A Selection of Labour Force Survey Results

Spring 1399[1] (20 March 2020- 20 June 2020)

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[1].It is the Iranian year which usually begins on the day of 21 March of the Gregorian calendar. To find the corresponding year of the Gregorian calendar, add 621 or 622 (depending on the time of the year) to a solar Hijri year. For example, the corresponding year of the year 1399 in the Gregorian calendar is (20 March 2020-20 March 2021).

Iranian seasons and their equivalent in Gregorian calendar

Spring (21 March-21June)

Summer (22 June -22 September)

Autumn (23 September -21 December)

Winter (22 December -20 March)

Introduction

The pair concepts of employment and unemployment are so basic to national economies that any rise in employment rate, which means a drop in unemployment, is reckoned as an indicator to the national development. Moreover, the unemployment rate is an indicator for appraising the national economic conditions. The information on the nation's market would be collected through the Household Employment and Unemployment Characteristics Survey (HEUCS) as of the year 1376. However, in order to improve the HEUCS quality and its conformance with the international concepts, particularly, with those of the ILO, the survey plan was revised in order that the current plan namely "Labour Force Survey" could be implemented. The "Labour Force Survey" was first conducted in the year 1384 and since then has regularly been taken in the middle month of every season.

The "Labour Force Survey" is conducted in order to obtain information on the composition and current condition of labour force and its changes. This objective is accomplished by "estimation of seasonal and annual labour force indicators at national and provincial levels", "estimation of annual number of population in labour force at national and provincial levels", "estimation of seasonal and annual changes in labour force at national and provincial levels", and "estimation of annual changes in labour force indicators at provincial levels".

The population covered in this survey includes the people who, according to the definition, are members of private or collective settled households in rural or urban areas, so the members of private unsettled households and institutional households are not included in this survey. The method used for conducting this survey is a two-step classified clustering method. In this survey, in addition to the estimation of current levels, the estimate of changes is made; therefore, the rotation sampling is used. The rotation sampling can provide the estimate of current levels and changes in the best manner by fixing some sample units between two quarters of the survey and changing the remaining units. With respect to the aim of the survey, the selected rotation pattern for this survey is a "2-2-2" pattern which means that during the Master Sample period, each sample household is enumerated four times; accordingly, that sample household is in the sample for two successive quarters and then is excluded from the sample temporarily for two successive quarters and again is included in the sample for the two next successive quarters. This household is then excluded from the sample until the end of the years related to the master sample period. It should be noted that for optimal conduct of rotation sampling, the master sample is needed. The master sample refers to the sample that can be used for the selection of sub-samples to satisfy the needs of several surveys or several rounds of a survey. The sampling frame of the first step (from the spring of the year 1397) is the fourth master sample of the household surveys. The master sample includes the sampling units (clusters) of the first step. Each cluster includes one block/village, part of a large block/village, or in some cases a combination of some small blocks/villages which were created from the 2016 National Population and Housing Census. With respect to the changes in population and housing units in urban areas and in order to prepare an appropriate and updated frame in urban areas, some households were listed within the master sample clusters in the winter of the year 1396, but due to minor changes in population and housing units in rural areas, no listing was made in rural areas (unless in exceptional cases).
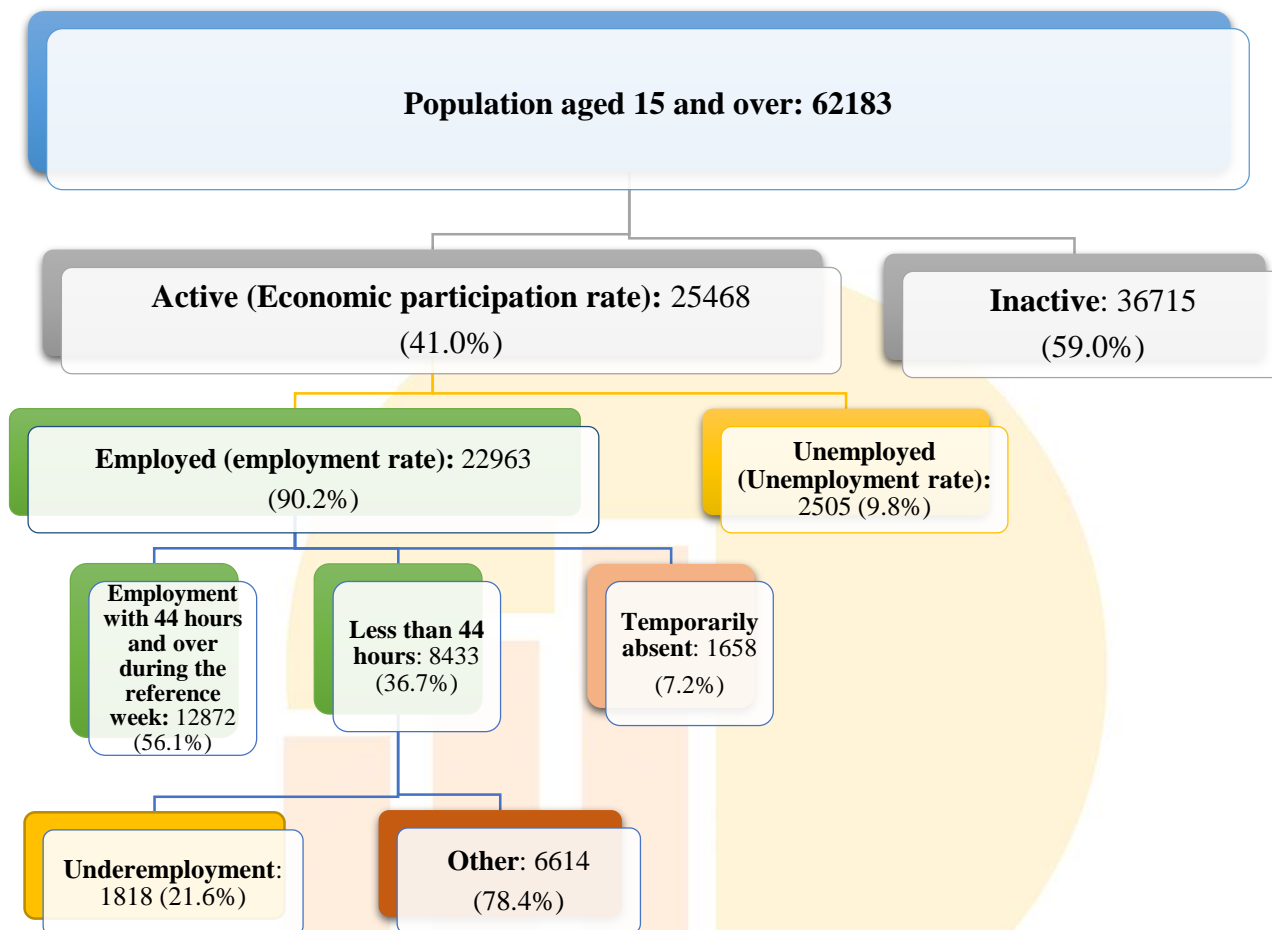
It should be cited that since the spring of the year 1397, the confidence interval for the unemployment rate has been 95 percent in the release of the Survey results. In view of the statistical methodology, the confidence interval means that if several samples are selected from the target population by using the same sampling method, and based on each of the samples, a confidence interval is calculated for the real unemployment rate. It is expected that 95% of these confidence intervals include the real unemployment rate.

It should be mentioned that according to the reviews, due to social changes in the entry age into the labour market in recent years in different countries, at least 15 years of age has been considered as the labour market key indicators that due to the similar changes in our country, from now on the main indicators of the country's labour market are calculated and presented based on the population aged 15 and over.

Findings

Based on the results of this survey conducted for the spring of the year 1399, major indicators of the labour market and its changes in this season compared to the spring of the year 1398, are presented in Table 1. Besides, table 2 shows the major characteristics of the labour market by province.

Figure 1 provides the major indicators of labour market in the spring of the year 1399 at a glance.

Population aged 15 and over: 62183

Active (Economic participation rate): 25468 (41.0%)

Inactive: 36715 (59.0%)

Employed (employment rate): 22963 (90.2%)

Unemployed (Unemployment rate): 2505 (9.8%)

Employment with 44 hours and over during the reference week: 12872 (56.1%)

Less than 44 hours: 8433 (36.7%)

Temporarily absent: 1658 (7.2%)

Underemployment: 1818 (21.6%)

Other: 6614 (78.4%)

A review of the economic participation rate for the population aged 15 and over (activity rate) reveals that 41.0% of the population at working-age (15 years and over) are economically active; i.e., they lie either in the employed or the unemployed group. In addition, the results indicate that the economic participation rate stands lower for women compared to men and urban areas in contrast to rural areas. The review of the trend of changes in national economic participation rate shows that this indicator decreased by 3.7 percent as compared with the corresponding season of the previous year (spring of the year 1398). The review of the employment rate of the population aged 15 and over shows that 36.9 percent of working-age population (15 years and over) were employed. This indicator stands higher for men and rural areas compared to women and urban areas.

TABLE 1. MAJOR LABOUR MARKET INDICATORS AND THEIR CHANGES BY SEX, URBAN AND RURAL AREAS; SPRING OF THE YEAR 1399 COMPARED TO THE SPRING OF THE YEAR 1398 (Number person-rate, share and ratio: percent)

Labour force indicators		Total country			Male			Female		
		Spring, the year 1399	Spring, the year 1398	Changes	Spring, the year 1399	Spring, the year 1398	Changes	Spring, the year 1399	Spring, the year 1398	Changes
Population aged 15 and over[1]	Number	62182707.5	61415119	767589	31047082	30723257	323824.5	31135626	30691861	443765
Economic participation rate of population aged 15 and over	Rate	41	44.7	-3.7	67.9	71.8	-3.9	14.1	17.6	-3.5
	Number	25467983	27460668	-1992685	21076246	22048266	-972020	4391737	5412402	-1020665
Employment rate of population aged 15 and over	Ratio	36.9	39.8	-2.9	61.8	65.1	-3.3	12.2	14.6	-2.4
	Number	22962647	24461929	-1499282	19172983	19987492	-814508.511	3789663	4474436	-684773
Unemployment of population aged 15 and over	Rate	9.8	10.9	-1.1	9	9.3	-0.3	13.7	17.3	-3.6
	Number	2505336	2998739	-493403	1903262	2060773	-157511	602074	937965	-335891
Unemployment of population aged 15-24	Rate	24.5	26.5	-2	23	23.9	-0.9	31.5	37.4	-5.9
	Number	560021	723935	-163914	438330	527930	-89600	121691	196004	-74313
Unemployment of population aged 18-35	Rate	16.7	18.2	-1.5	15	15.3	-0.3	24.3	28.8	-4.5
	Number	1740685	2237469	-496784	1270755	1479449	-208694	469930	758019	-288089
Unemployment of the population aged 15 and over graduated from higher education institutes	Rate	13.5	16.8	-3.3	10.3	12.5	-2.2	20.2	25.4	-5.2
	Number	902410	1210837	-308427	469292	601391	-132099	433118	609442	-176324
Employment in agriculture sector	Share	18.6	18.9	-0.3	18.3	18.3	0	19.8	21.8	-2
	Number	4264627	4629645	-365018	3514857	3654872	-140015	749770	974772	-225002
Employment in manufacturing sector	Share	31.8	31.5	0.3	33.4	32.9	0.5	23.2	24.9	-1.7
	Number	7290976	7693386	-402410	6411043	6578438	-167395	879933	1114948	-235015
Employment in services sector	Share	49.7	49.6	0.1	48.2	48.8	-0.6	57	53.3	3.7
	Number	11404942	12137676	-732734	9245194	9752960	-507766	2159748	2384715	-224967
Underemployment	Share	7.9	10	-2.1	8.9	10.9	-2	3.2	6.2	-3
	Number	1818432	2452652	-634220	1697813	2176780	-478967	120619	275872	-155253
The share of the unemployed higher education graduates aged 15 and over out of the total unemployed population	Share	36.0	40.4	-4.4	24.7	29.2	-4.5	71.9	65.0	6.9
The share of the employed higher education graduates aged 15 and over out of the total employed population	Share	25.2	24.5	0.7	21.3	21.1	0.2	45.1	40	5.1

-The difference between the total number of employees and the total number of employees in the three sectors is due to the unannounced (not stated) existence of the major sectors of economic activity.

- The difference is due to rounding.

1. The target population of the labour force survey is the people at working age from private settled and collective households in urban and rural areas.

TABLE 1. MAJOR LABOUR MARKET INDICATORS AND THEIR CHANGES BY SEX, URBAN AND RURAL AREAS; SPRING, THE YEAR 1399 COMPARED TO THE SPRING, THE YEAR 1398 (continued)   (Number person, rate, share and ratio: percent)

Labour force indicators		Urban areas			Rural areas		
		Spring, the year 1399	Spring, the year 1398	Changes	Spring, the year 1399	Spring, the year 1398	Changes
Population aged 15 and over[1]	Number	47537882	46700053	837829	14644826	14715066	-70240
Economic participation rate of population aged 15 and over	Rate	40	43.6	-3.6	44	48.3	-4.3
	Number	19024185	20348320	-1324135	6443798	7112348	-668550
Employment rate of population aged 15 and over	Ratio	35.7	38.3	-2.6	40.8	44.8	-4
	Number	16991483	17875162	-883679	5971164	6586767	-615603
Unemployment of population aged 15 and over	Rate	10.7	12.2	-1.5	7.3	7.4	-0.1
	Number	2032702	2473158	-440456	472634	525581	-52947
Unemployment of population aged 15-24	Rate	26.8	29.5	-2.7	19.2	19.7	-0.5
	Number	424131	557632	-133501	135890	166302	-30412
Unemployment of population aged 18-35	Rate	18	19.9	-1.9	12.7	13.1	-0.4
	Number	1413131	1840379	-427248	327554	397089	-69535
Unemployment of the population aged 15 and over graduated from higher education institutes	Rate	12.9	16.4	-3.5	19.4	20.9	-1.5
	Number	789449	1072631	-283182	112961	138203	-25242
Employment in agriculture sector	Share	6.8	6.8	0	52	51.8	0.2
	Number	1156940	1214530	-57590	3107688	3415115	-307427
Employment in manufacturing sector	Share	33.8	33.9	-0.1	26	24.8	1.2
	Number	5741363	6057595	-316232	1549613	1635791	-86178
Employment in services sector	Share	59.4	59.3	0.1	22	23.3	-1.3
	Number	10091533	10601815	-510282	1313409	1535860	-222451
Underemployment	Share	6.6	9	-2.4	11.5	12.8	-1.3
	Number	1128816	1612513	-483697	689617	840138	-150521
The share of the unemployed higher education graduates aged 15 and over out of the total unemployed population	Share	38.8	43.4	-4.6	23.9	26.3	-2.4
The share of the employed higher education graduates aged 15 and over out of the total employed population	Share	31.3	30.6	0.7	7.8	7.9	-0.1

--The difference between the total number of employees and the total number of employees in the three sectors is due to the unannounced (not stated) existence of the major sectors of economic activity.
- The difference is due to rounding.
1. The target population of the labour force survey is the people at working age from private settled and collective households in urban and rural areas.

A review of employment in major economic sectors indicates that the services sector holds the biggest share of employment with 49.7% of the total, followed by the manufacturing sector with 31.8% and the agriculture sector with 18.6%. In the spring of the year 1399, the contribution of the employed people to the agriculture sector had 0.3 percent decrease, but the contribution of the employed people to the manufacturing and services sectors increased by 0.3 and 0.1 percent respectively, in comparison with the corresponding season in the previous year (spring, the year 1398).

A review of the unemployment rate among the population aged 15 and over shows that 9.8 percent of the economically active population were unemployed. Moreover, based on the confidence interval of 95%, the total national unemployment rate was between 9.4 and 10.2 percent with a 9.8 percent point estimation. This means that with the confidence interval of 95 percent, this interval shows the national real unemployment rate. Based on the results, the unemployment rate was higher for women and urban areas than men and rural areas. A review of the trend of changes that happened in the indicator at the national level shows that this indicator experienced a 1.1 percent decrease compared to the last corresponding season (spring, the year 1398).

The unemployment rate among the youths aged 15-24 indicates that 24.5 percent of the economically active population at this age group were unemployed. This indicator stands higher for women and urban areas than for men and rural areas. A review of the trend of the changes in the national unemployment rate among the youths aged 15-24 shows that the indicator decreased by 2.0% from the last corresponding season (spring, the year 1398).

The unemployment rate among the youths aged 18-35 indicates that 16.7% of the active population aged 18-35 were unemployed. This indicator stands higher for women and urban areas than men and rural areas. A review of the trend of the changes among the youths aged 18-35 shows that this indicator fell by 1.5% compared to the last corresponding season (spring, the year 1398).

A review of the unemployment rate among the higher education graduates aged 15 and over shows that 13.5 percent of the active population among higher education graduates were unemployed. This indicator stands higher for women and rural areas than men and urban areas. A review of the trend of the changes shows that this indicator dropped by 3.3% in the spring of the year 1399 compared to the corresponding season in the previous year (spring, the year 1398).
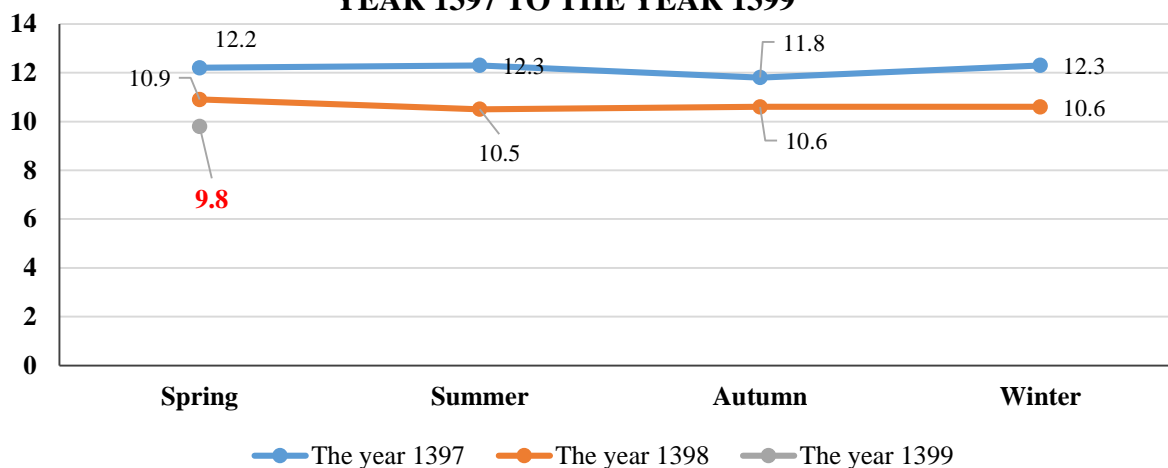
The underemployment share tells that 7.9% of the total employed population were underemployed. The indicator stands higher for men and rural areas than for women and urban areas. The underemployment share in the spring of the year 1399 experienced a 2.1 percent decrease compared to the corresponding season in the previous year (spring, the year 1398).

The study of the employed share aged 15 and over with the usual working hours of 49 hours and over shows that 33.5% of the employed, typically work 49 hours and over per week. This indicator, which is one of the indicators of decent work, shows that a large share of the employed work more than the standard hour. This indicator experienced a decrease of 5.8% compared to the corresponding season in the previous year (spring, the year 1398).

In the spring of the year 1399, the share of the unemployed higher education graduates out of the total unemployed population was 36.0 percent. The indicator stands higher for women and urban areas than for men and rural areas. A review of the changes shows that this indicator experienced a 4.4 percent decline compared to the corresponding season in the previous year (spring, the year 1398).

In the spring of the year 1399, the share of the employed higher education graduates out of the total employed people was 25.2 percent. The indicator stands higher for women and urban areas than for men and rural areas. A review of the changes shows that this indicator increased by 0.7 percent over the corresponding season in the previous year (spring, the year 1398).

FIGURE 2. UNEMPLOYMENT RATE OF THE POPULATION AGED 15 AND OVER IN SUCCESSIVE SEASONS FROM THE YEAR 1397 TO THE YEAR 1399

Table 2 shows some major labour market indicators for the population aged 15 and over in the spring, the year 1399, in comparison with the spring, the year 1398 by province.

TABLE 2- SOME MAJOR LABOUR MARKET INDICATORS FOR THE POPULATION AGED 15 AND OVER IN THE SPRING, THE YEAR 1399, IN COMPARISON WITH THE SPRING, THE YEAR 1398 BY PROVINCE (percent)

| Province | Economic participation rate | | Employment ratio | | Unemployment rate | | |
| | Spring, the year 1399 | Spring, the year 1398 | Spring, the year 1399 | Spring, the year 1398 | Spring, the year 1399 | | Spring, the year 1398 |
					Point estimation	95 percent confidence interval	
Total country	41.0	44.7	36.9	39.8	9.8	(9.4 - 10.2)	10.9
East Azarbayejan	42.7	44.3	38.8	39.7	9.0	(7.3 - 10.8)	10.3
West Azarbayejan	42.3	46.8	37.1	41.8	12.1	(10.0 - 14.2)	10.7
Ardebil	43.6	48.6	41.0	44.1	6.0	(4.4 - 7.7)	9.2
Esfahan	41.2	46.2	36.3	41.2	11.9	(9.8 - 14.1)	10.8
Alborz	39.4	44.1	34.6	37.9	12.3	(10.2 - 14.3)	14.1
Ilam	34.1	39.7	31.9	36.0	6.5	(4.6 - 8.4)	9.4
Bushehr	37.6	41.6	33.9	37.7	9.8	(7.9 - 11.6)	9.4
Tehran	40.3	43.2	36.8	38.8	8.8	(7.4 - 10.1)	10.2
Chaharmahal & Bakhtiyari	44.7	43.9	36.2	36.5	19.1	(16.1 - 22.0)	16.9
South Khorasan	41.0	46.2	39.4	42.2	4.0	(2.6 - 5.3)	8.7
Khorasan-e-Razavi	42.7	45.3	39.7	41.0	7.0	(5.7 - 8.4)	9.4
North Khorasan	44.3	49.8	39.0	45.8	12.0	(10.2 - 13.8)	8.0
Khuzestan	40.2	44.1	35.2	36.9	12.4	(10.8 - 14.1)	16.3
Zanjan	44.8	48.6	41.9	44.5	6.6	(5.0 – 8.1)	8.4
Semnan	38.0	40.9	34.9	37.5	8.1	(6.1 - 10.2)	8.3
Sistan & Baluchestan	33.4	40.0	29.1	34.5	13.1	(10.2 - 15.9)	13.8
Fars	37.9	42.9	35.4	39.9	6.6	(5.1 - 8.1)	7.1
Qazvin	42.9	46.5	39.0	41.5	9.1	(7.4 - 10.9)	10.8
Qom	37.2	39.8	33.3	35.7	10.4	(8.5 - 12.4)	10.3
Kordestan	44.4	48.0	38.6	41.9	12.9	(11.1 – 14.7)	12.7
Kerman	39.1	42.2	35.1	37.0	10.1	(8.2 - 12.0)	12.2
Kermanshah	43.1	47.9	37.2	40.8	13.8	(12.0 – 15.7)	14.8
Kohgiluyeh & Boyerahmad	35.7	40.6	31.2	35.9	12.6	(10.4 - 14.8)	11.7
Golestan	40.4	43.1	36.4	38.3	10.0	(8.1 - 11.9)	11.1
Gilan	45.2	51.8	41.1	47.5	9.0	(6.8 - 11.3)	8.3
Lorestan	39.4	40.7	31.1	34.1	21.0	(18.4 - 23.6)	16.3
Mazandaran	44.1	48.1	41.4	43.6	6.2	(4.7 - 7.7)	9.5
Markazi	35.8	37.5	33.4	34.3	6.5	(4.8 - 8.1)	8.4
Hormozgan	46.1	49.6	40.4	41.6	12.5	(10.7 - 14.3)	16.2
Hamedan	43.8	48.1	40.4	45.1	7.8	(5.7 - 9.9)	6.2
Yazd	41.0	46.1	37.9	40.3	7.6	(5.7 - 9.5)	12.7

Definitions and concepts

The Statistical Centre of Iran employs new international definitions and concepts based on the ICLS 1983[1] for measuring employment and unemployment in the Labour Force Survey.

Work: This key term is used to determine the status of the economic activity of people. The term "work" refers to the group of economic activities (mentally or physically) which are done for earning income (cash or in-kind) and its objective is to produce goods or services. Generally, the people who work are divided into two groups: self-employed, who work for themselves, and wage and salary earners, who earn money for the work they do.

Statistical period (Reference week): Refers to the second or third calendar week (Saturday to Friday) of the middle month of each season.

Employed: All people aged 15 or over who according to the definition of work, have worked for at least one hour during the reference week or have temporarily left their job for one reason or another, are reckoned as employed. Persons who, without receiving any remuneration, work for a member of their household that is a relative (unpaid family workers); trainees who perform an activity in relation to the activity of the institute for apprenticeships during the training period, namely, they directly contribute to the production of goods or services, their activity is considered "work"; students who have worked during the reference week, according to the definition of work; and all people who are serving as a permanent and temporary cadre in the armed forces (armed forces, cadre personnel, soldiers, commissioned officers, non-commissioned officers of the military forces and the police) are considered employed.

Unemployed: The unemployed are all people aged 15 or over who have the following three criteria together:

1. have no job during the reference week (not engaged in a wage salary job or self-employment),

2. have been seeking job during the reference week and the preceding three weeks (have taken specific steps to seek paid employment or self-employment),

3. are available to work during the reference week or the following week (available for a wage /salary employment or self-employment). All people who, because of expecting to start a job in future or return to their former job, have not been seeking a job, but have had no job and have been available to work - are also considered unemployed.

Labour force (active population): is the sum of persons in employment plus persons in unemployment.

Underemployment: The underemployed people are all employed people who have been present in or temporarily absent from the workplace and have worked less than 44 hours during the reference week due to economic reasons such as work recession, not finding a job with more hours, or non-work season, but have been willing and ready to do more work in the reference week.

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[1] ILO, Thirteenth International Conference of Labor Statisticians (Geneva, 1983).

Indicators

Economic participation rate (Economic activity rate)

The ratio of the active population (employed & unemployed) 15 years of age and over to the working- age population 15 years of age and over multiplied by 100.

$$\text{Economic participation rate} = \frac{\text{Economically active population aged 15 and over}}{\text{Population aged 15 and over}} \times 100$$

Employment ratio: The ratio of the employed population aged 15 and over to the total population at working age, 15 years old and over multiplied by 100

$$\text{Employment ratio} = \frac{\text{Employed population aged 15 and over}}{\text{Population aged 15 and over}} \times 100$$

Unemployment rate

The ratio of the unemployed population to the active population (employed & unemployed) multiplied by 100.

$$\text{Unemployment rate} = \frac{\text{Unemployed population aged 15 and over}}{\text{Active population aged 15 and over}} \times 100$$

Employment rate

The ratio of the employed population to the active population (employed & unemployed) multiplied by 100.

$$\text{Employment rate} = \frac{\text{Employed population aged 15 and over}}{\text{Active population aged 15 and over}} \times 100 = 100\text{-unemployment rate}$$

Unemployment rate of the population aged 15-24

The ratio of the unemployed population aged 15-24 to the economically active population aged 15-24 multiplied by 100.

$$\text{Unemployment rate aged 15-24} = \frac{\text{Unemployed population aged 15-24}}{\text{Economically active population aged 15-24}} \times 100$$

Unemployment rate of the population aged 18-35

The ratio of the unemployed population aged 18-35 to the economically active population aged 18-35 multiplied by 100.

$$\text{Unemployment rate aged 18-35} = \frac{\text{Unemployed population aged 18-35}}{\text{Economically active population aged 18-35}} \times 100$$

Unemployment rate of higher education graduates

The ratio of unemployed higher education graduates to active higher education graduates multiplied by 100

$$\text{Unemployment rate of higher education graduates} = \frac{\text{Unemployed higher education graduates}}{\text{Economically active higher education graduates}} \times 100$$

Share of unemployed higher education graduates aged 15 and over

The ratio of unemployed higher education graduates to the total unemployed population aged 15 and over multiplied by 100.

$$\text{Share of unemployed higher education graduates aged 15 and over} = \frac{\text{Unemployed higher education graduates aged 15 and over}}{\text{Unemployed population aged 15 and over}} \times 100$$

Share of employed higher education graduates aged 15 and over

The ratio of employed higher education graduates to the total employed population aged 15 and over multiplied by 100.

$$\text{Share of employed higher education graduates aged 15 and over} = \frac{\text{Employed higher education graduates aged 15 and over}}{\text{Total employed population aged 15 and over}} \times 100$$

Underemployment share

The ratio of the underemployed population aged 15 and over to the employed population aged 15 and over multiplied by 100.

$$\text{Underemployment rate} = \frac{\text{Underemployed population aged 15 and over}}{\text{Employed population aged 15 and over}} \times 100$$