

MANUFACTURING

Coverage

- 13.1 The manufacturing Sector is classified into two broad sectors, viz., 'registered' and 'unregistered'. The registered manufacturing sector and the unregistered manufacturing sector are complementary to each other. The manufacturing sector covers all manufacturing, processing and repair & maintenance services units irrespective of their employment size, investment and location.
- 13.2 According to NIC 1998, the manufacturing sector is covered under the codes 15 - manufacture of food products and beverages, 16 - manufacture of tobacco products, 17 - manufacture of textiles, 18 - manufacture of wearing apparel; dressing and dyeing of fur, 19 - tanning and dressing of leather; manufacture of luggage, handbags saddlery, harness and footwear, 20 - manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plating materials, 21 - manufacture of paper and paper products, 22 - publishing, printing and reproduction of recorded media, 23 - manufacture of coke, refined petroleum products and nuclear fuel, 24 - manufacture of chemicals and chemical products, 25 - manufacture of rubber and plastic products, 26 - manufacture of other non-metallic mineral products, 27 - manufacture of basic metals, 28 - manufacture of fabricated metal products, except machinery and equipments, 29 - manufacture of machinery and equipment n.e.c., 30 - manufacture of office, accounting and computing machinery, 31 - manufacture of electrical machinery and apparatus n.e.c., 32 - manufacture of radio, television and communication equipment and apparatus, 33 - manufacture of medical, precision and optical instruments, watches and clocks, 34 - manufacture of motor vehicles, trailers and semi-trailers, 35 - manufacture of other transport equipment, 36 - manufacture of furniture; manufacturing n.e.c., and 37 - recycling.
- 13.3 **Registered manufacturing sector:** The registered manufacturing sector includes all factories covered under sections 2m (i) and 2m (ii) of the Indian Factories Act (IFA), 1948 which respectively refers to the factories employing 10 or more workers and using power or those employing 20 or more workers but not using power on any day of the preceding 12 months and Bidi and cigar establishments registered under Bidi and Cigar Workers (Condition of Employment) Act, 1966 and employing 10 or more workers using power or 20 or more workers and not
- using power. A 'factory' or an 'establishment', in the context of registered manufacturing sector, is defined as any premises including the precincts thereof (i) whereon 10 or more workers are working or were working on any day of the preceding 12 months, and in any part of which a manufacturing process is carried on with the aid of power or is ordinarily so carried on or (ii) whereon 20 or more workers are working or were working on any day of the preceding 12 months, and in any part of which a manufacturing process is being carried on without the aid of power or is ordinarily so carried on - but does not include a mine subject to the operation of the Mines and Minerals (Regulation and Development) Act, 1957 or a railway running shed. The 'manufacturing process' is defined as any process for (i) making, altering, repairing, finishing, packing, oiling, washing, cleaning, breaking up, demolishing or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal; (ii) pumping oil, water, sewage or any substance; (iii) generating, transforming or transmitting power; (iv) composing types for printing, printing by letter press, lithography, photogravure or other similar process or book binding; (v) constructing, reconstructing, repairing, refitting, finishing or breaking up of ships or vessels; (vi) preserving or storing any article in cold storage.
- 13.4 Factories registered under IFA but not engaged in manufacturing activities are excluded. These registered factories are those whose activities are restricted to providing (i) water and sanitary services, (ii) recreation and cultural services, (iii) personal services which are excluded from the manufacturing sector but are covered under the "services" sector, and likewise those engaged in the generation, transmission and distribution of electricity are covered under "electricity" sector and manufacture of gas in gas works and operation of cold storage though classified under manufacturing are not covered in this sector but included respectively under trade, hotel, restaurants, gas and storage sectors.
- 13.5 All the factories forming part of the registered manufacturing sector are classified into 19 industry groups based on the National Industrial Classification (NIC). The NIC-1970, which inter-alia provided a uniform framework for grouping together economic activities of similar nature prevailing in the economy, has since been

revised and replaced by the revised National Industrial Classification of all Economic Activities NIC-1987, again by NIC-1998 and NIC 2004. In the new series 1999-2000, NIC 1998 classification has been adopted, as the base year estimates are based on the results of Annual Survey of Industries (ASI), 1999-2000, which followed the NIC-1998. The public sector undertakings producing currency, coinage and mint etc. have also been included in this sector. The industry group "repair services" (earlier 394, 398 and 97) in the new series would be accounted under 'trade sector'. For purpose of reference, 3 digit concordance of NIC-98 with NIC-87 is given at Appendix-13.1.

- 13.6 **Unregistered manufacturing sector:** The unregistered manufacturing sector - being complementary to registered manufacturing sector - thus, by implication, covers all those units which are not covered under the registered manufacturing sector. In other words, the unregistered manufacturing sector covers all the manufacturing, processing, repair & maintenance services units employing less than 10 workers and using power or less than 20 workers and not using power. It also covers Own Account Enterprises (OAE) engaged in the manufacturing activity. However, conversion of sugarcane into indigenous gur, slaughtering of animals and dressing of meat carried out by farmers and individuals are excluded from this sector as they are included under agriculture and allied activities.

A. Registered Manufacturing

Method of Estimation of Gross Value Added (GVA)

- 13.7 The estimates of GVA are prepared by following the production approach. This approach requires estimates of value of output at ex-factory prices and the corresponding value of inputs at purchasers' prices. The output, mainly comprises: (i) ex-factory value of all products and by-products including semi-finished goods manufactured; (ii) receipts for industrial and non-industrial services rendered to others; (iii) value of fixed assets produced by the factory for its use; and (iv) net balance of goods sold in the same condition as purchased. Likewise inputs mainly comprise: purchase value of all items of (i) raw-materials, components, chemicals, packing materials & stores actually used for the production process; (ii) fuels, lubricants, electricity, water etc. consumed (captive power generation consumed internally is

neither accounted in output nor in inputs, however, inputs used for captive power generation will be accounted for in the inputs); (iii) costs of non-industrial services received from other concerns; (iv) cost of material consumed for repairs & maintenance of fixed assets including cost of work done by others to the fixed assets; (v) cost of contract & commission work done by others on materials supplied by the factories; and (vi) cost of office supplies etc.

Sources of Data

- 13.8 Data on output and inputs in respect of manufacturing sector are collected annually by the NSSO under the Annual Survey of Industries (ASI). The survey extends to the entire country except the states of Arunachal Pradesh, Mizoram, Sikkim and Union territory of Lakshdweep Islands and covers all the factories registered under Sections 2m(i) and 2m(ii) of the IFA, 1948, bidi and cigar manufacturing establishments registered under Bidi and Cigar Workers (Condition of Employment) Act 1966 and employing 10 or more workers using power or 20 or more workers and not using power and all the electricity undertakings registered with the Central Electricity Authority (CEA) and located in the country.

- 13.9 For ASI, the factories in the frame are classified into two sectors, viz., the census sector (C) and the sample sector (S). The Census Sector consists of the following categories:-

- all industrial units belonging to the five less industrially developed states/UT's viz. Manipur, Meghalaya, Nagaland, Tripura, and Andaman & Nicobar islands.
- For the rest of the twenty-six states/UTs.
 - i. Units having 200 or more workers (upto 1999-2000). Census Sector coverage was extended to units having 100 or more workers from 2000-01 onwards.
 - ii. All factories covered under Joint Returns
- All electricity undertakings other than captive units as well as all departmental undertakings such as Railway workshops, etc. have been kept outside the purview of ASI from 1999-2000.

Estimates at Current Prices

- 13.10 As already mentioned above, to estimate the Gross Value Added (GVA) for the registered manufacturing sector, production approach is used. The production data in respect of units

registered under Factories Act and others is available through Annual Survey of Industries (ASI) results. The estimates of GVA for the year 1999-2000 have been prepared from the results of ASI.

13.11 The steps of calculation of GVA for the Registered Manufacturing sector for the base year 1999-2000 are as under:

- Output and input data at 3-digit of NIC-98 is available in ASI 1999-2000.
- GVA is calculated by subtracting input from output.
- GVA estimates are calculated as per recommended compilation categories (which were recommended by the Working Group on Workforce Estimates constituted by the Advisory Committee, and were based on regrouping of similar activities, as well as comparison with 1993-94 series industry-groups).
- Adjustments are made for the value of output/value added in respect of defence production units, railway workshops, currency, coinage, mints and security printing presses, which are not covered in the ASI.

13.12 The only change in this sector in the new series (1999-2000) is in the form of adopting NIC 1998 classification, in place of NIC 1987 and inclusion of Public sector undertakings producing currency, coinage and mint etc. As a result of adoption of NIC 1998, the industry group "repair services" (earlier 394, 398 & 97) in the new series has been accounted in the trade sector. Further, output of liquefied petroleum gas (LPG), which was earlier included in Gas sub-sector in 1980-81 series, has been included under manufacturing sector in the series 1993-94 and 1999-2000, as the production of LPG is essentially a manufacturing activity. The distribution of LPG in cylinders, however, shall be appropriately covered in trade sector only.

13.13 The estimates of GVA obtained from ASI include Financial Intermediation Services Indirectly Measured (FISIM) paid by the manufacturing establishments. The value of such services forms a part of the income originating in the banking and insurance sector and as such, is deducted from the GVA of the registered manufacturing sector. In the absence of adequate details, adjustment for FISIM is made only at the aggregate level, for all the industry-groups under manufacturing (registered). The nature of these services and the method of imputation of their values are described in the chapter relating to Banking and Insurance. The industry-wise adjusted (for FISIM) estimates

of Output and GVA for the base year 1999-2000 are presented in Table 13.1.

13.14 For estimating the GVA for other years (other than the base year), the normal practice is to use the same procedure that has been described for the base year, i.e. use the results of ASI directly on value of outputs and value of inputs and estimate the GVA as a difference between the two, at compilation category level, after making suitable adjustments for output and value added of railway workshops, etc. and FISIM. However, the ASI data since the year 2000-01 onwards could not be used as the growth rates for the years 2000-01 and 2001-02 are not in line with the growth rates indicated by the Index of Industrial Production (IIP), Excise revenue collections or the corporate sector (manufacturing segment) data. It was, therefore, decided in consultation with the Advisory Committee, to use the IIP data at detailed industry level, for compiling the estimates of value of output and value added for the subsequent years, till there is convergence between the IIP based GVA estimates and ASI based GVA estimates. Thereafter, the ASI data will be used for compiling the GVA estimates of manufacturing (registered) industry group. However, when the GVA estimates are based on Index of Industrial Production, these are initially at constant prices only, as the Index of Industrial Production is a volume/quantum index. For compiling the estimates of output and GVA at current prices, appropriate wholesale price indices at compilation category level are superimposed on the constant price estimates. The procedure of preparing the WPI at compilation category levels is spelt in paragraph 13.17 below.

Estimates at Constant Prices

13.15 For estimating the GVA at constant prices, ideally, the procedure of double deflation should be adopted. In this procedure the outputs and inputs are deflated by the respective price deflators. The price deflator for output should be based on the commodities (principal and subsidiary) produced, whereas the price deflator for inputs should be based on the commodities used as inputs. The procedure of double deflation should be done at detailed industry/compilation category level. The GVA for each industry/compilation category should be derived as residual of output at constant prices and inputs at constant prices. This procedure is being followed for the primary sectors in the national accounts statistics.

13.16 In the case of manufacturing (registered) industry, it has been observed (from the ASI

results) that the value added as a proportion of output is not very high, implying that inputs account for a high proportion of output. If the procedure of double deflation is adopted in this industry, there is a possibility of GVA becoming negative, when the input price deflator becomes higher than the output price deflator. There is also a possibility in such cases that the GVA growth rates are subject to volatility. In such case, there are guidelines to use only the output price index as the single deflator for obtaining both value of output and GVA at constant prices. This procedure is known as single deflation method.

- 13.17 Normally, when the GVA estimates are based on the results of ASI, these are at current prices only. For obtaining the estimates of value of output and GVA at constant (1999-2000) prices, appropriate price indices at compilation category level, are needed. For the manufacturing sector, these price indices are prepared using the detailed commodity-wise data available on WPI. As there is no one-to-one correspondence between some of the compilation categories/NIC 1998, 3 digit level classification and the corresponding wholesale price indices classification, appropriate price indices at the compilation categories level are compiled using wholesale price indices of relevant items covered under the compilation categories. For such compilation groups/NIC 1998 3-digit industries, the wholesale price index is derived as a weighted average of the wholesale price indices of these items, weights being those given in WPI commodity basket. However, when the GVA estimates are based on Index of Industrial Production, these are initially at constant prices only, as the Index of Industrial Production is a volume/quantum index.

Quality and Limitations of data base

- 13.18 The ASI data relating to both census and non-census sectors are quite comprehensive both in regard to the coverage and sample size and can be considered reliable. The sampling design followed in the case of non-census sector ensures, through suitable stratification and arrangement of sampling unit etc., that estimates of adequate reliability are available at (i) All India (4-digit level of NIC-98) and industry groups (3-digit level of NIC-98) and (ii) at 3-digit level at the state level. However, due to the reasons mentioned in paragraph 13.14, the IIP data is presently being used for estimating value of output and GVA for this industry. The limitations of IIP are well documented, most important being the old

base year, non-response, coverage of new units and new products.

- 13.19 The estimates at constant prices are prepared using single deflation method. The ideal method to arrive at the constant prices estimates is the double deflation method. This method inter-alia requires quantification of all items of output & input, availability of item-wise data on quantity & value and matching of items between the base year and the year for which these estimates are required. This method also involves estimation at very detailed level of items and is difficult to adopt, particularly for multi-product industry groups and in cases where inputs account for a large part of output.

B: Unregistered Manufacturing Method of Estimation of Gross Value Added (GVA)

- 13.20 The estimates of GVA for the unregistered manufacturing sector are obtained as a product of the work force and the corresponding GVA per worker. These estimates are first worked out for the benchmark (base) year and then carried forward to subsequent years on the basis of indicators representing physical volume of activity.

Sources of Data

- 13.21 The main data sources for the preparation of the new series (1999-2000) for the unregistered manufacturing sector are (i) Third All India Census of Small Scale Industrial Units, 2001-02 published by Development Commissioner, Small Scale Industries for the SSI segment and (ii) 56th Round of NSS (2000-01) for other unorganized manufacturing units. These data have been thoroughly examined with a view to assessing their suitability and acceptability for use in working out the GVA for the year 1999-2000 and onwards as discussed in subsequent paragraphs.
- 13.22 In order to meet the long felt need for the availability of reliable data in respect of unorganised sectors of non-agricultural sectors of the economy, an Economic Census and Surveys Scheme was launched by the CSO in 1976. Under this scheme, a countrywide census of non-agricultural establishments i.e., those employing at least one hired worker on a fairly regular basis, was conducted for the first time during the last quarter of 1977 to collect basic information, such as the number and nature of establishments, persons usually working in them, ownership etc. Based on the census

frame, a sample survey covering unregistered manufacturing sector was conducted to collect detailed information on employment, emoluments, inputs, output, investment etc. For this purpose, establishments covered in the EC were categorised into two groups, namely, (i) Directory Establishments (DE) i.e., establishments having a total employment of six or more persons and (ii) the rest called Non-Directory Establishments (NDE); and the survey was conducted separately for these two groups, the latter also covering the own account enterprises. Subsequently, the second and third economic censuses were conducted in 1980 and 1990 along with House listing operations of 1981 and 1991 Population censuses respectively. These two censuses covered all agricultural and non-agricultural enterprises excepting those engaged in crop production and plantation. The fourth Economic Census was carried out in 1998 with the same coverage, but was done independently of population census. Based on the frame available from the Economic Censuses, follow-up enterprise surveys were launched to collect information on unorganized segments of economy. Initially, surveys covering DEs were conducted by the CSO and NDE/OAEs by the NSSO. The first integrated survey on unorganised manufacturing was conducted as part of the 51st Round of NSS during July 1994 - June 1995. The coverage of NDME and OAE as well as DME was fairly complete. The latest sample survey, the second integrated survey on unorganised manufacturing sector, covering OAEs, NDMEs and DMEs, was conducted as a part of the 56th Round of NSS during July 2000 - June 2001, the results of which formed the basis for compiling benchmark estimates of GVA for the unorganized manufacturing sector.

- 13.23 With a view to developing a sound database on small scale units, the Office of the Development Commissioner (Small Scale Industries) conducted two censuses of registered SSI units prior to the Third Census. The First Census was conducted in 1973-74 in respect of 2.58 lakh SSI units registered up to 30-11-1973. The reference year for this Census was calendar year 1972 in respect of units not maintaining accounts and the actual accounting year closing between 1-4-1972 and 31-3-1973 for those units maintaining accounts. Some information was also collected for 1970 and 1971. The Second Census was conducted during 1990-91 in respect of 9.87 lakh SSI units registered up to 31-3-1988. The reference year for this Census was financial year 1987-88 in respect of units not maintaining accounts and the actual

accounting year closing between 1-4-1987 and 31-3-1988 for those units maintaining accounts. The Third all-India Census was conducted during 2002-03 for the possible proximate reference year, i.e., 2001-02.

Estimates at Current and Constant Prices

- 13.24 Traditionally, the All India estimates of GVA from unregistered manufacturing sector are compiled as product of workforce and GVA per worker estimated from the nearest follow up surveys of Economic Census. In the new series (1999-2000) & the previous (1993-94) series, these estimates have been compiled separately for the units belonging to Small Scale Industries (SSI) group and others.
- 13.25 Thus GVA for the unregistered manufacturing sector is calculated from two separate sources as under:
- i) All India Census of Small Scale Industrial Units, 2001-02 published by Development Commissioner, Small Scale Industries (DCSSI) ;
 - ii) The results of the 56th Round of Survey of NSSO pertaining to the year 2000-01; and
 - iii) Workforce estimates from the results of NSS 55th Round (1999-2000).
- 13.26 **Calculation of Workforce:** The calculation of the workforce is done as under:
- a. Firstly the Total Workforce (using the Industrial Code 151- 372 at NIC 1998) for the Manufacturing Sector (as per recommended compilation categories) is taken from the Report of the Working Group on Workforce Estimation for national accounts statistics with base year 1999-2000.
 - b. Then the workforce of the registered manufacturing part (ASI 1999-2000) was deducted from the total work force (at the compilation category-wise). The balance gives the workforce relating to the un-registered manufacturing sector.
 - c. The data on total number of employees working in the SSI sector (net of workers in SSI units covered under ASI) obtained from the O/o the DCSSI, based on the Third All India Census on Small Scale Industrial Units, 2001-02, pertains to the SSI units excluding the units covered in ASI, under unregistered manufacturing. This workforce is then interpolated backward using the inter-survey growth rate of the workforce of 50th Round (1993-94) and 55th Round (1999-2000) of NSS to obtain the workforce estimates for the base year 1999-2000 in the SSI

units covered under unregistered manufacturing.

- d. Lastly, from the workforce calculated in step 'b' above, the workforce of SSI units in unregistered manufacturing is deducted to obtain the residual workforce, i.e. those working in non-SSI Un-registered manufacturing units.

13.27 The GVA estimates for the new series for this sector for the base year 1999-2000 have been prepared separately for the two segments of the unregistered manufacturing sector, namely (i) the segment of Small Scale Industries (SSI) (other than those covered under the ASI), and (ii) the rest of the unorganized manufacturing sector, i.e. the manufacturing sector which is not covered under either the ASI or the SSI. The industry-group-wise estimates for these segments are presented in Table 13.2.

13.28 The GVA for the SSI segment for the new series has been estimated using the value of output data available from the results of Third All India Census on Small Scale Industries units, 2001-02 published by the Development Commissioner, Small Scale Industries and the GVA/GVO ratios available from the results of NSS 56th Round survey on unorganized manufacturing (The estimates of GVA are not separately available in the results of SSI Census). Due adjustments have been made to bring the estimates of GVA of the SSI segment to the price levels of 1999-2000. The GVA per worker (GVA/W) is again calculated in two parts.

(i) **DCSSI part:**

- The estimates of GVA pertaining to the SSI part are not directly available from the Third All India Census Report, 2001-02. The industry wise estimates of GVO have only been provided. To obtain the estimates of GVA, the GVA to GVO ratio as obtained from the NDME & DME part of 56th Round of NSSO has been applied.
- GVA/W has been worked out by using thus calculated GVA and no. of employees given by the Third All India Census Report, 2001-02.
- The GVA/W for the year 1999-2000 has been obtained by deflating the GVA/W estimates of 2001-02 with the help of Wholesale Price Index.
- The total GVA from DCSSI part is obtained as the product of no. workers and GVA/W.

(ii) **Survey-Part (Unorganised Manufacturing Sector in India- 2000-01)**

- GVA/W, GVO/W and number of workers have been obtained at 3-digit of NIC-98, separately for OAME, NDME & DME, with rural/ urban break up, from SDRD, NSSO. This information pertains to 56th Round of NSS (2000-01).
- Industry-wise (NIC-98 at 3-digit level) information on GVA/W has been worked out for all enterprises (OAME, NDME & DME)- rural, urban combined for the year 2000-01.
- GVA/W for clubbed NIC-98 groups as per recommended re-grouping has further been worked out for 2000-01 utilising the GVA/W and number of workers of respective industry groups.
- The GVA/W for the year 1999-2000 has been then obtained by deflating the GVA/W estimates of 2000-01 with the help of Wholesale Price Index.
- The total GVA from this part is obtained as the product of no. workers and GVA/W industry-wise.

13.29 The benchmark year's (1999-2000) estimates of GVA at industry level in respect of Un-registered Manufacturing Sector are finally obtained by adding the industry-wise estimates of DCSSI-part and Survey part.

13.30 **GVA estimates for Subsequent Years at 1999-2000 Prices:** The benchmark year (1999-2000) industry-wise estimates of GVA are moved with the help of Index of Industrial Production (IIP) to obtain the estimates for subsequent years. The IIP with base 1999-2000=100 at 3- digit level of NIC-98 has been calculated as per the steps as indicated below:

- Monthly Indices of Industrial Production at 3-digit of NIC-87 have been obtained from IIP-Unit of CSO. These monthly indices have been converted to annual averages.
- The indices of industrial production at 3-digit level of NIC-87 (1993-94 base) to the extent available as per the item basket have been utilised to prepare the indices in accordance with the corresponding NIC-98 codes.
- The newly framed indices as per NIC-98 with base 1993-94 have further been converted to base 1999-2000 =100.

13.31 **GVA estimates for subsequent years at Current Prices:** The industry wise current price estimates are obtained from the corresponding constant price estimates by superimposing the price changes as revealed by the indices of wholesale prices.

Quality and limitations of data base

13.32 The periodic surveys provide detailed data on input and output once in five years only and the problem of preparing the estimates for the intervening years remains. There has

been no satisfactory data to build up annual indicators necessary for carrying forward the bench-mark year estimates and this is a major gap in the data availability.

Appendix 13.1

**CONCORDANCE TABLE OF NATIONAL INDUSTRIAL CLASSIFICATION (NIC), 1998 AND NIC-1987
AT TWO DIGIT LEVEL OF INDUSTRY GROUPS**

S. No	NIC-1998	NIC-1987	Item/ Sub-groups
1	01405	230	Cotton ginning, cleaning and baling
2	151	200+202+203+210 to 212	Production, processing and preservation of meat, fish, fruit vegetables, oils and fats
3	152	201	Manufacture of dairy product
4	153	204+217+218	Manufacture of grain mill products, etc. and animal feeds
5	154	205 to 207+209+213 to 215+219	Manufacture of other food products
6	155	216+220 to 224	Manufacture of beverages
7	16	225 to 229	Manufacture of tobacco products
8	171+172+173	231 to 236+240 to 248 +250 to 264 + 267 to 269	Spinning, weaving and finishing of textile+ Other textiles+ Knitted and crocheted fabrics and articles
9	181-18105	265+266+292	Wearing apparel, except fur apparel and tailoring
10	182+19	290+293+299+291+311+294+295+296	Dressing and dyeing of fur; manufacture of articles of fur and tanning and dressing of leather; manufacture of luggage, handbags saddlery, harness and footwear
11	20	270 to 275+279	manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plating materials
12	361	276+277+342	Manufacture of furniture
13	21+22 *	28	Manufacture Of Paper And Paper Products and publishing, printing and reproduction of recorded media
14	23+25	310+312 to 319	Manufacture of coke, refined petroleum products and nuclear fuel and rubber and plastic products
15	24	30+208	Manufacture of chemical and chemical products
16	26	32	manufacture of other non-metallic mineral products
17	271+2731	-	Manufacture of Basic Iron & Steel+ Casting of iron and steel
18	272+2732	-	Manufacture of basic precious and non-ferrous metals+ Casting of non-ferrous metals

S.	NIC-1998	NIC-1987	Item/ Sub-groups
19	271+272+2731+2732	33	
20	371+372 **	-	Recycling of metal waste and scrap+ non-metal waste and scrap
21	28	-	Manufacture of fabricated metal products, except machinery and equipments
22	29+30	-	Manufacture of machinery and equipment n.e.c + office, accounting and computing machinery
23	28+29+30	340+341+343 to 346+349+350 to 359+364+367+388+390 to 393+397+399	
24	31+32	360 to 363+365+366+368+369+395+396	Electrical machinery and apparatus n.e.c.+ radio, television and communication equipment and apparatus
25	33+369	380 to 387 +389	Manufacture of medical, precision and optical instruments, watches and clocks+ Manufacturing n.e.c
26	34+35	37	Manufacture of motor vehicles, trailers and semi-trailers+ manufacture of other transport equipment

* '2213' (Publishing of recorded media) and '2230'(Reproduction of recorded media) of NIC-1998 were not defined in NIC-1987.

** '5240' (Retail Sale of second hand goods in stores) of NIC-1998 was not included in NIC-1987.

LIST OF RELEVANT ITEMS/SUB-GROUPS OF WHOLESALE PRICE INDICES USED FOR DEFLATING CURRENT PRICE ESTIMATES

NIC-1998	Industry Description	Item/ Sub-groups
151	Production, processing and preservation of meat fish, fruits, veg, oils & fats	Canned fish, edible oil, oil cakes
152	Mfg. of dairy products	Dairy Products
153	Mfg. of grain mill products, etc and animal feeds	Grain Mill Products
154	Mfg. of other food products	Bakery Products, Sugar, Khandsari & Gur, Common Salts, Cocoa Chocolate Sugar & Confectionery, Tea & Coffee Processing, Other Food Products n.e.c
155	Mfg. of beverages	Wine industries, Malt Liquor, Soft drinks & Carbonated Water
16	Mfg. of tobacco products	Manufacture of Bidi, Cigarettes, Tobacco & Zarda
171+172+173	Spinning, weaving and finishing of textiles etc.	Textiles (cotton textiles, man made textiles, woolen textiles, jute hemp & mesta textiles & other miscellaneous textiles)
181-18105	Wearing apparel, except fur apparel & tailoring	Textiles
182+19	Tanning and dressing of leather, fur and fur products.	Leather & Leather Products
20	Mfg. of wood and products of wood except furniture	Wood & Wood Products
361	Mfg of furniture	Wood & Wood Products
21+22	Mfg. of paper and paper products, publishing, printing etc.	Paper & Paper Products
23+25	Coke, refined petroleum products, nuclear, rubber & plastic products	Coke, Minerals Oils, Rubber & Plastic Products
24	Mfg of chemical and chemical products	Chemicals & Chemical Products
26	Mfg of other non-metallic mineral products	Non-Metallic Mineral Products
271+272+2731+2732	Mfg of basic iron and steel and non-ferrous metals	Basic Metals & Alloys, Non-Ferrous Metals
371+372	Recycling of metal waste and scrap+ non-metal scrap	Basic Metals & Alloys, Non-Ferrous Metals
28+29+30	Mfg of fabricated metal products, machinery & equipment n.e.c	Metal Products, Non-Electrical Machinery & Parts
31+32	Elect. Machinery and apparatus n. e. c.+ radio, TV & comm. equip.	Electrical Machinery
33+369	Mfg of medical, precision and optical instruments, watches clocks etc.	Manufactured products
34+35	Motor vehicles, trailers and semi- trailers& other transport equip	Transport Equipment & Parts

TABLE 13.1

ESTIMATES OF OUTPUT & GROSS VALUE ADDED FOR REGISTERED MANUFACTURING, 1999-2000*(Rs. crore)*

NIC-1998	Industry Description	Value of Output	Gross Value Added
151	Production, processing and preservation of meat fish, fruits, vegetables, oils & fats	38106	2961
152	Mfg. of dairy products	17490	1870
153	Mfg. of grain mill products, etc and animal feeds	38947	2990
154	Mfg. of other food products	43213	8677
155	Mfg. of beverages	11203	3110
16	Mfg. of tobacco products	10647	3929
171+172+173	Spinning, weaving and finishing of textiles etc.	90954	16047
181-18105	Wearing apparel, except fur apparel & tailoring	14947	3628
182+19	Tanning and dressing of leather, fur and fur products.	8468	1570
20	Mfg. of wood and products of wood except furniture	2098	445
361	Mfg of furniture	1845	565
21+22	Mfg. of paper and paper products, publishing, printing etc.	23632	5788
23+25	Coke, refined petroleum products, nuclear, rubber & plastic products	88979	13545
24	Mfg of chemical and chemical products	151992	42690
26	Mfg of other non-metallic mineral products	32914	9713
271+272+2731+2732	Mfg of basic iron and steel and non-ferrous metals	97366	23165
371+372	Recycling of metal waste and scrap+ non-metal scrap	29	2
28+29+30	Mfg of fabricated metal products, machinery & equipment n.e.c	71891	19314
31+32	Elect. Machinery and apparatus n. e. c.+ radio, TV & comm. equip.	47995	10536
33+369	Mfg of medical, precision and optical instruments watches clocks etc.	36400	9101
34+35	Motor vehicles, trailers and semi- trailers& other transport equip	65343	14509
	Total	894459	194155
	less: F.I.S.I.M.		21152
	Gross domestic product		173003

TABLE 13.2

ESTIMATES OF GROSS VALUE ADDED FOR UNREGISTERED MANUFACTURING, 1999-2000*(Rs. crore)*

NIC-1998	Description	Gross value added including FISIM
151	Production, processing and preservation of meat fish, fruits, vegetable oils & fats	2156
152	Mfg. of dairy products	503
153	Mfg. of grain mill products, etc and animal feeds	6415
154	Mfg. of other food products	4173
155	Mfg. of beverages	849
16	Mfg. of tobacco products	3232
171+172+173	Spinning, weaving and finishing of textiles etc.	12375
181-18105	Wearing apparel, except fur apparel & tailoring	5603
182+19	Tanning and dressing of leather, fur and fur products.	3763
20	Mfg. of wood and products of wood except furniture	7217
361	Mfg of furniture	2667
21+22	Mfg. of paper and paper products, publishing, printing etc.	3743
23+25	Coke, refined petroleum products, nuclear, rubber & plastic products	3702
24	Mfg of chemical and chemical products	3677
26	Mfg of other non-metallic mineral products	6872
271+272+2731+2732	Mfg of basic iron and steel and non-ferrous metals	4101
371+372	Recycling of metal waste and scrap+ non-metal scrap	127
28+29+30	Mfg of fabricated metal products, machinery & equipment n.e.c	12475
31+32	Elect. Machinery and apparatus n. e. c.+ radio, TV & comm. equip.	3177
33+369	Mfg of medical, precision and optical instruments, watches clocks etc.	6225
34+35	Motor vehicles, trailers and semi- trailers& other transport equip	1806
	Total	94859
	less: F.I.S.I.M.	3749
	Gross domestic product	91110
