

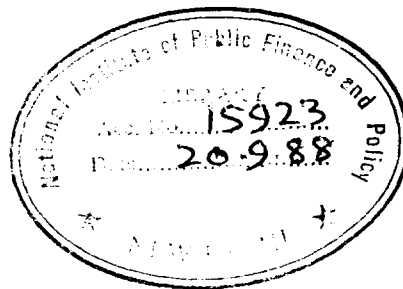


NEW SERIES ON
NATIONAL ACCOUNTS STATISTICS
SOME COMMENTS

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ABSTRACT

The Central Statistical Organisation has recently brought out the New Series of National Accounts Statistics with 1980-81 as the new base year for the constant price estimates. In this paper an attempt is made to undertake a careful evaluation of the series, the extent to which the new estimates are comparable with the past data and whether they can be used to build up a long period series.

One of the main features of the new series of national accounts is the introduction of a fresh set of measures of consumption of fixed capital which not only affects the figures of net domestic product, net savings etc. but reduces substantially the rates of capital formation and savings. More careful examination of these estimates is called for - particularly so for government administrative departments where previously 'repairs and maintenance' was assumed to have been sufficient to keep the capital intact and no separate provision for depreciation was considered necessary.

NEW SERIES ON NATIONAL ACCOUNTS STATISTICS
SOME COMMENTS*

1. Introduction

1.1 The Central Statistical Organisation must be congratulated for the issue of the New Series on National Accounts Statistics which had already been due. The new series has the year 1980-81 as the price base for the constant price series and covers the period of six years ending 1985-86. Quick estimates for 1986-87 have also been issued with the new base year. The publication, however, is not comparable to the annual publication on National Accounts Statistics (NAS) and presents data on the more important statistics only. It comprises only four sections covering a short write up on methods and changes as well as a comparison between the old and new series of the principle aggregates. The aspects of national accounts covered are gross/net domestic product, national income, expenditure aggregates, viz., private final consumption expenditure and gross capital formation, savings and transactions of the public sector. The measures which have been excluded from this publication are factor incomes, transactions of non-departmental enterprises within the public sector,

* Views expressed are those of the author and not necessarily of the organisation to which the author belongs.

consolidated accounts of the nation and disaggregated data on the principal aggregates.

1.2 The publication has a short and lucid though somewhat cryptic description of the changes in methods, new data used and comparison of the old series with the New Series at current prices. This comparison of the two sets of estimates at current prices is important and significant because the 'New Series' of national accounts statistics is not only 'new' with reference to the revision of the base year for the constant price estimates but also 'new' with reference to current price estimates. Thus the current price estimates incorporate major revisions resulting from use of new data as well as changes in methodology. These changes are listed in the first part of the publication. However, one has to be familiar with the details of the method adopted for the old series with 1970-71 as base to be able to appreciate the changes. In other words, the Notes are supplemental to National Accounts Statistics: Sources and Methods (CSO, April 1980) like the usual annual publication on National Accounts Statistics and a careful study of both the publications is necessary to understand the methodological changes introduced.

2. Long Period Series and Comparability

2.1 According to the United Nations Manual on National Accounts at Constant Prices, for national accounts 'the base year should be changed not

more frequently than every five years' and not less frequently than every ten years' (page 18, paragraph 3.9). In India the change of base year for national accounts has been according to the latter principle, i.e., every ten years and hence the New Series is along the same tradition as in the past.

2.2 The uses of national accounts statistics at constant prices are manifold and are not limited to the measurement of economic growth through a single aggregate such as gross/net National Product or Domestic Product. The major structural changes within the economy quantitatively measured, can be properly analysed only within the framework of a set of accounts at constant prices. Besides, the study of cyclical movements within the economy or of the productive capacity, i.e., the rates of growth of labour productivity and total factor productivity are directly related to the availability of a long-term series of national accounts at constant prices. It is therefore important that a reasonably long period series of national accounts at constant prices become available whenever the price base for the constant price series of national accounts is changed. Just as presentation of realistic, up-to-date and true to the situation measures of national accounts statistics is an obligation which any organisation concerned with estimation of national accounts statistics must fulfil, preparation and publication of comparable and consistent long period series is of equal importance and must draw equal attention of the concerned organisation.

2.3 There are two alternative methods of ensuring an unbroken series of national accounts at constant prices. According to the first method, not only all the estimates for the years subsequent to the new base year should be revalued at the new prices but also for all the years preceding the new base year in order to have an unbroken series extending on either side of the new base year [USA had followed this method to go as far as back 1929 in the late fifties when the revision involved methodological changes as well]. This procedure, though ideal from the point of view of the users, is very expensive and demanding in terms of statistical resources. Alternatively, the new base year prices are used for evaluating all goods and services from the new base year onwards and for long period comparisons the series can be reconstructed using in effect the chain index in which the individual links are comparison between each base year and the previous base year. For the current New Series of National Accounts this latter method will need to be followed if long period national accounts series is to be reconstructed with 1980-81 as base. This obviously is the only answer as the publication New Series on National Accounts Statistics with 1980-81 as base year (CSO, February 1988)¹ does not make any reference to possibilities of long period series with the new base being released in the very near future. But for the changes in method of estimation and data base in the New Series of National Accounts, this would be a simple exercise of index numbers and should not create a problem. However, because of the above,

for the New Series the problem is much more complicated and the construction of a long period series in this case is not an easy task.

2.4 At the same time, comparable official data on national accounts covering all the principal macro-aggregates already exist for the whole period beginning 1950-51. Substantial empirical studies have also followed making use of these huge mass of statistical information. Moreover, plan formulation and plan evaluation has depended heavily on the trends and patterns set by these data. Unless a meaningful series is built up using the past data and the new series, future economic and social analysis and decision making will become an impossible task. An easy solution to the problem is not at hand as will be obvious from the discussions which follow.

2.5 It may not be out of place, in this context, to trace the history of official series of national accounts statistics as it exists today. Though the work of standardisation of concepts had been initiated at the international level in the late forties and early fifties and India was actively involved in the task through its representation at these international bodies, the concepts involved in the measurement of various macro-aggregates were standardised at the international level only in the late sixties². These standards of concepts and table formats were expected to be used by countries for international reporting of comparable national accounting data. The System of National Accounts (SNA) however,

recognised the need of developing countries for adapting these standards in the light of their own requirements and circumstances. Since the system had to be used for international reporting of national accounting data, the adaptation/modification of these concepts to make them more meaningful for a country like India (with a large unorganised sector) became an important issue to be resolved. These Indian modifications to the internationally recommended standards were evolved after a series of debates, discussions and seminars where independent research workers also participated. This process of reviewing and examining the international concepts began very soon after the SNA was released and continued over a number of years. Thus today, the concept of 'household savings in physical assets' is not debated but accepted and so it is in the case of measurement of factor incomes in the form of 'mixed income of self-employed', or 'own account kutcha construction under capital formation'. The desirability of explicitly introducing production account for the household sector in the SNA with a clear definition of household sector as distinct from unincorporated enterprises is being recognised now at the international level when the Regional Accounts Committee in India accepted it in the seventies. Though preparation of estimates adopting the standards evolved after considerable work and discussion (over the sixties and early seventies) progressed simultaneously, their publication as a part of the official series of national accounts occurred mostly in the

seventies. This fact does not appear to be fully reflected in the New Series (1988) when it is stated: "The series released in August 1967 was based on comprehensive review of the estimates and utilised all available data and introduced a number of methodological changes after they were discussed in various forums. But the series with 1970-71 as the base issued in January 1978 primarily incorporated the latest data available from sources like population census and sample surveys" (New Series 1988, page 1). The publication is also silent on all the estimates of different macro-aggregates which were published for the first time during this period including the Inter-industry Table for 1968-69.

2.6 The present generation of national income estimators is doubtless fortunate because of the vastly improved data availability position today. But, with the availability of new data, one has also to ensure comparability and continuity of long period series of national income and related aggregates. Having separated the problems of methodological changes and publication of new estimates, the change of the base year from 1960-61 to 1970-71 was a smooth process which managed to maintain the continuity of the series. To make the task of the economic analyst simpler, the NAS (January 1978) also published the comparable working force data for the years 1961 and 1971 with detailed notes on derivation of annual comparable set of workers for all years beginning 1961. All this was possible because use of new data and change in methodology were treated as a

continuous process which integrated the revisions within the estimates, and were treated as developments of national accounts statistics quite independent of the change of the base year. Thus the NAS, January 1978 where the revised constant price series with 1970-71 as base was published for the first time states, "the estimates presented have the same scope, coverage and approach to the methodology as for the earlier estimates presented in NAS, October 1976. However, the estimates from 1970-71 onwards have been revised to not only take account of all fresh data but also to shift the price base for the constant price series to a more recent year, viz., 1970-71. All relevant data which take account of the structural shift between 1960-61 and 1970-71 have been used for the constant price series with 1970-71 as base" (page 158). Unfortunately one cannot say the same thing about the New Series (1988). No attempt is made by the CSO to link these estimates to earlier estimates (i.e., estimates for years prior to 1980-81) and the methodological changes in the New Series are such as to make it impossible to 'splice' the earlier series on to the new one. Short of reworking the earlier series - which the CSO has not attempted - we cannot now make any long period comparisons.

2.7 A critical examination of the New Series and the conceptual and methodological changes introduced therein would however suggest that the approach to the problem of change of the base year from 1970-71 to 1980-81 has not been very

different from the one for the shift from 1960-61 to 1970-71. The changes in methods (barring the new estimates of consumption of fixed capital) introduced for the New Series are very marginal and mostly involve reclassification between sectors (e.g., in agriculture sector using value of paddy output and not rice) and the revisions really result from use of new data. A careful reading through New Series (1988) shows that the conceptual changes referred to are again of minor nature and mainly consist of reclassification such as

- (i) allocation of pension to departmental commercial enterprises in proportion to salary bill,
- (ii) change in treatment of saving retained in India of branches of foreign companies they being no longer classified as outflow of factor income,
- (iii) change in the treatment of rent in departmental commercial undertakings,
- (iv) uniform treatment of all losses of departmental commercial undertakings,
- (v) treatment of non-commercial broadcasting activity as departmental commercial undertaking

and not administrative activity and porttrusts as non-departmental commercial undertaking as opposed to departmental commercial undertaking, and finally

- (vi) changes in the classification of private final consumption expenditure by object.

2.8 Besides the revision of the estimates of consumption of fixed capital (discussion on which will follow) and the above reclassifications, the revisions incorporated in New Series are those necessitated by availability of new data. A few minor methodological changes have also been introduced which are more in the nature of adjustments and reclassifications within the system and which therefore should affect individual estimates but not the totals. Thus, for example, the new procedure of evaluation of paddy and no adjustment for rice milling in the agriculture sector should affect only the inter-se contribution of agriculture and industry and should not affect the total value of output of agriculture and manufacturing taken together. Similarly, the value of trees grown on farm land being shifted from agriculture to forestry is a matter of reallocation and so are changes in treatment of pension. Such changes were not unknown in the past (See Notes on Methodology in earlier issues of NAS, for example, January 1979). Apart from the revision in the estimates of consumption of fixed capital, the revisions of the

macro-aggregates in the New Series of national accounts should therefore be due essentially to the use of fresh data which, in any case, is normal practice with all official estimates.

2.9 In the light of this background it should have been possible for CSO to indicate the effect of the use of new data in the context of the comparability of the New Series with the old (with 1970-71 as base), so that it would have been possible to reconstruct the long period series with the new base without impairing the continuity.

2.10 The new basic data which become available in this country from time to time and are used for revision of national accounts estimates can be classified into two distinct groups. In the first group one could include all information which are of regular nature, are released annually with or without time lag and are incorporated into the national accounts series as and when they become available. These therefore do not create a problem in the comparability of the series of national accounts as a result of the utilisation of new information, and a cursory glance through the notes at the end of annual issues of NAS will make this amply clear. The situation is somewhat different with regard to the data which become available only as a result of infrequent surveys or censuses, e.g., the results of National Sample Survey on household industries or the results of the Economic Census or of the decennial population censuses or the All-India Debt and Investment

Surveys (AIDIS) and the like. Use of such data for national income estimation is more complicated and when such data are used, one needs to attempt to maintain some degree of comparability and continuity of the series by indicating adjustment factors wherever possible. The New Series (1988), for example, mentions the use of latest data on working force available from 1981 population census and of AIDIS, 1981-82, but does not touch upon the question of the effect the use of new data has on the comparability of the new series with the old. The question of comparability is of vital importance if one were not to break the series but construct a long period series using the old series and the new. Could this be one of the factors which has led to "large differences between the new series and the estimates based on 1970-71 series"? (New Series 1988, page 3 para 1.7) (emphasis added). If it is so, will it at all be possible to build up a long period series or is it that one has to reconcile with the situation that long period studies covering time horizon on both ends of 1980-81 is no longer possible for this country? Unless a long period series is built up how do we explain the "large differences" which go beyond sectoral estimates of value added and cover even rates of savings and investment? In fact, the changes in the savings and investment are proportionately much greater. And what happens to studies undertaken and conclusions drawn in the past regarding the behaviour of the economy? For example, a recent study at one place states, "Between 1970-71 and 1983-84 the ratio of gross savings to GDP increased in India from 16.8 per

cent to 22.1 per cent, reaching a peak of 24.7 per cent in 1978-79. This is clearly in conformity with the hypothesis of a worsening income distribution, brought about inter alia through the squeeze on the agriculture sector, over large tracts of the country. The concentration of agricultural growth in advanced regions would tend ceteris paribus to push up the rate of savings, there is also evidence that a decline in the terms of trade for agriculture tends to raise the rate of overall savings in the economy." [Prabhat Patnaik in "Recent Growth Experience of the Indian Economy: Some Comments", Economic and Political Weekly, Annual Number, 1987] Sukhamoy Chakravarty [in "Reflections on the Growth Process of the Indian Economy," Indian Left Review, June 1974] argues along the same lines. "A long period comparable series, in other words, is essential if any meaningful conclusion is to be drawn regarding the functioning of the economy. Equally this should be a pre-requisite for the release of a new set of estimates. It is this which raises questions as to the acceptability of the New Series of National Accounts Statistics (1988).

3. Gross Domestic Product

3.1 It might be worthwhile at this stage to go into a little more detail and examine some of the factors which have led to an upward revision in the levels of gross domestic product and private final consumption expenditure and downward revision in gross domestic capital formation in the New Series (1988).

3.2 Taking up the revision of gross domestic product first, there is no doubt that fresh data have been used and coverage has been extended wherever necessary. Thus, for example, estimates for Sikkim State have been included in the New Series (1988). It certainly would have been desirable to show these estimates separately to get an idea of the extent of revision on this account.

3.3 In the Agriculture sector the revisions have led to a reduction in the input-output ratio, i.e., the input per unit of output is found to be lower than what had been assumed earlier. Two of the factors responsible for this reduction in inputs are (i) the revision of the levels of consumption of chemical fertilisers and (ii) of diesel oil for tractors. While in the case of the former this is because of the rejection of survey data, in the case of the latter it is because of acceptance of survey data as opposed to norms! In view of the significant nature of the change, the adjustment factors could have been indicated to permit research workers to adjust the earlier estimates. For forestry, the substantial upward revision of value of output is somewhat intriguing. We are told that "Hitherto, the value of unrecorded production of firewood has been assumed at only 10 per cent of recorded production. However, on the basis of studies carried out in a number of states it has been felt that unrecorded production including the production accounted for in agriculture constitutes a much larger proportion of the

recorded production and the former has now been assumed to be 10 times of the latter, thus accounting for the substantial increase in this sector" (paragraph 2.10, page 11, New Series, 1988) (emphasis added). For water supply, the old method which had used data from municipal records and working force as the basis (paragraphs 8.8 to 8.11, pages 37-38 of National Accounts Statistics: Sources and Methods, April 1980) has now been replaced by a method which gives no details except to say that separate estimates have been prepared for water supply in private sector! Similarly, kutchra construction in the public sector in the form of canals, etc. has been included in the construction sector where no details of the estimates are indicated. In the case of ownership of dwellings we are told that the use of NSS data "seems to have significantly corrected the under-estimation in the income in this sector and as a result the new series shows a much higher figure of value added in this sector as compared to the 1970-71 series" (para 2.14, page 12, New Series, 1988) (emphasis added).

3.4 All these changes have meant an upward revision in the gross domestic product (gdp) by 8 to 9 per cent and in the net domestic product (ndp) by 5 to 6 per cent (lesser upward revision in level of ndp as compared to gdp is accounted for by the relatively larger upward revision of consumption of fixed capital). The corresponding revisions in expenditure on gdp leads to upward revision in private final consumption expenditure (also at per capita level) by as much as 8 to 10

per cent and reduction in gross domestic capital formation and saving by nearly 8 per cent (except in the years 1980-81 and 1981-82 when the revisions are of much smaller order). In other words, the New Series, (1988) would like us to believe that the economy actually produced substantially more goods and services than what had been estimated so far. And this adjustment is not in respect of tax-evaded unreported output/income. In other words, revision of the estimates primarily due to change in assumptions raises output by some 8 to 9 per cent, makes people better off (with higher levels of per capita consumer expenditure) to the same extent, and - we may be told later - may show reduced poverty levels (by "imputing" larger use of firewood and thereby raising the per capita expenditure). At the same time, along with higher levels of gdp and private final consumption expenditure, the capital expenditure is stated to have been far below the level that had been assessed previously. Not only have the rates of investment and savings become lower but even their absolute levels. It also appears that the involvement of the public sector in the overall economic activities had been less significant than what had been assessed earlier. Tables 1 and 2 give a summary of the changes.

3.5 The method adopted for preparing estimates of gdp and ndp at constant prices for the New Series is the same as "adopted hitherto except in the industry group public administration and defence" [New Series, (1988), page 15, paragraph

2.23]. For the new series, the current price estimates of public administration and defence have been deflated by the consumer price index of industrial workers as "most of the state governments are now following the dearness allowance pattern of the central government" (ibid). As a result "the rate of growth in this sector over the years is now around half of that under the 1970-71 series" (ibid). It is ironical, however, that this method of deflation is being adopted from 1981-82 onwards, though the situation with the State governments in regard to dearness allowance was very different at that time.

3.6 A comparison of gross domestic product at the economic activity level at this stage may be of interest. This is undertaken for the two years 1980-81 and 1984-85 (at current prices) in Tables 3 and 4 where the effect of revision of consumption of fixed capital has been separated out to highlight the effects of new data and changes in method of estimation.

4. Expenditure on Gross Domestic Product

4.1 It will be legitimate to ask as to what extent better data base prompted such revisions and changes in gdp and whether these changes have been consistently maintained to present a balanced system of income and expenditure at the overall level.

A. Private Final Consumption Expenditure

4.2 First, it is not clear to what extent the commodity flow method has been followed to ensure a complete accounting of utilisation of total availability of goods and services. This is relevant because by definition private final consumption expenditure (pfce) covers consumption expenditure of households and private non-profit bodies. When independent data for private non-profit bodies are not available, only the commodity flow method can ensure that the measure of has complete coverage. This cannot be ensured when results of household survey are adopted for individual items in pfce. Many of the revisions being so based do not ensure such a complete balance. The more prominent of these are consumption of kerosene oil (-15 p.c.), refrigerator, cooking, washing appliances (-65 p.c.), glassware, tableware and utensils (+50 p.c.), medical care and health services (+23 p.c.), personal transport equipment (-42 p.c.), purchase of transport services (-40 p.c.), recreation and cultural services (+435.5 p.c.), equipment, paper and stationery (-53 p.c.) where the percentages in brackets indicate the differences between old and new estimates in the year 1980-81. The change in the classification by object in the New Series do not allow such comparison for other years and no conclusion can be drawn regarding the reliability and consistency of the changes introduced.

B. Changes in Stocks

4.3 The revisions in the measure of changes in stocks raise similar doubts. Foodgrains stocks - we are told - are measured after adjusting for consumption of foodgrains. But it is not clear whether the measure of consumption has a sound basis. Stocks, if available, are held either by producers or by traders. What is necessary is to take complete account of stocks held. The 1970-71 series ensured this through the Input-Output Tables for 1968-69 and 1973-74 and commodity balances. When producers of agricultural commodities are holding stocks they are in principle functioning as traders and unless one can ensure a complete accounting of output through commodity balances, unrelated independent adjustments and revisions do not necessarily mean any improvement. Thus it is essential to indicate how and where the stocks of cotton, oil seeds sugarcane, etc. have been accounted for before one can say that "it is unlikely that producers would keep stocks of commodities like cotton, oil seeds, sugarcane, fruits and vegetables etc. As such, in the new series, the stocks of such commodities with the producers are assumed to be negligible" [page 29-30, para 3.11(i) New Series, 1988].

C. Capital Formation and Savings

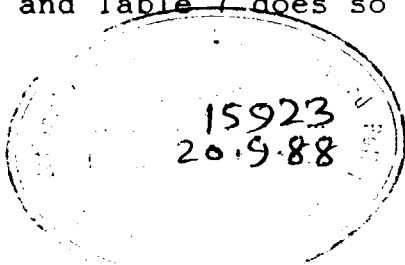
4.4 The estimates of gross capital formation and gross savings by institutional sectors now appear to have become the joint responsibility of Central Statistical Organisation (CSO) and Reserve

Bank of India (RBI). The revisions in the estimates of savings and capital formation of the individual institutional sectors as well as in the figures of consumption of fixed capital change substantially the percentage share of different institutional sectors in capital formation and savings. Tables 5 and 6 present the results both for gross and net estimates, i.e., including and excluding consumption of fixed capital to highlight the effects of the revisions. Thus in the New Series, domestic capital formation of private corporate sector has increased substantially, almost doubling its share both in gross and net terms. This had led to a fall in both public and household sectors' share, the effect not being uniform either over the period of study or over the two sectors. Institutional share in savings, on the other hand, remain almost unaffected in the case of gross savings. For net savings both public and private corporate sectors have, according to the New Series, (1988) very low levels of savings - even negative for the public sector, in three of the five years under study (as much as -12.4 per cent in 1984-85). In the old series, public sector net saving accounted for as much as 20 per cent in 1981-82 and 5 per cent in 1984-85. In the New Series these revisions have resulted in a very high share for the household sector (of the order of 103.9 per cent in 1983-84 and 108.8 in 1984-85). In summary, the revision of estimates of saving has resulted in a fall in overall totals and in the measures of savings of public and private corporate sectors as well as of household sector

saving in physical assets. In contrast, there is an increase in the levels of household saving in financial assets leading to a large increase in its overall share. It is necessary and important to investigate whether this change in the distribution of institutionwise saving is the direct consequence of the method of estimation adopted.

4.5 Before looking more carefully into the sectoral estimates to answer such questions and to identify the factors leading to such drastic changes, it might be desirable to obtain an overall view of the effect of the revisions by presenting the rates of capital formation and savings. This is important since the absolute levels of all the relevant aggregates, viz., domestic product, capital formation and savings have undergone revision in the New Series. A careful perusal of the New Series, (1988), suggests that the changes in the figures of gross capital formation are primarily due to the use of new data and no conceptual changes are involved. As regards savings, the publication clearly states: "The methodology adopted for the compilation of the estimates of saving of various institutional sectors in the new series is broadly the same as in the 1970-71 series except for a small methodological change in the private corporate sector" (para 3.17, page 33, New Series, 1988). In view of this, it has been considered meaningful to present the rates of capital formation and savings for periods earlier to 1980-81 as well, and Table 7 does so both in terms of

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102



gross and net rates of capital formation and savings. While substantive conclusions out of these results may be drawn by economic analysts, we would like to pose a question from the standpoint of internal consistency and feasibility of the orders of magnitude. Between the years 1980-81 and 1985-86 - that is over six years - capital consumption appears to have gone up from 8.9 per cent to 10.1 per cent of gdp at market prices. While in a period of rapid obsolescence, depreciation as percentage of output could increase substantially - in fact, depreciation need have no fixed relationship with output - yet the magnitude of the change (by 13.5 per cent) would cast some doubt about either the methodology used for calculation of depreciation or the actual calculations pertaining to these magnitudes.

4.6 To comprehend more fully the factors which have led to the substantial changes in the distribution of capital formation and savings of the three institutional sectors and finally fluctuations in their overall levels and the rates, a more careful reading of the New Series (1988) was resorted to. This leaves one somewhat confused in regard to the sanctity of the new method of estimation and the new approach to the measurement of consumption of fixed capital in the government administrative departments. The following extracts from different sections of the New series (1988) tell their own story:

- "i. In the case of the fixed assets of the Government, no estimate of consumption of fixed capital was being made, as no

provision for depreciation is made in the govern-
ment departments (paragraph 2.2, page 4,
(emphasis added)

- ii. Compared with 1970-71 series, GDP has moved up Of this increase, Rs. 602 crores is contributed by the increase in the consumption of fixed capital, in the public administration and defence, education, medical service etc., in the public sector.... The practice hitherto has been to take gross value added as the same as net value added in these sectors of activity because no depreciation is being provided by the Government departments. When consumption of fixed capital is taken into account, GDP will increase by a corresponding amount in these sectors (paragraph 2.6, page 8), (emphasis added).
- iii. Under the institutional sectors (gross capital formation of) the public sector shows a marginal increase of Rs. 34 crores. This is primarily due to the inclusion of Sikkim and the increased coverage of non-departmental commercial undertakings" (para 3.8, page 26), (emphasis added).

The two sets of estimates of domestic product, capital formation, savings and final consumption expenditure for government administrative departments from old and new series are presented in Table 8 to give an overall idea of the extent of revision introduced in the New Series, (1988). The above extracts supplemented by the data in Table 8 create the following doubts in regard to the estimates. First, it would appear from the explanations given that depreciation provision is now being "imputed" in respect of government administration, and added on to the current estimates of net output of this sector to derive

the gross domestic product. However the ndp in the New Series goes down sharply as compared to the old series and this obviously has an effect on gdp as well. In other words, the difference between old and new estimates of gdp is not due to addition of depreciation provision only and in fact 'imputed' depreciation provision is much larger than this difference. The only change in estimational procedure which could be identified from New Series (1988) is in terms of allocation of pension payments to departmental enterprises instead of the total being included under public administration and defence (see paragraph 2.15, page 12, New Series, 1988). This fact is also suggested by the increase in the net output of other sectors. However it is not clear whether reallocation of pension payments alone could lead to such sharp decline in ndp of public administration and defence. Secondly, and this is where one feels mystified, there is a sharp decline in the absolute value of net domestic saving of government administrative departments. It would appear, therefore, that in fact, the imputed value of depreciation has been deducted from the estimates of savings. If that is the procedure, it would tantamount to incorrect accounting because an imputed figure of depreciation is now being deducted from the actual financial figure of saving. These comments would be relevant for gross and net capital formation as well. Incidentally, an assumption implicit in the earlier estimates (1970-71 series) was that though no depreciation is provided for government administrative departments, the current repairs

and maintenance expenditure is such as to maintain the capital intact. If, therefore, an adjustment was necessary, it was in respect of a part of current costs (maintenance expenditure) which should have been added to old estimates of gross value of output, gross savings and gross capital formation.

4.7 It is necessary for the CSO to (a) explain more explicitly what they have done, and (b) in case the surmise given above be true, to justify the deduction of the imputed figure of depreciation provision from the figures of actual financial savings, to derive net savings. To repeat, the imputed depreciation provision can be deducted from estimates of capital formation and savings only if the imputed value of depreciation is added to the gdp, the estimates of capital formation and the estimates of saving. Alternatively, the imputed value of depreciation would be a deduction on the expenditures on current repairs and maintenance³, which include outlays intended to keep the capital intact. Indeed, the latter would have been the correct procedure. One can certainly argue that different elements of total maintenance expenditure (large and small) should be identified, and the portion defined as expenditure on capital consumption be treated as part of gross capital formation and gross savings. In this case, the old estimates of capital formation and savings must be adjusted upwards to take account of maintenance expenditure hitherto counted under current government final expenditure, and to reduce

current expenditure to the same extent.

4.8 In case the CSO insists on holding to its estimates of depreciation provision of government administrative departments, then it would become necessary for the policy makers in the government and private economic analysts, to undertake the required adjustments to obtain meaningful and realistic estimates of capital formation and savings. In other words, the old estimates of both gross capital formation and savings should first be revised to include part of maintenance expenditure and adjusted upwards. Net savings and net capital formation figures can then be derived by deducting depreciation provision as estimated. However, part of current expenditure would now be of the nature of depreciation provision, and, therefore, part of gross saving and gross capital formation. Government final consumption expenditure in this case should go down and include only current repairs and no maintenance expenditure. The exercise will thus result in (i) increase⁴ in domestic product, capital formation and savings, (ii) reduction in current expenditure, and (iii) upward revision in capital receipts and expenditure of government administrative departments by the amount of imputed depreciation provision (now part of maintenance expenditure). Such revisions appear to be necessary before making any use of the data in the New Series, (1988) for drawing reliable conclusions regarding the behaviour of saving and capital formation in the public sector.

4.9 The revised estimates of capital formation and savings in each of the institutional sectors also tell their own story. For the private corporate sector, we are told, the Department of Company Affairs made available revised estimates of paid up capital in December 1987 (presumably for as far back as 1980-81, if not earlier) and RBI revised the estimates of gross capital formation and savings for joint stock companies and CSO thereafter accepted those estimates. The outside researchers are however not favoured with the details of what these revisions were, and why they were necessary. We also do not know whether these revisions affect the estimates for years prior to 1980-81. There is also 'a small methodological change' (para 3.17, page 33, New Series, 1988). Thus the question of comparability of estimates for periods prior to 1980-81 and thereafter becomes a pertinent question in respect of all the adjustments made. One can understand revisions arising from the availability of new data. But when the new data are a revision of the data which already existed and also a change in methodology is introduced, sufficient details should be made available which would be such as to facilitate adjustments in the long-term series. In this case, the drastic nature and extent of revisions in the estimates of gross capital formation, savings and capital consumption for the private corporate sector raise doubt as to the new data and new methodology used. Table 9 brings out the position clearly.

4.10 It is claimed that the New Series has rectified the under-estimate of the consumption of fixed capital, and the estimates are no longer based on figures of depreciation in the books of accounts. However, for the private corporate sector, the consumption of fixed capital as a proportion of gross capital formation is actually lower in the New Series (1988) than in the series with 1970-71 as base. Since it is claimed that the current estimates are better and are based on replacement cost of fixed assets, there is need for an explanation of this as well as elaboration of the basis of calculation because the results are contrary to the claims. The New Series is silent on this issue.

4.11 Lastly, we take up the estimates of capital formation and savings for the household sector which both in terms of its content and method of estimation are very different from the above two. We again present extracts from the New Series, (1988) to bring out the doubtful points:

- "a. Under type of assets, the estimates in respect of (i) construction and (ii) machinery and equipment are prepared at the aggregate level by commodity flow approach..... From these, the estimates of the public sector and the private corporate sector derived by expenditure approach are deducted to arrive at the corresponding estimates of the household sector.... As such, the estimates of the household sector undergo changes due to the revisions in the estimates of public and private corporate sectors (para 3.6, page 25).

- b. RBI have revised the estimates of joint stock companies significantly upwards which have a corresponding downward effect in the estimates of household sector. It may also be added that the estimates of gross capital formation derived here are taken as a part of the saving of the households in the form of physical assets. Thus, any significant downward revision in the household physical assets would automatically result in reduction of the rate of saving (para 3.8, pages 27-28).

Thus, for the household sector, there is an increase in the levels of saving in financial assets coupled with a fall in the savings of public and private corporate sectors. For household savings in physical assets, at the same time, there is a fall as compared to the old estimates. All this leads to a large increase in the share of the household sector in total savings [see Tables 5 & 6]. It is necessary and important to investigate whether this change in the distribution of institutionwise saving is the direct consequence of the method of estimation adopted for measuring financial savings in the household sector or is an improvement on the earlier estimates in the sense of presenting more realistic figures. This question is pertinent since many of the instrumentwise household savings in financial assets are derived as residuals and could lead to unrealistic results following from the method adopted. As an instance, we need only point out that the latest figures of the break-up of ownership of bank deposits are for June, 1982; and there is a large element (more than 40 per cent) of "unclassified" time deposits, which are

a major element of household saving in financial assets. By treating the household sector as a residual, this entire chunk of unclassified savings would get credited to the household sector and one is not quite sure whether that is in fact so. A further examination of the savings estimates therefore is urgently called for.

5. Public Sector

5.1 A few words about the estimates for the public sector may not be out of place in the present context. For the public sector, detailed results and accounts have been presented for departmental enterprises and administrative departments while for non-departmental enterprises only the final results have been integrated with the rest of the estimates. Changes have been introduced in the presentation of results, railways and communications now having independent production, income and outlay and capital finance accounts. Production account has also been introduced for producers of government services, i.e., administrative departments while income and outlay and capital finance accounts in this case cover administrative departments and departmental enterprises other than railways and communications. The absence of clear cut segregation of the sub-sectors within the public sector is unfortunate. The summary results presented in Tables 10, 11 and 12 show that the differences between the two sets of estimates (as available in the old series and as available now) is substantial though according to New Series,

(1988) "there are minor differences between the two series which are primarily due to changes in the estimates of consumption of fixed capital" (page 39, paragraph 4.2) (emphasis added). Because of changes in presentation of results it is not easy to make a more detailed comparison and draw more positive conclusions at this stage. This section deserves a careful detailed examination which, it is hoped, will be undertaken at a future date.

6. Consumption of Fixed Capital

6.1 Since revised estimates of consumption of fixed capital is the primary factor leading to the revision of the estimates for the public sector and reduction in the rates of net capital formation and net savings for the economy by as much as 5 percentage points, we next examine carefully the revisions in the estimates of consumption of fixed capital. It is true that the previous estimates of consumption of fixed capital were often based on provision for depreciation in the books of accounts of enterprises and needed revision. But this was true only of a limited number of cases and not universally for all economic activities. Thus it is likely that the estimates of consumption of fixed capital called for revision in the case of Mining and Quarrying, Construction or Public Sector undertakings [especially the departmentally-run establishments] but it is doubtful whether such revisions were equally necessary for Agriculture and Allied Activities, all types of Manufacturing, Ownership

of dwelling, etc. where the estimates for the 1970-71 series were based on survey data and not on books of accounts.

6.3 Current estimates of consumption of fixed capital are claimed to be based on the estimates of capital stock and life of various types of fixed assets. This, in capital stock literature, is termed as Perpetual Inventory Method (PIM). The method in principle assumes to have access to reliable estimates of capital expenditure and age structure of assets in existence. For a meaningful application of PIM the capital expenditure (capital formation) series should extend back as far as the life of the most durable assets in existence. The series on capital stock are then simulated from cumulated past capital formation expenditures appropriately adjusted for discards. Also required are good representative price indices for different groups of capital goods for an equivalent span of years as well as knowledge of the service lives of different types of capital goods. The precision of the estimates of capital stock and hence the capital consumption estimates derived in this way depends very much on the assumptions reflecting the use of capital as a factor of production, retirement rate of investment goods, and the pace of technical change. In other words, the precision of the capital stock estimates thus obtained depends very much on reliability of the assumptions about the average lengths of life and associated patterns of retirement of different types of capital assets, as well as on the replacement value (at current

prices) of all capital assets. This latter factor is crucial, especially because in real life, technological change makes it impossible to assess the precise replacement cost of most types of equipment. The estimates of consumption of fixed capital are then obtained by the straight line method given the age and current replacement cost of different types of assets.

6.3 New Series (1988) does not give sufficient details which would enable one to obtain a clear picture of the basis of revisions in the estimates of consumption of fixed capital. This should have been given adequate importance in the publication and the summary two-paragraph description leaves much to be desired. A careful study of the section devoted to this subject (paragraphs 2.2 and 2.3, pages 4-5) together with the paper 'Estimates of Fixed Capital Stock and Consumption of Fixed Capital in India' by Jagdish Kumar, R.P. Katyal and S.P. Sharma⁵ [Economic and Political Weekly, November 21, 1987, Vol.XXII, No. 47] suggests that except for minor revisions of figures, this latter paper is the background to the current estimates of consumption of fixed capital. One would therefore be justified in assuming that the paper under reference gives the necessary details of the method followed for measurement of consumption of fixed capital used in the New Series (1988). A careful examination of the details brings out the following:

- i. No reliable basis has been indicated for the assumptions regarding the age of the fixed assets and the list is not exhaustive enough to cover different

assets under all the industry groups (both organised and unorganised).

- ii. No attempt has been made to obtain the age composition of the assets in 1949-50 which presumably has been used as the base year and the estimates of capital consumption are likely to be affected by the composition of service life of the assets on that date and thereafter.
- iii. Consumption of fixed capital has now been provided for public administration and defence which was not estimated in the past. Although the imputed value of capital consumption in this sector is added to the domestic product (which was equal for gross and net measures in the earlier series) on the assumption that the net output of such assets is equal to the imputed value of capital consumption, this procedure does not affect the earlier estimates of gross savings but results in downward revision of net savings of government departments. The argument put forward by earlier estimators for not explicitly providing capital consumption for this sector was that repairs and maintenance expenditure undertaken in these cases is large enough to maintain the capital services of the assets intact and no separate depreciation provision need therefore be provided. In other words, if actual wear and tear be compensated by replacements (and maintenance expenditure), the only problem earlier was that part of (gross) capital expenditure was shown as current (repair) expenditure. To provide for additional capital consumption expenditure now would be to indulge in over-compensating for capital consumption. The assets under public administration and defence undergo many additions, renovations, alterations and modifications during their lifetimes and it is almost impossible to attach any precise asset lives and provide depreciation for such assets, after such renewals and maintenance expenditure. Since the life of a capital good is a composite of the lives of component parts

which have either been added to or replaced in the capital since its initial construction, and since in some cases, very little may be left of the original capital good other than its basic framework or superstructure, the question of its lifetime becomes an esoteric one. For this reason, according to past practice large maintenance expenditures on building and construction etc. incurred by administrative departments were treated as (gross) capital formation while all expenditures on repairs and annual contingent replacements were treated as current repairs. For the current estimates, consumption of fixed capital has been provided over and above the maintenance and contingent replacements already incurred by the government departments. Incidentally, according to UN Handbook on National Accounting, Vol. 2, Gross Domestic Product, "Sometimes all expenditures on repairs and maintenance of fixed capital are treated as intermediate consumption in business accounts. It is then necessary to identify the part of the repair work that lengthens the expected life of the fixed assets or increases their productivity, and to transfer the expenditures on these major repairs to gross fixed capital formation. The expenditures on repairs and maintenance left in intermediate consumption should be outlays required to make good breakage or to keep fixed assets in proper working conditions, such as replacement of parts of machinery and equipment that are worn out (tyres of trucks) and usually replaced several times during the life of the asset." The above discussion would appear to suggest that substantial downward revision in the estimates of consumption of fixed capital for government administrative departments (and corresponding upward revision in the estimates of net savings) is called for. This is also relevant because government accounts are on "cash basis" with no economically meaningful separation between current and capital expenditures. Even in the case of some of the non-departmental

enterprises (particularly electricity, etc.) the distribution between repairs and maintenance and provision for depreciation in the books of accounts may require more careful examination. This is, to some extent, also suggested by the very high estimates of consumption of fixed capital in the case of some of the non-departmental enterprises.

- iv. While the above argument would indicate that the estimates of capital consumption in the New Series, (1988) are exaggerated, on the other side, no allowances has been made for retirements and discards and obsolescence. In periods of rapid technological progress this might have substantial effect on measures of capital consumption. For example, in Railways, dieselisation and electrification as well as gauge conversion would completely change the age structure of assets in existence. This is likely to increase the rates of retirement of coaches and engines and upset estimates of capital consumption prepared on replacement cost basis. This would also imply that for the Indian railways, the compilation of capital outlays for past years (going as far back as the year 1853 with adjustment for area changes, etc.) is a fruitless exercise. Further, according to the CSO authors themselves "most of the assets prior to 1950 would retire by 1981". If this is true, then for preparing estimates for 1981 the exercise would suffice if the capital formation series were to be extended back as far as the life of most durable assets, i.e., 1949-50 since when capital stock estimates are being obtained by cumulation. The only assets with long lives are generally buildings, roads and bridges where also the services they provide do not materially change over time and the rates of capital consumption may be assumed to be low, and hence, to generally remain unaffected. Incidentally, D.N. Chaturvedi and Amaresh Bagchi in their paper 'Towards a Revision of Capital Consumption Estimates in National Income Accounts' (Journal of Income and Wealth,

Vol. 8, No.1 January, 1985) have presented estimates of capital consumption after making necessary adjustments for discards of assets. The estimates of consumption of fixed capital so obtained by the authors were lower than what has been indicated in the New Series, (1988).

- v. The revaluation of capital assets at current replacement cost (as per PIM) creates a major problem because of the difficulty of obtaining reliable price indices for equipment (which are generally custom made). Since, in real life, we hardly ever replace any equipment with identical equipment, there is considerable danger of overvaluation since replacement equipment (though more expensive) is usually more efficient, of higher capacity, and better (in terms of input use, including energy consumption). This makes the PIM give a higher value of capital consumption than warranted. Accountants all over the world have been wrestling with the problem of allowing realistic depreciation charges for corporate accounting purposes, and no clear - cut, uniform solution has yet emerged. The somewhat "violent" changes introduced in the New Series, (1988), particularly for public enterprises - mainly for price changes, even though most public investments have been made not so far back - suggest that these estimates be looked at again, closely.
- vi. While preparing estimates of capital stock, no adjustment has been made for capital losses. This topic has been under discussion for some time, and one would have expected the CSO to make at least a token allowance for accidental loss of capital. This becomes important when estimates are being added under new construction for even kutcha canals, etc. in the public sector (paragraph 2.13, page 12, New Series, 1988). Even if it is argued that capital loss or capital destruction (due to unforeseen causes) should not be a deduction on the annual flow of capital formation, it is essential

that necessary adjustments are made to the estimates of capital stock. A.K. Ghosh and others in their paper 'Trends in Capital Formation, Growth of Domestic Product and Capital - Output Ratios: A Review (1950-51 to 1978-79)' (Journal of Income and Wealth, Vol.5, No. 1, January 1981) have presented rough estimates of the total value of capital assets lost, houses damaged, public utilities damaged/destroyed for a number of years, and the amounts are not too insignificant to be ignored. It is therefore necessary to examine the question and adjust the estimates of capital stock and hence consumption of fixed capital obtained by the PIM method.

- vii. In the case of real estate and ownership of dwellings the estimates are based on survey data (ALDIS) which possibly take due account of capital discards and capital losses and hence are not abnormally high.
- viii. Finally, one of the results of the new methodology used for deriving estimates of capital consumption is to make these figures increase substantially from year to year. This is a direct result of the methodology used, since the revaluation of all assets every year (as required under the PIM) introduces errors arising from the use of incorrect price indices. One has to remember in this context that our estimates of capital stock are probably the weakest in the entire set of national accounts statistics, indeed no official estimates of capital stock have so far been released. To base the depreciation figures entirely on these estimates - and not the allowance made by accountants or investors - and further to introduce large changes in these estimates from year to year, would be tantamount to introducing unknown error in the estimates of capital consumption; and the enormous changes in the figures from year to year should have suggested to the CSO need for greater circumspection and care before releasing the New Series.

7. Consolidated Accounts of the Nation

7.1 For examining whether the main flows of production, consumption and accumulation published in New Series of National Accounts Statistics, February, 1988 present a coherent and meaningful picture, the summary Consolidated Accounts of the Nation is the answer. No such Accounts are available in New Series, (1988). To obtain such a set of Accounts some details other than those included in the publication are required. The two principal gaps in this respect are (i) breakdown of domestic product into factor incomes and (ii) transactions of the nation with the Rest of the World. Without these details one is obviously handicapped. The breakdown of factor incomes though desirable is not essential. One could construct both Account 1 (Gross Domestic Product and Expenditure) and Account 3 (National Disposable Income and Its Appropriation) using aggregate figures of Domestic Product without losing any of the other essential information within the Accounts. To present a complete System of Accounts many of the details from the Rest of the World Accounts are however required. These mainly cover figures of Exports and Imports (Account 1), Net factor income from abroad and Other Current Transfers from the Rest of the World (Account 3), Capital Transactions with the Rest of the World (Account 5) and Net Capital Inflow. Even if the Consolidated Accounts are not presented, figures of Net factor incomes from abroad are necessary to derive gross/net national product from gross/net domestic product.

Similarly, figures of Net Capital Inflow are necessary as by definition gross/net domestic saving and gross/net domestic capital formation differ by the extent of net capital inflow only. The New Series of National Accounts Statistics therefore has implicitly used figures of 'Net factor income from abroad' and 'Net capital inflow' though Consolidated Accounts of the Nation have not been presented. In paragraph 2.21, page 14 the publication states "The estimates of net inflow of factor income from Rest of the World (ROW) are broadly the same except for a small difference arising out of the change that has been effected in the treatment of saving retained in India of branches of foreign companies. These savings are no longer treated as part of the outflow of factor income" (emphasis added). This obviously is a matter of reclassification, wrong in principle, but perhaps justified in practice because of non-availability of current data (the information being available only periodically from the REI census of foreign assets and liabilities). But the CSO has not given the revised figures in the New Series, (1988) so one has to work them out assuming that the figures available in NAS 1987 remain unchanged. Though it is not explicitly stated, the reference to 'the same' is presumably with respect to External Transactions (Account 6) published in NAS, January, 1987. The word 'broadly', however does not convey any meaning in the context of a reference to a set of published figures. Reference to the figures of net inflow of capital from ROW is noncommittal (paragraph 3.22, page 37, New Series, 1988) and therefore

one would normally assume them to be roughly "the same".

7.2 In this background, we venture next to present the Consolidated Accounts of the Nation for the period 1980-81 to 1984-85 using the details of External Transactions from Account 6 of NAS, January, 1987 and the estimates of production, consumption and accumulation from the New Series, (1988). The task has not been easy. Though no details are given in the New Series, (1988) it is found that the figures of 'net inflow of capital' from ROW used implicitly in Statement 14 of New Series, 1988 (to derive 'errors and omissions') is not the same as in NAS, January, 1987. They differ by Rs. 7 crore in all the years. This raises questions in regard to our own assumption of no revision in figures of External Transactions published in NAS, January, 1987. Detailed investigation to the extent the publication New Series, 1988 allows does not lead to a positive answer to this difference. Indirect checks only suggest that the rest of the data used from Account 6 of NAS, January, 1987 are likely to have remained unchanged and can now be used for the construction of the Consolidated Accounts of the Nations. Reproduction of relevant items of External Transactions in New Series, (1988) with changes, if any, would have avoided the doubts and nagging questions that still remain.

7.3 The Consolidated Accounts are presented in Table 13. The set of three Accounts give

interesting details and place the estimates in their proper perspective. Thus the new estimates suggest an under-estimation of saving as is apparent from Account 3 (National Disposable Income and Its Appropriation) where, unlike in the old series, "statistical discrepancy" is positive except for the year 1980-81. This is also indicated in Account 5 on Capital Finance: 'errors and omissions' measuring the difference between total saving and total domestic capital formation is substantially higher than those derived in the old series. Thus 'errors and omissions' form as much as 15 per cent of gross domestic capital formation in 1981-82 and 13 per cent in 1984-85 against less than one per cent and 3 per cent respectively in the old series. Also, the unexplained difference in the Capital Finance Account would have not come to light had no attempt been made to construct the Consolidated Accounts. Table 14 next presents a summary picture of the discrepancies for the period 1980-81 to 1984-85 and could certainly form the basis for further investigation into the estimates. It would be seen how the overall discrepancy changes between the two sets of estimates. The difference is really marked in the case of Account 5 and requires more careful investigation into the estimates of savings and capital formation. The other disturbing factor is that a complete balance could not be achieved in Account 5 though this is expected to follow after 'errors and omissions' had been determined.

8. Conclusion

8.1 In the final analysis though the CSO has doubtless taken great pains to utilise all available fresh data and produce a set of estimates with great care, it might still be necessary to examine the New Series carefully before one makes use of the data to draw conclusions regarding the behaviour of the economy since 1980-81. The improvement of national income estimates with the use of fresh data is a continuing process and the efforts for revision of the estimates need to continue. However, the important problem to be resolved in this connection is the reliability of the estimates so produced. A careful examination shows that the revisions in the estimates of gross domestic product are primarily for the unorganised sectors and revisions for consumption of fixed capital are for the public sector. The estimates of domestic product for some of the unorganised sectors have been revised upwards to an extent which is very difficult to accept, because of the sudden sharp changes introduced. This is also important because many of these revisions are based on 'surmises' rather than the use of more recent data of sufficient reliability. In the case of measurement of consumption of fixed capital in the public sector in general and government administration in particular, more careful examination of the distinction between 'repairs and maintenance' and capital consumption is called for. This question is also directly linked with the measurement of saving in the public sector.

8.2 Finally, the question of preparation of long period series and comparability of the new estimates with the past data cannot be ignored. It is true that it is neither feasible nor always desirable to go backwards in time and to change past estimates, especially since it cannot be presumed that current observations would have held good in the past. What needs to be attempted therefore is to achieve some sort of comparability after careful examination of the basic data for different points of time. One could then make necessary adjustments to obtain a long period series after the index number problems which crop up in the process are resolved. Though it is true that this is not a matter which can be solved overnight, it can not be ignored either. This is so because the question of evaluation of performance of the economy over plan periods, economic and social analysis and economic decision making are all linked with the availability of a consistent long period series of national accounts statistics and can be tackled only when the basic information is ready at hand.

TABLE 1

Comparison of Levels of Selected Macro-Aggregates, ✓
1980-81 to 1985-86 (at current prices)

(Rs. crore)

Item	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
1. Gross domestic product						
Old series	113548	130770	145961	172704	190888	215024
New Series	122226	142876	158851	186406	206732	233305
Percentage difference	7.64	9.26	8.83	7.93	8.30	8.50
2. Private final consumption expenditure						
Old series	90939	103459	113792	135592	145962	163506
New series	99083	113559	125456	145613	160324	174379
Percentage difference	8.96	9.76	10.25	7.39	9.84	6.65
3. Gross domestic capital formation						
Old series	31476	36076	39941	45607	52387	59916
New series	30867	36279	37236	43540	48130	63864
Percentage difference	-1.93	0.56	-6.77	-4.53	-8.13	6.59
4. Gross savings						
Old series	29375	33458	37368	43083	49090	55431
New series	28773	33668	34670	41023	44838	57630
Percentage difference	-2.05	0.63	-7.22	-4.78	-8.66	3.97

Note: Difference as percentage of old series.

TABLE 2

Performance of Public Sector,
1980-81 to 1984-85
(at constant prices)

Item	1980-81	1981-82	1982-83	1983-84	1984-85
Percentage share of public sector in total					
1. Gross domestic product					
Old series	22.8	23.3	25.1	25.4	27.0
New series	19.8	19.3	20.7	20.5	21.6
2. Final consumption expenditure					
Old series	14.9	15.8	16.7	17.0	18.1
New series	11.7	11.6	12.3	12.1	12.6
3. Gross domestic capital formation					
Old series	45.6	48.9	48.7	45.1	48.1
New series	42.5	42.7	48.9	46.6	49.8

TABLE 3
Comparison of Old and New Series of Gross Domestic Product at
Current Prices, 1980-81 and 1984-85

Economic activity	(Rs. crore)					
	1980-81			1984-85		
	NAS 1987	NAS 1988	Diffe- rence	NAS 1987	NAS 1988	Diffe- rence
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Agriculture etc.	42788	46479	3691	63261	71094	7833
1.1 Agriculture	40838	42466	1628	60147	65779	5632
1.2 Forestry & logging	1041	3092	2051	1537	3560	2023
1.3 Fishing	909	921	12	1577	1755	178
2. Mining & quarrying	1843	1887	44	5829	6078	249
3. Manufacturing	18963	21644	2681	31081	37406	6325
3.1 Registered	12306	12281	-25	21386	23389	2003
3.2 Unregistered	6657	9363	2706	9695	14017	4322
4. Electricity, gas & water supply	1970	1989	19	3720	3899	179
5. Construction	5671	6114	443	10040	10234	194
6. Trade hotels & restaurant	17023	14713	-2310	28535	25478	-3057
6.1 Trade	15837	13839	-1998	N.A.	23895	-
6.2 Hotels & restaurant	1186	874	-312	N.A.	1583	-
7. Transport, storage & communication	6238	5724	-514	12563	11878	-685
7.1 Railways	1124	1124	-	2474	2474	-
7.2 Transport by other means	4167	3680	-487	8636	7941	-695
7.3 Storage	157	122	-35	-	-	-
7.4 Communication	790	798	8	1453	1463	10
8. Financing, insurance real estate & business services	7860	10841	2981	14658	16039	3381
8.1 Banking & insurance	3461	3458	-3	7625	7199	-426
8.2 Real estate, ownership of dwellings & business services	4399	7383	2984	7033	10840	3807
9. Community, social & personal services	11192	12835	1643	21201	22626	1425
9.1 Public administration & defence	5414	5794	380	10158	10836	678
9.2 Other services	5778	7041	1263	11043	11790	747
10. Total	113548	122226	8678	190888	206732	15844

Note: Column (4) = Column (3) - Column (2)
Column (7) = Column (6) - Column (5)

TABLE 4

Percentage Difference between Old and New Series of Gross Domestic Product at Current Prices, 1980-81 and 1984-85
(Difference as Percentage of Old Estimates)

Economic activity	1980-81			1984-85		
	Total	Consumption of fixed capital	New data & method*	Total	Consumption of fixed capital	New data & method*
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Agriculture etc.	8.62	2.09	6.53	12.38	2.22	10.16
1.1 Agriculture	3.99	2.01	1.98	9.36	2.04	7.32
1.2 Forestry & logging	197.02	2.11	194.91	131.62	3.58	128.04
1.3 Fishing	1.32	5.61	-4.29	11.29	7.61	3.68
2. Mining & quarrying	2.39	6.19	-3.80	4.27	1.56	2.51
3. Manufacturing	14.14	5.06	9.08	20.35	6.45	13.90
3.1 Registered	0.20	4.27	-4.47	9.37	4.75	4.62
3.2 Unregistered	40.65	6.53	34.12	44.58	10.21	34.37
4. Electricity, gas & water supply	0.97	41.27	-40.30	4.81	43.68	-38.87
5. Construction	7.81	0.95	6.86	1.93	1.12	0.82
6. Trade, hotels & restaurant	-13.57	-1.64	-11.93	-10.71	-1.47	-9.24
6.1 Trade	N.A.	-	-	-	-	-
6.2 Hotels & restaurants	-	-	-	-	-	-
7. Transport, storage & communication	-8.24	14.68	-22.92	-5.45	-9.43	-14.88
7.1 Railways	-	31.94	-31.94	-	19.40	-19.40
7.2 Transport by other means	12.07	10.22	-22.29	-8.05	5.73	-13.78
7.3 Storage	-	-	-	-	-	-
7.4 Communication	1.02	14.56	-13.54	0.69	14.45	-13.76
8. Financing, insurance, real estate & business services	37.93**	-0.83	39.76	23.07	-3.15	26.22
8.1 Banking & insurance	-0.08	0.38	-0.46	-5.59	-4.55	-1.04
8.2 Real estate, ownership of dwelling & business services	67.83	-1.78	69.61	54.13	-1.63	55.77
9. Community, social & personal services	14.68	5.84	8.84	6.72	6.17	0.55
9.1 Public administration & defence	7.02	9.00	-1.98	6.67	10.06	-3.39
9.2 Other services	21.86	2.89	18.97	6.76	2.60	4.16
10. Total	7.54	3.51	4.13	8.30	3.59	4.71

* Indicates the percentage difference in net domestic product.

** Columns (3) & (4) do not add to column (2) because of "adjustment for revaluation of assets, loss on sale/purchase of assets etc." made to the old estimates of consumption of fixed capital (see notes on Table 2, page 7, NS, February, 1988).

TABLE 5

Domestic Capital Formation by Type of Institution
(percentage share)

Institution	1980-81	1981-82	1982-83	1983-84	1984-85
gross domestic capital formation					
1. Public Sector					
Old Series	44.76	49.09	50.23	46.53	48.94
New Series	42.52	42.47	48.65	45.07	48.32
2. Private Corporate Sector					
Old Series	11.96	12.45	15.31	14.40	13.94
New Series	17.28	23.58	24.53	18.00	21.80
3. Household Sector					
Old Series	43.28	38.46	34.46	39.07	37.12
New Series	40.20	33.95	26.82	36.94	29.88
net domestic capital formation					
1. Public Sector					
Old Series	51.82	57.48	58.53	53.05	56.13
New Series	43.68	43.51	53.64	47.39	52.58
2. Private Corporate Sector					
Old Series	10.04	10.79	14.58	13.26	12.48
New Series	19.15	28.77	31.84	20.46	27.06
3. Household Sector					
Old Series	38.14	31.73	26.89	33.69	31.39
New Series	37.17	27.72	14.52	32.15	20.36

TABLE 6

Domestic Saving by Type of Institution
(percentage share)

Institution	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
gross domestic saving						
1. Public Sector						
Old Series	15.67	21.60	20.98	15.46	13.08	13.50
New Series	16.17	21.55	22.56	16.52	14.69	14.10
2. Private Corporate Sector						
Old Series	9.03	8.19	8.18	7.74	8.05	8.02
New Series	7.94	7.41	8.39	7.73	8.90	8.79
3. Household Sector						
Old Series	75.30	70.21	70.84	76.80	78.87	78.48
New Series	75.89	71.04	69.05	75.75	76.41	77.11
net domestic saving						
1. Public Sector						
Old Series	12.34	19.60	17.33	8.82	4.88	4.79
New Series	-1.44	7.27	4.73	-5.82	-12.41	-10.29
2. Private Corporate Sector						
Old Series	5.81	4.57	4.19	3.40	3.70	4.44
New Series	3.50	2.58	3.19	1.88	3.64	4.18
3. Household Sector						
3.1 Total						
Old Series	81.85	75.82	78.48	67.78	91.42	90.77
New Series	97.94	90.16	92.07	103.94	108.77	106.11
3.2 Financial Saving						
Old Series	39.45	39.65	47.66	48.07	54.61	49.84
New Series	51.52	51.03	71.94	61.20	79.88	61.31
3.3 Saving in Physical Assets						
Old Series	42.40	36.18	30.82	39.72	36.81	40.93
New Series	46.42	39.12	20.14	42.74	28.89	44.80

TABLE 7

Rates of Capital Formation and Savings
(percentage of domestic product at market prices)

Year	Rate at constant prices				Rate at current prices							
	Capital formation				Capital formation				Savings			
	Gross		Net		Gross		Net		Gross		Net	
	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New
1950-51	12.9		9.3		10.0		6.8		10.2		7.0	
1951-52	14.8		11.3		11.9		8.6		10.0		6.7	
1952-53	9.4		5.6		7.9		4.1		8.3		4.5	
1953-54	10.2		6.6		8.7		5.1		8.8		5.3	
1954-55	11.0		7.3		11.0		6.9		10.9		6.8	
1955-56	14.9		11.3		14.3		10.4		13.9		10.0	
1956-57	18.2		14.7		16.6		13.0		13.5		9.8	
1957-58	17.5		13.8		15.4		11.4		11.4		7.3	
1958-59	13.4		9.5		13.3		9.0		10.5		6.1	
1959-60	14.5		10.6		14.3		10.0		12.6		8.3	
1960-61	16.7		12.9		16.9		12.7		13.7		9.3	
1961-62	14.6		10.7		15.3		10.7		13.1		8.4	
1962-63	16.5		12.2		17.1		12.3		14.5		9.6	
1963-64	16.4		12.3		16.6		12.1		14.4		9.8	
1964-65	16.8		12.6		16.2		12.0		13.6		9.2	
1965-66	19.3		14.8		18.2		13.8		15.7		11.2	
1966-67	20.9		16.3		19.7		15.4		16.3		11.8	
1967-68	17.8		13.0		16.5		12.3		13.9		9.6	
1968-69	16.1		11.3		15.4		10.8		14.1		9.5	
1969-70	17.6		12.7		17.1		12.5		16.4		11.8	
1970-71	17.8		13.0		17.8		13.0		16.8		12.0	
1971-72	18.3		13.5		18.4		13.6		17.3		12.5	
1972-73	17.4		12.2		17.0		12.1		16.3		11.4	
1973-74	21.4		16.6		20.0		15.7		19.4		15.0	
1974-75	19.4		14.6		19.2		14.9		18.3		13.9	
1975-76	18.1		13.4		19.9		15.3		20.1		15.4	
1976-77	19.7		14.9		20.8		16.1		22.5		17.9	
1977-78	19.9		15.4		20.9		16.2		22.5		18.0	
1978-79	22.6		18.0		24.8		20.1		24.7		20.0	
1979-80	21.2		16.2		23.5		18.4		23.0		17.8	
1980-81	22.1	22.7	17.2	15.2	24.7	22.7	19.6	15.2	23.0	21.2	17.8	13.5
1981-82	21.3	22.4	16.2	14.8	24.4	22.8	19.1	15.1	22.7	21.1	17.2	13.3
1982-83	20.8	20.5	15.7	12.6	24.2	21.0	18.5	12.7	22.6	19.5	16.9	11.1
1983-84	20.1	19.8	14.9	12.0	23.5	21.0	17.8	12.9	22.2	19.8	16.4	11.5
1984-85	20.4	19.6	15.1	11.5	24.4	21.0	18.6	12.5	22.9	19.5	16.9	10.9
1985-86		22.5		14.6	24.6	24.4	18.6	15.9	22.8	22.0	16.7	13.3

TABLE B

Estimates of Various Macro-Aggregates for Government
Administrative Departments As Per the Two Series,
1980-81 to 1985-86
(at current prices)

(Rs. crore)						
	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
1. Gross Domestic Product						
Old Series	8349	9664	1154	413419	15686	-
New Series	9020	10470	12536	14583	16910	19875
Difference	671	806	992	1164	1224	-
2. Net Domestic Product						
Old Series	8349	9664	11544	13419	15686	-
New Series	8256	9545	11404	13260	15332	17942
Difference	-93	-119	-140	-159	-354	-
3. Gross Domestic Saving*						
Old Series	2874	4190	3660	1999	382	-
New Series	2804	4101	3520	1879	417	903
Difference	-70	-89	-140	-120	35	-
4. Net Domestic Saving*						
Old Series	2509	3593	2927	1136	-483	-
New Series	579	1442	338	-1746	-3825	-4214
Difference	-1930	-2151	-2589	-2882	-4308	-
5. Gross Capital Formation						
Old Series	3097	3529	3996	4439	5309	-
New Series	3101	3515	3970	4384	5328	6457
Difference	4	-14	-26	-55	19	-
6. Net Capital Formation						
Old Series	3097	3529	3996	4439	5309	-
New Series	2337	2590	2838	3061	3750	4544
Difference	-760	-939	-1158	-1378	-1559	-
7. Final Consumption Expenditure						
Old Series	13033	15276	18016	20788	24062	-
New Series	13084	15355	18272	21141	24352	29261
Difference	51	79	256	353	290	-

* Includes savings of departmental enterprises.

Note: Difference taken as New Series minus old series.

TABLE 9

Comparison of Gross Capital Formation and Savings of
Private Corporate Sector
1980-81 to 1984-85
(at current prices) ✓

(Rs. crore)

Item	1980-81	1981-82	1982-83	1983-84	1984-85
1. Gross capital formation					
Old series	3764	4511	6196	6806	7504
New series	5691	9802	10196	8670	11836
Percentage difference	51.20	117.29	64.56	27.50	57.73
2. Net capital formation					
Old series	2345	2852	4227	4480	4799
New series	3991	7801	7856	5905	8667
Percentage difference	70.19	173.53	85.85	31.81	80.60
3. Consumption of fixed capital					
Old series	1419	1659	1969	2325	2705
New series	1700	2001	2340	2765	3169
Percentage difference	19.80	20.61	18.84	18.92	17.15
4. Consumption of fixed capital as p.c. of gcf					
Old series	37.70	36.78	31.78	34.16	36.05
New series	29.87	20.41	22.95	31.89	26.77
5. Gross savings					
Old series	2653	2740	3055	3333	3952
New series	2284	2496	2908	3172	3991
Percentage difference	-13.91	-8.91	-4.81	-4.83	-0.99
6. Net savings					
Old series	1235	1081	1086	1008	1247
New series	584	495	568	407	822
Percentage difference	-52.71	-54.21	-47.70	-59.62	-34.08

Note: Difference as percentage of old estimates.

TABLE 10

Comparison of Net Domestic Product from Public Sector by Type of Economic Activity, 1980-81 and 1984-85
(At Current Prices)

(Rs. crore)

Economic activity	1980-81			1984-85		
	NAS 1987	NAS 1988	Per- centage differ- ence	NAS 1987	NAS 1988	Per- centage differ- ence
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Agriculture etc.	1036	993	-1.29	1681	1625	-3.33
1.1 Agriculture	583	589	1.03	1072	989	-7.74
1.2 Forestry & logging	423	404	-4.49	609	634	4.11
2. Mining & quarrying	1343	1365	1.64	4860	5293	13.58
3. Manufacturing	2678	1794	-33.01	5042	3922	-22.21
3.1 Registered	2678	1794	-33.01	5042	3922	-22.21
3.2 Unregistered	-	-	-	-	-	-
4. Electricity, gas & water supply	1495	758	-49.30	2784	1490	-46.48
5. Construction	904	923	2.10	1658	1672	0.84
6. Trade, hotels & restaurant	792	796	0.51	1304	1315	0.84
6.1 Trade	-	-	-	-	-	-
6.2 Hotels & restaurant	-	-	-	-	-	-
7. Transport, storage & communication	2504	1852	-26.04	4831	3909	-19.09
7.1 Railways	917	558	-39.15	1896	1415	-25.37
7.2 Transport by other means	867	681	-21.45	1619	1378	-14.89
7.3 Storage	-	-	-	-	-	-
7.4 Communication	720	613	-14.86	1316	1116	-15.20
8. Financing, insurance, real estate & business services	2863	2859	-0.10	6025	5770	-4.23
8.1 Banking & insurance	2863	2859	-0.14	5025	5769	-4.23
8.2 Real estate, ownership of dwellings & business services	-	1	-	-	1	-
9. Community, social & personal services	7973	7935	-0.48	15031	14748	-1.88
9.1 Public administration & defence	5414	5307	-1.98	10158	9814	-3.39
9.2 Other services	2559	2628	2.70	4873	4934	1.25
10. Total	21558	19276	-10.59	43016	39744	-7.61

Note: Difference (New - Old) as percentage of old estimates.

TABLE 11

Comparison of Net Domestic Capital Formation in Public Sector
by Industry of Use, 1980-81 and 1984-85
(At Current Prices)

(Rs. crore)

Economic activity	1980-81			1985-85		
	NRS 1987	NRS 1988	Perce- tage diffe- rence	NRS 1987	NRS 1988	Perce- tage diffe- rence
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Agriculture etc.	1920	1573	-18.07	2694	2018	-25.09
1.1 Agriculture	1828	1502	-17.83	2515	1877	-25.37
1.2 Forestry & logging	92	71	-22.83	179	136	-24.02
1.3 Fishing	-	-	-	-	-	-
2. Mining & quarrying	775	816	5.29	1352	1968	44.49
3. Manufacturing	2562	2107	-17.76	3996	3430	-14.16
3.1 Registered	2562	2107	-17.76	3996	3430	-14.16
3.2 Unregistered	-	-	-	-	-	-
4. Electricity, gas & water supply	2611	1837	-29.64	4675	3199	-31.57
5. Construction	230	187	-18.70	120	67	-44.17
6. Trade, hotel & restaurant	-358	-319	10.89	1242	124	0.08
6.1 Trade	-	-	-	-	-	-
6.2 Unregistered	-	-	-	-	-	-
7. Transport, storage & communication	1347	658	-51.15	2232	1257	-43.68
7.1 Railways	650	291	-55.23	851	371	-56.40
7.2 Transport by other means	425	211	-50.35	661	385	-41.75
7.3 Storage	-	-	-	-	-	-
7.4 Communication	272	156	-42.65	720	501	-30.42
8. Financing, insurance, real estate & business services	103	78	-24.27	203	218	7.39
8.1 Banking & insurance	103	78	-24.27	203	218	7.39
8.2 Real estate, ownership of dwelling & business services	-	-	-	-	-	-
9. Community, social & personal services	2798	2168	-22.52	4720	3447	-26.97
9.1 Public administration & defence	2276	1922*	-15.55	3849	3136	-18.52
9.2 Other services	522	246	-52.87	871	311	-64.29
10. Total	11988	9105	-24.04	21244	16847	-20.70

Note: * Rs. 132 crore shown against real estate and business services (administrative departments) have been included under public administration and defence.

TABLE 12

Public Sector Net Saving by the Type of Institution

(Rs. crore)					
	1980-81	1981-82	1982-83	1983-84	1984-85
(1)	(2)	(3)	(4)	(5)	(6)
1. Administrative Departments and Departmental Enterprises					
Old Series : total	2509	3593	2927	1136	-483
New Series : administration department	1795	2842	1764	-122	-1893
: departmental enterprises	-1216	-1400	-1426	-1624	-1932
: total	579	1442	338	-1746	-3825
Difference (new - old)	-1930	-2151	-2589	-2882	-3342
2. Non-departmental enterprises					
Old Series	116	1046	1560	1476	2128
New Series	-820	-46	504	484	1023
Difference (new - old)	-936	-1092	-1056	-992	-1105
3. Public Sector : total					
Old Series	2625	4639	4487	2612	1645
New Series	-241	1396	842	-1262	-2802
Difference (new - old)	-2866	-5243	-3645	-3874	-4447

TABLE 13

Consolidated Accounts of the Nation
Account 1: Gross Domestic Product and Expenditure
(at current prices)

(Rs crore)

Item	1980-81	1981-82	1982-83	1983-84	1984-85
1.1 Compensation of employees					
1.2 Operating surplus	110139	128417	141925	167084	184475
1.3 Mixed income of self employed					
1.4 Consumption of fixed capital	12087	14458	16586	19322	22257
1.5 Indirect taxes	16746	20088	22985	26471	30640
1.6 <u>Less</u> subsidies	3160	3545	4242	5005	7830
1.7 Gross domestic product at market prices	135812	159420	177588	207272	229542
1.8 Government final consumption expenditure	13084	15355	16273	21141	24352
1.9 Private final consumption expenditure	97919	110504	124394	144630	159659
1.10 Gross fixed capital formation	26278	31455	35769	39566	44847
1.11 Change in stocks	6253	10117	5744	5312	9448
1.12 Exports of goods and services	9029	10256	11668	13243	15957
1.13 <u>Less</u> imports of goods and services	13233	14816	15836	17614	19530
1.14 Discrepancies	-3546	-5451	-2533	-2333	-5221
1.15 Expenditure on gross domestic product	135812	159420	177588	207272	229542

In NAS figures in this row are shown split up into categories of factor incomes.

Account 3: National Disposable Income and
its Appropriation
(at current prices)

(Rs crore)

Item	1980-81	1981-82	1982-83	1983-84	1984-85
3.1 Government final consumption expenditure	13084	15355	18272	21141	24352
3.2 Private final consumption expenditure	97919	112504	124394	144630	159689
3.3 Saving	16686	19209	17784	21701	22581
3.4 Statistical discrepancy	-1362	154	2145	2308	2340
3.5 Appropriation of disposable income	126327	147222	162595	189780	208962
3.6 Net domestic product at factor cost*	110139	128417	141965	167084	184475
3.7 Compensation of employees from the rest of the world, <u>net</u>	-29	-18	-62	-63	-101
3.8 Property and entrepreneurial income from the rest of the world, <u>net</u>	374	58	-572	-681	-1323
3.9 Indirect taxes	16746	20089	22985	26471	30640
3.10 Less subsidies	3160	3545	4248	5605	7830
3.11 Other current transfers from the rest of the world, <u>net</u>	2257	2221	2527	2774	3101
3.12 Disposable income	126327	147222	162595	189780	208962

In NAS this is shown split up between categories as shown in Account 1.

Accounts 5: Capital Finance
(at current prices)

(Rs crore)

Item	1980-81	1981-82	1982-83	1983-84	1984-85
5.1 Gross domestic capital formation	30867	36279	37236	43540	48130
5.1.1 Gross fixed capital formation	26276	31455	35769	39866	44847
5.1.2 Change in stocks	6653	10117	5794	8312	9448
5.1.3 Errors and omissions	-2062	-5293	-4327	-4638	-6165
5.2 Purchase of intangible assets n.e.c. from the rest of the world, net	-1663	-2324	-2303	-2269	-2859
5.3 Net lending to the rest of the world					
5.4 Gross accumulation	29204	33955	34933	41271	45271
5.5 Saving	16686	19209	17784	21701	22581
5.6 Consumption of fixed capital	12087	14459	16886	19322	22257
5.7 Capital transfers from the rest of the world, net	438	294	270	255	440
5.8 Unexplained difference*	-7	-7	-7	-7	-7
5.9 Finance of gross accumulation	29204	33955	34933	41271	45271

* It has not been possible to identify the source of difference appearing under 'net capital inflow' when compared between figures of NAS, January, 1987 and New Series, (1988). The difference therefore automatically appears in this Account as the figures of Transactions with Rest of the World are taken from NAS, January, 1987. Unless any of the figures of External Transactions (Account 6 published in NAS, January, 1987) has been revised the only conclusion one can prima facie draw is a change in the treatment of 'non-cash inflow'. Since no mention of this appears anywhere in New Series, (1988) (for example, see paragraph 3.22 page 37) it has been considered best to show the unexplained difference within the Account separately.

TABLE 14

Discrepancies in Gross Domestic
Product and Expenditure
(at current prices)

(Rs. crore)

Year	Overall discrepancy (gross domestic product and expenditure in Account 1)		Disposable income and its Appropriation in Account 3		Saving and Domestic Capital Formation in Account 5		Adjustment of merchandise exports/imports to change of ownership basis in Account 6	
	NAS 1987	NS 1988	NAS 1987	NS 1988	NAS 1987	NS 1988	NAS 1987	NS 1988
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1980-81	-2238	-3546	-2128	-1362	19	-2062	-129	-129
1981-82	-1665	-5451	-1193	154	-153	-5293	-319	-319
1982-83	-1948	-2503	-1085	2145	-535	-4327	-328	-328
1983-84	-4217	-2303	-2589	2308	-1648	-4638	20	20
1984-85	-5275	-5221	-2417	2340	-1455	-6165	-1403	-1403

Note: Cols. (2) and (3) are respectively the sum of cols. (4), (6) and (8) and (5), (7) and (9) except for unexplained difference of Rs. 7 crores in the case of New Series, 1988.

NOTES

1. Referred to as 'New Series, (1988)' in what follows.
2. A System of National Accounts (United Nations, New York, 1968).
3. Except major maintenance expenditures which presently are treated as part of capital formation.
4. The amount will, however, not be the same for domestic product and capital formation/savings.
5. This conclusion is strengthened by the fact that two of the three authors are officially stated to be responsible (along with others) for the preparation of the New Series of National Accounts Statistics (preface paragraph 3, New Series, 1988).
6. The change in the treatment of retained earnings of foreign companies is a matter of reclassification and not revision of figures.


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