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UNECE SURVEY ON USE OF EMPLOYMENT DATA IN NATIONAL ACCOUNT

Note by the secretariat¹

Addendum

Metadata Sheets

I. ALBANIA

Generalities

1. The estimate of persons employed partially follows the national accounts concept. It is made mainly as part of the process of exhaustiveness adjustments in national accounts. At this stage no estimates are made for hours worked. The main data source is the annual enterprise survey.

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Main source for employment

2. The main source for employment is the Annual Structural Business Survey (SBS), which covers all active enterprises in Albania. The survey does not include the financial corporations, and the enterprises classified in education, health, culture, public administration and agriculture. The data are in terms of persons employed.

3. The second data source is an annual household survey called Living Standard Measurement Survey (LSMS) that is a sample survey covering all districts of the country. It is used to measure household's living standard but it also provides information on employment in the informal sector. The data are both in terms of persons and jobs.

4. The first labour force survey (LFS) was conducted in 2007 but no results are available yet.

Adjustments conducted to main source of employment

5. The SBS provides data as annual averages.

6. The data on second jobs are excluded from LSMS in order to reconcile the estimates between the two different sources.

7. On the basis of the LSMS, adjustments for exhaustiveness are made for activities C to I, O and P from the statistical classification of economic activities in the European Community (NACE). The hidden labour is estimated as a difference between the estimates provided by the SBS and LSMS.

8. No adjustments for geographical coverage or other adjustments are made.

Main sources and adjustments for hours worked

9. National accounts employment in terms of hours worked is not compiled.

10. No such data are collected by the existing surveys.

II. ANDORRA

Generalities

11. Employment according to national accounts concept is not compiled. The only existing data source is the register of the Andorran office of social security (CASS).

Main source for employment

12. The CASS register covers only employees in terms of persons. No further adjustments are made.

Adjustments conducted to main source of employment: n.a.

Main sources and adjustments for hours worked: n.a.

III. ARMENIA

Generalities

13. The estimate of persons employed follows the national accounts concept. At this stage no estimates are compiled for hours worked. The main data sources are administrative registers and business surveys.

Main source for employment

14. The main sources for employment are the business surveys of macro- and medium- sized enterprises (including state sector's micro-sized institutions), sample surveys of small and micro-sized private enterprises, and administrative sources for self-employed (number of employed in agricultural farms and State Register of Legal Entities under the Ministry of Justice).

15. Due to resource constraints the LFS is not conducted with sufficient periodicity and therefore is not used as a main data source.

Adjustments conducted to main source of employment

16. Annual data are calculated by averaging monthly or daily data where available or by averaging beginning and end of period values for the rest. All sources provide estimates in terms of persons.

17. Adjustment for persons employed in the informal sector is made on the basis of the LFS.

18. No adjustments are made for resident and non-resident producer units and for military forces.

19. Self-employed in agricultural farms are included in the employment data. Adjustment is also made for workers below and above threshold working age.

20. In addition, the population census, Income and Living Conditions Survey (ILCS), and labour force data collected by other organizations are used for cross-checking the information coming from the main sources.

Main sources and adjustments for hours worked

21. National accounts employment in terms of hours worked is not compiled. Such estimates are foreseen in the mid and long-term period.

IV. AZERBAIJAN

Generalities

22. Number of employed and hours worked is estimated following recommendations of International Labour Organisation (ILO). Main data sources are quarterly LFS and reports of enterprises.

Main source for employment

23. The following labour data sources are available:
- (a) Quarterly labour force survey covering population of 15 years of age or more;
 - (b) Quarterly and annual surveys of all enterprises residing in the economic territory of the country providing information on the number of employees and wage bill.

Adjustments conducted to main source of employment

24. Annual average number of employed is estimated from the quarterly LFS data.
25. No other adjustments are made.

Main sources and adjustments for hours worked

26. Hours worked are estimated on the base of total hours that are worked by employees and self-employed.

The main data sources used are:

- (a) Monthly surveys of enterprises – reports on the number of employees and wage bill;
- (b) Quarterly LFS.

27. The estimates of hours worked cover the hours actually worked, including over-time, and time worked during business trips, national holidays and other non-working days.

V. BELARUS

Generalities

28. The estimate of persons employed follows the national accounts concept. The data on hours worked refers only to employees. The main data sources are enterprise surveys and tax data, complemented by household surveys and other administrative sources.

Main source for employment

29. Following sources provide monthly data for employment:
- (a) Monthly survey of enterprises and public institutions providing data on persons employed (excluding small businesses of non-state ownership);
 - (b) Data from the tax agencies on the number of individual entrepreneurs.

30. Data from the following sources are available on annual basis:
- (a) Survey of small businesses of non-state ownership;
 - (b) Data from the tax agencies on the number of persons employed by individual entrepreneurs;
 - (c) Household income and expenditure sample survey on the number of persons engaged at personal subsidiary plots;
 - (d) Data of the Commissioner on Religions and Nationalities on the religion ministers.
31. The total number of the employed is calculated on the base of the monthly data from enterprise surveys and tax records on the number of individual entrepreneurs. The data coming from annual sources (number of employees of small businesses of non-state ownership, persons employed by individual entrepreneurs, persons engaged at personal subsidiary plots, and persons working in religious organizations) are taken at the level of the previous year and are re-calculated when the reference year is over.
32. Labour force survey is not conducted.

Adjustments conducted to main source of employment

33. The data on persons employed refer to employees of all enterprises; employed in agricultural farms and persons working at their personal subsidiary plots, individual entrepreneurs and their employees.
34. The survey of enterprises and public institutions provides data on monthly averages of payroll employees (by averaging daily numbers). Monthly averages of the data from tax agencies on individual entrepreneurs are calculated as a mean of the beginning and the end of month numbers. Annual averages for both sources are calculated from the monthly data. For other sources annual averages are calculated as a mean of the beginning and end of year numbers.
35. In order to pass from jobs to persons concept, the secondary jobs of the same person are not taken into account in the estimates.
36. Adjustments (imputations) for coverage are made for residents employed by foreign affiliates that are considered in the economic territory of the country. Foreign diplomatic missions and international organizations are not included in the employment estimates.
37. Adjustments for exhaustiveness for employees of small businesses of non-state ownership are made on the base of data from the statistical register. Adjustments (imputations) are made also for self-employed engaged in own account capital formation, e.g. home-building cooperatives.
38. The data sources implicitly cover all working persons, irrespective of the age. No other adjustments are made.

Main sources and adjustments for hours worked

39. Estimates of employment in terms of hours worked are not calculated for the whole economy due to insufficient information in the major data sources.
40. The main source on hours worked is the monthly survey of enterprises and public institutions.
41. The number of hours worked refers only to employees and covers the hours actually worked including overtime, hours worked during national holidays, holiday (non-working) days, days off (according to schedule) and hours worked in business trips.
42. For employees having reduced working day only the hours actually worked are taken into account.
43. Hours worked do not include time within shifts, leaves, strikes, disability, and other absence from work irrespective of whether the wage was preserved or no. As opposed to the SNA definition, hours worked do not include working time losses as a result of temporary lay-off due to various reasons irrespective whether they are paid or not.

VI. BOSNIA AND HERZEGOVINA

Generalities

44. Employment data according to national accounts concept are not compiled. A labour force survey was conducted for the first time for reference year 2006. The results were not available at the time the questionnaire was sent.

Main source for employment: n.a.

Adjustments conducted to main source of employment: n.a.

Main sources and adjustments for hours worked: n.a.

VII. CROATIA

Generalities

45. Employment data according to national accounts concept are not compiled. The existing administrative sources provide information on employment in terms of persons. LFS also exists. However, official estimates for national accounts employment figures are not published yet.

Main sources for employment

46. The main sources are administrative registers:
- (a) Croatian Payment Agency (annual average number of employees calculated by averaging end-of-quarter data);

- (b) Croatian Institute for Pension Insurance (annual average number of pension beneficiaries in legal entities and crafts);
- (c) Tax Authority (number of owners and workers in crafts from tax claims).

47. LFS is conducted according to ILO recommendations, but is not used in national accounts for the moment. Prior to 2007, the survey was carried out annually, and then it became quarterly. It is planned that in the next two years the LFS results will be used in combination with the regular administrative sources in order to estimate employment according to national account concept.

Adjustments conducted to main source of employment: n.a.

Main sources and adjustments for hours worked

48. National accounts employment in terms of hours worked is not compiled. Experimental estimates are under way.

VIII. GEORGIA

Generalities

49. The estimate of persons employed partially follows the national accounts concept. Estimates for hours worked are foreseen for reference year 2007.

Main source for employment

50. The main sources for employment are the business sector survey and LFS.

Adjustments conducted to main source of employment

51. Annual averages are calculated on the base of quarterly number of persons employed.

52. Adjustment from jobs to the concept of persons is made, but it needs further improvement.

53. The estimate on persons employed in enterprises is based on the business surveys. Hidden employment and self-employed are estimated on the base of the LFS.

54. No adjustments are made for geographical coverage (resident and non-resident producer units), or other.

55. In addition to the main source specialised surveys are carried out on an ad-hoc basis and used for cross-checking the data.

Main sources and adjustments for hours worked

56. The LFS contains questions on total hours worked, but estimates are not made yet. Data would be available for reference year 2007.

IX. ISRAEL

Generalities

57. The estimate of persons employed and hours worked follows the national accounts concept. The LFS is the major data source for number of persons employed, employees and work hours of employed persons and employees.

Main source for employment

58. The main data source is the LFS, which is conducted quarterly.

59. LFS in Israel covers all Israeli residents and measures the number of employees and employed persons and their work hours.

60. The estimates relating to residents of the Palestinian Authority who work in Israel are based on the labour force survey of the Palestinian Authority. Labour force survey of the Palestinian Authority is also carried out quarterly and covers all Palestinian residents.

Adjustments conducted to main source of employment

61. Annual averages are calculated as an average of the quarterly LFS estimates.

62. No adjustments to pass from jobs to persons are needed.

63. Adjustments for non-residents working with resident producer units are made. The estimates are based of the LFS survey of the Palestinian Authority and on net entries of foreign workers to Israel after deducting tourists, new immigrants, diplomats or students.

64. The adjustments implicitly include estimate of hidden labour.

65. In order to crosscheck the data on number of employees the change in the number of Israeli employees from the LFS is compared with the change in the number of employee posts reported to the National Insurance Institute.

66. Employment in manufacturing and in hotel services is based on surveys conducted by C.B.S. The data from these surveys are considered more reliable, although they provide information on jobs rather than on persons.

Main sources and adjustments for hours worked

67. The data on work hours of Israelis is based on the LFS. The data on work hours of residents of the Palestinian Authority who work in Israel come from the LFS of the Palestinian Authority. Work hours of foreign workers are calculated by estimating the average weekly work hours of foreign workers and multiplying it by the number of foreign workers.

68. The estimates of total hours worked by foreign workers include also estimates for hidden labour.

69. Adjustments are also made to smooth the breaks in the quarterly LFS data.

X. KAZAKHSTAN

Generalities

70. The estimate of persons employed and actual hours worked follows the national accounts concept. The main data sources are the LFS, enterprise surveys and tax data.

Main source for employment

71. The following employment data sources exist:
- (a) LFS: it is conducted quarterly during the last week of the middle month of the quarter. Respondents are all members of the household who are 15 years of age or older;
 - (b) Quarterly and annual surveys of big enterprises: they submit a special questionnaire on employment. Respondents are enterprises, affiliates, representative offices, excluding small enterprises.
 - (c) Quarterly and annual surveys of small enterprises (with 50 and less employees): they submit a special questionnaire "Report on small enterprises";
 - (d) Data from the Tax Committee.

Adjustments conducted to main source of employment

72. The adjustment from persons to jobs and vice versa is done on the base of the LFS. It provides information on hours worked in second/auxiliary activities. The hours worked are then recalculated in full time equivalent.

73. The estimate on persons employed in enterprises is based on the business surveys. The tax authorities' data provide information on self-employed.

75. Collective households are not included in the estimates.

76. Persons employed in the non-observed economy are estimated on the base of LFS data. Adjustments are made for the following activities: construction; trade; repair of motor vehicles, motorcycles and personal and household goods; hotels and restaurants; transport; other community, social and personal service activities.

77. No adjustments for residency of employees or other adjustments are made.

Main sources and adjustments for hours worked

78. The major source for actual hours worked is the LFS. Public holidays, vacations and sick leaves are excluded from the LFS estimates. The questionnaire contains information on overtime but does not distinguish between paid and unpaid overtime.

XI. KYRGYZSTAN

Generalities

79. Employment according to national accounts concept is not compiled. At present, surveys of enterprises and municipal establishments are the only sources providing data on employment. Development of estimation methods for labour inputs according to national accounts concept is foreseen for the future.

Main source for employment

80. The following two data sources provide information on employed persons and hours worked:

- (a) Annual business survey of enterprises;
- (b) Data of municipal establishments.

Adjustments conducted to main source of employment: n.a.

Main sources and adjustments for hours worked: n.a.

XII. MOLDOVA

Generalities

81. The estimate of persons employed partially follows the national accounts concept. At this stage no estimates are made for hours worked. The main data sources are the LFS and enterprise surveys. Data exclude Transdnistria.

Main source for employment

82. The following sources provide employment data:

- (a) LFS covers all employed persons, including those from the informal sector. The survey includes questions that allow the identification of unregistered employees, own account workers, unpaid family workers and members of cooperatives. The LFS does not cover the whole territory of the country (it excludes the population of the left bank of the Nistru river and municipality Bender).
- (b) The Structural Business Surveys.
- (c) Specialised enterprise survey on employment.

Adjustments conducted to main source of employment

83. The annual averages are calculated as arithmetic mean of quarterly estimates.
84. The estimate on persons employed in enterprises is based on the business surveys. Adjustments for exhaustiveness for all NACE activities are made on the basis of the LFS. Self-employed, own account workers and unpaid family workers are estimated on the base of LFS.
85. No adjustments for residency of employees or other adjustments are made.

Main sources and adjustments for hours worked: n.a.

XIII. SERBIA

Generalities

86. The estimate of persons employed partially follows the national accounts concept. The main data sources are enterprise surveys and administrative data from the central bank and tax authorities. At this stage, only experimental estimates are made for hours worked.

Main source for employment

87. The main sources for employment are:
- (a) The annual financial statements compiled by the National Bank of Serbia.
 - (b) Data from tax declarations of persons employed;
 - (c) A monthly sample survey of enterprises – the sample covers 70 per cent of total employment and the data are grossed up to the total population.
88. The following specialised enterprise surveys on employment are used as additional data sources:
- (a) A semi-annual survey on employed persons: it covers registered big enterprises of more than 50 employees, part of small-size enterprises up to 50 employees, public institutions, cooperatives and other organizations;
 - (b) A supplemental survey of small-sized enterprises of less than 50 employees not covered by the above survey.
 - (c) A semi-annual survey of private entrepreneurs based on Health Insurance Fund data.
89. The Labour Force Survey is used as a supplementary data source. It is conducted only once a year, in October. LFS does not cover: citizens who live and work in foreign country for foreign employer or as self-employed; foreign citizens who stay in the country less than one year; foreign citizens who work in diplomatic or other missions and members of their families; foreign citizens who attend schools in the country regardless of time spent.

Adjustments conducted to main source of employment

90. The annual average number of employed persons is calculated as the arithmetical mean of the number of the employed persons as of 31 March and 30 September.
91. Adjustments for hidden labour are made for NACE sections: F, G, H, I, J, K and M, as a part of measurement of non-observed economy. The estimates refer to full-time equivalent and are based on LFS results.
92. Adjustments to cover the military forces are made. The annual financial statements, which are the basic data source, explicitly cover the police and Serbian branch offices abroad, so no adjustments are necessary for this group.
93. No other adjustments are made.

Main sources and adjustments for hours worked

94. The RSOS has conducted a pilot labour cost survey. The first LFS survey for the reference year 2006 provides information on hours worked but only preliminary results are available.

XIV. THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Generalities

95. The estimate of persons employed partially follows the national accounts concept. At this stage no estimates are made for hours worked. The main data sources are the business register and tax authorities data on self-employed. These data are completed with information from the LFS. The use of LFS data in order to compute hours worked is foreseen for the reference year 2007.

Main source for employment

96. The following three data sources provide information on employment:
- (a) The Central Register is the main data source. It collects the annual financial statements of legal units (corporate and unincorporated units above a certain turnover threshold) and provides information on employees and partially on self-employed in full time equivalents;
 - (b) Personal income tax declarations submitted to the Public Revenue Office are used as information source for that part of self-employed that are below the turnover threshold of the Central register. Persons who perform second jobs as self-employed are also included there;
 - (c) The LFS is conducted in accordance with the ILO methodological recommendations. It is used to ensure exhaustiveness, but is also the main data source for the number of farmers and individual construction workers.

Adjustments conducted to main source of employment

97. The data obtained from the Central Register are presented in annual averages (annual average number of persons on the payroll during the 12 months of the year).
98. Adjustments to pass from persons to jobs and vice versa are made by using data on primary and secondary jobs coming from the LFS.
99. Adjustments for exhaustiveness are made by comparing the data from the Central Register to the LFS results at NACE division level (A60) by type of unit. The basic assumptions are the following:
- (a) For activities where public enterprises or big enterprises prevail, the Central Register data are considered more reliable and no adjustment is made;
 - (b) For activities where the number of employees from the Central Register is higher than the number of employees from the LFS, the number from the Central Register is taken;
 - (c) For activities performed by small enterprises LFS estimate is considered as more reliable.
100. The self-employed are estimated on the base of tax income declarations and the LFS. In order to reconcile the two data sources, the unpaid family workers are excluded from the LFS estimates and all self-employed are considered to operate an enterprise without employees. Unpaid workers are not included in the estimates.

101. No adjustments for residency of employed or other adjustments are made. The number of employees is crosschecked against the data from the Pension and Disability Insurance Fund to which all legal units are obliged to pay social contributions.

Main sources and adjustments for hours worked

102. National accounts employment data in terms of hours worked are currently not compiled. The compilation is foreseen for the reference year 2007.

XV. TURKMENISTAN

Generalities

103. Employment according to national accounts concept is not compiled. However, variety of sources is used to produce labour-force balance sheets. A household survey was conducted in 2003 collecting detailed data on employment, hours worked and production.

Main source for employment

104. Labour-force balance sheets are compiled using the following data sources: reports of enterprises of all ownership types; business register data; social statistics data (for estimation of non-active population); agricultural statistics (employed in agricultural associations) and households' statistics (information on employed in small unincorporated household enterprises).

105. In 2003 a household survey on employment, hours worked and production of goods and services was carried out. The survey covered the following types of employment: employees, employers, self-employed, employed in unincorporated household enterprises. It provided information on the number of employed and hours worked. The survey results were used to estimate non-observed economy and adjust value added and output. The adjustments were concentrated in the following activities: trade, construction, repairs, transport services, health and education services.

Adjustments conducted to main source of employment: n.a

Main sources and adjustments for hours worked: n.a

XVI. UKRAINE

Generalities

106. The estimates of persons employed partially follows national account concept. Employment data in terms of persons come from the LFS. Hours worked are also available from LFS but at present they are not used in national accounts.

Main source for employment

107. The following sources provide information on employment:

- (a) Enterprise surveys – provide data on employees;
- (b) Administrative data from government institutions;
- (c) LFS – provides estimates for both employees and self-employed.

108. The LFS has been conducted yearly for the period 1995-1998, quarterly (last month of each quarter) for the period 1999-2003, and monthly since 2004. It covers persons aged 15 to 70 years.

109. The LFS does not cover the irradiated territory of Chernobyl accident (zone I and II), institutional households, one-person households with serious impairment, students and pupils of all educational institutions temporarily living in other district, persons who are in military service, and persons who are temporarily absent from their households and are not expected to return before 12 months.

Adjustments conducted to main source of employment

110. The annual averages are calculated as arithmetic mean of monthly estimates.

111. The starting point for employees of enterprises are business surveys and administrative data of the government sector. The estimates for self-employed, own account workers and family workers are based on the LFS.

112. Adjustments for exhaustiveness are made on the base of cross-checks with LFS and other administrative data (tax records, social security and health insurance data).

113. The administrative data of government institutions cover the military forces therefore no adjustment is needed.

Main sources and adjustments for hours worked: n.a.

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