

REAL ESTATE, OWNERSHIP OF DWELLINGS AND BUSINESS SERVICES

Coverage

- 19.1 The economic activities covered in this sector are (i) ownership of dwellings (occupied residential houses), (ii) real estate services (activities of all types of dealers such as operators, developers and agents connected with real estate), (iii) renting of machinery and equipment without operator and of personal and household goods, (iv) Computer and Related Activities, (v) Accounting, Book-keeping and Related Activities, (vi) Research and development, market research and public opinion polling, business & management consultancy, architectural, engineering & other technical activities, advertising and business activities not elsewhere classified and (vii) legal services. Ownership of dwellings also includes the imputed value of owner occupied dwellings. Services rendered by non-residential buildings are considered to be a subsidiary activity of the industries, which occupy the buildings and therefore, are not included in this sector. In the NIC 1998, these activities, other than ownership of dwellings, are covered under the 3-digit codes:
- 701: Real estate activities with own or leased property;
 711: Renting of transport equipment;
 712: Renting of other machinery and equipment;
 713: Renting of personal and household goods n.e.c.;
 721: Hardware consultancy;
 722: Software consultancy and supply;
 723: Data processing;
 724: Database activities;
 725: Maintenance and repair of office, accounting and computing machinery;
 729: Other computer related activities;
 731: Research and experimental development on natural sciences and engineering;
 732: Research and experimental development on social sciences and humanities;
 741: Legal, accounting, book-keeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy;
 742: Architectural, engineering and other technical activities;
 743: Advertising; and
 749: Business activities n.e.c.
- 19.2 In the current series of NAS, research & scientific services are placed along with the activities 'real estate, ownership of dwelling and business services sector'. In the earlier series these services were included under 'other services' sector.
- ### Sources of data
- 19.3 The data sources include:
- Employment and Unemployment survey data from NSS 55th Round and population census, 2001 estimates of work force;
 - value added per worker from Enterprise Survey, 57th Round;
 - annual reports of software companies,
 - NASSCOM data of output of software services;
 - 2001 Census residential houses in urban and rural areas;
 - NSS 55th Round results for rent per household separately for rural and urban areas; and
 - Consumer Price Index for Agriculture labour-CPI (AL), Consumer Price Index for industrial workers-CPI (IW) and Consumer Price Index for urban non-manual employees-CPI (UNME) of house rent sub group.
- ### Methods of GVA Estimation
- 19.4 The estimates of real estate, legal services and business services (except software development) are prepared using labour input and value added per worker approach. The estimates of software development activities are prepared using NASSCOM data of output from these services and Gross Value Added (GVA) to Gross Value Output (GVO) ratio obtained from the annual reports of various companies engaged in software development activities. For ownership of dwellings, the methodology consists of estimating the gross rental of residential buildings (including owner occupied) and deducting therefrom the cost of repairs and maintenance to obtain the estimates of GVA.
- ### Estimates at current prices
- #### Real Estate
- 19.5 **Real estate activities (NIC-98, code 70):** These includes buying, selling, renting and operating of self-owned or leased real estate such as apartment building and dwellings, non-residential buildings, developing and subdividing real estate into lots etc. Also included are developments and sale of land

and cemetery lots, operating of apartment hotels and residential mobile home sites, Development on own account involving construction classified in class 4520 of NIC 1998. Purchase, sale, letting and operating of real estate—residential and non-residential buildings, Developing and subdividing real estate into lots, Lessors of real property, Real estate activities with own or leased property n.e.c., Real estate activities on a fee or contract basis. Further activities relating to buying, selling, renting managing and appraising real estate on a fee or contract basis are also included.

- 19.6 The GVA estimates for this activity are prepared separately for organized and unorganized segments. Initially estimates are prepared for a benchmark year (usually the base of current national accounts series), and for subsequent years, the benchmark year GVA estimates are extrapolated with suitable physical and price indicators. The benchmark year GVA estimates are prepared as a product of estimated workforce engaged in the economic activity and the estimated value added per worker (VAPW), separately for organized and unorganized segments. For the current NAS series (base year 1999-2000), the workforce estimates are from the NSS 55th round (1999-2000) survey results (for details, please refer to the Chapter on workforce estimates), and the estimates of VAPW are from the results NSS 57th round (2001-02). The GVA estimates for the base year have been prepared separately for rural/urban areas and also separately for organized/ unorganized segments. It may be mentioned that the NSS 57th round survey results has provided the data separately for corporate sector and unorganized sector.
- 19.7 For subsequent years, the estimates of workforce have been prepared using the inter survey average compound growth rate of quinquennial Employment & Unemployment surveys as observed between 1993-94 and 1999-2000 of NSS 50th and NSS 55th round survey results. The value added per worker of rural and urban areas and organized and unorganized segments, have been projected to subsequent years with the CPI (AL) and CPI (IW) respectively. The GVA estimates have been compiled as product of workforce and VAPW for the respect rural/urban/organized and unorganized segments.

Ownership of Dwellings

- 19.8 In the production boundary of national accounts, only two categories of services

produced by households for own final consumption are included, namely,

- (a) **Services of owner-occupied dwellings:** Owner-occupiers are deemed to own household unincorporated enterprises that produce housing services for their own consumption; and
- (b) **Domestic services produced by employing paid staff:** Households are deemed to own household unincorporated enterprises in which they employ paid staff like servants, cooks, gardeners, etc. to produce services for their own consumption.

- 19.9 The activities mentioned under (a) above are included under 'ownership of dwellings'. The economic activities covered are ownership of dwellings (occupied residential houses) including imputed value of owner occupied dwellings also. Services rendered by non-residential buildings are considered to be a subsidiary activity of the industries, which occupy the buildings and therefore, are not included in this sector.

- 19.10 The data available on dwellings from the Population Census and the data on rent from the NSS Consumer Expenditure Surveys are the principal sources for estimating the GVA of 'ownership of dwellings'. The number of census dwellings in the base year (1999-2000) in urban and rural areas has been arrived at by adjusting 2001 figures for the mid-year 1999-2000 using the rate of growth between 1991 and 2001. The number of census houses so arrived has been multiplied by the average rent per household, information on which is obtained from results of NSS 55th (1999-2000) Round survey. This has been done separately for rural and urban areas to estimate the gross rental in the country. From this estimated gross rental, the cost of repair and maintenance is subtracted, separately for rural and urban areas, to obtain the GVA estimates for rural and urban areas.

- 19.11 For subsequent years, estimates of census residential houses are prepared using the inter-censal average compound growth rate, separately for rural and urban areas. The rent per household is moved to subsequent years with the index of house rent. In case of urban areas the house rent sub-group in the CPI (UNME) is used. In the absence of any suitable indicator for the rural areas on rent, half the growth rate of urban index is used.

Business Services

- 19.12 **Renting of Machinery & Equipment without Operator (NIC-98 code 71):** The activities

- covered under this compilation category are: renting of machinery and equipment without operator and personal & household goods. The estimates of GVA for these activities have been compiled separately for the first time in the current (1999-2000) series.
- 19.13 The estimates of GVA for these activities for the year 1999-2000 have been compiled by using the labour input method. The VAPW of rural/ urban areas of Enterprise Survey, 2001-02 of NSS 57th Round and the labour input estimates based on EUS 1999-2000 of the 55th Round have been used to prepare the GVA estimates for the base year.
- 19.14 For subsequent years, the estimates of labour input have been prepared using the population growth rate as projected by the Office of the Registrar General of India (RGI). The value added per worker of rural and urban areas are projected to subsequent years using CPI(AL) and CPI(IW) respectively.
- 19.15 **Computer and Related Activities in Private Sector (NIC-98 code 72):** The activities covered under this compilation category are hardware consultancy, software consultancy & supply, data processing, database activities, maintenance & repair of office/accounting/computing machinery and other computer related activities. The estimates of GVA for 1999-2000 series of NAS have been compiled separately for organised and un-organised sectors.
- 19.16 GVA estimates for organised sector are prepared using NASSCOM data of output of software services and GVA to output ratio obtained from the analysis of available annual reports of software companies on year to year basis.
- 19.17 The estimates of GVA for the year 1999-2000 for un-organised sector have been prepared by using the labour input method based on GVAPW estimates of ES 2001-02 and the labour input estimates from EUS 1999-2000 of NSS 55th Round, separately for rural and urban areas.
- 19.18 For subsequent years, the estimates of labour input in the unorganized sector are prepared using the growth observed in the organized sector. The value added per worker of rural and urban areas are projected to subsequent years with the CPI (AL) and CPI (IW) respectively.
- 19.19 **Legal Activities (NIC-98 code 7411):** This compilation category includes legal services such as those rendered by advocates, barristers, solicitors, pleaders, mukatiars, etc. (law court activities are classified in class 7523 of NIC 1998).
- 19.20 The estimates of GVA for legal services for the base year 1999-2000 have been prepared by using the labour input method based on VAPW estimates of NSS Enterprise Survey of 2001-02 and the labour input estimates based on EUS 1999-2000 of NSS 55th Round, worked out separately for rural/urban and organized/un-organised segments.
- 19.21 For subsequent years, the method is same as indicated at para 19.7 above.
- 19.22 **Accounting, Book-keeping and Related Activities in Private Sector (NIC-98 code 7412):** The activities covered under this compilation category are accounting, book-keeping & auditing activities and tax consultancy services.
- 19.23 The estimates of GVA for accounting & book-keeping services etc. in the private sector for the base year 1999-2000 have been prepared by using the labour input method based on GVAPW estimates of NSS Enterprise Survey of 2001-02 and the labour input estimates based on EUS 1999-2000 of NSS 55th Round, worked out separately for rural and urban areas.
- 19.24 For subsequent years, the method is same as indicated at para 19.7 above.
- 19.25 **Research and development, market research and public opinion polling, business & management consultancy, architectural, engineering & other technical activities, advertising and business activities n.e.c. excluding auctioning (NIC-98 codes 73, 7413, 7414, 742, 743, 749(-)74991):** This compilation category has been obtained by re-grouping the activities under business services and other services. In the 1993-94 series, the estimates of Research & scientific services (NIC-87 code 922) were included under 'other services'. In NIC-98, this activity is classified under code 73, which is under 'business services'. In 1999-2000 series of NAS, the estimates of this activity are included under 'business services' only. Similarly, the GVA estimates of 'press agency activities' falling under NIC-87 code 897 were being compiled, though not exclusively, under the category of 'business services' in 1993-94 series. Now, this activity falls under 'news agency activities', which is classified under NIC-98 code 922. The GVA estimates from this category are included under 'other services' in the new

series. Thus, the comparison of GVA estimates of 'business services' in the 1993-94 series, and 1999-2000 series, has to be done keeping in view these changes in grouping.

- 19.26 The estimates of GVA for this compilation category have been prepared for organized & un-organised and rural /urban areas for the base year 1999-2000 by using VAPW estimates of NSS Enterprise Survey of 2001-02 and the labour input estimates from EUS 1999-2000 of NSS 55th Round.
- 19.27 For subsequent years, the estimates of labour input have been prepared using the population growth rate as projected by the Office of the RGI. The value added per worker of rural and urban areas have been projected to subsequent years with the CPI (AL) and CPI (IW) respectively.

Estimates at constant prices

- 19.28 For Real estate activities, Renting of Machinery & Equipment without Operator, Computer and Related Activities, Legal activities, Accounting, book keeping, Research & Development, the constant price

estimates for rural and urban areas are obtained by deflating current price estimates with CPI (AL) and CPI (IW) respectively. The constant price estimates for Ownership of dwellings are obtained by multiplying the rent per household of the base year with the projected residential census houses of the subsequent years and subtracting there from the cost of repairs and maintenance at constant prices.

Quality and limitations of data base

- 19.29 While the estimates for the organized sector in the computer related services are estimated from direct data sources, those of organized and unorganized segments in respect of all other sub-sectors are prepared through benchmark-indicator method. On these segments no current data on annual basis is available, although rental information for urban areas from CPI (UNME) can be assumed to be a reliable source of current data. Regular, timely and complete data in respect of these services, if available on the corporate sector, could improve considerably the quality of their GVA estimates.

Appendix 19.1

GDP from Real estate, Ownership of dwellings and Business Services

(Rs. crore)

Services	1999-2000
Gross rental of dwellings	97666
Rural	42931
Urban	54735
Less: cost of repairs & maintenance of dwellings	4683
Rural	3408
Urban	1276
Gross domestic product	128556
Dwellings	92983
Rural	39524
Urban	53459
Real Estate	1373
Renting of Machinery	1407
Computer relating services	17187
Legal services	3062
Accounting	1725
Research Dev.	10819
Less: F.I.S.I.M.	668
GDP net of F.I.S.I.M.	127888