

Comparisons of the NSS and CSO Estimates of Private Consumption

(Some Observations Based on 1983 Data)

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The detailed itemwise tabulations of per capita household expenditure for the 38th round of the NSS (January to December 1983) have just become available to us. Recently, CSO (1988) also brought out the revised estimates of private consumption for the financial years 1980-81 to 1985-86, with 1980-81 as the benchmark year. These revised estimates for many commodities and services are markedly different from the earlier (old) estimates, as the CSO has made many changes in its methodology and also availed of more current data on production levels and on ratios/allocations of production among different uses. Some of the revisions, which appear in the New Series of the CSO (1988), also seem to have been influenced by the comments and suggestions made in our two earlier studies (Minhas *et al.*, 1986 and Minhas, 1988).

This paper compares the 1983 (38th round) NSS household consumer expenditure estimates with the CSO estimates of private consumption for 1982-83 and 1983-84. These comparisons are made mainly between the revised estimates of the CSO and the NSS estimates of 1983, except for certain items where reference is also made to the old series, for which strikingly large differences between the old and the new estimates of the CSO are noted.

As the time period of the NSS 38th round estimates is the calendar year 1983, these estimates are not directly comparable with CSO estimates, either for 1982-83 (April 1982 - March 1983) or for 1983-84 (April 1983 to March 1984). However, the NSS estimates of household expenditure on most agricultural products consumed during 1983 should be approximately comparable with the CSO's product-flow estimates for 1982-83, as the latter include the kharif and rabi crops raised during the agricultural year 1982-83 (July 1982 to June 1983). It must nevertheless be noted that the com-

parisons between these two data sets are complicated by an additional difficulty: the CSO estimates for 1982-83 are based on the set of average prices during 1982-83, whereas the NSS estimates are based on the implicit prices for 1983. In other words, the NSS implicit prices for 1983 would have to be compared with some combination of the CSO's implicit prices for 1982-83 as well as for 1983-84.

It is worth noting at this stage that some of the revisions (in the New Series in comparison with the original (old) estimates) appear to have brought in more and new sources of error rather than assure better and more reliable estimates. The CSO's new procedure for the estimation of stocks of foodgrains with traders and producers, for instance, is very unsatisfactory. The assumption that the per capita consumption of foodgrains is given and remains constant in good as well as bad harvest years, and that stocks can be derived from gross availability minus average consumption, is indeed curious. All this has been done to estimate the availability of foodgrains for consumption, which nevertheless has already been assumed to be given for the estimation of stocks. This adjustment procedure of the CSO appears to be stretching too far the oversimplified assumption (that stocks with traders at the end of a year of bad harvest are zero) made by Dandekar (1987) to derive stylized magnitudes of average food-grain consumption over a number of years.

Using the detailed itemwise estimates of NSS monthly per capita consumption expenditure in 1983 in rural and urban areas and the 1983 population figures, we have worked out itemwise all-India estimates of total consumption for the whole year 1983. These are presented in Annexure I along with the corresponding estimates of the CSO for 1982-83 and 1983-84.

At the aggregate level, CSO's revised estimates of total private consumption expenditure in 1982-83 are higher by about 6 per cent than the corresponding 1983 NSS estimates duly adjusted for imputed rents. While the CSO's estimate of expenditure on food in 1982-83

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was two per cent lower than the corresponding NSS estimate, on the other hand the non-food expenditure estimates of the former was 17 per cent higher than the latter (Table 1).

As mentioned earlier, we cannot directly compare the NSS 1983 consumption estimates with those of the CSO because of the substantial differences in the respective time periods to which the two sets of estimates relate. However, we have made some adjustments in the CSO estimates (at the individual item level) to make them broadly comparable with the NSS estimates. These itemwise estimates are discussed below.

Cereals and Pulses

CSO's estimate of expenditure on foodgrains in 1982-83 was about 77 per cent of the NSS foodgrain expenditure in 1983. While this ratio was 78 per cent for cereals and 53 per cent for pulses (other than gram), it was 163 per cent for gram and gram products. These differences are attributable partly to higher NSS foodgrain prices and partly to the differences in the consumption of various cereals and pulses (in quantity terms) under the two estimates. We eliminated the price effect by evaluating the CSO quantities of different foodgrains in 1982-83 at NSS prices and, in consequence of this adjustment, the difference between the two estimates of foodgrains consumption narrows down by 12 percentage points—the ratio between the two estimates increases from 77 per cent to 89 per cent (Table 2).

While for cereals the ratio of CSO expenditure (when evaluated at NSS prices) to NSS expenditure increased by about 8 percentage points—from 78 per cent to 86 per cent, for pulses it increased by 33 percentage points—from 53 to 86 per cent.

For gram the CSO expenditure estimate in 1982-83 was higher than that of the NSS by about 63 per cent. The difference between the two estimates becomes much higher if the quantity of gram allocated to final consumption by the CSO is evaluated at the NSS gram prices. The NSS recorded a consumption of 1.9 million tonnes of gram and gram products in 1983, whereas the CSO estimate of gram consumption in 1982-83 was about 4.4 million tonnes. This requires a careful examination of the CSO's estimation procedure, especially the change made between 1977-78 and 1982-83 in the percentage of gram production allocated to seed, feed, etc. While gram production marginally declined from 5.4 million tonnes in 1977-78 to 5.3 million tonnes in 1982-83, the final consumption showed a steep increase from 3.0 million tonnes in 1977-78 to 4.4 million tonnes in 1982-83. One notable change in the estimation procedure between 1977-78 and 1982-83 was the reduction in the

ratio of gram used for animal feed from 8.3% in 1977-78 to about 4% in 1982-83. This, however, would account for only 2.5 lakh tonnes out of the total discrepancy of about 14 lakh tonnes between the two years. In the NSS the consumption of gram has remained constant around 1.9 million tonnes in 1977-78 as well as in 1983. Part of the difference between the CSO and NSS estimates might be due to the fact that a large quantity of gram products (dal and besan) are used by the commercial establishments for making snacks and sweets which are excluded from the household consumption of gram and gram products under the NSS but are included in the national accounts estimates of private consumption.

One may roughly say that the CSO estimate of foodgrains consumption (in quantity terms) in 1982-83 was about 11 per cent lower than that of the NSS in 1983. However, as mentioned earlier, the time periods of the two estimates are quite different: while the reference period of the NSS was from January to December 1983, the CSO estimate relates to the period from July 1982 to June 1983. In other words, in the NSS consumption estimates, a small part of the kharif crops of 1983-84 was also included. In order to negotiate comparability between the NSS foodgrain consumption estimates of 1983 and that of the CSO for 1982-83, we worked out the CSO's foodgrains consumption estimates in 1983 by inflating the 1982-83 figures to reflect the impact of the larger kharif crops of 1983-84 as compared with 1982-83. Since the consumption of the kharif foodgrains during November and December 1983 under NSS estimates was likely to be from 1983-84 kharif crops, we took roughly one-third of the increase in the consumption of kharif foodgrains in 1983-84 over 1982-83 and added it to the 1982-83 consumption figures of the CSO. Table 3 gives the adjusted consumption estimates of the CSO along with the NSS estimates of foodgrain consumption in 1983. Difference between the two estimates gets further narrowed down by about 7 percentage points.

After effecting these adjustments, the CSO consumption estimates work out to be lower than the NSS estimates by about 6 per cent for cereals and by about 5 per cent for pulses (other than gram).

Consistency of the NSS estimates of foodgrain consumption over time can be judged from the fact that, both in 1977-78 as well as in 1983, the per capita monthly consumption of foodgrains remained almost stationary (with marginal decline in 1983 over 1977-78); the increase in total consumption of foodgrains in 1983 over 1977-78 was mainly due to population growth during the five-year period.

NSS ESTIMATES OF FOODGRAIN CONSUMPTION

	Per capita per month		Total consumption
	(kg)		(million tonnes)
	Rural	Urban	All-India
Foodgrains			
1977-78	16.24	12.68	119.1
1983	15.59	12.17	129.1

Milk and Milk Products

The CSO has revised upwards their earlier estimates of consumption of milk and milk products and, for 1982-83, this increase is shown to be more than 40 per cent. In other words, in the revised estimates for 1982-83, CSO has assumed a much larger production base for milk and has also increased (by assumption) the percentage of marketable surplus of liquid milk. The new marketable surplus ratio is taken to be 32 per cent as against the earlier figure of 5 per cent.

To compare the 1983 NSS estimates of milk consumption with that of the CSO we have worked out the CSO estimates of milk consumption in 1983. As milk is a perishable commodity and has to be consumed within a short period, we have taken one-fourth of the 1982-83 plus three-fourths of the 1983-84 CSO milk consumption as a proxy for CSO's estimate of milk consumption in 1983.

The CSO estimates of private consumption of milk and milk products in 1983 work out to be higher by about 49 per cent as compared to that of the NSS. This difference is partly due to higher (+5%) CSO price of liquid milk (Rs. 3.03/kg as compared to the NSS price of Rs. 2.89/kg). After eliminating the price difference, the CSO consumption estimates of milk and milk products in 1983 are higher by about 42 per cent than the corresponding NSS estimates. This quantitative difference appears to be in the right direction (though its magnitude seems questionable) as a large quantity of milk and milk products is used by the commercial establishments for making sweets, tea, coffee, etc., which is included in the CSO estimates of private consumption of milk but is excluded from the NSS estimates. However, one has to carefully look into the CSO data of butter production and the milk used for making butter. While milk used for making butter has been shown by CSO to go down from about 7.4 million tonnes in 1982-83 to 6.4 million tonnes in 1983-84, the quantity of butter produced has been estimated to be marginally higher.

Edible Oils

Except for vanaspati and imported edible oils for which the CSO-like estimates of private consumption for 1983 can be (approximately) built up directly, the NSS estimates of consumption of the remaining edible oils for 1983 should be broadly comparable with the corresponding CSO estimates of 1982-83 as they pertain to production of oil seeds crops raised during the agricultural year 1982-83. For vanaspati and imported edible oils, we have derived the consumption estimates for 1983, comparable with 1983 NSS figures, by taking one-fourth of the 1982-83 plus three-fourths of the 1983-84 estimates of the CSO.

In value terms, the CSO consumption estimates of total edible oils, including vanaspati, were higher (by about 25 per cent) than the corresponding NSS estimates in 1983. However, the difference between the two estimates was much higher for vanaspati (103%) than for the other edible oils (+10%).

To judge the impact of the price difference between the two estimates, quantity estimates of edible oils and vanaspati have also been worked out and are presented in Table 5, along with the corresponding consumption expenditure estimates. Difference between the two estimates in quantity terms becomes slightly higher as the implicit prices of some of the oils in the CSO estimates were lower than those of the NSS.

It is not surprising that CSO consumption estimates of vanaspati were almost twice as large as the corresponding NSS estimates. Like milk and sugar, a substantial quantity of vanaspati and edible oils is used in hotels and restaurants and other commercial establishments which are included in the CSO consumption estimates of edible oils. In the NSS estimates of household expenditure on edible oils, on the other hand, edible oils used in commercial establishments are excluded. The edible oils contained in sweets, snacks, etc. purchased by the households from commercial establishments are classified by the NSS elsewhere. One must also take note that the differences between the CSO's revised and old estimates of edible oils and oil seeds move quite erratically. For instance, while the difference between the revised and old estimates of the CSO was only Rs. (-) 40 crores in the benchmark (1980-81) year, it increased to Rs. (+) 414 crores in 1982-83 and Rs. (+) 611 crores in 1983-84. Are these large directional changes due to changes (now effected) in production data or in price, or due to some other factors? The CSO's estimation procedure needs to be examined in detail both for the revised as well as for the old estimates.

Fruits and Vegetables

In this group we have covered all fresh fruits and vegetables (including nuts) and have shifted processed fruits and vegetables from the CSO estimates to the miscellaneous food group. The CSO consumption estimates of fruits and vegetables in 1982-83 were higher than the corresponding NSS estimates in 1983 by about 26 per cent. However, for potato and onion, the CSO consumption estimates were considerably lower than the NSS figures. The quantity estimates of the CSO for potato were still lower, as the CSO's implicit price (Rs. 1.74/kg) of potato in 1982-83 was about 12 per cent higher than the NSS price (Rs. 1.56/kg) in 1983. For banana and mango, on the other hand, the NSS consumption estimates in 1983 were just one-fourth of the corresponding CSO estimates in 1982-83. The CSO's consumption estimates for vegetables were considerably lower than the NSS estimates, whereas for fruits the estimates of the CSO were substantially higher (Table 6).

It is generally contended that the NSS is not able to capture all expenditure on fruits, and that their estimates of fruit consumption are on the low side: nevertheless, there are certain major classification differences between the two sources which would affect the comparability of the two sets of estimates. For instance, a large portion of the mango crop is used as *amchur* (dried mango slices) which is reported under spices in the NSS classification. The CSO, on the other hand, shows the entire mango crop under the fruits and vegetables group. This might also be true for many other items such as dry chillies, ginger, etc. Since the CSO now has started using the NSS consumption estimates for spices, it is all the more necessary to make the adjustments for these items to avoid any double counting in the CSO's overall private consumption estimates. At present, the CSO also does not make any adjustment for the consumption of home-grown vegetables (in the kitchen gardens), which are, however, expected to be covered under the NSS estimates. Cashewnuts is another item for which the NSS consumption estimates in 1983 were extremely low (Rs. 15 crores). The CSO, on the other hand, has over-estimated the cashewnut consumption by taking a very high unit price and, additionally, by not making due adjustments for cashewnut exports. This last adjustment is a significant omission, as a major portion of cashew produced and processed in India is exported/re-exported.

Sugar and Gur

The NSS consumption estimates of sugar and gur in 1983 should be broadly comparable with the corresponding CSO estimates in 1982-83 as the latter are based on the sugar cane production during October 1982 to

September 1983. In value terms, the CSO consumption estimates of sugar and gur were higher than the NSS estimates by about 77 per cent. While for refined sugar the former was higher by 33 per cent than the latter, the CSO estimates for gur were nearly three times the corresponding NSS consumption estimates. Some of the differences between the two estimates, of course, were due to higher CSO prices of sugar and gur than the corresponding NSS prices. After eliminating this price difference, the sugar consumption estimates of the CSO, in quantity terms, were higher by only 16 per cent; however, for gur, the CSO estimates remained considerably higher (190 per cent) than the NSS consumption estimates (Table 7).

Keeping in view that a large proportion of sugar (as well as gur) is used in the commercial establishments for making sweets, tea, coffee, etc., the CSO consumption estimates of sugar are expected to be higher than the NSS estimates of household consumption. A difference of 16 per cent in sugar consumption between the two sources appears to be quite reasonable. However, the difference in consumption estimates of gur is abnormally high and needs to be examined. One should also examine the estimation procedure used in the revised as well as in the old CSO estimates, as the *inter se* difference, which was (-) Rs. 437 crores in 1980-81 (benchmark year), increased to (+) Rs. 162 crores in 1982-83.

Meat, Fish and Eggs

The CSO consumption estimates for this group in 1982-83 were about 16 per cent higher than the NSS estimates for 1983. This difference becomes much higher (31 per cent) if one works out the CSO estimates for 1983 from their 1982-83 and 1983-84 figures and compares them with the corresponding NSS estimates in 1983 (Table 8).

While the difference between the CSO and NSS consumption estimates was (-) 15 per cent for meat and meat products, for eggs and poultry it was more than 180 per cent. Similar patterns of difference between the two estimates were also observed in 1977-78.

For fish and fish products, the CSO consumption estimates work out to be about 26 per cent higher than the corresponding NSS estimates. In quantity terms, the difference between the two estimates becomes 33 per cent, as the CSO prices were slightly lower than the NSS prices. NSS consumption of salted and dried fish appears to be on the low side if one compares it with the official estimates of quantity of fish utilised for salting and drying.

In the absence of reliable production and utilisation data on meat and fish, both inland (including subsis-

tence) and marine fish, it is very difficult to reach a comparative judgement on the quality of either of the two estimates. In this context, it may be instructive to note that the CSO has shown substantially higher value for the consumption of fish and fish products in the revised estimates for 1982-83 (Rs. 1398 crores) as compared to its corresponding estimate in the old series (Rs. 1091 crores). The revised consumption estimates of the meat, fish and eggs group in 1982-83 were higher by about 400 crores (by 13%) than the corresponding old estimates, whereas in the benchmark year 1980-81 the difference between the two estimates (old and new) was only Rs. 83 crores (about 3%).

Salt and Spices

In the revised series, the CSO has adopted the NSS consumption estimates for salt and spices. However, their consumption estimates in 1982-83 (Rs. 1921 crores) as well as in 1983-84 (Rs. 2087 crores) were substantially lower than the NSS estimates in 1983 (Rs. 2629 crores). This discrepancy arose primarily due to non-availability of the NSS estimates for 1983 to the CSO at the time of preparing the revised estimates. In the absence of 1983 NSS consumption estimates of salt and spices the CSO carried forward the 1977-78 NSS estimates of per capita expenditure to subsequent years by using population figures and the index of wholesale prices for the spices group.

While adopting the NSS estimates of salt and spices, the CSO must adjust their estimates of fruits and vegetables, as some items of spices under the NSS classification are already included in fruits and vegetables under the CSO estimation procedure.

Other Miscellaneous Food

This group includes tea, coffee, non-alcoholic beverages, processed food (including fruits and vegetable products), all commercial establishments (providing sweets and snacks) and hotels and restaurants. For this whole group, the CSO consumption estimates for 1983 work out to be lower by only 13 per cent than the corresponding NSS estimates in 1983. This difference between the two estimates is indeed small, particularly in view of the fact that all basic materials (sugar, edible oils, milk, etc.) used by the commercial establishments are already included in the CSO estimates of the respective primary products. Table 9 gives the consumption estimates of the other food group in 1983.

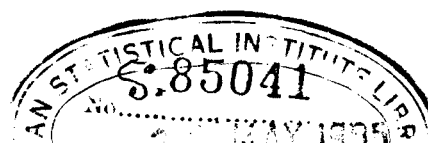
In value terms, the CSO consumption estimates of tea (leaf) in 1983 were higher by about 19 per cent than the corresponding NSS estimates. However, in quantity

terms the former are lower (401 m.kg) than the latter (416 m.kg) by about 4 per cent, as the CSO's price of tea was higher than the NSS implicit price of tea. The difference in tea consumption would be still higher between the two estimates if one takes into account the quantity of tea used in the prepared form and sold as tea cups. The above observations are also true for the consumption estimates of coffee (quantity) in the two sources. While the CSO estimates of coffee (powder) consumption were 34 m.kg in 1983, the NSS figures were 67 m.kg.

NSS consumption estimates of non-alcoholic beverages were just one-half of the corresponding CSO estimates in 1983. However, even the CSO appears to have underestimated the consumption expenditure on soft drinks, as the organised sector alone produced more than 60 million crates (of 24 bottles each) in 1982-83, which, when priced at Rs. 1.50 per bottle, would be worth more than Rs. 200 crores.

Corresponding to the NSS consumption estimates of sweets, snacks and cooked meals, etc., there are no comparable CSO estimates, as all the basic materials used in their preparation are already covered by the CSO under the respective primary products (consumption) estimates, and only the value added under these commercial activities (hotels and restaurants) is separately shown by the CSO. Taking expenditure on tea and coffee cups, sweets and cooked meals together, the NSS consumption estimates of these items in 1983 were nearly two and a half times higher than the CSO estimates of the gross value added in hotels and restaurants. To a large extent, this difference between the CSO and NSS estimates is due to the inherent difference in the estimation procedures of the two agencies. For instance, under the CSO estimation procedure, the value of raw materials, such as milk, sugar, edible oils and fats, is already included in the respective sectors; whereas under the NSS procedure these form a part of the value of the final products, such as sweets, cooked meals, prepared tea and coffee bought by the consumers from establishments.

For other processed foods, which include preserved fruits and vegetables (jam, jelly, pickles, etc.), tinned food products, etc., the NSS consumption estimates in 1983 were substantially lower than the corresponding CSO estimates. While comparing the NSS and CSO consumption estimates of various food groups in 1983, it is to be re-emphasised that there is no one-to-one correspondence between the two sets of estimates and one can only point out the sectors/areas where large differences between the two estimates are observed.



Pan, Tobacco and Liquor

For tobacco products and liquor, etc., as mentioned in our earlier study (Minhas *et al.*, 1986), the NSS consumption estimates are generally on the low side in all the years. Earlier, the CSO also grossly underestimated the expenditure on the liquor group, which however has been substantially increased in the revised series by properly taking into account the excise duties. For tobacco products also, the CSO has revised their consumption estimates. However, the revision is not observed to be in the same direction in all the years. In the benchmark year 1980-81, for instance, the revised estimates were higher than the old estimates by Rs. 190 crores, in 1982-83 the two estimates were almost the same and in 1983-84 the revised estimates were again higher by about Rs. 400 crores than the old estimates.

For pan the CSO has adopted the NSS consumption estimates. However, for supari the CSO is using the official production data (after adjusting for exports and imports), and the CSO estimates are substantially higher than the NSS figures for supari. While adopting NSS consumption estimates of pan, it has to be kept in mind that the NSS includes pan (leaf) as well as finished pan, and the latter would also include a large proportion of supari production. In this situation the alternative course for CSO would be to adopt the NSS consumption estimates of the pan group in toto.

Fuel and Light

The CSO consumption estimates of fuel and light in 1983 were substantially lower (by about 25 per cent) than the corresponding NSS estimates. The difference was primarily due to the very low CSO estimate of firewood consumption at Rs. 2064 crores in 1983 as compared to the NSS figure of Rs. 3653 crores (Table 10).

In the new series, the CSO has revised, substantially upwards, the consumption of firewood and dungcakes in the benchmark year 1980-81. As a result, their 1980-81 revised consumption estimates of all fuel and power items were higher by about Rs. 700 crores than the old estimates. However, in the subsequent years the difference between the revised and old estimates became negative, which was (-) Rs. 113 crores in 1982-83 and (-) Rs. 602 crores in 1983-84. Such anomalous results require examination of the CSO's estimation procedure, for the revised as well as for the old series, especially for the firewood estimates which constitutes about 35 per cent of total fuel expenditure in the CSO and about 45 per cent in the NSS estimate of total fuel and light expenditure.

In the benchmark year 1980-81, the CSO assumed that the total firewood available for consumption would

be nearly 10 times the reported official production of firewood from the forests, whereas in the old series it was taken to be only 10 per cent higher. In the subsequent years, however, the official production figures of firewood have been taken to be drastically lower, which in turn reduced the private consumption figures of firewood. This raises a number of questions about the reliability of official production data.

In view of the weak data base for some fuel items, the CSO may do well to adopt the NSS consumption estimates for all non-commercial fuel items. For two major items of this group, i.e. kerosene oil and electricity, the consumption estimates of the CSO and NSS were only marginally different.

Clothing and Footwear

The CSO's consumption expenditure on clothing and footwear is substantially higher (by 54 per cent) than the corresponding estimates of the NSS. The difference between the two estimates is entirely due to the difference in the clothing expenditure, as the footwear expenditure estimates of the NSS and the CSO were almost the same in 1983 (Table 11).

It is to be noted that the CSO has revised substantially upwards their clothing and footwear consumption estimates in the new series. While in the benchmark year 1980-81 the difference between new and old estimates was about 31 per cent, in 1982-83 the corresponding difference was 14 per cent and in 1983-84 the two estimates differed by 20 per cent. Most of the increase in revised consumption estimates of clothing was in cotton clothing, which rose from Rs. 5822 crores in the old series to Rs. 7926 crores (+36%) in the new series in 1982-83, and from Rs. 6029 crores to Rs. 8807 crores (+46%) in 1983-84. Silk and woollen clothing underwent small increases in the revised estimates as compared to the old estimates: 3 per cent in 1982-83 and 13 per cent in 1983-84. However, for other clothing (synthetic and mixed), the revised consumption estimates were lower than the old estimates in both the years (by about 17 per cent in 1982-83 and 14 per cent in 1983-84). Admittedly, a lot of spade work has been done by the CSO to prepare the benchmark estimates for 1980-81. However, it needs to be examined whether the benchmark estimates have been carried forward to subsequent years with the help of representative and reliable indicators.

Education and Amusements

The CSO's estimates of private expenditure on educational services and related items were substantially higher (by about 58%) as compared to the corresponding NSS

estimates in 1983. The CSO's estimates of expenditure on educational services covers both households as well as non-profit institutions. The NSS, on the other hand, covers only the expenditure by the households and excludes all educational expenditure incurred by the non-profit institutions. For educational services, the CSO's estimate of expenditure was nearly four times the corresponding NSS figure. However for books, stationary, newspapers, etc., CSO's expenditure was only about 30 per cent of the NSS estimate and appears to be on the low side (Table 12).

It is to be noted that in the new series the CSO has drastically reduced the educational expenditure (both for services as well as for education-related items) as compared to the old estimates for 1982-83 and 1983-84, whereas in the benchmark year 1980-81 the two estimates were almost the same. This reduction was made mainly to eliminate duplication of expenditures relating to tuition fees etc. However, for books, stationery, newspapers, etc., there is no clear-cut explanation for their downward revision.

The CSO has done a manifold upward revision of their old estimates of expenditure on amusements, sports, etc., by taking appropriate account of the entertainment tax in their expenditure estimates. The revised CSO estimates of expenditure on amusements for 1983 were about 62 per cent higher than the corresponding NSS estimates, whereas the old estimates of the CSO were considerably lower than the NSS estimates.

Medical Care

The CSO has adopted the NSS expenditure estimates on medical services and medicines. The CSO estimates in 1983, however, were substantially lower (by about one-third) than the corresponding NSS estimates. Here also, like species, the CSO has used the NSS per capita expenditure in 1977-78 and carried it forward to subsequent years by using population figures and the wholesale price index for medicines. What they have ignored is the increase in per capita consumption of medicines and medical services between 1977-78 and 1983.

It is to be remembered that the NSS gives only the household consumption expenditure estimates, whereas the CSO estimates cover households as well as non-profit institutions. Thus, by adopting the NSS estimates of medical expenditure, the CSO would be underestimating the total private expenditure on medical care. Medical care and education are two important areas where charitable and non-profit institutions incur a large amount of expenditure and provide free or subsidised services. The CSO should make adjustments to cover the expenditure

on medical services incurred by the non-profit institutions.

Consumer Services

The CSO expenditure estimates on consumer services in 1983 were substantially higher (by about 90 per cent) than the corresponding NSS estimates. The major difference between the two estimates is in the category of unspecified personal and miscellaneous services (including imputed banking charges) for which the CSO expenditure estimates were more than two and a half times the corresponding NSS estimates in 1983 (Table 13).

Since imputed banking charges are not included in the NSS estimates of consumer services, the difference between the CSO and NSS estimates of total consumer services (after their exclusion) narrows down to 44 per cent. The NSS appear to have underestimated the expenditure on religious services. However, a part of these services might have been provided by the charitable institutions, which are included in the CSO estimates but are excluded from the NSS coverage. For some of the specific services (e.g. domestic, laundry and barber services taken together), the two estimates were almost the same.

Transport and Communication

For this group, the CSO expenditure estimates in 1983 were more than three times the corresponding NSS estimates (Table 14).

It appears that the NSS is not able to capture fully the household expenditure on transport and communications. It may, however, be noted that the CSO in their revised series has drastically reduced (to nearly half) its estimate of road transport expenditure as compared to the corresponding figures in the old series. Their revised estimates of road transport services (excluding railways) were Rs. 3978 crores in 1982-83 as compared to old estimates of Rs. 7869 crores, and in 1983-84 the new and the old estimates were Rs. 5083 crores and Rs. 9370 crores, respectively. Such a drastic reduction must have some sound explanation, with adequate documentation. In case of expenditure on taxi services, for instance, the proportion of gross taxi earnings allocated to household expenditure was reduced from 90 to 50 per cent, and the household expenditure on taxi services was reduced to less than half from Rs. 800 crores in the old series to Rs. 280 crores in the revised series in 1982-83 and from Rs. 840 crores to Rs. 330 crores in 1983-84.

Toilet and Sundry Goods

This group includes all toilet articles, washing requi-

sites and other sundry goods. The CSO consumption estimates for all toilet and sundry goods in 1983 were about 22 per cent lower than the corresponding NSS estimates. For toilet and washing materials, the former were substantially lower (by about 55 per cent) than the latter, whereas for other personal and sundry goods the CSO consumption estimates were nearly three times the NSS estimates in 1983 (Table 15).

The NSS consumption estimates of glass, plastic and earthenware goods appear to be very low. However, for toilet and washing requisites the CSO figures seem to be on the low side as they do not appear to have fully taken into account the production of soaps and detergents in the unorganised sector.

Durable Goods

The CSO consumption estimates for all durable goods were substantially higher (by about 70 per cent) than the corresponding NSS estimates in 1983. Utensils is the only items among the durables where the NSS expenditure estimates were higher than the CSO estimates. For all other durable good items, the NSS consumption estimates were considerably lower than the corresponding CSO estimates (Table 16).

In the CSO consumption estimates of other durables, a major item is other metal products (consisting of safe, almirah, steel trunks, hurricane lantern, etc.) which are of a long-lasting nature. The expenditure on this item (i.e. other metal products) was about Rs. 800 crores in 1982-83 and Rs. 890 crores in 1983-84, and curiously it has been incorporated for the first time in the new series. Thus, in spite of substantial reduction in the CSO's revised estimates of expenditure on TV sets, radios, transport equipment and household electrical appliances as compared to their old estimates, the old and the revised estimates of all durables were the same in 1982-83 (Rs. 3434 crores for the revised series and Rs. 3433 for the old series). For revised estimates of durables the CSO has used some results from the All-India Debt and Investment Survey conducted in the 37th round (January-December 1982) of the NSS. However, for working out expenditure estimates of durables from AIDIS data (given in the form of stocks at the beginning and the end of 1981-82) one has to make a number of assumptions which need to be examined carefully.

Consumer Rent

So far the NSS in their household consumption surveys covered only the actual rent paid for the rented dwellings. Recently the NSS provided the per capita monthly rent for rented as well as owner-occupied houses in urban areas. The CSO in their revised series have

adopted these NSS estimates of per capita rent in urban areas. For rural areas, the CSO have used the average urban per capita rent for kutchha houses as a proxy for average rent in rural areas. Thus the NSS and CSO estimates of consumer rent should be nearly the same in 1983.

Some Concluding Remarks

Since this paper is a straightforward extension of our earlier work in this area, we do not intend to repeat the methodological issues encountered in making meaningful comparisons between the product flow estimates of private consumption in the National Accounting System (NAS) of the CSO and NSS estimates of private consumer expenditure obtained from the household budget surveys. The present study based on 1983 data, of course, endorses many of our earlier observations about the comparability/non-comparability of the estimates of private consumption available from the two data sets in 1972-73 and 1977-78. Nevertheless, certain additional remarks seem to be in order, particularly in view of the fact that the old NAS estimates for the period 1980-81 to 1985-86 have recently been replaced by a New (Revised) Series with 1980-81 as the benchmark year.

As the basic set of prices (not implicit prices) used by the NAS should remain invariant under the old and the revised series, the changes incorporated in the new series must essentially be some function of the revisions in the old data on production (and allocations/ratios among different uses), made in the light of new information received after the old series had been prepared and released during the past few years. One hopes that the CSO would, in course of time, provide proper documentation in support of changes (in quantities) made in the new series.

Proper documentation must be made where there are large differences between the old and the revised estimates of the CSO, particularly for groups such as milk and milk products, beverages, clothing, glassware, entertainment and amusements, metal products and transport services (see Annexure II). Further, explanation is also required in the case of many commodity groups, where directional changes are observed in the difference between the revised and the old estimates for the years, say, 1982-83 and 1983-84 as against the benchmark year (1980-81). These commodity groups include cereals, sugar and gur, edible oils and fuel and power. Also, large fluctuations, from one year to another, are observed in the differences between the revised and the old estimates of the CSO for certain groups such as fruits and vegetables, meat, fish and egg, tobacco products, cloth-

ing and footwear, education and personal services (see Annexure II).

As indicated in our earlier studies, the NSS estimates of expenditure on minor vices (tobacco and liquor) continue to be unreliable; and the NSS estimates for some other commodity groups, particularly fruits and durables, appear to be underestimates. It must however be noted that the CSO estimates for these commodity groups are also based on extremely weak data.

Derivation of annual changes in stocks (held by producers and traders) in the NAS framework, both in the old and in the revised series, is grounded in data and secondary information of questionable value; the procedure adopted in the new series is equally unsatisfactory.

For certain commodity groups and services, the CSO have adopted the NSS consumption estimates. However, adequate care does not seem to have been exercised to avoid double counting, or underestimation, in the aggregate private consumption expenditure. A certain proportion of mango and chillies, for instance, is included both in the expenditure on spices as well as in that on fruits and vegetables in the CSO estimates. Medical expenditure incurred by the non-profit and charitable institutions, on the other hand, does not seem to have been included in the CSO estimates for private consumption expenditure.

The CSO's data base for deriving private expenditure on non-commercial fuels is extremely shaky. As the prospects of improvement in production data for non-commercial fuels seem dim, the CSO are better advised to adopt the NSS estimates for this group.

It has been shown elsewhere (Minhas, 1988) that the standard errors of the NSS estimates of consumer expenditure on broad commodity groups, most of the individual items and all commodity groups taken together are not only small, but are also quite stable from round to round. On the other hand, the CSO's current price estimates of private consumption for the same years in the old and the revised series (1980-81 to 1985-86) are vastly different from each other, not only for many commodity groups but also for aggregate private consumption. The margin of uncertainty (error) in NAS estimates—uncertainty caused by subjective adjustments, methodological innovations and changes in production data—

is uncomfortably too large to sustain a healthy degree of confidence in them. Some crude estimates of the margin of uncertainty (error) in the NAS estimates of private consumption by commodity groups, total private consumption and the two broad aggregates of food and non-food for the years, 1980-81, 1982-83 and 1983-84, are provided in Annexure II.

A Postscript

The results reported in this paper were presented at the IARNIW Seminar at Lucknow on 16-18 November 1988. In view of the many serious misgivings and doubts which were expressed by the Seminar participants about the CSO's revised estimates of private consumption for the years 1980-81 to 1985-86, these revised estimates have since been re-revised (NAS 1989) by the CSO. In other words, now we have three different sets of NAS estimates of private consumption—Old Series (NAS 1987), Revised Series (NAS 1988) and the Re-revised Series (NAS 1989). This paper is confined to the comparative analysis of the old and the revised series only, as the data of the re-revised series have not yet been examined. However, we intend to analyse the re-revised series in a subsequent paper, which will assess all these three sets of the CSO's current price estimates of private consumption for their *inter se* validity as well as compare them with the NSS estimates for 1983 to seek cross-validation of private consumption data in the two sources.

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TABLE 1—AGGREGATE PRIVATE CONSUMPTION EXPENDITURE

(Rs. crores)

Group	CSO (revised)		NSS 1983	Col. 2/4 %	CSO (old)		Col. 6/4 %
	82-83	83-84			82-83	83-84	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Food	67960	84690	69040	98	62860	78960	91
Non-Food	56920	63650	48710	117	51620	57440	106
Total	124880	148340	117750	106	114480	136400	97

NOTE: We have ignored the CSO's figures of consumption out of the stocks, which were plus Rs. 580 crores in 1982-83 and minus Rs. 2730 crores in 1983-84 under the revised series; and minus Rs. 690 crores in 1982-83 and minus 800 crores in 1983-84 in the old series.

TABLE 2—CONSUMPTION ESTIMATES OF FOODGRAINS

(Rs. crores)

Item	CSO (revised)		NSS 1983	Col. 2/4 %	CSO (at NSS prices) 82-83	Col. 6/4 %
	82-83	83-84				
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Cereals	23759	30293	30581	78	26293	86
Gram	1149	1437	706	163	1636	232
Pulses	1755	2542	3327	53	2863	86
Foodgrains	26663	34272	34617	77	30792	89

TABLE 3—CONSUMPTION ESTIMATES OF FOODGRAINS
(in million tonnes)

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	1982-83	1983-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
Cereals	107.8	124.7	113.7	121.1	94
Gram	4.4	3.9	4.4	1.9	232
Pulses	5.6	7.0	6.0	6.3	95
Foodgrains	117.8	135.6	124.1	129.3	96

TABLE 4—CONSUMPTION OF MILK AND MILK PRODUCTS

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	1982-83	1983-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
Total consumption (Rs. crores)	11663	13500	13041	8765	149
Milk price (Rs. per kg.)	2.85	3.09	3.03	2.89	105
Total quantity produced (m. tonnes)	35.79	38.59	37.89		

TABLE 5—CONSUMPTION OF EDIBLE OILS AND VANASPATI

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	82-83	83-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
<i>A. Value of consumption</i>					
1. Vanaspati (Rs. crores)	1415	1496	1475	728	203
2. Edible oils („)	4170	6019	4269	3870	110
3. Total („)	5585	7515	5744	4598	125
<i>B. Quantity of consumption</i>					
1. Vanaspati (000 tonnes)	870	901	893	455	196
2. Edible oils („)	2845	3558	2935	2472	119
3. Total („)	3715	4459	3828	2927	131

TABLE 6—CONSUMPTION OF FRUITS AND VEGETABLES

(Rs. crores)

Item	CSO (revised)		NSS 1983	Col. 2/4 %
	82-83	83-84		
(1)	(2)	(3)	(4)	(5)
Potato	1050	1522	1494	70
Onion	370	471	675	55
Banana and mango	2140	2444	531	403
Cashewnuts	417	658	15	—
Other fruits and vegetables	4637	5636	4098	113
Total fruits and vegetables	8614	10731	6813	126

TABLE 7—CONSUMPTION OF SUGAR AND GUR

(Rs. crores)

Item	CSO (revised)		NSS 1983	Col. 2/4 %
	82-83	83-84		
(1)	(2)	(3)	(4)	(5)
Refined sugar	2560	3236	1928	133
Gur	2572	3119	868	296
Others	91	96	156	—
Total sugar and gur	5223	6451	2952	177
Sugar (000 tonnes)	5000	6296	4299	116
Gur („)	9157	10167	3161	290

TABLE 8—CONSUMPTION OF MEAT, FISH AND EGGS

(Rs. crores)

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	82-83	83-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
Meat and products	1279	1446	1404	1648	85
Eggs and poultry	1336	1623	1551	550	282
Fish	1398	1647	1585	1260	126
Total	4013	4716	4541	3458	131
Fish (000 tonnes)	1809	2133	2052	1539	133

TABLE 9—CONSUMPTION ESTIMATES OF OTHER MISCELLANEOUS FOOD

(Rs. crores)

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	82-83	83-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
Tea (leaf)	887	1309	1203	1011	119
Coffee (powder)	53	79	72	130	55
Tea and coffee (cups)	—	—	—	1270	—
Non-alcoholic beverages	94	130	121	60	202
Bread and biscuits	461	464	463	351	132
Sweets and refreshments	37	38	38	721	70
Cooked meals (H&R)	1197	1376	1331	1237	—
Other processed food	904	1082	1037	124	
Total miscellaneous food	3633	4478	4265	4904	87

TABLE 10—CONSUMPTION OF FUEL AND LIGHT

(Rs. crores)

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	82-83	83-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
Coke and coal (inc. charcoal)	182	194	191	330	58
Electricity	588	665	646	697	93
Kerosene oil	1133	1292	1252	1295	97
Firewood	2291	1989	2064	3653	56
Dungcake	789	875	854	1042	82
Matches	353	379	373	293	127
Other fuel and light	355	431	412	374	110
Total fuel and light	5691	5825	5791	7684	75

TABLE 11—CONSUMPTION ESTIMATES OF CLOTHING AND FOOTWEAR

(Rs. crores)

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	82-83	83-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
Clothing	13235	15030	14581	9068	161
Footwear	1041	1140	1115	1118	100
Total	14276	16170	15696	10186	154

TABLE 12—EXPENDITURE ESTIMATES ON EDUCATION AND AMUSEMENTS

(Rs. crores)

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	82-83	83-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
Educational services	2109	2223	2195	535	410
Books, stationery, newspapers, etc.	280	308	301	1043	29
Total educational expenditure	2389	2531	2496	1578	158
Amusement, etc.	1150	1143	1145	707	162

TABLE 13—EXPENDITURE ESTIMATES ON CONSUMER SERVICES

(Rs. crores)

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	82-83	83-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
Domestic and laundry	481	506	500	407	97
Barber and saloons	318	354	345	466	
Religious services	261	294	286	68	420
Other personal services	762	838	818	692	284
Other miscellaneous services	984	1203	1148		
Total consumer services	2806	3195	3097	1633	190
of which banking charges	634	785	747		

TABLE 14—CONSUMPTION EXPENDITURE ON TRANSPORT AND COMMUNICATION

(Rs. crores)

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	82-83	83-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
Rail services	929	1083	1044	314	332
Other transport services	4190	5196	4945	1980	250
Expenditure on own conveyance	1773	2072	1997	289	691
Communications	516	585	568	80	711
Total transport and communication	7408	8936	8554	2663	321

TABLE 15—CONSUMPTION ESTIMATES OF TOILET AND SUNDRY GOODS

(Rs. crores)

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	82-83	83-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
Toilet and washing goods	1236	1474	1414	3143	45
Glass, plastic, etc. goods	991	1195	1144	107	} 284
Other personal and sundry goods	368	279	301	401	
Total toilet and washing goods	2595	2948	2859	3651	78

TABLE 16—CONSUMPTION EXPENDITURE ON DURABLE GOODS

(Rs. crores)

Item	CSO (revised)			NSS 1983	Col. 4/5 %
	82-83	83-84	1983		
(1)	(2)	(3)	(4)	(5)	(6)
Furniture	441	502	487	263	185
T.V., radio, etc.	315	371	357	198	180
Utensils	332	350	345	519	67
Ornaments	822	521	596	404	148
Transport equipment	376	507	474	324	146
Other durables	1148	1245	1221	319	383
Total durables	3434	3496	3480	2027	172

ANNEXURE I
PRIVATE CONSUMPTION EXPENDITURE IN INDIA

(Rs. crores)

Sl. No.	Item	CSO (revised)		NSS 1983	CSO (old)	
		1982-83	1983-84		1982-83	1983-84
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Rice	12215	17144	17774	12276	17279
2.	Wheat	7279	7768	8120	6396	7013
3.	Jowar	1612	1931	1806	1525	1761
4.	Bajra	779	1154	1089	739	1025
5.	Maize	1096	1331	958	1090	1377
6.	Other cereals	842	1035	1094	811	1044
	Cereals (Sub-total)	23823	30363	30841	22837	29499
7.	Arhar	715	1023	1472	750	972
8.	Moong	339	515	578	340	518
9.	Urad	314	452	450	284	408
10.	Other pulses	1472	1919	1273	1398	1731
	Pulses (Sub-total)	2840	3909	3773	2772	3629
	A. Foodgrains (Sub-total)	26663	34272	34614	25609	33128
	B. Milk and products	11663	13500	8765	8334	9459
1.	Vanaspati	1415	1496	728	1430	1468
2.	Other oils and oil seeds	4435	6397	3910	3949	5592
	C. Edible oils (Sub-total)	5850	7893	4638	5379	7060
1.	Potato	1050	1522	1494	1149	1767
2.	Fruits and other vegetables	7940	9775	5590	8220	10992
	D. Fruits and vegetables (Sub-total)	8990	11297	7084	9369	12059
	E. Sugar and gur	5223	6451	2952	5061	6595
1.	Meat and egg	2615	3069	2198	2470	2915
2.	Fish (fresh)	1398	1647	1126	1091	1321
3.	Fish (dried and salted)			134		
	F. Meat, egg and fish (Sub-total)	4013	4716	3458	3561	4236
1.	Salt	180	188	166	180	187
1.	Spices	1741	1899	2463	1500	1616
	G. Salt and spices (Sub-total)	1921	2087	2629	1680	1803
1.	Tea and coffee	940	1388	1141	956	1383
2.	Tea (cups)	—	—	1188	—	—
3.	Coffee (cups)	—	—	82	—	—
4.	Other non-alcoholic beverages	94	130	60	68	70
5.	Salted refreshments	—	—	433	—	—
6.	Cooked meals (hotels, restaurants)	1197	1376	1237	1534	1758
7.	Other processed food	1402	1584	763	1306	1411

(continued)

ANNEXURE I (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
H.	Miscellaneous food (Sub-total)	3633	4478	4904	3864	4622
I.	Food (Sub-total)	67956	84694	69044	62857	78962
	1. Pan, supari, etc	682	747	641	696	894
	2. Liquor etc.	1659	2176	718	688	677
	3. Tobacco and products	2989	3338	1690	2959	2888
	I. Pan, liquor and tobacco (Sub-total)	5330	6261	3049	4343	4459
	1. Electricity	588	665	697	569	638
	2. Kerosene oil	1133	1292	1295	1334	1521
	3. L.P.G.	175	214	—	175	214
	4. Other fuel and power	3795	3654	5692	3451	3756
J.	Fuel and power (Sub-total)	5691	5825	7684	5529	6129
	1. Clothing	13235	15030	9068	11710	12528
	2. Footwear	1041	1140	1118	817	955
K.	Clothing and footwear (Sub-total)	14267	16170	10186	12527	13483
	1. Amusement etc.	1150	1143	707	146	156
	2. Educational services	2109	2223	535	2820	3239
	3. Books, newspapers and stationery	280	308	857	443	571
	4. Other educational expenditure	—	—	186	—	—
L.	Education and amusement (Sub-total)	3539	3674	2285	3409	3966
M.	Medical services (Sub-total)	2798	3173	4704	2284	2582
	1. Domestic and laundry	481	406	407	443	501
	2. Other personal services	1341	1586	1226	1210	1482
	3. Miscellaneous services	984	1203		866	1052
N.	Consumer services (Sub-total)	2806	3195	1633	2519	3035
	1. Transport services	5119	6279	2294	8865	10528
	2. Running expenses on own transport	1773	2072	289	1784	2116
	3. Communications	516	585	80	516	585
O.	Transport and communications (Sub-total)	7408	8936	2663	11165	13229
	1. Household and personal goods	1407	1532	3303	2050	2129
	2. Other sundry goods	1188	1416	348	1283	1392
P.	Household and sundry goods (Sub-total)	2595	2948	3651	3333	3521
	1. Furniture	441	502	263	451	495
	2. Electric appliances	180	201	94	388	428
	3. T.V., radio etc.	315	371	198	631	685
	4. Transport equipment	376	507	324	676	869
	5. Other durables	2122	1915	1148	1287	1229
Q.	Durable goods (Sub-total)	3434	3496	2027	3433	3706

(continued)

ANNEXURE I (concluded)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
R.	House rent (Sub-total)	9045	9974	10452	3082	3326
S.	Miscellaneous expenditure (Sub-total)	—	—	373	—	—
II	Non-food expenditure (Sub-total)	56922	63652	48707	51624	57436
III	Total consumption expenditure	124878	148346	117751	114481	136398
T.	Adjustment of stocks	+577	-2734	—	-689	-796
IV	Adjusted private consumption expenditure	125455	145612	117751	113792	135602
	Population (million)	709	724	720	709	724

ANNEXURE II

DIFFERENCE BETWEEN CSO'S REVISED AND OLD ESTIMATES OF PRIVATE CONSUMPTION AS PERCENT OF OLD ESTIMATES

	1980-81	1982-83	1983-84
1. Cereals and bread	(+) 0.7	(+) 7.9	(-) 3.8
2. Pulses	(+) 0.2	(+) 4.4	(+) 2.8
3. Sugar and gur	(-) 7.6	(+) 3.2	(-) 2.2
4. Oils and oilseeds	(-) 0.8	(+) 7.7	(+) 8.6
5. Fruits and vegetables	(+) 0.2	(+) 3.9	(+) 2.6
6. Potato and tubers	(-) 6.4	(-) 5.6	(-) 12.7
7. Milk and products	(+) 30.0	(+) 40.0	(+) 43.0
8. Meat, egg and fish	(+) 3.1	(+) 11.1	(+) 9.5
9. Coffee, tea and cocoa	(-) 1.8	(-) 1.7	(+) 0.4
10. Spices	(+) 1.1	(+) 16.1	(+) 17.5
11. Other food	(+) 7.3	(+) 13.3	(+) 16.7
12. Beverages	(+) 113.6	(+) 132.1	(+) 206.2
13. Pan and other intoxicants	(-) 3.3	(-) 1.9	(-) 16.2
14. Tobacco and products	(+) 8.2	(+) 0.1	(+) 14.2
15. Rent and water	(+) 164.7	(+) 193.5	(+) 199.9
16. Hotels and restaurants	(-) 26.5	(-) 22.0	(-) 21.7
17. Fuel and power	(+) 20.9	(-) 2.1	(-) 10.0
of which other fuel	(+) 40.4	(+) 2.0	(-) 10.9
18. Clothing and footwear	(+) 31.3	(+) 14.0	(+) 19.9
19. Furniture	(+) 2.2	(-) 2.2	(+) 1.4
20. Household appliances	(-) 67.3	(-) 63.9	(-) 64.8
21. Glassware and utensils	(+) 50.6	(+) 60.9	(+) 78.8
22. Other household goods	(-) 26.4	(-) 4.7	(-) 4.0
28. Household services	(+) 20.3	(+) 8.2	(+) 0.8
24. Medical care	(+) 23.1	(+) 22.5	(+) 22.9
25. Transport equipment	(-) 43.2	(-) 44.4	(-) 41.7
26. Operation own transport	(-) 2.6	(-) 0.6	(-) 2.1
27. Transport services	(-) 40.4	(-) 42.3	(-) 40.4
28. Communication	—	—	—
29. Recreation services	(+) 435.5	(+) 665.4	(+) 578.2
30. Education	(+) 0.6	(-) 25.2	(-) 31.4
31. Equipment, paper and stationery	(-) 53.7	(-) 28.5	(-) 32.0
32. Personal care and effects	(+) 35.0	(+) 10.8	(+) 0.3
33. Other personal goods	(-) 23.8	(-) 10.7	(-) 14.2
34. Other miscellaneous services	(+) 15.4	(+) 13.9	(+) 14.6
I Total private consumption expenditure of which	(+) 9.0	(+) 10.2	(+) 7.4
(a) Food (inc. H&R)	(+) 2.4	(+) 10.3	(+) 4.9
(b) Non-food	(+) 18.3	(+) 10.2	(+) 10.8