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Employment and Social developments in Europe 2018

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3. DATA SOURCES AND DEFINITIONS

Most of the data used in this report originates from Eurostat, the Statistical Office of the European Union. The main data sources used are:

•   European Union Labour Force Survey (EU-LFS)

•   ESA2010 National Accounts

•   EU-Statistics on Income and Living Conditions (EU-SILC)

•   European System of Social integrated protection Statistics (ESSPROS)

The European Union Labour Force Survey (EU-LFS) is the EU's harmonised household survey on labour market participation. While in the early years, it was carried out as an annual survey conducted in the spring quarter in many Member States it is now a continuous quarterly survey in all EU Member States. If not mentioned otherwise, the results based on the LFS for years before the introduction of the quarterly survey refer to the spring quarter of each year. LFS data covers the population living in private households only (collective households are excluded) and refers to the place of residence (household residence concept). They are broken down by various socio-demographic categories, in particular gender and age. The EU-LFS covers all EU Member States as well as Macedonia and Turkey plus Iceland, Norway and Switzerland.

A particular data collection connected to the EU-LFS is Eurostat's 'LFS main indicators' which present a selection of the main statistics on the labour market. They encompass annual and quarterly indicators of population, activity and inactivity; employment; unemployment; education and training. Those indicators are mainly but not only based on the results of the EU-LFS, in few cases integrated with data sources like national accounts employment or registered unemployment. National accounts employment data covers all people employed in resident producer units (domestic concept), including people living in collective households. In the main indicators, these national accounts figures are broken down by sex, working-time status (full-time/part-time) and contract status (permanent/temporary) using LFS distributions. Where available, all key employment indicators in this report are based on the 'LFS main indicators'.

For the unemployment-related indicators, Eurostat's series on unemployment comprises yearly averages, quarterly and monthly data. It is based on the (annual and quarterly) EU-LFS data and monthly data on unemployment, either from the national LFS or other national sources, mainly unemployment register data. For the compilation of monthly unemployment estimates, these monthly figures from national sources are benchmarked against the quarterly EU-LFS data, and they are used to produce provisional unemployment figures for recent months which are not yet covered by quarterly EU-LFS results. Monthly unemployment by skills or duration is not available from this data collection.

Most macro-economic indicators are based on Eurostat's collection of national accounts data according to the European System of National Accounts (ESA2010 National Accounts). The recent changeover to ESA2010 could produce some changes in relation with previous years. Data is compiled by the Member States and collected by Eurostat. The collection comprises aggregates such as GDP, from which derived measures such as productivity and real unit labour costs are calculated. In addition, national accounts also cover population and employment data, the latter expressed in persons and in hours worked and also broken down by economic activity, but not by socio-demographic categories.

The main data source for the social indicators is the EU-SILC (EU-Statistics on Income and Living Conditions). The EU-SILC instrument is the EU reference source for comparative statistics on income distribution and social inclusion at the European level. It provides two types of annual data for 28 European Union countries, Iceland, Norway, Switzerland and Turkey: Cross-sectional data pertaining to a given time or a certain time period with variables on income, poverty, social exclusion and other living conditions, and Longitudinal data pertaining to individual-level changes over time, observed periodically over a four year period. EU-SILC does not rely on a common questionnaire or a survey but on the idea of a "framework". The latter defines the harmonised lists of target primary (annual) and secondary (every four years or less frequently) variables to be transmitted to Eurostat; common guidelines and procedures;

common concepts (household and income) and classifications aimed at maximising comparability of the information produced.

Data regarding social protection expenditures are from the European System of integrated Social PROtection Statistics (ESSPROS). ESSPROS is an instrument of statistical observation which enables international comparison of the administrative national data on social protection in the EU Member States. The conventional definition used for the scope of social protection definition is the following:

"Social Protection encompasses all interventions from public or private bodies intended to relieve households and individuals of the burden of a defined set of risks or needs, provided that there is neither a simultaneous reciprocal nor an individual arrangement involved. The list of risks or needs that may give rise to social protection is, by convention, as follows: Sickness/Health care, Disability, Old age, Survivors, Family/children, Unemployment, Housing and Social exclusion not elsewhere classified".

Physically, data is generally obtained from Eurobase, Eurostat's online dissemination database and open to public access. Data shown here represents availability and revision status of mid-July 2015.

3.1   Definitions and data sources of macro-economic indicators

1. Real GDP: Gross Domestic Product (GDP), volume, annual change (Source: Eurostat, ESA2010 National Accounts [tec00115]).

2. Total employment: Employment, total economy, annual change (Source: Eurostat, ESA2010 National Accounts [nama_10_a10_e]).

3. Labour productivity: GDP volume per person employed, annual change (Source: Eurostat, ESA2010 National Accounts [nama_10_lp_ulc]).

4. Annual average hours worked per person employed, annual change (Source: Eurostat, ESA2010 National Accounts and DG EMPL calculations).

5. Productivity per hour worked: GDP volume per hour worked, annual change (Source: Eurostat, ESA2010 National Accounts [nama_10_lp_ulc]).

6. Harmonised CPI: harmonised consumer price index, annual change (Source: Eurostat, HCIP [prc_hicp_aind]).

7. Price deflator GDP: Implicit price deflator of GDP, annual change (Source: Eurostat, ESA2010 National Accounts [nama_10_gdp]).

8. Nominal compensation per employee, total economy, annual change (Source: Eurostat, ESA2010 National Accounts and DG EMPL calculations).

9. Real compensation per employee (GDP deflator): nominal compensation deflated with the implicit deflator of GDP, per employee, annual change (Source: Eurostat, ESA2010 National Accounts and DG EMPL calculations).

10. Real compensation per employee (private consumption deflator): nominal compensation deflated with the implicit deflator of private consumption expenditure, per employee, annual change (Source: Eurostat, ESA2010 National Accounts and DG EMPL calculations).

11. Nominal unit labour costs: Nominal compensation per employee divided by labour productivity, annual change (Source: Eurostat, ESA2010 National Accounts [nama_10_lp_ulc]).

12. Real unit labour costs: Real compensation per employee divided by labour productivity, annual change (Source: Eurostat, ESA2010 National Accounts and DG EMPL calculations).

3.2 Definitions and data sources of key employment indicators

1. Total population in 1000s, excluding population living in institutional households (Source: Eurostat, demographics [demo_pjanbroad]).

2. Total population aged 15-64 (the 'working age population') in 1 000s (Source: Eurostat, Demographics [demo_pjanbroad]).

3. Total employment in 000s (Source: Eurostat, LFS [lfsa_egan]).

4. Population in employment aged 15-64 in 1 000s (Source: Eurostat, EU-LFS [lfsa_egan]).

5-9. Employment rates: calculated by the number of employed divided by the population in the corresponding age bracket (Source: Eurostat, EU-LFS [lfsi_emp_a]).

10. Full-time equivalent employment rate: calculated by dividing the full-time equivalent employment by the total population in the 20-64 age group. Full-time equivalent employment is defined as total hours worked on both main and second job divided by the average annual number of hours worked in full-time jobs (Source: Eurostat, EU-LFS and DG EMPL calculations).

11. Self-employed in total employment: number of self-employed as a share of total employment (Source: Eurostat, EU-LFS and DG EMPL calculations).

12. Part-time employment in total employment: number of part-time employed as a share of total employment (Source: Eurostat, EU-LFS [lfsi_pt_a]).

13. Fixed-term contracts in total employees: number of employees with contracts of limited duration as a share of total employees (Source: Eurostat, EU-LFS [lfsi_pt_a]).

14. Employment in services: employed in services (NACE Rev. 2 sections G-U) as a share of total employment (Source: Eurostat, EU-LFS and DG EMPL calculations).

15. Employment in industry: employed in industry, including construction (NACE Rev. 2 sections B-F) as a share of total employment (Source: Eurostat, EU-LFS and DG EMPL calculations).

16. Employment in agriculture: employed in agriculture, forestry and fishing (NACE Rev. 2 section A) as a share of total employment (Source: Eurostat, EU-LFS and DG EMPL calculations).

17-20.Activity rates: labour force (employed and unemployed) as a share of total population in the corresponding age group (Source: Eurostat, EU-LFS [lfsi_emp_a]).

21. Total unemployment in 1 000s (Source: Eurostat, EU-LFS [une_rt_a]).

22-23. Unemployment rates: unemployed as a share of the labour force (employed and unemployed persons) in the corresponding age group (Source: Eurostat, EU-LFS [une_rt_a]).

24. Long-term unemployment rate: persons unemployed for duration of 12 months or more as a share of the labour force (Source: Eurostat, EU-LFS [une_ltu_a]).

25. Share of long-term unemployment: persons unemployed for duration of 12 months or more as a share of the total unemployed force (Source: Eurostat, EU-LFS [une_ltu_a])

26. Youth unemployment ratio: young unemployed (aged 15-24) as a share of the total population in the same age group (Source: Eurostat, EU-LFS [yth_empl_140]).

27-35. Employment rates: calculated by the number of employed divided by the population in the corresponding age bracket, by education attainment (based in the ISCED classification), nationality and country of birth (Source: Eurostat, EU-LFS [lfsa_ergaed]).

36. Underemployment, persons in part-time jobs that would like to work more hours (Source: Eurostat, EU-LFS [lfsi_sup_a]).

37. Seeking but not available, persons seeking a job but not available to work immediately (Source: Eurostat, EU-LFS [lfsi_sup_a]).

38. Discouraged, available but not seeking persons available to work but not seeking job at the moment (Source: Eurostat, EU-LFS [lfsi_sup_a]).

3.3   Definitions and data sources of key social indicators

* At-risk-of-poverty-or-exclusion. Percentage of a population representing the sum of persons who are: at risk of poverty or severely materially deprived or living in households with very low work intensity (Eurostat, EU-SILC [ilc_peps01])

* At-risk-of-poverty. Share of people with an equivalised disposable income (after social transfer) below the at-risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income after social transfers (Eurostat, EU-SILC [ilc_li02])

* At-risk-of-poverty threshold. 60 % of the national median equivalised disposable income after social transfers (Eurostat, EU-SILC [ilc_li01])

* Poverty gap. Difference between the median equivalised disposable income of people below the at-risk-of-poverty threshold and the at-risk-of-poverty threshold, expressed as a percentage of the at-risk-of-poverty threshold (cut-off point: 60 % of national median equivalised disposable income) (Eurostat, EU-SILC [ilc_li11])

* Persistent at-risk-of-poverty. Percentage of the population living in households where the equivalised disposable income was below the at-risk-of-poverty threshold for the current year and at least two out of the preceding three years (Eurostat, EU-SILC [ilc_li21])

* At-risk-of-poverty before social transfers excl. pensions. Share of people having an equivalised disposable income before social transfers that is below the at-risk-of-poverty threshold calculated after social transfers (Eurostat, EU-SILC [ilc_li10])

* Impact of social transfers. Computed indicator (Eurostat, EU-SILC), formula: 100*(B-A)/B, where:

    * B: At-risk-of-poverty before social transfers excl. pensions

    * A: At-risk-of-poverty

* Severe Material Deprivation. Inability to afford some items (at least 4 on a list of 9) considered by most people to be desirable or even necessary to lead an adequate life (Eurostat, EU-SILC [ilc_mddd11])

* Share of people living in low work intensity households. Share of persons living in a household having a work intensity below a threshold set at 0.20. The work intensity of a household is the ratio of the total number of months that all working-age household members have worked during the income reference year and the total number of months the same household members theoretically could have worked in the same period (Eurostat, EU-SILC [ilc_lvhl11])

* Real Gross Household Disposable Income growth. The amount of money available for spending or saving. This is money left after expenditure associated with income, e.g. taxes and social contributions, property ownership and provision for future pension income (Eurostat, National Accounts and DG EMPL calculations)

* Income quintile share ratio S80/S20. Ratio of total income received by the 20 % of the population with the highest income (the top quintile) to that received by the 20 % of the population with the lowest income (the bottom quintile) (Eurostat, EU-SILC [ilc_di11])

- GINI coefficient. The relationship of cumulative shares of the population arranged according to the level of equivalised disposable income, to the cumulative share of the equivalised total disposable income received by them (Eurostat, EU-SILC [ilc_di12])

- Life expectancy at birth. The mean number of years a newborn child can expect to live if subjected throughout his or her life to the current mortality conditions, the probabilities of dying at each age (Eurostat [hlth_hlye])

- Healthy life years at birth. Number of years that a person is expected to continue to live in a healthy condition (Eurostat [hlth_hlye])

- Early leavers from education and training. Early leaver from education and training, previously named early school leaver, generally refers to a person aged 18 to 24 who has finished no more than a lower secondary education and is not involved in further education or training; their number can be expressed as a percentage of the total population aged 18 to 24. (Eurostat, EU-LFS [edat_lfse_14])

- NEET: Young people not in employment, education or training. Share of people aged 15 to 24 who are unemployed, not engaged in housework, not enrolled in school or work-related training, and not seeking work(Eurostat, EU-LFS [edat_lfse_20])

- Risk of poverty of children in households at work (Working Intensity > 0.2). Share of children at-risk-of-poverty living in households with work intensity bigger than very low (Eurostat, EU-SILC [ilc_li06])

- In-work at Risk-of-poverty rate. The share of persons who are at work and have an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income (after social transfers) (Eurostat, EU-SILC [ilc_iw01])

- Relative median income of elderly. Ratio of the median equivalised disposable income of people aged above 65 to the median equivalised disposable income of those aged below 65.(Eurostat, EU-SILC [ilc_pnp2])

- Aggregate replacement ratio. Ratio of the median individual gross pensions of 65-74 age category relative to median individual gross earnings of 50-59 age category, excluding other social benefits.(Eurostat, EU-SILC [ilc_pnp3])

- Social indicators expenditure. Percentage of expenditure in different social protection areas in relation with the GDP (Eurostat, ESSPROSS [spr_exp_sum, spr_exp_gdp])