

## **QUALITY REPORT FOR STATISTICAL SURVEY**

### **Monthly Survey on Persons in Employment and Earnings (RAD-1) for 2024**

Organisation unit: Demographic and Social Statistics Directorate / Labour Market Statistics  
Prepared by: Dean Maslovara, Varga Snježana

## 0. Basic information

- Purpose, goal, and subject of the survey

The aim of this statistical survey is to obtain data on the monthly data on earnings and employment, which are the basic indicators for the analysis of the economy in the long and short term (number of employees, unemployment rate, average monthly net and gross wages per employed person and per paid hours of work; nominal and real indices gross and net salaries, and are used for the calculation of STS indicators, Labour Cost Index and input for National Accounts). The subject of this survey is the average monthly paid net and gross wages per employee/paid hours in legal entities, the number of employees to whom the payments refer, the number of paid hours and hours worked, the number of employees according to the personnel records of the legal entity submitting the report, which includes the number of employees at the end of the previous reporting period. of the month, the number of employees by gender.

- Reference period

Month

- Legal acts and other agreements

Labour Law (NN, Nos 93/14, 127/17, 98/19, 151/22, 46/23 and 64/23.), Collective agreements between employees and employers, Income Tax Act (NN, Nos 115/16, 106/18, 121/19, 32/20, 138/20, 151/22, 114/23 and 152/24), Income Tax Ordinance (NN, Nos 10/17, 128/17, 106/18, 1/19, 80/19, 1/20, 74/20, 138/20, 01/21, 102/22, 112/22, 156/22, 1/23, 56/23 and 143/23), Decision on the National Classification of Activities - NKD 2007 (NN, Nos 58/07 and 72/07), Ordinance on the Content and Manner of Keeping Records of Workers (NN, Nos 73/17, 55/24)

- Classification system

National Classification of Activities 2007

- Statistical concepts and definitions

**Persons in paid employment** are all persons who have signed a work contract with an employer for a fixed or an unspecified period of time, irrespective of the type of ownership and whether they work full-time or less than full-time.

**Registered unemployment rate** is calculated as a ratio of the number of unemployed persons to the total active population (labour force).

**Average monthly paid off net earnings** comprise income of a person in employment earned for work done during regular working hours as well as annual leave, paid leave, holidays and day-offs as prescribed by law, sickness leave up to 42 days, absence for continuing professional education, during lay-off and job stop caused against person's will and of no fault of his own and net pays on the basis of compensations, allowances and rewards in sums which are subjects to contributions, taxes and surtaxes.

**Average gross earnings** include all kinds of net pays on the basis of employment and the following mandatory allocations: pension insurance contributions, income tax and surtax on income tax.

**Average net and gross earnings per person in employment** are calculated by dividing the total pay- offs with the number of persons in employment expressed in full- time equivalent.

Data on the average monthly net and gross salary paid per employee are reported according to the principle of payments made in the current month for the previous month, which corresponds to the dynamics of payments in the largest number of legal entities, and the average salary per employee refers to the month for which the payment was received.

**Indices of nominal net and gross earnings** are calculated from the data on average monthly net and gross earnings for the respective year.

**Real indices of net and gross earnings** are calculated by dividing the index of nominal gross and net earnings with the cost of living index for the respective year and, since 2004, with the consumer price index.

**Paid hours** are hours actually done during regular working hours, overtime hours as well as paid hours not actually done (annual leave, holidays, sick leave lasting up to 42 days and other paid hours not actually done).

- Statistical units

Enterprises with one and more employees.

- Statistical population

Until 2016 data was compiled from business survey, sample based.

Since 2016. data have been obtained by processing data from administrative sources, on a full-coverage basis.

## 1. Relevance

### 1.1 Data users

Internal users: within the Croatian Bureau of Statistics, Macroeconomic Statistics Directorate.

External users: national users - Government of the Republic of Croatia, ministries, Economic Institute, faculties, media, scientists, labour market analysts. International users - UN, ILO, IMF, World Bank.

#### 1.1.1 User needs

The monthly surveys on employment and wages provide data on the average monthly gross and net wage per employee and per paid hour, the average number of paid hours, the monthly number of employees by sex, data on the active population, and the registered unemployment rate. In quarterly publications, data on employment and wages by counties as well as data on average wages by sex are available.

#### 1.1.2 User satisfaction

The first user satisfaction survey of the Croatian Bureau of Statistics was conducted in 2013, the next one in 2015 and 2022, and the last one at the end of 2024. The results of the survey can be checked on the website of the Croatian Bureau of Statistics – [User satisfaction surveys](#).

### 1.2. Completeness

Survey is conducted for national needs, data is collected and published in accordance with the Annual Implementation Plan.

#### 1.2.1 Data completeness rate.

Indicator for this survey is not applicable.

## 2. Accuracy and reliability

### 2.1. Sampling error

Not applicable.

#### 2.1.1 Sampling error indicators

Indicator for this survey is not applicable.

### 2.2. Non-sampling error

Not applicable.

#### 2.2.1. Coverage error

Not applicable.

#### 2.2.2. Over-coverage rate

Indicator for this survey is not applicable.

#### 2.2.3. Measurement error

Not applicable.

#### 2.2.4. Non-response error

Not applicable.

#### 2.2.5. Unit non-response rate

Indicator for this survey is not applicable.

#### 2.2.6. Item non-response rate

Indicator for this survey is not applicable.

#### 2.2.7. Processing error

Not applicable.

#### 2.2.8. Imputation rate

Indicator was not computed for this survey.

#### 2.2.9. Model assumption error

Not applicable.

### 2.3. Data revision

#### 2.3.1. Data revision – policy

The users of statistical data are informed about revisions on the website of the Croatian Bureau of Statistics, on the link – [General Revision Policy of the CBS](#).

#### 2.3.2. Data revision – practice

Data on average monthly paid net and gross wages per employee in legal entities are final and do not change.

In March of each year, the final data on employees by month are published. A revision of data was performed on the basis of monthly data sets, JOPPD forms (Report on income, income tax and surtax as well as contributions for mandatory insurances), containing final data for the previous year.

#### 2.3.3. Data revision – average size

Indicator for this survey is not applicable.

## **2.4. Seasonal adjustment**

Seasonally adjusted data are available for Labour Cost Index from Q1 2008 onwards and for STS indicators (earnings and hours worked from Q1 2000).

For seasonal adjustment of time series X13 method (JDemetra + software) was used.

## **3. Timeliness and punctuality**

### **3.1. Timeliness**

Publication on the 20th of each month for the previous month.

#### **3.1.1. Timeliness – first results**

Indicator was not computed for this survey.

#### **3.1.2. Timeliness – final results**

Indicator was not computed for this survey.

### **3.2. Punctuality**

Employed persons, lag of 30 days from the reference period.

Earnings and paid hours, lag of 60 days from the reference period.

#### **3.2.1. Punctuality – delivery and publication**

Indicator was not computed for this survey.

## **4. Accessibility and clarity**

Data are available on the website of Croatian Bureau of Statistics.

### **4.1. News release**

First Release RAD-2024-1-1 Average Monthly Net and Gross Earnings of Persons in Paid Employment, 2024

First Release RAD-2024-1-2 Average Monthly Net and Gross Earnings of Persons in Paid Employment, by Accounting Periods, 2024

First Release RAD-2024-2-1 Persons in Paid Employment by Activities, 2024

### **4.2. Online database**

Data are available in PC-Axis databases at the link [Employment and Wages](#) and in the [STS database](#).

### **4.3. Microdata access**

The conditions under which certain users can access microdata are regulated by the [Ordinance on Conditions and Terms of Access and Use of Confidential Statistical Data of the Croatian Bureau of Statistics for Scientific Purposes](#) (NN, No. 5/23).

### **4.4. Documentation on methodology**

Methodological explanations, which form part of the publications, are available on the website of the Croatian Bureau of Statistics.

## **5. Coherence and comparability**

### **5.1. Asymmetry for mirror flows statistics**

Indicator for this survey is not applicable.

### **5.2. Comparability over time**

The number of employees according to personnel records has been monitored since 1998 by gender.

Until 1998, neither persons in employment in police and defence nor persons who performed their activity at private farms were included. In order to obtain as full data as possible, since 1998, the number of persons in employment has included the estimated data on persons in employment in police and defence. Since January 2004, these data have been included on the basis of reports submitted by competent ministries.

Since 2006, the questionnaire has included elements for calculating the hours worked.

Since 2016, data on persons employed, monthly paid off net and gross earnings have been obtained by processing data from the Report on Income, Income Tax and Surtax as well as Contributions for Mandatory Insurances (JOPPD form), in effect since 1 January 2014.

#### **5.2.1. Length of comparable time series**

Indicator was not computed for this survey.

#### **5.2.2. Reasons for break in time series**

Changes in the classification of activities. Data on the number of employed persons, average net and gross earnings in legal entities in the period from 2002 to 2007, backcasted from the NKD 2000. to the NKD 2007. Data on the number of employed persons, average net and gross earnings in 2008, backcasted from the NKD 2002. to the NKD 2007., the macro method was used in backcasting of data from the NKD 2002. activities to the NKD 2007. activities. The National Classification of Activities, 2007 version - NKD 2007., entered into force on 1 January 2008 (NN, Nos. 58/07 and 72/07). This classification has a different structure as compared to the NKD 2002. and all significant changes that occurred in the National Classification of Activities - NKD 2007. were published in the Methodology for Statistical Application of National Classification of Activities 2007. - NKD 2007. (NN, Nos. 102/07 and 123/08). Full coverage, since January 2016, data have been taken over from the JOPPD form (Report on income, income tax and surtax as well as contributions for mandatory insurances).

### **5.3. Coherence – short-term and annual statistics**

Indicator was not computed for this survey.

### **5.4. Coherence – national accounts**

Indicator was not computed for this survey.

### **5.5. Coherence – administrative sources**

Indicator was not computed for this survey.

## **6. Cost and burden**

### **6.1. Cost**

Introducing a new method of data collection, uploading data from the Tax Administration, the costs of collection and processing were also reduced, i.e. the costs were reduced to a minimum.

### **6.2. Burden**

In order to reduce burden for reporting units starting with January 2016 administrative source was used to compile data.