Estonia

Sources:
Atkinson and Micklewright 1992, UE5, UE6 and UI3 from the Statistical Appendix
Alexeev and Gaddy 1993, Table 3, 4a and 4b
Milanovic and Ying 1996
Milanovic 1998, country tables in the Appendices 2 and 4
Social Trends, Statistical Office of Estonia 1998
Estonian Statistics Monthly 1/99
Estonia CSO: data provided directly by the Statistical Office
Estonia CSO 1998, 2003 & 2004
Transmonee 2004
Luxembourg Income Study (for more information please look at http://www.lisproject.org/techdoc/ee/eeindex.htm)

The documentation relies heavily on Atkinson and Micklewright (1992).

Surveys:
Family Budget Survey 1988, 1989, 1990
The Family Budget Survey used by Atkinson and Micklewright (1992), Alexeev and Gaddy (1993) and Milanovic (1998) was a survey of families of persons employed in the state sector and of families of collective farmers (covering the whole USSR). Families have been selected by sampling individuals at their place of work. Sampling appears to have operated principally on a quota basis, with quotas for economic sectors, industrial branches and, within these, republics and oblasts. Beneath this level enterprises were selected on the basis of average age level and within each enterprise individuals were chosen according to their skill level and wage. Once included in the sample, an individual (and his or her family) was asked to participate until they left the enterprise or retired; retirement did not lead to automatic exclusion from the sample but was usually associated with a family dropping out from the survey. Replacement occurred only when a household dropped out from the survey. Participating households were monitored by the survey throughout the year. There were interviews with the whole household twice every month with diary records being maintained continuously. At inception in its post-war form in 1951, the sample size was about 51 000 families, in 1969, 62 000 and in 1988, 90 000. A family was defined as relatives who share a common budget. Approx. one third of the oblasts were not represented in the survey, high wage heavy industrial branches were over-represented in the selection of enterprises and less-skilled workers and those outside the direct production process were less likely to be selected. State farm workers seem also to have been under-represented but the rural population as a whole over-represented. When the sample size was expanded in 1988 it was specifically to correct problems of regional and branch representation.

For the above mentioned reasons the FBF sample was unrepresentative: families of those employed in the co-operative or private sectors and those not employed were in general excluded, old-age pensioners were heavily under-represented since they were originally excluded, the probability of selection was proportional to the number of working

members since the sampling unit was the worker and, the panel nature of the survey biased the sample towards families of elder persons with long service records.

No figures of non-response are available but apparently the response rates were very high due to material and moral incentives to participate. Where non-response did occur, the household concerned was substituted with another household with similar observable characteristics.

When reporting results, figures have been adjusted for the over-sampling of collective farm families.

Annual gross family income was collected, including all money income from employment and from social security benefits. Reported cash income from sales of agricultural produce was included as was the value at state prices of agricultural production for self-consumption. The value of benefits in-kind from the employers such as meals and transport was included. Apparently benefits in-kind from the state are not included. Respondents' information on earnings and pensions were checked with employer records.

In Atkinson and Micklewright (1992) the reference period was a year but the data has been divided by twelve in the tables. The authors had to interpolate in order to arrive at values for the mean, median, and the Gini coefficient. To do this the authors used the program INEQ written by F.A. Cowell. Alexeev and Gaddy (1993) used a simple nonparametric technique based on the Kolmogorov-Smirnov test is used to fit the data to a lognormal distribution. They report that the estimates for 1990 are more reliable than those for 1988, as incomes were grouped only into 5 categories in 1988 but into 7 in 1990.

Earnings Surveys 1981, 1986, 1989

Two sources of data have been used for earnings by Atkinson and Micklewright (1992). The first is Goskomstat 100% census of enterprises, held periodically since 1956, and from 1976 every five years (this is called the March Census by the authors). Enterprises were obliged to provide information on earnings for all their employees in a number of discrete earnings bands. The second source relates to data for 1984 and 1989. This is a survey of households of state sector and collective farm employees (this is called the March Household Survey by the authors). The information from this survey should be comparable with the first one. The March census covered only persons working in state enterprises, whereas those about 10% working on collective farms or private agricultural plots were excluded. Those employed by "social organisations", usually taken to mean the Communist Party and its close affiliates, were also excluded. The earnings data used from the household survey 1989 have been selected to include only those employed in state enterprises and farms (i.e. excluding collective farm workers). Employees not working a full month were excluded and only first jobs were considered. Part-time workers were included but are excluded from the tables provided by the authors.

The earnings concept is gross earnings for the month in question. The monthly bonus and the monthly value of any quarterly bonuses were included but annual bonuses or any other rewards based on a period of more than three months were excluded. No account was taken of the value of income in kind provided by enterprises. The reference period was gross earnings in March for both surveys. The authors had to interpolate in order to arrive at values for the mean, median, and the Gini coefficient. To do this the authors used the program INEQ written by F.A. Cowell.

Household Budget Survey 1993-2003

The survey sometimes goes under the name Estonia Living Conditions Survey or Household Income and Expenditure Survey.

The methodology of the survey, which was worked out by the Family Laboratory and the Institute of Mathematical Statistics of Tartu University, is reported to be close to the methodology of surveys conducted in other European countries. All private households living officially and permanently in Estonia are covered. Systematic random sampling was used among persons age 16 or older at the beginning of the survey year. Each person selected into the sample brings his or her household to the survey. If the person does not live at the address given in the population database, the household which actually lives at the address will be surveyed. In 2002, 850 households were surveyed per month and in 2003, 520 (6749 households during the year). The biggest source of error in the survey is that caused by the huge non-response. The response rate is only around 50%.

The survey design was substantially revised in 2000. In earlier years the households were repeatedly interviewed according to a rotation scheme. The rotation scheme was 3 months and each household was in general interviewed three times. Since 2000, each household was interviewed two times; the rotation period was 12 months, whereby the sample was replaced every half year. To minimize processing errors the data-entering program BLAISE was taken into use in 2000. The new methods caused some what higher inequality estimates.

The data are collected from households by face-to-face interviews (both pre- and post-interviews) and by diaries. Both income and expenditures are collected through the diaries. Food expenditures are collected during half a month whereas income, taxes and other expenditure are collected for the survey month.

The CSO uses mainly estimates based on expenditures. It seems that the Gini coefficients have been calculated based upon the full expenditures rather than consumption. The concept looks complete including both monetary and non-monetary expenditures and covering the following items: food, alcoholic beverages and tobacco, clothing and footwear, dwelling, household equipment and operation, medical care and health services, transport and communications, recreation, leisure and entertainment, education, hotels, cafés and restaurants and miscellaneous goods and services. Other spending includes gifts, donations and fines. The non-monetary expenditures include goods and services received from employers and agricultural products produced for own consumption and consumed during the survey month.

The income concept as defined by the CSO includes monetary and non-monetary income which is received as:
earnings from employment – wages and salaries, advance payments and premiums, holiday compensations and compensation for business trip
income from self-employment - agricultural and non-agricultural both monetary and non-monetary
property income – income from rent of real estate, income from interest, dividends and intellectual property
transfers – pension, unemployment benefits, child benefits, sick payments, alimonies, social support, grants and gifts of money
scholarships
other income - selling of goods, personal income tax returned, settlements of accounts (taxes), refunded insurance premiums and lottery prizes

Non-monetary income includes income paid for labour or goods and services received as a gift and calculated into a monetary value. Incomes included apparently also savings during the years 1992 to 1994.

Until 1997, the CSO reported the Ginis based on quarterly data, so four different Ginis were reported per year. Milanovic (1998) had access to unit record data for the third quarter of HBS95.

Data from Transmonee
Earnings: The survey name is apparently Hourly Wages and Earnings conducted in October each year and including full time employees but excluding self-employed and farmers.

Income: HBS used (see above).