1990s which coincided with the onset of the East Asian financial crisis, setbacks to the fiscal correction process, quality of fiscal adjustment, slowdown in agriculture growth affected by lower than normal monsoon years, and some slackening in the pace of structural reforms. Monetary tightening in the face of inflationary pressures is also believed by some to have contributed to the slowdown over this period.

3.9 The uptrend in decadal domestic growth (except for interregnum in 1970s) during the first two phases (1950's to 2000's) was associated with the consistent trends of increasing domestic savings and investment over the decades. Gross domestic savings increased continuously from an average of 9.6 per cent of GDP during the 1950s to about 38 per cent of GDP during 2007-08 ; over the same period, the domestic investment rate has also increased continuously from 10.8 per cent in the 1950s to close to 36 per cent by 2006-07. A very significant feature of these trends in savings and investment rates was that Indian economic growth was financed predominantly by domestic savings. The recourse to foreign savings – equivalently, current account deficit – was rather modest during these phases of Indian growth process. The two decades, 1960s and 1980s, when the current account deficit increased marginally towards 2 per cent of GDP, it was followed by significant balance of payments and economic crisis.

3.10 Sector wise growth during the two phases is summarised as below. Interestingly, growth of manufacturing production, in terms of decadal averages, was roughly constant at around 5.6-5.9 per cent in the first five decades after Independence, except for the 1970s. There are two other features of our growth history that are notable. First, agricultural growth has been subject to large variation over the decades. The 1970s interregnum is particularly marked by the severe deceleration in agricultural growth, followed by a marked recovery in the 1980s, and a slowdown thereafter. Second, until the 1990s, little note had been taken of growth in the services sector. A glance at the growth record suggests that it is the continuing and consistent acceleration in growth in services over the decades, that had earlier been ignored, that really accounts for the continuous acceleration in overall GDP growth, once again, except for the 1970s interregnum.

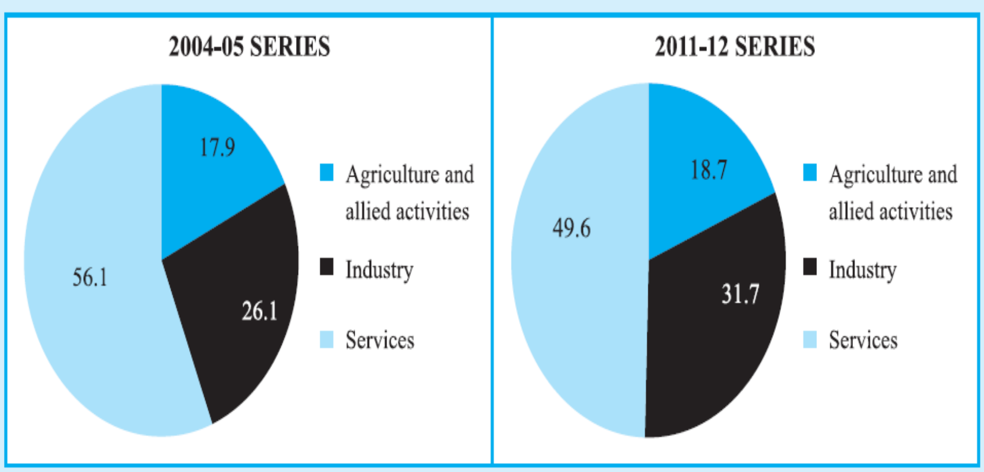
	Sector	***Phase I: 1951-2 to 1979-80***	***Sub-phase I A*** (1951-64)	***I B*** (1965-79)	***Phase II: 1980-1 to 2001-2***	***Sub-phase II A*** (1980-91)	***II B*** (1992-01)
1	*Agriculture & allied*	2.1%	2.9%	1.4%	3.6%	3.9%	3.3%
1.1	*Agriculture*	2.3%	3.1%	1.5%	3.8%	4.2%	3.3%
2	*Mining*	4.6%	5.6%	3.7%	6.3%	8.4%	3.8%
3	*Manufacturing*	5.3%	6.6%	4.1%	6.4%	6.1%	6.8%
3.1	*Registered (Modern)*	6.1%	7.9%	4.4%	6.9%	6.8%	7.1%
3.2	*Unregistered*	4.5%	5.4%	3.7%	5.6%	5.0%	6.3%
4	*Electricity, Gas, & Water*	9.6%	11.2%	8.1%	7.5%	9.0%	5.7%
5	*Construction*	4.9%	6.8%	3.2%	5.2%	5.2%	5.3%
6	*Trade, Hotels, & Restaurants*	4.8%	5.6%	4.0%	6.7%	5.4%	8.1%
6.1	*Trade*	4.8%	5.6%	4.0%	6.6%	5.4%	8.0%
6.2	*Hotels & restaurants*	4.8%	5.6%	4.0%	8.0%	6.1%	10.3%
7	*Storage, transport, & communication*	5.7%	5.9%	5.6%	7.2%	5.7%	8.9%
7.1	*Railway*	4.2%	4.8%	3.6%	4.2%	4.9%	3.3%
7.2	*Other transport*	6.3%	6.4%	6.3%	6.5%	6.0%	7.0%
7.3	*Storage*	5.5%	2.3%	8.5%	2.3%	2.5%	2.0%
7.4	*Communication*	6.7%	7.4%	6.1%	11.6%	6.3%	18.0%
8	*FIREBHS*	3.5%	3.1%	4.0%	8.6%	9.4%	7.7%
8.1	*Banking & insurance*	6.7%	6.6%	6.9%	10.6%	11.6%	9.4%
8.2	*Real estate, housing & business services*	2.6%	2.1%	3.0%	7.2%	8.0%	6.3%
9	*Community, social, & personal services*	4.3%	4.4%	4.2%	6.3%	5.6%	7.1%
9.1	*Public administration & defense*	6.1%	6.6%	5.7%	6.2%	6.2%	6.3%
9.2	*Other services*	3.3%	3.3%	3.3%	6.4%	5.2%	7.7%
	Sub-aggregates						
A	*Tradable goods*	2.8%	3.6%	2.0%	4.6%	4.7%	4.5%
B	*Non-tradable services*	4.7%	5.2%	4.2%	6.9%	6.3%	7.5%
b.1	*Services, excluding FIREHBS*	4.9%	5.6%	4.3%	6.5%	5.7%	7.4%
C	*GDP, excluding GDP administration*	3.4%	4.0%	2.8%	5.7%	5.4%	6.1%
D	*Services excluding GDP administration*	4.5%	5.0%	4.1%	6.9%	6.4%	7.6%

Source CSO (all series at 1993-94 prices)

3.11 Recent Performance of the Indian Economy: After achieving unprecedented growth of over 9 per cent for three successive years between 2005-06 and 2007-08 and recovering swiftly from the global financial crisis of 2008-09, the Indian economy has been going through challenging times that culminated in lower than 5 per cent growth of GDP at factor cost at constant prices for two consecutive years, i.e. 2012-13 and 2013-14. The strong post financial crisis stimulus led to stronger growth in 2009-10 & 2010-11. However, the boost to consumption , coupled with supply side constraints , led to higher inflation. Monetary policy was tightened, even as external headwinds to growth increased. The consequent slowdown, in 2012-13 and 2013-14, has been board based , affecting particularly the industry sector. Sub-5 per cent GDP growth for two years in succession was last witnessed a quarter of a century ago in 1986-87 and 1987-88.

3.12 Revision of the Base Year of National Accounts from 2004-05 to 2011-12: Before analysing the recent macroeconomic trends, it may be mentioned that the Central Statistics Office (CSO) has revised the national accounts aggregates by shifting to the new base of 2011-12 from the earlier base of 2004-05. Headline growth rate will now be measured by GDP at constant market prices, which will henceforth be referred to as 'GDP', as is the practice internationally. Earlier, growth was measured in terms of growth rate in GDP at factor cost at constant prices. Sector-wise estimates of gross value added (GVA) will now be given at basic prices instead of factor cost. Owing to these changes, estimates of GVA both at aggregate and sectoral levels have undergone changes. The sector-wise shares in aggregate GVA have undergone significant revision especially in the case of manufacturing and services. Changes have also been observed in the growth rates in GVAs of individual sectors and contribution of each sector to overall GVA due to use of sales tax and service tax data for estimation in the years 2012-13 and 2013-14. Caution needs to be exercised while comparing estimates and growth rates from the earlier series to the new series.

Percentage Share of Sectors in GVA at factor cost at current prices-Average of 2011-12 to 2013-14



Comparison of Old Series and New Series

Item	Year	Difference between new series and old series in percentage points
Growth in GVA at factor cost	2012-13	0.4
	2013-14	1.9
Growth in deflator	2012-13	0.5
	2013-14	-0.3
Level of GVA at factor cost at current prices	2011-12	-2.2
	2012-13	-1.3
	2013-14	0.2

Source: CSO.

3.13 India's growth has declined from an average of 8.3 per cent per annum during 2004-05 to 2011-12 to an average of 4.6 per cent in 2012-13 and 2013-14. Average growth in the emerging markets and developing economies including China declined from 6.8 per cent to 4.9 per cent in this period (calendar-year basis). What was particularly worrisome was the slowdown in manufacturing growth that averaged 0.2 per cent per annum in 2012-13 and 2013-14.

3.14 The economic scenario presented by the new series (with 2011-12 as base year) reveals that there was perceptible improvement in some of the macro-aggregates of the economy in 2013- 14, which got strengthened in 2014-15. Economic growth, measured by growth in gross domestic product (GDP) at constant market prices, estimated at 5.1 per cent and 6.9 per cent respectively during 2012-13 and 2013-14, was higher than the corresponding figures of 4.7 per cent and 5.0 per cent released under the 2004-05 series in May 2014. That this high growth occurred in a year when the both the savings and investment to GDP ratios were lower than the average of a number of years and when the level of imports (that are generally positively associated with GDP) actually declined by 8.4 per cent in real terms, is somewhat puzzling. One of the reasons why the real GDP growth rate for 2013-14 appears to be strong is the lower GDP level in 2011-12 and 2012-13 along with lower GDP deflators than were thought hitherto.

Growth in GVA at Constant (2011-12) Basic Prices (per cent)

	2012-13	2013-14	2014-15
Agriculture, forestry & fishing	**1.2**	**3.7**	**1.1**
Industry	**2.3**	**4.5**	**5.9**
Mining & quarrying	-0.2	5.4	2.3
Manufacturing	6.2	5.3	6.8
Electricity, gas, water supply,& other utility services	4.0	4.8	9.6
Construction	-4.3	2.5	4.5
Services	**8.0**	**9.1**	**10.6**
Trade, hotels & restaurants, transport &communication	9.6	11.1	8.4
Financing, insurance, real estate & business services	8.8	7.9	13.7
Community, social,& personal services	4.7	7.9	9.0
GVA at basic prices	**4.9**	**6.6**	**7.5**
GDP (at market prices)	**5.1**	**6.9**	**7.4**

Source: **Based on the CSO's Press Notes dated 30 January 2015 and 9 February 2015.**

3.15 The manufacturing sector registered a growth of 6.2 per cent and 5.3 per cent respectively in 2012-13 and 2013-14 (6.1 per cent and 5.3 per cent in terms of GVA at factor cost). As per the pre-revised series, this growth was 1.1 per cent and - 0.7 per cent. This surprising change in growth rate can be ascribed to normal data revisions that take place as per revision schedules, the effect of base change as well as more comprehensive coverage of the corporate sector with the incorporation of MCA21 database of the Ministry of Corporate Affairs. For instance, on the basis of earlier methodology and the 2004-05 series, growth rate of the manufacturing sector for 2011-12 was 3.9 per cent as per estimates released in February 2012, which was later revised to 2.7 per cent in January 2013 and 7.4 per cent in January 2014. This implies that some revision in manufacturing growth could have taken place in 2012-13 and 2013-14, even without the base revision. The upward revision in manufacturing growth in the new series also owes to inclusion of trade carried out by manufacturing companies in the manufacturing sector itself, which was earlier part of the services sector.

3.16 At the disaggregated level of the new series, the growth in manufacturing sector was chiefly on account of robust growth in textiles, apparels, and leather products, averaging 17.7 per cent during 2012-13 and 2013-14, and the machinery and equipment sector averaging 9.3 per cent, with food products yet to pick up momentum. The services sector triggered the growth momentum in 2013-14. Services like trade and repair services, rail transport, communication and broadcasting services and miscellaneous services achieved double-digits/close to double-digits growth during the year. However, sectors like water transport and storage services lagged behind.

3.17 The AE of national income for the current year indicate that the positive growth trends that unravelled in 2013-14 appear to have strengthened in 2014-15 in the industrial and services sectors, with the result that the growth in GVA at basic prices improved by 0.9 percentage points and the GDP by 0.5 percentage points in 2014-15. While electricity, gas, and water supply and other utility services are projected to achieve robust growth, manufacturing has gained momentum. Construction has done better while mining and quarrying activities still exhibit a tentative pattern. With appropriate policy changes, coal sector has broken shackles and grew by 9.1 per cent during April-December 2014. However, crude oil, natural gas and refinery products continued the slump, damaging the overall mining story. It is difficult to reconcile the results for the industrial sector, particularly manufacturing, from the new series of the national accounts with the indications from the Index of Industrial Production (IIP). The IIP is based on a limited sample of producing units, while the new series of national accounts employs varied data sources including Annual Survey of Industries, MCA21 and IIP.

3.18 All major service-sector activities are estimated to have done well in the year 2014-15 too. Financing, insurance, real estate, and business services, one of the most dynamic sector in the economy in recent years, is reckoned to have driven growth in the current year. The base revision has also shown that the contribution of the agriculture sector to overall GVA at factor cost is somewhat higher than was hitherto being shown on the basis of the earlier (2004-05) series. In addition, despite higher growth in services, there has been a realignment of sectoral shares in favour of the industrial sector mainly on account of the correction for underestimation of manufacturing GVA in the old series and overestimation of the trade sector GVA in services.

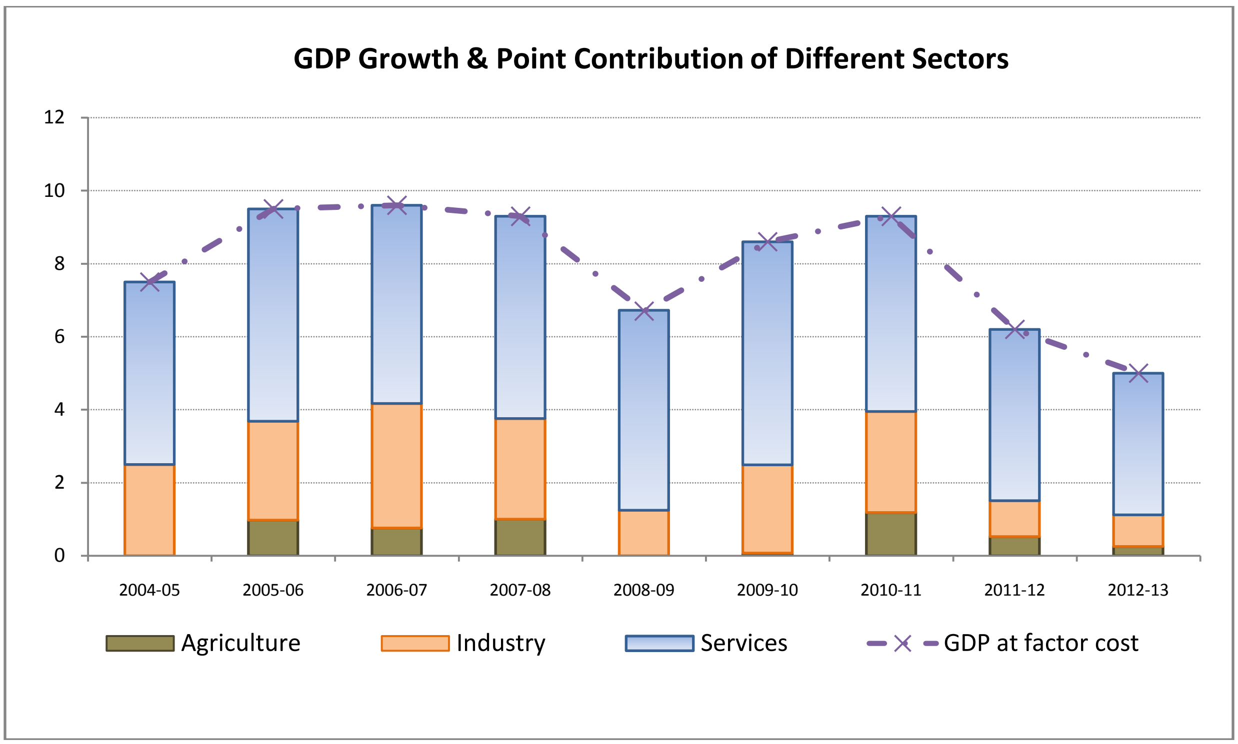
Share in GVA at Factor Cost at Current Prices

Sector	2004-05 series			2011-12 series			
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2014-15
Agriculture and allied activities	17.9	17.5	18.2	18.9	18.7	18.6	17.6
Industry	27.2	26.2	24.8	32.9	31.7	30.5	29.7
Services	54.9	56.3	57.0	48.2	49.6	50.9	52.7

Source : CSO's Press Releases of 30 January 2015 and 9 February 2015 on New Series Estimates of National Income.

3.19 Overall, the average share of the industrial sector was revised upwards by 5.6 percentage points from 26.1 per cent in the old series to 31.7 per cent under the new series, for the three- year block, 2011-12 to 2013-14. Corresponding to this, there was a downward revision in the average share of services by 6.5 percentage points from 56.1 per cent to 49.6 per cent. Agriculture and allied sectors also had a share gain of 0.9 percentage point during the period. Despite reasonable growth in the industrial sector, its GVA share declined in 2014-15 because of the robust growth in the services sector. It is observed that the contribution of the services sector to total GVA growth (at basic prices) increased from 68.2 per cent in 2013-14 to 72.4 per cent in 2014-15, while the corresponding figures for agriculture and allied sectors and the industrial sector changed from 9.8 per cent to 2.6 per cent and from 22.1 per cent to 25.1 per cent respectively.

3.20 Comparison of growth rates in GDP (factor cost , constant prices) and the constituents contribution to the same during past few years reveals that for achieving an annual growth rate of 9% or higher, all the three major sectors of the economy i.e. agriculture, industry & services have to perform well. In view of the same, performance of agriculture & industry is particularly a matter of concern. Industrial revival, in particular is central to sustained revival in overall growth.



Sectoral Share in GDP(%)

Sector	1999-2000	2007-08	2012-13	2013-14(P)
Agriculture & allied	23.2	16.8	13.9	13.9
Industry	26.8	28.7	27.3	26.1
Mining & quarrying	3.0	2.5	2.0	1.9
Manufacturing	15.0	16.1	15.8	14.9
Registered manufacturing	9.2	10.7	11.2	NA
Unregistered manufacturing	5.8	5.4	4.5	NA
Services	50.0	54.4	58.8	59.9
Trade, hotels, transport, and communication	21.2	25.9	26.9	26.4
Financing, insurance, real estate, and business services	14.5	16.1	19.1	20.6
Community, social, and personal services	14.4	12.4	12.8	12.9

Ratio of Investment to GDP (atcurrent market prices-per cent)

	2011-12	2012-13	2013-14
Gross capital formation	38.2	36.6	32.3
Public sector	7.6	7.2	8.0
Private sector	28.4	26.3	23.3
Corporate sector	13.3	13.5	12.6
Household sector	15.1	12.9	10.7
Gross savings	33.9	31.8	30.6
Saving investment gap	-4.3	-4.8	-1.6
Net capital inflow	4.3	4.8	1.6

Source : CSO.

3.21 While the old series of savings is not strictly comparable with the new series (2011-12 base) for many reasons, including on account of the inclusion of 'valuables' as part of savings, the three years' data from the new series suggests that households' acquisition of physical assets is on the decline Disaggregated data further shows that despite the annual addition to financial assets of households growing from 31.2 per cent of gross savings in 2011-12 to 36.8 per cent in 2013-14, the rate of financial savings of households did not pick up because their financial liabilities increased simultaneously from 9.7 per cent of gross savings to 13.2 per cent. Data from the Reserve Bank of India (RBI) shows that, on one side, additional bank deposits of households increased by 27.8 per cent during 2011-12 to 2013-14, while, on the other side, bank advances to households increased by 25.9 per cent.

Gross Savings as Percentage of GDP at Market Prices

	2011-12	2012-13	2013-14
Gross savings	33.9	31.8	30.6
Public	1.4	1.7	1.6
Private corporate	9.7	10.0	10.9
Household	22.8	20.2	18.2
Physical*	15.5	13.2	11.0
Financial	7.3	7.0	7.2

Source : CSO.

Note: *Household physical savings include valuables.

3.22 Gross Domestic savings rate averaged 18.6 per cent in the 1980s and 23 per cent in the 1990s. The savings rate exceeded 30 per cent for the first time in 2004-05 to reach to 36.8 per cent in 2007-08, which still remains the historic peak. From a high of 36.8 per cent, the gross savings rate fell by 6.7 percentage points of the GDP in 2012-13. The bulk of the decline can be attributed to the private corporate and public sectors. On average, households accounted for nearly three-fourths of gross domestic savings during the period 1980-81 to 2012-13. The share declined somewhat in recent years whereas that of the private corporate sector increased from about 15 percent since 1980's to about 23 % in past few years. Within households, the share of financial savings vis-à-vis physical savings has been declining in recent years. With a significant reduction in the growth of construction activity in 2012-13, physical savings rates by households also declined.

Gross Domestic Savings Rate and its Components as Percentage of GDP at Current Market Prices

Item	1990s	2000s	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	Historic high*
Gross domestic savings	23.0	30.6	36.8	32.0	33.7	33.7	31.3	30.1	36.8 (2007-08)
Household sector	17.7	23.1	22.4	23.6	25.2	23.1	22.8	21.9	25.2 (2009-10)
Financial	9.6	10.8	11.6	10.1	12.0	9.9	7.0	7.1	12.0 (2009-10)
Physical	8.0	12.3	10.8	13.5	13.2	13.2	15.8	14.8	15.8 (2011-12)
Private corporate sector	3.6	6.3	9.4	7.4	8.4	8.0	7.3	7.1	9.4 (2007-08)
Public sector	1.6	1.2	5.0	1.0	0.2	2.6	1.2	1.2	5.6 (1976-77)

3.23 Concepts & Definitions : The major concepts used in National Accounts Statistics and the inter relationship, particularly of those relating to macro-economic aggregates of domestic product, consumption, saving and capital formation are given in the following paragraphs.

- **Domestic Product** : Domestic product by definition is a measure in monetary terms of the volume of all goods and services produced by an economy during a given period of time, accounted without duplication. The measure obviously has to be in value terms as the physical units of production and different measures of services are not capable of simple addition. In the case of a closed economy, this measure amounts to domestic product.

- **Domestic Product And National Income** : The domestic product measures all goods and services arising out of economic activity, while national income is the sum of all incomes as a result of the economic activity. Since the production of goods and services is the result of the use of primary factors of inputs, namely, capital and labour, along with the raw materials, the process automatically generates income. This income is in the form of return to capital and labour used in the production process. National income includes only those incomes which are derived directly from the current production of goods and services, which are called factor incomes.

- **National Income And Expenditure**: The production within the economy over a given period of time is spent either for consumption of its members or for addition of fixed assets or for addition to the stock of existing productive assets within the country. Hence, production can also be measured by considering the expenditure of those who purchase the finished or final goods and services. The national expenditure is the sum of expenditure of all spending of institutional sectors viz., government, households and enterprises. The expenditure on final goods and services may be purely for consumption purposes like consumption of food, clothing, shelter; services etc., or for capital formation such as addition to buildings, plant, machinery, transport equipment, and the like. Some goods may not be immediately sold and may be kept aside as stocks. These goods which are added to stocks are also accounted for as final expenditure.

- **Production/Income/Expenditure**: The national income of a country can be measured in three different ways, from the angle of production, from income generation and from final utilization. These three forms are circular in nature.

- **Gross National Income (GNI)**: The economy of India is not closed as there are transactions with rest of the world in the form of exports, imports, loans and the like. This gives rise to the concept of national or domestic income. Gross Domestic Product refers to the production of all resident units within the borders of a country, which is not exactly same as the production of all productive activities of residents. Some of the productive activities of residents may take place abroad. Conversely, some production taking place within a country may be attributed to temporary and seasonal foreign labour. The Gross National Income is calculated by the following formula:

- GNI = GDP + compensation of employees and property income receivable from the rest of the world – compensation of employees and property income payable to the rest of the world.

- **Categories Of Expenditure**: The income available to the individuals in the form of labour income or capital income or to the productive units in the form of retained income is then spent. The utilization or expenditure of the income can take various forms, namely, (a) household consumption expenditure; (b) government consumption expenditure; and (c) capital formation comprising fixed capital formation and stock accumulation.

- **Household Consumption Expenditure**: The household consumption expenditure referred to as private final consumption expenditure (PFCE) in the National Accounts Statistics (NAS), consists of expenditure by households (including non-profit institutions) on non-durable consumer goods and services and all durable goods except land and buildings.

- **Government Final Consumption Expenditure:** Government final consumption expenditure comprises of the compensation to the Government Employees and purchases of goods and services by the Government including purchases abroad. Compensation of Employees of general Government consists of wages and salaries and social security contribution.

- **Gross Capital Formation:** Gross Capital Formation includes only produced capital goods (machinery, buildings, roads, artistic originals etc.) and improvements to non-produced assets. Gross Capital Formation measures the additions to the capital stock of buildings, equipment and inventories, i.e. additions to the capacity to produce more goods and income in the future. The components of gross capital formation are

- gross fixed capital formation
- changes in inventories
- acquisition less disposal of valuables(such as jewellery and works of art)

- Gross Fixed Capital Formation includes purchases of new assets within the domestic market like buildings, transport equipment, machinery, breeding stock etc.; import of new assets; own account production of new assets such as production of rail engines, wagons, trucks, aero-planes, farm machinery, breeding stock of fish, sheep, cows etc. by the enterprise; purchase of new houses by consumer households and net purchase of second hand physical assets from abroad.

- Change in stocks (inventories) consists of the difference between the opening stock and the closing stock.

- **Saving**: Saving represents the excess of current income over current expenditure of various sectors of the economy. It is the balancing item on the income and outlay accounts of the producing enterprises, households, government administration and other final consumers. For a closed economy, savings equals capital formation during the year, whereas for the open economy savings equals capital formation plus net capital inflow from abroad during the year.

- **Gross Versus Net Value Added:** GDP does not take into account the depreciation factor because of which it does not reveal the complete flow of goods and services through various sectors. Thus, the term net product is considered more suitable which is obtained by subtracting depreciation cost from the gross domestic product. Capital goods like machines, equipment, tools, factory building, tractors etc. get depreciated during the process of production. After some time these capital goods need replacement. The decline, during the course of the accounting period, in the current value of the stock of fixed assets owned and used by a producer as a result of physical deterioration, normal obsolescence or normal accidental damage is called Consumption of Fixed capital (CFC). Deduction of CFC from GDP provides with the net domestic product.

- **Current Versus Constant Prices:** National income regardless of the concept is obviously measured at prices prevailing during the period or in other words at current prices. When calculated over a number of years, the changes in national income would, therefore, include implicitly not only the effect of the changes in production but also the changes in prices. This estimate compared over the period would not, therefore, give a proper measure of the overall real increase in production of the country or the economic welfare of the people or growth of the economy. Therefore, it would be necessary to eliminate the effect of prices, or in other words to recompute the whole series at given prices of one particular base year. National income thus computed, is termed as National Income at constant prices or in real terms.

3.24 Sources Of Data: National Accounts Statistics in India are compiled by National Accounts Division in the Central Statistics Office, Ministry of Statistics & PI. The data are released as per advance release calendar available on the website of the Ministry (www.mospi.nic.in) and annual as well as quarterly estimates are leased. The Advance Estimates after release undergo several rounds of revision before they are finalized. Consequently various versions like Provisional Estimates , First Revised Estimates, Second Revised Estimates etc are also released. Earlier 1993-4 series was being used which has now been replaced by 2004-05 series and 2004-05 prices are being currently used to derive estimates for constant prices. Data needed for computation of National income is collected from various diverse sources and is used not only for the actual computation of National Income, but also for cross-checking the final National Accounts Estimate.

3.25 Administrative Records, Census And Surveys
Some of the important sources of data, which have been used in the new series, are as follows:
(a) NSS 61st round (2004-05) on employment and unemployment and consumer expenditure;
(b) NSS 62nd round (2005-06) on unorganized manufacturing;
(c) NSS 63rd round (2006-07) on services sectors;
(d) All India Livestock Census, 2007;
(e) NSS 59th round (2002-03) on All India Debt and Investment Survey;
(f) Population Census, 2001; and
(g) Fourth All India Census of Micro, Small and Medium Enterprises,2006-07.

3.26 Further, the results of various studies undertaken by the Central Statistics Office through the Ministry of Agriculture, Ministry of Environment and Forests and State Governments and also the Input-Output Transactions Tables prepared by the Central Statistics Office and the Cost of Cultivation Studies conducted by the Ministry of Agriculture have been used in the new series for updating the rates and ratios used to estimate the consumption of fodder, market charges paid by the farmers, yield rates of meat, meat products and meat by products for different categories of animals, input rates for agriculture and forestry and the trade and transport margins.

3.27 National Industrial Classification 2004 is used for computation of National Income Estimates in India.

3.28 Coverage : In the system of National Accounts, the accounts relating to the resident institutional sectors portray various facets of economic activity (production, distribution etc) pertaining to the following institutional units:

- Public sector
- Government Administrative Departments
- Departmental Commercial undertakings
- Non Departmental Commercial Undertakings
- Private Corporate Sector
- Households including NPISHs

References :

- The Growth Record of the Indian Economy, 1950-2008: A Story of Sustained Savings and Investment(Keynote Address by Dr.Rakesh Mohan, Deputy Governor, Reserve Bank of India at the Conference “Growth and Macroeconomic Issues and Challenges in India” organised by the Institute of Economic Growth, New Delhi on February 14, 2008)
- Working Paper No. 122, India’s Economic Growth: From Socialist Rate of Growth to Bharatiya Rate of Growth, Arvind Virmani, Indian Council For Research On International Economic Relations
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