

CHAPTER 11

TRADE, HOTELS AND RESTAURANTS

Coverage

11.1 The activities considered in the sector are (i) wholesale and retail trade in all commodities both produced at home (including exports) and imported, (ii) purchase and selling agents, brokers and auctioneers, (iii) services rendered by hotels and other lodging places, restaurants, cafes and other eating and drinking places. Wholesale trade covers units which resell without transformation, new and used goods generally to the retailer and industries, commercial establishments, institutional and professional users or to other wholesalers. Retail trade covers units which mainly resell without transformation new and used goods for personal or household consumption.

Methodology and Source material

11.2 Wholesale and retail trade deal with distribution activities of goods produced in other sectors of the economy like agriculture, mining, manufacturing, etc. The gross output in the distribution of commodities is measured as gross trade margins of the trading establishments i.e. gross output is the gross margins realised on the sale of goods in the same condition as they have been purchased reduced by the delivery cost of the goods to the unit. From the gross trade margins the intermediate cost incurred is to be deducted for arriving at the GVA. Due to the nature of available data, the estimates from trade, hotels and restaurants are being prepared by adopting the income approach.

Sources of Data

11.3 The major sources of data used are (i) the population census data from which the details of working force are obtained, (ii) the follow-up surveys of EC concerned with trade, hotels & restaurants, (iii) annual reports of public sector enterprises dealing in trade, hotels and restaurants, and (iv) RBI analysis of companies in private corporate sector and cooperative societies.

11.4 Details of available data and the method of estimation of working force based on the population census data are given in Chapter 17 on Working Force.

11.5 The EC of 1977-78 provided the basic frame for conducting sample surveys on many sectors including trade, hotels and restaurants. The first follow-up survey on trade, hotels and restaurants was conducted in 1979-80. The survey was conducted in two parts, DE establishments with six or more workers and/or annual turn over of Rs. 1,00,000 or more was conducted by CSO. NDE establishments with total number of five or less workers and annual turn over less than Rs.1,00,000 and OAE were surveyed by the NSSO in the 34th round during 1979-80. All public sector establishments, namely, central, state and local government corporations and undertakings were outside the scope of the survey.

11.6 Similarly, after the second EC conducted in 1980, follow-up surveys were programmed on various sectors. The survey on hotels and restaurants was conducted by the CSO during 1983-84. The survey called the 'Enterprise Survey' covered all the three sub-groups, namely, DE, NDE and OAE. The corresponding survey for trade sector was conducted in the year 1985-86.

11.7 The available results of 1979-80 follow up survey at the time of preparation of the new series were (i) DE data for trade, hotels and restaurants and (ii) computer print out of the results of NDE and OAE for trade only (and not for hotels and restaurants). So far as 1983-84 follow up survey was concerned, the complete results of the enterprise survey covering DE, NDE and OAE for hotels and restaurants were available. The results of similar survey relating to trade conducted during 1985-86 were not available.

11.8 On examination of the results of 1979-80 survey on trade, hotel & restaurants during 34th round of NSSO, it was found that there was a conceptual problem with regard to estimation of value added from these enterprises since the estimates of GVA did not take into account the opening and closing stock which are crucial for the estimation of value added from this sector. This may be the basic reason due to which the combined value added per worker for NDE and OAE in the trading sector for 1979-80 was lower than those of 1974-75 (29th round of NSSO) in a number of cases. Further, the value added per worker from (i) DE, 1979-80 for trade and (ii) ES, 1983-84 data for hotel and restaurant, on examination were found to be consistent among themselves as well as the existing estimates.

11.9 In the case of public sector enterprises, the annual reports are obtained by the CSO and complete analysis of the reports including the profit and loss account and balance-sheet are undertaken for preparing the components of value added and other aggregates. The details are discussed in the Chapter 23 on Public Sector. The data relating to central public undertakings are generally up-to-date and complete. In the case of a few undertakings of the State Governments, which are generally small in comparison, a time lag of one or two years is sometimes observed.

11.10 RBI undertakes sample studies of finances of joint stock companies in the private corporate sector. Besides other aggregates, estimates of GVA for the sample companies dealing in trade, hotels & restaurants are also presented. For details of these studies see chapter 21 on 'Capital Formation'. In case of co-operative societies, the NABARD's publication entitled 'Statistical Statements relating to co-operative movement in India' Part II-Non-credit societies is the main source. The publication has a time lag of 4-5 years. However, the requisite data are collected directly from NABARD.

Estimates at Current Prices

11.11 The estimates of GVA are prepared separately for the organised segment comprising public sector and private corporate sector (including co-operatives) enterprises and the rest of the enterprises constituting unorganised segment. For the organised segment, the estimates are based on the current data whereas for the unorganised segment, the base year estimates are carried forward with the indicators of Gross Trading Income (GTI).

Organised

11.12 **Trade, hotels & restaurants:** The annual estimates (including bench-mark year estimates) for organised trade, hotels and restaurants activities are prepared using the results of the analysis of the annual reports of the public sector and the details of analysis of finances of joint stock companies for the private corporate sector and co-operative societies. While the analysis of the annual reports of the public sector enterprises is undertaken in the CSO, the results for the private corporate sector are furnished by RBI. For co-operative societies also these details are available in the NABARD publications. In the case of public sector, annual reports of non-departmental enterprises of the Central and State governments e.g. FCI, STC, MMTC, IDC, ITDC etc., are generally available for most of the important enterprises by the time the estimates for NAS are prepared. In the case of a few small enterprises for which the reports are not received, the estimates are prepared either by reproducing the previous years estimates or by using the trend observed in the earlier years. These estimates are revised as soon as the reports are received. In the case of private corporate sector and co-operatives, the time lag is quite substantial. In these cases the estimates available for the latest year are carried forward on the basis of growth rate in the paid up capital of the relevant sub-sector. These are revised as soon as the actual estimates are received from the RBI.

Unorganised

Bench-mark estimates for 1980-81

11.13 **Trade:** In the case of unorganised sector, the estimates for bench-mark year 1980-81 have been prepared separately for rural and urban areas which are obtained as a product of (i) number of workers and (ii) GVA per worker during the year. The bench-mark estimates of GVA are carried forward to other years through the index of gross trading incomes in the commodity producing sector of the economy.

11.14 The estimates of number of workers are obtained by adjusting the 1981 population census based working force. A number of adjustments are required to estimate the working force in the private sector. The population census working force is adjusted first to refer to mid-financial year 1980-81 and thereafter it is adjusted to include subsidiary and marginal workers. Details of these adjustments are discussed in Chapter 17 on Working Force. Since the estimates of working force for private sector are required, the mid-financial year estimates have to be further adjusted to exclude the estimates of working force in public sector. DGET provides the distribution of employment in public sector by major industries. It is further assumed that these activities of the public sector are undertaken only in the urban areas. By subtracting the estimates of employment in the public sector from the total working force the estimates of working force in the private sector are obtained. The estimates of working force in trade are given in Table 11.1.

11.15 While examining the data of the 1979-80 follow up survey of EC, it was found that in the case of trade, the results of the segment relating to OAE and NDE of the 34th round were not compatible with the similar results of the NSSO. The results also showed a large number of inconsistencies within the sub-sectors. In view of these discrepancies in the data relating to NDE and OAE, it was decided to make use of DE survey data only in compiling the GVA per worker in the private sector. This, in the normal course, should be an over-estimate as it is expected that the larger establishments covered in the DE survey may result in higher GVA per worker than those in a smaller establishments covered in NDE and OAE. The estimates of GVA per worker obtained from the DE survey relate to the year 1979-80 and therefore, it is necessary to adjust these estimates to correspond to the year 1980-81. In order to do this, the GVA per worker in 1979-80 has been carried forward with the index of wage rate of rural skilled workers for rural areas and with the CPI relating to urban non-manual employees for the urban areas. The assumptions involved in these cases are that the rate of increase in GVA per worker in rural areas may be related to the rate of increase of the wage rate of rural skilled workers while in urban areas the rate of increase will be similar to the increase in prices paid by urban non-manual employees. The details of estimates for bench-mark year 1980-81 for trade are given in Table 11.1.

11.16 **Hotels and restaurants:** The complete results of 1979-80 follow-up survey for hotels and restaurants were not available at the time of release of the New Series as the results of NDE and OAE were still awaited. At the same time, the complete results of 1983-84 follow up survey were available. Since the results were available for all the three segments namely DE, NDE and OAE and on examination these results were found to be reliable and internally consistent as well as consistent with the current estimates, it was decided to make use of the results of 1983-84 survey for working out the GVA as such instead of using the GVA per worker. However, these estimates relate to the year 1983-84 and these have to be adjusted to correspond to the bench-mark year 1980-81. This adjustment has been done with the help of index of Gross Trading Income (GTI) which is regularly compiled for extrapolating the bench-mark estimates of trade, hotels and restaurants for other years as discussed in detail in subsequent paragraphs 11.17 to 11.20. The details of bench-mark estimates for hotels and restaurants are given in Table 11.2.

Annual estimates

11.17 **Trade:** The annual estimates at current prices are obtained by extrapolating the corresponding bench-mark estimates for 1980-81 by a specially constructed index of GTI

at current prices. The GTI is based on (i) the value of marketable surplus in commodity producing sectors in agriculture, livestock, fishing, forestry, mining and manufacturing and (ii) the corresponding TTMs. For preparing the index of GTI, some provisions have been incorporated in the ratios of Marketable Surplus and TTMs'. In the 1970-71 series, the marketable surplus ratios for agricultural commodities were based on the studies undertaken by the DMI in 1950's and 1960's. These ratios were examined afresh by a sub-group of Estimation of Marketable Surplus of Agricultural Commodities in the Ministry of Agriculture in connection with the revision of Index Number of wholesale prices. The CSO had also collected data on marketable surpluses for milk from the major milk producing states. Recently the DMI has brought out reports on jowar and mangoes which provide new ratios in respect of these commodities.

11.18 All these newly available information were examined in the CSO and based on these examination, revised ratios in respect of commodities have been used in the new series. For want of current data, no revision could be made in the marketable surplus ratios in respect of the remaining commodities in agriculture, livestock, fishing, forestry and manufacturing which are based on relevant Marketing Reports of DMI. For the remaining products of Agriculture and Livestock like sugarcane, oilseeds etc., the source is commercial Crop Statistics issued by DESAg. For cash crops like tea, coffee and cocoa and other commodity producing sectors, total production is taken as marketable surplus. The marketable surplus ratios used for all these commodities are given in Appendix 11.1.

11.19 The marketable surplus value obtained from commodity producing sectors are at factor cost prices. For estimation of volume of goods handled by traders, data on volume of transactions at each stage alongwith corresponding prices paid are required. But such detailed data are not available. However, data on prices in primary markets for agricultural products, pithead prices for minerals, ex-factory prices for manufactured goods etc., are available in connection with evaluation of gross output in these sectors. The corresponding wholesale and retail prices are also available. The TTM's required for marking up ex-farm/ex-factory prices are revised from time to time. Since the existing TTM's for manufacturing are based on scanty data available from various sources such as NSSO, DESAg etc., and related to very distant past, CSO undertook a special study to revise these ratios. Details of this study are given in the chapter 19 on Private Final Consumption Expenditure. Based on the information obtained from a large number of dealers through correspondence and personal discussions, the TTM's in respect of various manufactured goods have been revised in the new series. Appendix 11.2 gives the TTM's for groups of commodities used in the new series.

11.20 The GTI is, thereafter, estimated by multiplying the marketable surplus by the corresponding trade and transport margins for groups of commodities for which these ratios are available. The base year estimates of GVA are then carried forward with the index of GTI thus obtained to arrive at the annual estimates of GVA.

11.21 **Hotels and restaurants:** In the case of hotels and restaurants, apart from the follow-up surveys of EC, there is no other current data to indicate trends in the output in the activity of unorganised hotels and restaurants. Therefore, the annual estimates of this component are obtained by carrying forward the bench-mark estimates of GVA with the index of GTI constructed and used in the unorganised trade, the assumption being that the trend in income of unorganised hotels and restaurants will be the same as the trend in the income in the unorganised trade.

Estimates at Constant Prices

11.22 The estimates at constant prices have also been prepared separately for the organised and unorganised components

Organised

11.23 Trade: The estimates for organised trade have been obtained on the basis of quantum indices of purchases and sales. In the case of public sector, the quantum index is obtained on the basis of purchase and sales of public sector trading companies, the data on which are available from their annual reports. The quantities of different products handled by FCI, MMTC, STC and IDC have been evaluated at base year prices to prepare the quantum index. In the case of joint stock companies and co-operative societies engaged in trading activity, the base year estimates have been similarly moved with the quantum index of sales of private corporate sector and co-operatives. This quantum index of sales is obtained by deflating the current value of sales by wholesale price index of selected commodities, namely, non-food articles and manufactured products. The data on sales at current prices of the private corporate sector have been obtained from RBI sample studies of finances of medium and large public and private limited companies. The sales data so obtained did not cover the whole sector and hence these have been adjusted for full coverage with the ratio of paid up capital of the sample companies to total paid up capital, data on which are available from the Company Law Board. The sales data obtained from RBI studies generally have a time lag of 2-3 years. For the years for which these data are not available, the estimates have been prepared by carrying forward the latest year estimates with growth observed in the previous years.

11.24 Hotels and restaurants: In the absence of data for the public sector the quantum index of sales of private corporate sector only have been used to carry forward the base year figures for the organised part (public and private combined) to obtain the corresponding constant price estimates. The quantum index of private corporate sector has been obtained following the same method as that for trade the only difference being that the volume of sales at current prices has been deflated by wholesale price index of consumer goods.

Unorganised

11.25 The estimates at constant prices for unorganised trade have been obtained by extrapolating the corresponding base year (1980-81) estimates by a specially prepared index of GTI at constant (1980-81) prices. This index is prepared in the same way as for estimates at current prices, the only difference being that these are based on the value at 1980-81 prices of marketable surplus and trade and transport margins in commodity producing sectors. In the absence of any other data, the same index of GTI has been used for obtaining the value added at constant prices for the unorganised activities of hotels and restaurants.

Quality and limitations of Data base

11.26 The estimates of public sector are based on current data and can be considered as reliable. In the case of private corporate sector, the estimates are based on data from RBI sample studies and finances of medium and large public and private limited companies. Such data become available after considerable time lag and in the absence of current data, the estimates are built-up on the basis of growth in the paid up capital.

11.27 For the unorganised part of the activity only the bench-mark estimates are based on data available from sample surveys. Even in this case, the survey years are not coterminous with the bench-mark year and this results in errors in the estimates. For other years, no current data are available and estimates are built up with the indicator of GTI from commodity producing sectors. The estimates for this sector, therefore, have large scope for improvement.

APPENDIX 11.1 : MARKETABLE SURPLUS RATIOS

| Commodities | Ratio | Commodities | Ratio |
|-------------------------------|-------|---------------------------------|-------|
| 1. Rice | 42.7 | 49. Grapes | 75.0 |
| 2. Wheat | 52.4 | 50. Cashewnut | 100.0 |
| 3. Jowar | 32.8 | 51. Potato | 75.8 |
| 4. Bajra | 33.3 | 52. Sweet potato | 75.8 |
| 5. Barley | 28.0 | 53. Tapioca | 70.0 |
| 6. Maize | 27.2 | 54. Papaya | 50.0 |
| 7. Ragi | 18.2 | 55. Onion | 96.6 |
| 8. Small millets | 16.4 | 56. Other fruits and vegetables | 75.0 |
| 9. Other cereals | 24.2 | 57. Rubber | 100.0 |
| 10. Gram | 40.3 | 58. Fodder | 5.0 |
| 11. Arhar | 50.9 | 59. Misc. food crops | 22.7 |
| 12. Urd | 61.3 | 60. Guar seed | 83.0 |
| 13. Moong | 59.8 | 61. Misc. non-food crops | 22.7 |
| 14. Masoor | 53.5 | 62. Cattle hides | 100.0 |
| 15. Other pulses | 64.0 | 63. Buffalo hides | 100.0 |
| 16. Linseed | 88.8 | 64. Goat skins | 100.0 |
| 17. Sesamum | 77.7 | 65. Sheep skins | 100.0 |
| 18. Groundnut | 82.3 | 66. Wool | 100.0 |
| 19. Rape and mustard | 92.7 | 67. Goat hair | 100.0 |
| 20. Castor | 83.0 | 68. Camel hair | 100.0 |
| 21. Coconut | 44.1 | 69. Pig bristles | 100.0 |
| 22. Niger seed | 97.5 | 70. Dung fuel | 5.0 |
| 23. Safflower | 87.7 | 71. Other dung | 5.0 |
| 24. Other oil seeds | 83.0 | 72. Bones, horns & hoofs etc. | 25.0 |
| 25. Sugarcane | 86.6 | 73. Hen eggs | 88.2 |
| 26. Gur | 86.6 | 74. Duck eggs | 88.2 |
| 27. Kapas | 75.8 | 75. Adult fowls | 50.0 |
| 28. Jute | 100.0 | 76. Chickens | 50.0 |
| 29. Sannhemp | 80.0 | 77. Ducks (adult) | 50.0 |
| 30. Mesta | 100.0 | 78. Ducklings | 50.0 |
| 31. Indigo | 100.0 | 79. Other eggs & poultry | 56.8 |
| 32. Tea | 100.0 | 80. Milk consumed as such | 60.0 |
| 33. Coffee | 100.0 | 81. Lassi | 4.7 |
| 34. Tobacco (leaf) | 85.0 | 82. Beef | 100.0 |
| 35. Tobacco (stem) | 85.0 | 83. Buffalo meat | 100.0 |
| 36. Opium | 100.0 | 84. Goat meat | 100.0 |
| 37. Other drugs and narcotics | 95.0 | 85. Mutton | 100.0 |
| 38. Cardamom | 100.0 | 86. Pork | 100.0 |
| 39. Chillies | 88.0 | 87. Glands | 100.0 |
| 40. Black pepper | 100.0 | 88. Head & legs | 100.0 |
| 41. Dry ginger | 82.4 | 89. Other meat products | 100.0 |
| 42. Turmeric | 80.6 | 90. Butter | 81.6 |
| 43. Arecanut | 94.6 | 91. Fats | 90.0 |
| 44. Garlic | 95.0 | 92. Honey | 100.0 |
| 45. Coriander | 95.0 | 93. Silk worm cocoons | 100.0 |
| 46. Banana | 90.0 | 94. Inland fish | 65.5 |
| 47. Mango | 81.0 | 95. Marine fish | 93.0 |
| 48. Citrus fruits | 96.5 | | |

APPENDIX 11.2: Trade and transport margins for various commodities/ groups

| Commodity/group | TTM | Commodity/group | TTM |
|-------------------------------|-------|--|------|
| Agriculture | | Livestock | |
| 1. Rice | 14.8 | 36. Hen eggs/Duck eggs | 17.1 |
| 2. Wheat | 27.8 | 37. Adult fowls | 56.2 |
| 3. Jowar | 10.3 | 38. Chickens | 56.2 |
| 4. Bajra | 18.2 | 39. Ducks(adult) | 56.2 |
| 5. Barley | 37.7 | 40. Milk consumed as such | 20.0 |
| 6. Maize | 19.4 | 41. Lassi | 20.8 |
| 7. Ragi | 19.1 | 42. Beef | 27.2 |
| 8. Small millets | 16.7 | 43. Buffalo meat | 27.2 |
| 9. Other cereals | 28.9 | 44. Goat meat | 16.2 |
| 10. Gram | 34.0 | 45. Mutton | 14.4 |
| 11. Arhar | 39.2 | 46. Pork | 23.2 |
| 12. Urd | 39.9 | 47. Other meat products | 27.2 |
| 13. Moong | 52.8 | 48. Butter | 20.8 |
| 14. Masoor | 38.7 | Fishing | |
| 15. Other pulses | 40.2 | 49. Inland fish | 33.4 |
| 16. Linseed | 21.3 | 50. Marine fish | 33.4 |
| 17. Sesamum | 20.1 | Manufacturing | |
| 18. Groundnut | 10.0 | (Registered & unregistered) | |
| 19. Rape and mustard | 11.7 | 51. Food products | 25.0 |
| 20. Castor | 21.3 | 52. Beverages, tobacco etc. | 24.0 |
| 21. Coconut | 54.5 | 53. Cotton textiles | 20.0 |
| 22. Other oil seeds | 21.3 | 54. Wool, silk etc. | 20.0 |
| 23. Gur | 50.5 | 55. Jute textiles | 20.0 |
| 24. Tobacco (leaf) | 65.0 | 56. Textiles products | 20.0 |
| 25. Tobacco (stem) | 65.0 | 57. Wood furniture etc | 25.0 |
| 26. Cardamom | 66.8 | 58. Paper & printing etc | 25.0 |
| 27. Chillies | 34.8 | 59. Leather & fur products | 25.0 |
| 28. Black pepper | 91.4 | 60. Rubber, petroleum etc | 25.0 |
| 29. Turmeric | 103.6 | 61. Chemicals etc. | 25.0 |
| 30. Coriander | 66.8 | 62. Non-metallic products | 25.0 |
| 31. Potato | 114.6 | 63. Basic metal industries | 25.0 |
| 32. Sweet potato | 30.9 | 64. Metal products | 25.0 |
| 33. Tapioca | 13.9 | 65. Machinery, machine tools | 24.0 |
| 34. Onion | 64.1 | 66. Electrical machinery | 19.0 |
| 35. Other fruits & vegetables | 84.6 | 67. Transport equipment | 21.0 |
| | | 68. Other manufacturing | 25.0 |
| | | 69. Repairing services | 25.0 |

Note : In respect of commodities for which TTMs are not available, the same are estimated on the basis of average available TTMs of the corresponding group of commodities.

TABLE 11.1 : Estimates of Gross Value Added in Trade, 1980-81

| Item | Value added per worker in 1980-81(Rs.) | Working force (in '000) | Gross value added (Rs. Crore) |
|-------------------|--|-------------------------|-------------------------------|
| (1) | (2) | (3) | (4) |
| 1. Private sector | | 11780 | 13283 |
| 1.1 Rural | 7998 | 4811 | 3848 |
| 1.2 Urban | 13539 | 6969 | 9435 |
| 2. Public sector | | 106 | 795 |
| 3. Total(1+2) | | 11886 | 14078 |
| 3.1 Organised | | | 1611 |
| 3.2 Unorganised | | | 12467 |

TABLE 11.2 : Estimates of Gross Value Added in Hotels and Restaurants, 1980-81

| (Rs. crore) | | | | | |
|-------------------|------------------------------|-----|-----|----------|------------------------------|
| | Gross Value added in 1983-84 | | | | |
| Item | DE | NDE | OAE | Combined | Gross value added in 1980-81 |
| (1) | (2) | (3) | (4) | (5) | (6) |
| 1. Private sector | 385 | 377 | 528 | 1290 | |
| 1.1 Rural | 218 | 141 | 82 | 441 | |
| 1.2 Urban | 167 | 236 | 446 | 849 | |
| 2. Public sector | | | | 66 | |
| 3. Total (1+2) | | | | 1356 | 876 |
| 3.1 Organised | | | | 232* | 133* |
| 3.2 Unorganised | | | | 1124 | 743** |

* - Based on current data

** - GVA in 1983-84 deflated with the index of GTI during 1983-84 as 151.28 (1980-81=100) which is specially prepared in the NAD

TABLE 11.3 : Composition of Gross Value Added, 1980-81

| Item | (Rs. crore) |
|-------------------------------------|--------------|
| (1) | (2) |
| 1. Trade | 14078 |
| 2. Imputed bank charges (I.B.C.) | 239 |
| 3. Trade less I.B.C. | 13839 |
| 3.1 Organised | 1611 |
| 3.1.1 Public sector | 795 |
| 3.1.2 Private corporate sector | 652 |
| 3.1.3 Co-operatives | 164 |
| 3.2 Unorganised | 12467 |
| 4. Hotels & restaurants | 876 |
| 5. Imputed bank charges | 2 |
| 6. Hotels & restaurants less I.B.C. | 874 |
| 6.1 Organised | 133 |
| 6.1.1 Public sector | 41 |
| 6.1.2 Private corporate sector | 92 |
| 6.2 Unorganised | 743 |