



REPUBLIC OF CROATIA



CROATIAN BUREAU OF STATISTICS

QUALITY REPORT FOR STATISTICAL SURVEY
Labour Force Survey (LFS)
for 2015

Organisation unit: Labour Market Statistics Department
Prepared by: Martina Špundak

January, 2022

0 Basic information

- Purpose, goal, and subject of the survey

The Labour Force Survey measures the economic activity of population in a short observing period of one week. The survey collects demographic and educational characteristics of household members by sex, characteristics of a main and secondary jobs as well as of a past job a person did, employment status, hours of work, working time, activity, occupation, characteristics of unemployed persons, inactive persons.

- Reference period

Data are collected and published for each quarter of a year.

- Legal acts and other agreements

The Labour Force Survey is carried out in line and on the basis of the following national legal acts:

- Official Statistics Act (OG, Nos 103/03, 75/09, 59/12 and 12/13 – consolidated text)
- Programme of Statistical Activities of the Republic of Croatia 2013 – 2017 (OG, No. 69/13)
- Annual Implementation Plan of Statistical Activities of the Republic of Croatia.

The Labour Force Survey is carried out in line and on the basis of the following international legal acts:

General regulations

- Regulation (EC) No 577/98 of 9 March 1998 on the organisation of a labour force sample survey in the Community
- Regulation (EU) No 545/2014 of the European Parliament and of the Council of 15 May 2014 amending Council Regulation (EC) No 577/98
- Regulation (EC) No 596/2009 of the European Parliament and of the Council of 18 June 2009 amending Council Regulation (EC) No 577/98
- Regulation (EC) No 1372/2007 of the European Parliament and of the Council of 23 October 2007 amending Council Regulation (EC) No 577/98
- Regulation (EC) No 2257/2003 of the European Parliament and of the Council of 25 November 2003 amending Council Regulation (EC) No 577/98
- Regulation (EC) No 1991/2002 of the European Parliament and of the Council of 8 October 2002 amending Council Regulation (EC) No 577/98

Implementing regulations concerning the Survey

- Regulation (EC) No 377/2008 of 25 April 2008 implementing Council Regulation (EC) No 577/98

The Regulation regulates the implementation of the codification to be used for data transmission from 2009 onwards, including the compulsory survey characteristic 'income', the use of a sub-sample for the collection of data on structural variables and the definition of the reference quarters.

- Regulation (EC) No 430/2005 of 15 March 2005 implementing Council Regulation (EC) No 577/98

The Regulation regulates the implementation of the codification to be used for data transmission from 2006 onwards and the use of a sub-sample for the collection of data on structural variables.

- Regulation (EC) No 1897/2000 of 7 September 2000 implementing Council Regulation (EC) No 577/98

This Regulation regulates the implementation of the operational definition of unemployment and contains 12 principles for constructing the questionnaire.

- Regulation (EC) No 1575/2000 of 19 July 2000 implementing Council Regulation (EC) No 577/98

This regulation provides the codification to be used for data transmission from 2001 to 2005. It was corrected twice: Corrigendum to Commission Regulation (EC) No 1575/2000, Corrigendum to Commission Regulation (EC) No 1575/2000.

- Regulation (EC) No 1571/98 of 20 July 1998 implementing Council Regulation (EC) No 577/98

The Annex I of the regulation defines the reference quarters for the first two years of the continuous survey and the Annex IV defines the codification in force for the period from 1998 to 2000.

Regulations on the use of classifications in the EU-LFS

- Regulation (EU) No 317/2013 of 8 April 2013 amending the Annexes to Regulations (EC) No 1983/2003, (EC) No 1738/2005, (EC) No 698/2006, (EC) No 377/2008 and (EU) No 823/2010 as regards the International Standard Classification of Education. This regulation stipulates the use of the ISCED 2011 in the LFS from 2014 onwards.
- Regulation (EC) No 1022/2009 of 29 October 2009 amending Regulations (EC) No 1738/2005, (EC) No 698/2006 and (EC) No 377/2008 as regards the International Standard Classification of Occupations (ISCO). This regulation stipulates the use of the ISCO-08 in the LFS from 2011 onwards.
- Regulation (EC) No 973/2007 of 20 August 2007 amending certain EC Regulations on specific statistical domains implementing the statistical classification of economic activities NACE Revision 2. Article 9 stipulates the use of NACE rev 2 in the LFS from 2008 onwards.

- Classification system

National Classification of Activities 2007 (NKD 2007)

Statistical Classification of Economic Activities in the European Community (NACE Rev. 2)

National Standard Classification of Education (NSKO)

International Standard Classification of Education (ISCED 2011)

National Classification of Occupations, 2010 version

International Standard Classification of Occupations (ISCO-08)

Alphabetical list of countries and their codes – letter codes

Code List of Citizenship

Common classification of territorial units for statistics (NUTS)

Classification of territorial units for statistics (NUTS 2013)

Degree of Urbanisation (DEGURBA) – local administrative units (DEGURBA 2011)

All listed classifications are published on the web site of the Croatian Bureau of Statistics in the application KLASUS. <https://www.dzs.hr/App/klasus/default.aspx?lang=en>

- Concepts and definitions

The most important variables observed in the Labour Force Survey are the following: household, working-age population, persons in employment, employees, self-employed persons, unpaid family workers, unemployed persons, labour force, inactive population, activity rate, employment rate and unemployment rate.

A household is a small family or economic group of persons that is usually, although not always, a group of relatives living together and sharing costs of living (housing, food, etc.).

Working-age population comprises all persons aged 15 years and over.

Persons in employment are those who were engaged in any work for payment in cash or kind during the reference week. They include all employees, self-employed persons and family members helping in a business entity owned by a member of their family or in some other kind of a gainful activity, as well as persons who worked on contract basis of any kind for direct payment in cash or kind. Therefore, the survey covers all persons who worked for at least one hour in the reference week, irrespective of their formal status or means of payment. In this way, a retired person, a student or a housewife can also be classified as employed. Employed persons also include all employees or self-employed persons who were temporarily absent from work in the reference week, but who intend to return to work for the same employer or in the same activity after the reasons for the absence discontinued.

Employees are those who work for an employer in the state or private sector and are paid for their work in cash or kind.

Self-employed persons are employers who run a business entity and employ one or more employees as well as own-account workers who have no employees.

Unpaid family workers are those who are not in paid employment or self-employment, but work in a business entity owned by a family member and do not receive payment for their work.

Unemployed persons are those who meet the following three criteria:

- a) in the reference week did not work for payment in cash or kind;
- b) were actively seeking work during four weeks prior to the survey;
- c) were currently available for work within the next two weeks.

Those who have found a job to start in the future (in the period shorter than three months after the interviewing) are also included in this group.

Currently active population or the labour force consists of persons whose activity status in the reference week is either employed or unemployed.

Inactive population consists of persons under the age of 15 as well as those of working age who are neither employed nor unemployed.

Key indicators:

Activity rate represents the labour force as a percentage of the working-age population.

Employment rate represents persons in employment as a percentage of the working-age population.

Unemployment rate represents unemployed persons as a percentage of the labour force.

- **Statistical units**

Statistical units consist of private households and working-age population – persons aged 15 years or over. Data are collected for the household as a whole and for all members who belong to the selected household.

- **Statistical population**

Target population comprises all persons who live in private households on the territory of the Republic of Croatia. Further on, the target population covered by the survey is determined by the presence of interviewed household members in the household. The definition of presence is based on the "de facto" principle, which excludes household members living at some other address where they live during their work or education for more than 12 months and do not include temporarily present members of another household. The survey does not cover collective households such as student homes, convents, etc.

1. Relevance

1.1. Data users

Internal users – National Accounts Department

National users – Government of the Republic of Croatia, ministries, Institute of Economics, faculties, media, scientists, labour market analysts

International users – UN, ILO, IMF, World Bank

1.1.1 User needs

Standard prescribed by Eurostat meets the needs of national and international users.

Scientific and research institutes use survey results for national and international scientific and research projects and works in order to develop recommendations to relevant institutions aimed at improving the status of the labour force, especially of unemployed persons on the territory of the Republic of Croatia. The Croatian Employment Service use survey results to determine the necessary improvements in their field of work, for example, in the area of labour market. Eurostat use survey data for a systematic and user-oriented presentation of internationally comparable indicators on the Labour Force Survey (for all EU Member States).

1.1.2 User satisfaction

The first survey on user satisfaction was conducted in 2013, and the second one in 2015. They provided the user satisfaction rating in the field of employment statistics. According to the results of that survey, out of the total number of all users of CBS data, as much as 40.2% of them searched data within the field of employment (which included this survey as well) and gave them quite a high quality rating, 3.66. You can find more details of that survey on the following link:

http://www.dzs.hr/Eng/international/Quality_Report/Quality_Report_Documents/Quality_Report_Satisfaction_Survey.pdf

1.2. Completeness

Data collected through this survey are determined by the survey methodology defined by EU regulations and Eurostat methodological standards related to the EU-LFS (Labour Force Survey). The implementation of this survey, data processing and publication of the results are fully aligned with the defined methodology, thus ensuring a complete comparability of national results with the results of other EU Member States.

1.2.1 Data completeness rate

Data are completely comparable with data of other EU Member States. A part of the results is available to users in regular publications of the Croatian Bureau of Statistics. Other data are available on users' request. Data completeness rate is: 100%.

2. Accuracy and reliability

2.1. Sampling error

It refers to a random sample selection as well as to precision measures of the most important indicators of the economic activity of population using standard estimation error, variation coefficient and confidence interval. Therefore, the sample error can be expressed in the following ways:

- In absolute form – as a standard error
- In relative form – as a variation coefficient
- in relation to confidence – as a confidence interval.

Pursuant to Eurostat's recommendations, it is necessary to reach a certain level of precision for the following indicators:

1. Activity rate
2. Unemployment rate
3. Employment rate.

If we deal with a continuous survey, during the process of estimating developments that occurred between two subsequent quarters at the national level, a relative standard error for a subpopulation that makes 5% of active population is not to exceed 2% of that subpopulation.

For Member states with the population between one and twenty million, this requirement is tempered in a way that a relative standard error is not to exceed 3% of that subpopulation during the process of estimating quarterly developments.

2.1.1 Sampling error indicators

Estimations and precision measures of the most important indicators of economic activity of the population, first quarter of 2015

%

	Estimation	Standard estimation error	Confidence interval (95%)	Variation coefficient
Activity rate	52.1	0.7	[50.8; 53.5]	1.3
Employment rate	42.7	0.8	[41.2; 44.3]	1.8
Unemployment rate	18.1	0.9	[16.3; 19.8]	5.0

Estimations and precision measures of the most important indicators of economic activity of the population, second quarter of 2015

%

	Estimation	Standard estimation error	Confidence interval (95%)	Variation coefficient
Activity rate	52.7	0.7	[51.3; 54.1]	1.4
Employment rate	44.5	0.8	[43.0; 46.0]	1.7
Unemployment rate	15.5	0.8	[14.0; 17.1]	5.0

Estimations and precision measures of the most important indicators of economic activity of the population, third quarter of 2015

%

	Estimation	Standard estimation error	Confidence interval (95%)	Variation coefficient
Activity rate	53.5	0.7	[52.1; 55.0]	1.4
Employment rate	45.3	0.8	[43.7; 46.8]	1.7
Unemployment rate	15.4	0.8	[14.0; 16.9]	4.9

Estimations and precision measures of the most important indicators of economic activity of the population, fourth quarter of 2015

%

	Estimation	Standard estimation error	Confidence interval (95%)	Variation coefficient
Activity rate	52.5	0.7	[51.2; 53.8]	1.3
Employment rate	44.0	0.7	[42.7; 45.4]	1.5
Unemployment rate	16.1	0.7	[14.7; 17.5]	4.6

2.1.2 Bias due to sample selection process

Indicator for this survey is not computed.

2.2. Non-sampling error

Non-sampling errors are in relation with other errors that are not connected with the sample selection – coverage, measurement, processing, non-response. Non-response errors result from the non-response of the entire survey unit (household or referent person – unit non-response) and the non-response to a particular variable, i.e. question in the questionnaire (item non-response).

2.2.1 Coverage error

Data from the 2011 Census were used as a sample frame. Coverage errors (i.e. frame errors) are caused by differences between the target population and the sample frame. Sample frame is a set of available target population items and, as such, can be selected in the survey sample. It is a list of all units within the population from which a sample is selected, which contains contact details as well as sufficient information for stratification and sampling. As compared to over-coverage, under-coverage is very hard to estimate due to the fact that it is not possible to determine which units are not included in the target population.

2.2.2 Over-coverage rate

The over-coverage rate is a share of sample units that are not a part of the target population. Within the Labour Force Survey, it presents a share of addresses selected in the sample, but for which the field work (interviewing) showed that either they did not exist any more, or that they were generally unoccupied or that the dwelling found at that address was not intended for permanent residence (such as business premises, cottages, summer houses etc.). The 2011 Census was used as a sample selection frame in 2015. That is why the over-coverage rate was somewhat lower at 9.4%.

2.2.3 Measurement errors

Data for the Labour Force Survey were collected by using the PAPI method, i.e. on paper questionnaires that do not allow automated checks of questions and answers. This is why errors made by interviewers (e.g., at data entry) could have occurred, but they were reduced to an acceptable minimum by providing regular trainings, pilot tests, etc. Data verification is integrated into the Blaise entry programme (checks of minimal and maximum values, logical correlation between particular questions etc.), which helps in minimising the data entry errors. During data processing, a detailed data verification of all answers is done, e.g. verification of entered values by ranges, checks of possible answers, logical and computational checks of activities and occupations, logical checks of data on economic activity, status in employment, educational attainment etc.

2.2.4 Non-response errors

The non-response errors show how many statistical units did not answer to the questions in the questionnaire.

There two types of non-responses:

- The non-response of the whole observation unit (household/reference person selected in the sample)

- The non-response to a particular question – a selected observation unit was successfully interviewed, but particular questions/variables remained unanswered.

In 2015, the non-response rate was 30.3%.

2.2.5 Unit non-response rate

Unweighted non-response rate is:

Coverage domain	Domain value	Q1	Q2	Q3	Q4	On average
Croatia		29.48	30.17	31.66	29.83	30.28
County	Bjelovar-Bilogora	11.03	8.7	11.19	13.28	11.05
County	Slavonski Brod-Posavina	25	19.28	27.5	29.17	25.24
County	Dubrovnik-Neretva	39.13	45.2	47.62	42.53	88.29
County	City of Zagreb	36.34	40.54	43.13	38.49	39.63
County	Istria	40.57	40.78	41.69	43.49	41.63
County	Karlovac	53.2	47.59	49.73	57.07	51.9
County	Koprivnica-Križevci	16.13	17.56	15.38	13.16	15.56
County	Krapina-Zagorje	19.49	20.83	25.95	18.94	21.3
County	Lika-Senj	5.19	2.97	2.94	5.97	4.27
County	Međimurje	32.8	22.83	30.95	29.03	28.9
County	Osijek-Baranja	26.96	27.59	32.06	29.03	28.91
County	Požega-Slavonia	20	22.67	25	22.99	22.67
County	Primorje-Gorski kotar	43.41	40.23	36.67	38.17	39.62
County	Sisak-Moslavina	30.64	34.83	33.71	27.47	31.66
County	Split-Dalmatia	23.12	28.83	24.8	18.7%	23.86
County	Šibenik-Knin	49.65	52.6	49.69	41.91%	48.46
County	Varaždin	13.19	15.12	21.93	20.73%	17.74
County	Virovitica-Podravina	23.88	19.32	18.18	24.18%	21.39
County	Vukovar-Sirmium	21.23	25.9	30.49	26.63%	26.06
County	Zadar	27.02	16.39	13.95	21.52%	19.72
County	Zagreb	11.01	15.38	22.98	17.95%	16.83

2.2.6 Item non-response-rate

Non-response to a particular question/variable – annual data (as compared to variables defined in the Regulation (EC) 377/2008 of the European Commission)

Variable status	Column	Identifier/Variable name	2015
Compulsory	Col_016	MARSTAT	13.2
	Col_077	LOOKREAS	21.7
	Col_118 – Employed	AVAIRES	83.6
	Col_150/151	COUNTR1Y	13.9
	Col_154/155	INCDECIL	25.1
Optional	Col_133/134	COURFILD	100

Non-response to a particular question/variable – quarterly data (as compared to variables defined in the Regulation (EC) 377/2008 of the European Commission)

Variable status	Column	Identifier/Variable name	Q1	Q2	Q3	Q4
Compulsory	Col_065/66	HWOVERP	97.2	96.8	97.3	97.6
	Col_073/74	HWWISH	86.4	88.3	88.6	87.3
	Col_101 – Employed	SEEKTYPE	100	100	100	100
	Col_101 – Unemployed persons	SEEKTYPE	100	100	100	100

2.2.7 Processing errors

During data processing, a detailed data verification of all answers is done, e.g., checks of possible answers, logical and computational checks of the status in employment, logical checks of data on the status in economic activity and codes of activities and occupations, logical check of data on educational attainment, working time, hours of work etc. Data processing is done on the microdata set at the level of the survey questionnaire.

2.2.8 Imputation rate

Indicator for this survey is not applicable.

2.2.9 Editing rate

Indicator for this survey is not computed.

2.2.10 Hit rate

Indicator for this survey is not computed.

2.2.11 Model assumption error

Indicator for this survey is not applicable.

2.3. Data revision

2.3.1 Data revision – policy

The users of statistical data are informed about possible revisions (provisional, final data) on the website of the Croatian Bureau of Statistics.

2.3.2 Data revision – practice

Data to be published in this survey include first results encompassing only main indicators at the labour market (employment, unemployment and activity rates) and final results encompassing all indicators (demographic, social, economic) at the labour market that are in line with EU regulations and the Annual Implementation Plan. In spite of the fact that data are published twice for the same observation period, the standard data revision is not done for this survey since, until now, data published in first and final results did not differ.

The data revision, i.e. the weighting revision, was done for data for the period from 2007 to 2013 in order to make them consistent and comparable to 2014 data. The weighting procedure is performed in order to calculate estimations for the whole population of households. This procedure compensates the impact of the design and size of the sample and the effect of household non-responses on the survey.

Since the beginning of 2014, the new procedure for weighting the collected data has been determined. In the first phase of weighting, unit selection weights from both sampling stages were calculated (segments and dwellings), while in the second one, it was weights due to adjustments to unit non-response that were calculated. In the last phase of weighting, final weights from the first two phases were calibrated to estimations of population distributions by age groups, sex and NUTS according to the 2011 Census, which was updated with data on live births and deaths as well as with data on population migrations in the Republic of Croatia.

Calibration is the process of reweighting in order to balance the survey population estimations by age groups, sex and according to the second level of the NUTS 2012 from the survey so that those estimations correspond to totals of the whole population, i.e., to the distribution of the Croatian population by age groups, sex and NUTS according to the 2011 Census.

2.3.3 Data revision – average size

Since there were no differences between the first and final results, the indicator for this survey is not applicable.

2.4. Seasonal adjustment

Seasonal adjustment is not available for this survey for the time being.

3. Timeliness and Punctuality

3.1. Timeliness

3.1.1 Timeliness – first results

Timeliness of first results is: T + 3 months

3.1.2 Timeliness – final results:

Timeliness of final results is: T + 3.5 months

3.2. Punctuality

3.2.1 Punctuality – delivery and publication

Punctuality is defined as a period from the actual date of data publishing and the target date of data publishing according to the Calendar of Statistical Data Issues 2015. Results from this survey were published exactly according to the Calendar of Statistical Data Issues 2015, for each quarter in which data were published, as well as for all planned publications.

Punctuality: 100%

4. Accessibility and clarity

Data are available on the internet and in printed form. In addition, data are also available in the Safe Room and on CD (on user's request).

News release

First Release No. 9.2.7/1. "Labour Force of the Republic of Croatia"

First Release No. 9.2.7/2. "Labour Force of the Republic of Croatia"

First Release No. 9.2.7/3. "Labour Force of the Republic of Croatia"

First Release No. 9.2.7/4. "Labour Force of the Republic of Croatia"

First Release No. 9.2.8. "Labour Force of the Republic of Croatia – Annual Average"
Labour Force Survey Results, Croatia – Europa 2015.

4.1. Other publications

Women and Men in Croatia; Croatia in Figures; Statistical Information; Monthly Statistical Report; Statistical Reports – Labour Force Survey Results, Croatia – Europe; Statistical Yearbook

4.2. On-line database

On-line databases can be found on Eurostat's web pages.

<http://ec.europa.eu/eurostat/data/database>

4.3. Micro-data access

The conditions under which certain users can access microdata are regulated by the Ordinance on the Conditions and Terms of Using Confidential Data for Scientific Purposes. The Ordinance on the Access to Confidential Statistical Data can be found on the following link:

https://www.dzs.hr/Eng/about_us/Legals/Ordinance%20on%20the%20access%20to%20confidential%20statistical%20data.pdf

4.4. Documentation on methodology

Basic methodological information can be found in every first release, while detailed notes on methodology of this survey are available on the web page of the Croatian Bureau of Statistics in the separate methodological guidelines within the Released Data.

In addition, methodological guidelines and the questionnaire for the Labour Force Survey are available on the Eurostat's webpage.

5. Comparability

5.1. Asymmetry for mirror flows statistics

Indicator for this survey is not computed.

5.2. Comparability over time

5.2.1 Length of comparable time series

Data weighted according to the new process of weighting of collected data are comparable for the period from the first quarter of 2007 to the fourth quarter of 2015.

	Ø 2007.	Ø 2008.	Ø 2009.	Ø 2010.	Ø 2011.	Ø 2012.	Ø 2013.	Ø 2014.	Ø 2015.
	Total, '000								
Working-age population (15+)	3 642	3 645	3 643	3 637	3 631	3 627	3 623	3 615	3 602
Labour force population	1 925	1 936	1 935	1 913	1 883	1 863	1 842	1 893	1 898
Persons in employment	1 734	1 771	1 757	1 690	1 625	1 566	1 524	1 566	1 589
Unemployed persons	191	165	178	222	258	297	318	327	309
Inactive population (15+)	1 717	1 709	1 708	1 724	1 749	1 764	1 781	1 722	1 704
	Total, %								
Activity rate	52.9	53.1	53.1	52.6	51.8	51.4	50.8	52.4	52.7
Employment rate	47.6	48.6	48.2	46.5	44.8	43.2	42.1	43.3	44.1
Unemployment rate	9.9	8.5	9.2	11.6	13.7	15.9	17.3	17.3	16.3

5.2.2 Reasons for break in time series

Until 2007, the survey was conducted by interviewing a part of sampled households every month. Since 2007, the Labour Force Survey has been carrying out continuously, i.e., households are being interviewed continuously during the whole year. It means that every week in a year is both reference and implementing. This is why there was a break in data series in 2007. Until the beginning of 2014, it was the 2001 Population Census data that were used in weighting. Since the beginning of 2014, the data from the Census of Population, Households and Dwellings 2011 have been a new frame for sample selection and weighting. In order to make 2014 data consistent and comparable to previous data, the weighting revision was done, i.e., the data for the period from 2007 to 2013 have been weighted according to the 2011 Census results. Since the beginning of 2014, the new procedure for weighting the collected data has been determined. In the first phase of weighting, unit selection weights from both sampling stages were calculated (segments and dwellings), while in the second one, it was weights due to adjustments to unit non-response that were calculated. In the last phase of weighting, final weights from the first two phases were calibrated to estimations of population distributions by age groups, sex and NUTS according to the 2011 Census, which was updated with data on live births and deaths as well as with data on population migrations in the Republic of Croatia. Calibration is the process of reweighting in order to balance the survey population estimations by age groups, sex and according to the second level of the NUTS 2012 from the survey so that those estimations correspond to totals of the whole population, i.e., to the distribution of the Croatian population by age groups, sex and NUTS according to the 2011 Census.

6. Coherence

6.1. Coherence – short-term and structural data

Indicator for this survey is not computed.

6.2. Coherence – national accounts

The National Accounts Department use Labour Force Survey data in calculating the number of persons in employment and hours of work.

6.3. Coherence – administrative sources

Along with survey data, CBS also releases administrative data on employment and unemployment in the Republic of Croatia.

Administrative data on persons in employment are based on data collected in monthly and annual survey (RAD-1 and RAD-1G forms), which encompasses legal entities of all types of ownership, government bodies and bodies of local and regional self-government units. Monthly survey includes 70% of persons in employment from every NKD 2007. division. Data on persons in employment in crafts and trades and free lances as well as on insured persons – private farmers are taken over from the records of the Croatian Pension Insurance Institute. Since the beginning of 2004, administrative data on employment also include the number of persons in employment in the police and defence. The Labour Force Survey results are estimated on the basis of the representative statistical sample of private households in the Republic of Croatia. Administrative data on persons in employment refer to the last day of the previous month, while the survey collects data for the reference week.

Administrative data are processed and published monthly, while the Labour Force Survey results refer to quarters.

Administrative sources apply the formal definition of employment (persons who have signed the work contract with the employer for a fixed or unspecified period of time, irrespective of type of ownership and of whether they work full time or less than full time), while the Labour Force Survey shows persons in employment as all persons who were, in the reference week, engaged in any work for payment in cash or kind, as well as those who were absent from work during the reference week, but had a job to return to with the same employer after the reason for absence no longer existed.

Data on registered unemployment are obtained from the Register of Unemployed Persons kept by the Croatian Employment Service, while the Labour Force Survey results are collected by interviewing private households. Register contains data on all unemployed persons in the Republic of Croatia, while the Labour Force Survey results are estimated on the basis of the representative statistical sample.

Register data refer to the last day of every month, while the survey collects data for the reference week. Register data are taken over every month, while the Labour Force Survey results are processed and published quarterly.

Registered unemployed person is a person registered with the Croatian Employment Service, i.e., every person who meets the criteria defined in the Act on Job Placement and Unemployment Insurance and the Croatian Employment Service. According to the Labour Force Survey, an unemployed person is either a person who did not perform any work for payment in cash or kind in the reference week, and was actively seeking job in the course of four weeks before the interview and is prepared to start performing an offered job in the following two weeks or a person who has found a job and will start working shortly after the interview.

7. Cost and burden

7.1. Cost

The total costs that include compensations for contractual agreements for external interviewers who participated in collection of data in 2015 amounted to 652 000 kuna. That amount does not include costs of interviewers who work for the Croatian Bureau of Statistics, and neither the costs of the preparation and processing of data.

7.2. Burden

The burden on respondents includes the time spent to answer to the questions in the survey questionnaire. An important factor that impact the respondents' burden is the number of questions in the questionnaire. The Labour Force Survey 2015 contained 101 questions. Although not every respondent provides answers to every question due to automated skips integrated in the entry software programme, participation in the survey represents a substantial burden to the respondent. The interviewing of a single household took 15 minutes on average. In 2015, about 209 500 minutes were spent in interviewing households who gave their consent to be interviewed for the survey, which makes approximately 6.6 minutes per person.