

## QUICK ESTIMATES OF NATIONAL INCOME, 1996-97 AND ADVANCE ESTIMATES, 1997-98: A REVIEW\*

In February 1998, the Central Statistical Organisation (CSO) has released *Provisional Estimates* for 1995-96, *Quick Estimates* for 1996-97 and *Advance Estimates* for 1997-98. A brief review of these estimates is attempted here.

### 1. Real Gross Domestic Product (GDP) and its Sectoral Composition

#### 1.1 Review of the Estimates

##### (a) *Quick Estimates, 1996-97*

According to the *Quick Estimates*, Gross Domestic Product (GDP) at factor cost (at 1980-81 prices) in 1996-97 had shown an increase of 7.5 per cent over the year, which was higher than that in 1995-96 (7.2 per cent) (Table 1 and Statement 1). The higher growth rate in 1996-97 was due to an

accelerated growth rate in 'agriculture and allied activities', which had more than compensated the decelerations in 'industry' and 'services'. Real national income (i.e., NNP at factor cost) had also registered a higher growth rate of 7.7 per cent in 1996-97 as against 7.3 per cent in 1995-96. Similarly, per capita income recorded a growth of 5.9 per cent as compared to 5.5 per cent, during the same years.

A sector-wise analysis of the growth in real GDP for 1996-97 brings out the following features (Statement 2).

- There was a sharp turnaround in the growth of GDP from agriculture (from (-) 3.4 per cent to 8.2 per cent), on account of steep increases in the production of wheat, coarse cereals, pulses, oilseeds and cotton.

Table 1: Growth Rates and Sectoral Composition of GDP

(Per Cent)

Sector	Growth Rate			Sectoral Shares		
	1995-96 (Provisional Estimates)	1996-97 (Quick Estimates)	1997-98 (Advance Estimates)	1995-96 (Provisional Estimates)	1996-97 (Quick Estimates)	1997-98 (Advance Estimates)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Agriculture and Allied Activities	(-) 3.0	7.9	(-) 2.0	26.0	26.1	24.4
Industry (excluding Construction)	12.9	6.6	6.1	27.0	26.8	27.0
Services (including Construction)	10.3	7.8	8.3	47.0	47.1	48.6
Gross Domestic Product	7.2	7.5	5.0	100.0	100.0	100.0

\* Prepared in the Division of National Income, Saving & Flow of Funds in the Department of Economic Analysis and Policy.

- The rates of growth in two other sectors, namely 'transport, storage and communication' and 'community, social and personal services' were also higher (from 8.3 per cent and 6.0 per cent, respectively, in 1995-96 to 9.2 per cent and 6.4 per cent, respectively, in 1996-97).
- There were some decelerations in the growth rates of (a) manufacturing (from 14.0 per cent to 7.4 per cent), (b) electricity, gas and water supply (from 7.3 per cent to 5.0 per cent), (c) trade, hotels and restaurants (from 15.4 per cent to 8.4 per cent) and (d) financing, insurance, real estate and business services (from 9.7 per cent to 8.7 per cent). But, inter temporally, the rates were high.
- There was a sharp decline in the growth of 'mining and quarrying' (from 8.4 per cent to (-) 0.3 per cent).

Consequent to the differences in the annual rates of growth, the shares of 'agriculture and allied activities' and 'services' for 1996-97 had improved with a *per contra* decline in the share of 'industry' in GDP (Statement 2).

The growth rate for Net Domestic Product (at 1980-81 prices) improved from 7.0 per cent in 1995-96 to 7.5 per cent in 1996-97. The sectoral distribution of NDP depicts a pattern more or less similar to that for GDP (Statement 3).

#### (b) *Advance Estimates, 1997-98*

The growth rate of real GDP is estimated to decelerate from 7.5 per cent in 1996-97 to 5.0 per cent in 1997-98, primarily on account of a *negative* growth of GDP originating from 'agriculture and allied

activities' (from 7.9 per cent to (-) 2.0 per cent).

Other sectors, which have experienced deceleration in their growth rates in 1997-98 are the following:

- manufacturing (from 7.4 per cent to 6.1 per cent).
- construction (from 5.2 per cent to 3.2 per cent).
- trade, hotels, restaurants, transport, storage and communication (from 8.6 per cent to 5.9 per cent).

On the other hand, the following sectors have shown accelerated growth rates:

- Financing, insurance, real estate and business services (from 8.7 per cent to 9.5 per cent).
- Community, social and personal services (from 6.4 per cent to 13.8 per cent).
- Mining and Quarrying (from (-) 0.3 per cent to 6.3 per cent).
- Electricity, gas and water supply (from 5.0 per cent to 6.4 per cent).

On the whole, in 1997-98, the shares of 'industry' and 'services' in GDP have moved up, respectively, to 27.0 per cent and 48.6 per cent, along with a decline in the share of 'agriculture and allied activities' to 24.4 per cent.

Other real national and domestic product aggregates have also suffered decelerations in their growth rates in 1997-98 (Statement 1). The real National Income is estimated to show a lower growth of 4.9 per cent. Per capita real national income is

placed at Rs. 2,847, with a lower growth of 3.1 per cent.

## 2 Saving and Capital Formation

### 2.1 Aggregate Saving and Capital formation

There was a significant step-up in the rate of Gross Domestic Saving (GDS) from 25.3 per cent of GDP at current market prices in 1995-96 to 26.1 per cent in 1996-97 (Table 2 and Statement 5). Gross Domestic Capital Formation (GDCF, which is *adjusted* for errors and omissions), registered a marginal increase from 27.1 per cent of GDP in 1995-96 to 27.3 per cent in 1996-97. Thus, the

gap in saving-GDCF further narrowed due to a decline in the rate of net inflow of resources from abroad. Incidentally, Gross Capital Formation (GCF, which is *unadjusted* for errors and omissions) declined substantially from 27.3 per cent of GDP in 1995-96 to 25.2 per cent of GDP in 1996-97. This was due to 'errors and omissions', which had changed from (-) Rs.1,197 crore (or (-)0.1 per cent) in 1995-96 to (+) Rs. 26,637 crore (or 2.1 per cent) in 1996-97.

At the risk of simplifying the definition of incremental capital output ratio (ICOR), we can calculate ICOR for a year, as the ratio of

Table 2: Saving and Investment Rates

(as percentage of GDP at current market prices)

Items	1995-96 (Provisional Estimates)	1996-97 (Quick Estimates)
(1)	(2)	(3)
1 Gross Domestic Saving (1.1 + 1.2 + 1.3)	25.3	26.1
1.1 Public Sector	23	19
1.2 Private Corporate Sector	42	39
1.3 Household Sector (a + b)	18.8	20.3
a) Financial Saving	8.6	10.7
b) Physical Saving	10.3	9.6
2 Gross Domestic Capital Formation (3 + 4)	27.1	27.3
3 Gross Capital Formation (3.1 + 3.2 + 3.3)	27.3	25.2
3.1 Public Sector	7.9	7.4
3.2 Private Corporate Sector	9.1	8.2
3.3 Household Sector	10.3	9.6
4 Errors and Omissions	(-) 0.1	2.1
5 Saving- Investment Gap (1-2)	(-) 1.8	(-) 1.2
5.1 Public Sector (1.1-3.1)	(-) 5.6	(-) 5.5
5.2 Private Corporate Sector (1.2-3.2)	(-) 4.9	(-) 4.3
5.3 Household Sector (1.3-3.3)	8.5	10.7

Note: Components may not add up to the totals due to rounding off.

'real investment rate' and 'growth rate of real GDP at market prices'.<sup>1</sup> Consequent to the opposite behaviour of the two measures of investment (i.e., increase in the rate of GDCF and reduction in the rate of GCF in 1996-97), the movement in ICOR becomes quite sensitive to the choice of the measure of investment.

- If GDCF is taken to be appropriate investment measure, ICOR had *increased marginally* from 3.69 in 1995-96 to 3.70 in 1996-97.
- If GCF is considered, ICOR had *declined substantially* from 3.70 in 1995-96 to 3.43 in 1996-97.

This contrary behaviour of ICOR as regards the choice of measure of investment is due to the substantial errors and omissions in 1996-97.

## 2.2 Sectoral Saving and Capital formation

The step-up in the rate of GDS in 1996-97 is attributable only to a sharp rise in the rate of household sector savings in financial assets to 10.7 per cent of GDP from 8.6 per cent of GDP in 1995-96. The increase was primarily due to a large accretion to bank deposits. However, there was a decline in the rates of saving in all its other

components, viz., household sector's physical saving, public sector saving and private corporate sector saving. Public sector saving rate had deteriorated because of large dissaving by government administrative departments.

## 3. Summing Up

Strong performance in 'agriculture and allied activities' had compensated the decelerations in 'industry' and 'services' and enabled the real GDP growth to accelerate to 7.5 per cent in 1996-97. Rate of Gross Domestic Saving (GDS) had improved from 25.3 per cent of GDP in 1995-96 to an all time high rate of 26.1 per cent in 1996-97. The rate of gross domestic capital formation (*adjusted for errors and omissions*) moved up from 27.1 per cent to 27.3 per cent. The estimate of 'errors and omissions' had, however, turned 'positive', and amounted to Rs.26,637 crore. Gross capital formation (unadjusted for 'errors and omissions') had *declined* from 27.3 per cent of GDP in 1995-96 to 25.4 per cent in 1996-97. *Advance Estimates* for 1997-98 predicted a lower growth rate of 5 per cent primarily on account of a negative growth in value added from 'agriculture and allied activities' (7.9 per cent in 1996-97 to (-)2.0 per cent in 1997-98).

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1. Ideally ICOR should be calculated for a period of time. For a period, ICOR can be expressed as a geometric mean of the individual year ICORs. ICOR for each year is the proportion of the real investment to change in *estimated* real GDP at market prices. The series of GDP at constant market prices is normally estimated on the basis of semilogarithmic trend for the period.

STATEMENT 1: IMPORTANT MACRO ECONOMIC AGGREGATES

Item	1995-96 (Provisional Estimates)		1996-97 (Quick Estimates)		1997-98 (Advance Estimates)	
	Amount (Rs. crore)	Growth Rates (Per Cent)	Amount (Rs. crore)	Growth Rates (Per Cent)	Amount (Rs. crore)	Growth Rates (Per Cent)
I Output						
1 GDP at factor cost (1980-81 prices)	2,76,132	7.2	2,96,845	7.5	3,11,828	5.0
2 GDP at factor cost (current prices)	10,06,286	15.9	11,49,215	14.2	na	na
3 GDP at current market prices	11,18,964	16.1	12,76,974	14.1	na	na
4 NDP at factor cost (1980-81 prices)	2,45,104	7.0	2,63,427	7.5	2,75,836	4.7
5 NDP at current market prices	10,07,378	16.0	11,49,792	14.1	na	na
6 NNP at factor cost (1980-81 prices)	2,39,957	7.3	2,58,465	7.7	2,71,052	4.9
7 NNP at factor cost (current prices)	8,81,216	16.0	10,08,188	14.4	na	na
8 NNP at market prices (1980-81 prices)	2,73,742	7.6	2,94,341	7.5	na	na
9 NNP at current market prices	9,93,894	16.2	11,35,947	14.3	na	na
10. GNP at factor cost (1980-81 prices)	2,70,985	7.4	2,91,883	7.7	3,07,044	5.2
11. GNP at factor cost (current prices)	9,92,802	16.1	11,35,370	14.4	na	na
12. Per capita National Income (In Rupees)						
12.1 at current prices	9,578	14.0	10,771	12.5	na	na
12.2 at 1980-81 prices	2,608	5.5	2,761	5.9	2,847	3.1
II Consumption Expenditure (at current prices)						
1 Private Final Consumption Expenditure	6,49,094 (58.0)	12.8	7,34,866 (57.5)	13.2	na	na
2 Government Final Consumption Expenditure	1,15,957 (10.4)	15.4	1,32,166 (10.3)	14.0	na	na
III Saving and Investment (at current prices)						
1 Gross Domestic Saving ( GDS )	2,83,003 (25.3)	14.5	3,33,816 (26.1)	18.0	na	na
2 Gross Domestic Capital Formation (GDCF)	3,03,783 (27.1)	17.3	3,48,485 (27.3)	14.7	na	na

Note: Figures in brackets are percentages of Gross Domestic Product (GDP) at current market prices.

Source: Central Statistical Organisation.

STATEMENT 2: SECTORAL COMPOSITION OF GROSS DOMESTIC PRODUCT (at 1980-81 Prices)

Item	1995-96 (Provisional Estimates)		1996-97 (Quick Estimates)		1997-98 (Advance Estimates)	
	Amount (Rs. crore)	Growth Rates (Per Cent)	Amount (Rs. crore)	Growth Rates (Per Cent)	Amount (Rs. crore)	Growth Rates (Per Cent)
1. Agriculture and Allied Activities	71,907 (26.0)	-3.0	77,564 (26.1)	7.9	76,011 (24.4)	-2.0
1.1. Agriculture	66,863 (24.2)	-3.4	72,362 (24.4)	8.2	na	na
2. Industry	74,471 (27.0)	12.9	79,389 (26.8)	6.6	84,271 (27.0)	6.1
2.1. Manufacturing	62,207 (22.5)	14.0	66,785 (22.5)	7.4	70,863 (22.7)	6.1
2.2. Mining & Quarrying	5,151 (1.9)	8.4	5,138 (1.7)	-0.3	5,463 (1.8)	6.3
2.3. Electricity, Gas & Water Supply	7,113 (2.6)	7.3	7,466 (2.5)	5.0	7,945 (2.5)	6.4
3. Services	1,29,754 (47.0)	10.3	1,39,892 (47.1)	7.8	1,51,546 (48.6)	8.3
3.1. Construction	12,216 (4.4)	9.7	12,851 (4.3)	5.2	13,261 (4.3)	3.2
3.2. Trade, Hotels and Restaurants	39,968 (14.5)	15.4	43,313 (14.6)	8.4	63,526 (20.4)	5.9
3.3. Transport, Storage and Communication	15,264 (5.5)	8.3	16,664 (5.6)	9.2		
3.4. Financing, Insurance, Real Estate & Business Services	33,152 (12.0)	9.7	36,045 (12.1)	8.7	39,456 (12.7)	9.5
3.5. Community, Social & Personal Services	29,154 (10.6)	6.0	31,019 (10.4)	6.4	35,303 (11.3)	13.8
4. Gross Domestic Product (1+2+3)	2,76,132 (100.0)	7.2	2,96,845 (100.0)	7.5	3,11,828 (100.0)	5.0

Note: (1) Figures in brackets are percentages of Gross Domestic Product (GDP) at factor cost.

(2) The sectoral classificatory scheme of Advance Estimates is slightly different from Quick Estimates. It clubs 'Trade, Hotels and Restaurants', and 'Transport, Storage and Communication', under a single head called 'Trade, hotels, transport and communication'.

Source: Central Statistical Organisation.

STATEMENT 3: SECTORAL COMPOSITION OF NET DOMESTIC PRODUCT (at 1980-81 Prices)

Item	1995-96 (Provisional Estimates)		1996-97 (Quick Estimates)	
	Amount (Rs. crore)	Growth Rates (Per Cent)	Amount (Rs. crore)	Growth Rates (Per Cent)
1. Agriculture and Allied Activities	67,264 (27.4)	-3.7	72,593 (27.6)	7.9
1.1. Agriculture	62,665 (25.6)	-4.0	67,871 (25.8)	8.3
2. Industry	60,212 (24.6)	14.0	63,990 (24.3)	6.3
2.1. Manufacturing	53,760 (21.9)	14.6	57,425 (21.8)	6.8
2.2. Mining & Quarrying	3,031 (1.2)	10.4	2,968 (1.1)	-2.1
2.3. Electricity, Gas & Water Supply	3,421 (1.4)	9.1	3,597 (1.4)	5.1
3. Services	1,17,628 (48.0)	10.6	1,26,844 (48.2)	7.8
3.1. Construction	11,416 (4.7)	9.9	12,006 (4.6)	5.2
3.2. Trade, Hotels and Restaurants	38,843 (15.8)	15.6	42,091 (16.0)	8.4
3.3. Transport, Storage and Communication	9,934 (4.1)	8.7	10,933 (4.2)	10.1
3.4. Financing, Insurance, Real Estate & Business Services	30,076 (12.3)	9.8	32,686 (12.4)	8.7
3.5. Community, Social & Personal Services	27,359 (11.2)	6.0	29,128 (11.1)	6.5
4. Net Domestic Product (1+2+3)	2,45,104 (100.0)	7.0	2,63,427 (100.0)	7.5

Note: Figures in brackets are percentages of Net Domestic Product (NDP) at factor cost.

Source: Central Statistical Organisation.

STATEMENT 4 - DOMESTIC SAVINGS (at Current Prices)

Item	1995-96 (Provisional Estimates)		1996-97 (Quick Estimates)	
	Amount (Rs. crore)	Ratio to GDP or NDP at current market prices (Per Cent)	Amount (Rs. crore)	Ratio to GDP or NDP at current market prices (Per Cent)
1. Gross Domestic Saving (GDS)	2,83,003	25.3	3,33,816	26.1
1.1 Household Sector	2,10,417	18.8	2,59,543	20.3
1.1.1 Financial Saving	95,715	8.6	1,36,644	10.7
1.1.2 Saving in physical assets	1,14,702	10.3	1,22,899	9.6
1.2 Private Corporate Sector	47,391	4.2	49,545	3.9
1.2.1 Joint-stock companies	46,182	4.1	48,336	3.8
1.2.2 Co-operative banks & societies	1,209	0.1	1,209	0.1
1.3 Public Sector	25,195	2.3	24,728	1.9
1.3.1 Public authorities	-12,252	-1.1	-16,569	-1.3
1.3.1.1 government administration	-22,774	-2.0	-27,498	-2.2
1.3.1.2 departmental enterprises	10,522	0.9	10,929	0.9
1.3.2 Non-departmental enterprises	37,447	3.3	41,297	3.2
2. Less consumption of fixed capital	1,11,586	10.0	1,27,182	10.0
2.1 Household sector	37,464	3.3	41,733	3.3
2.2 Private corporate sector	26,198	2.3	31,972	2.5
2.3 Public sector	47,924	4.3	53,477	4.2
3. Net Domestic Saving (NDS)	1,71,417	17.0	2,06,634	18.0
3.1 Household sector	1,72,953	17.2	2,17,810	18.9
3.2 Private corporate sector	21,193	2.1	17,573	1.5
3.3 Public sector	-22,729	-2.3	-28,749	-2.5

Note: 1) Consumption of fixed capital (item 2) has been estimated from the value of fixed capital stock and expected age of various types of assets and differs from the provision of depreciation as per books of accounts. Alternative estimates can be derived using the latter.

2) While the ratio of gross domestic saving and consumption of fixed capital have been computed with respect to GDP at current market prices, the ratio of net domestic saving is with respect to NDP at current market prices.

Source: Central Statistical Organisation.



STATEMENT 5: CAPITAL FORMATION BY TYPE OF INSTITUTION

Item	1995-96 (Provisional Estimates)		1996-97 (Quick Estimates)	
	Amount (Rs. crore)	Ratio to GDP or NDP at current/constant market prices (Per Cent)	Amount (Rs. crore)	Ratio to GDP or NDP at current/constant market prices (Per Cent)
<b>A At Current Prices</b>				
1. Gross Capital Formation	3,04,980	27.3	3,21,848	25.2
1.1 Public sector	88,477	7.9	94,215	7.4
1.2 Private corporate sector	1,01,801	9.1	1,04,734	8.2
1.3 Household sector	1,14,702	10.3	1,22,899	9.6
2. Consumption of fixed capital	1,11,586	10.0	1,27,182	10.0
2.1 Public sector	47,924	4.3	53,477	4.2
2.2 Private corporate sector	26,198	2.3	31,972	2.5
2.3 Household sector	37,464	3.3	41,733	3.3
3. Net Capital Formation (1-2)	1,93,394	19.2	1,94,666	16.9
3.1 Public sector (1.1-2.1)	40,553	4.0	40,738	3.5
3.2 Private corporate sector (1.2-2.2)	75,603	7.5	72,762	6.3
3.3 Household Sector (1.3-2.3)	77,238	7.7	81,166	7.1
4. Errors & omissions	-1,197	-0.1	26,637	2.1
5. Net capital formation adjusted for errors and omissions (3-4)	1,92,197	19.1	2,21,303	19.2
6. Gross capital formation adjusted for errors and omissions (1-4)	3,03,783	27.1	3,48,485	27.3
<b>B At 1980-81 Prices</b>				
1. Gross Capital Formation	84,912	27.4	84,418	25.4
1.1 Public sector	22,937	7.4	22,992	6.9
1.2 Private corporate sector	32,419	10.5	31,765	9.5
1.3 Household sector	29,556	9.5	29,661	8.9
2. Consumption of fixed capital	31,028	10.0	33,418	10.0
2.1 Public sector	13,105	4.2	13,602	4.1
2.2 Private corporate sector	8,444	2.7	9,865	3.0
2.3 Household sector	9,479	3.1	9,951	3.0
3. Net Capital Formation (1-2)	53,884	19.3	51,000	17.0
3.1 Public sector (1.1-2.1)	9,832	3.5	9,390	3.1
3.2 Private corporate sector (1.2-2.2)	23,975	8.6	21,900	7.3
3.3 Household Sector (1.3-2.3)	20,077	7.2	19,710	6.6
4. Errors & omissions	-328	-0.1	6,907	2.1
5. Net capital formation adjusted for errors and omissions (3-4)	53,556	19.2	57,907	19.3
6. Gross capital formation adjusted for errors and omissions (1-4)	84,584	27.3	91,325	27.4

- Note: 1) Consumption of fixed capital (item 2) has been estimated from the value of fixed capital stock and expected age of various types of assets and differs from the provision of depreciation as per books of accounts. Alternative estimates can be derived using the latter.
- 2) While the ratio of gross capital formation, errors and omissions, and consumption of fixed capital have been computed with respect to GDP at current/constant market prices, the ratio of net capital formation is with respect to NDP at current/constant market prices.

Source: Central Statistical Organisation.