

# A Selection of Labor Force Survey Results

Autumn 1397<sup>1</sup> (23 September- 21 December 2018)

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<sup>1</sup>.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 1397 in the Gregorian calendar is (21 March 2018-20 March 2019).

**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 economic conditions of the country. 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 "Labor Force Survey" could be implemented. The "Labor Force Survey" was first conducted in the year 1384 and since then has regularly been taken in the middle month of every season.

The "Labor 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 of labour force at national and provincial levels", and "estimation of annual changes of 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 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 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).

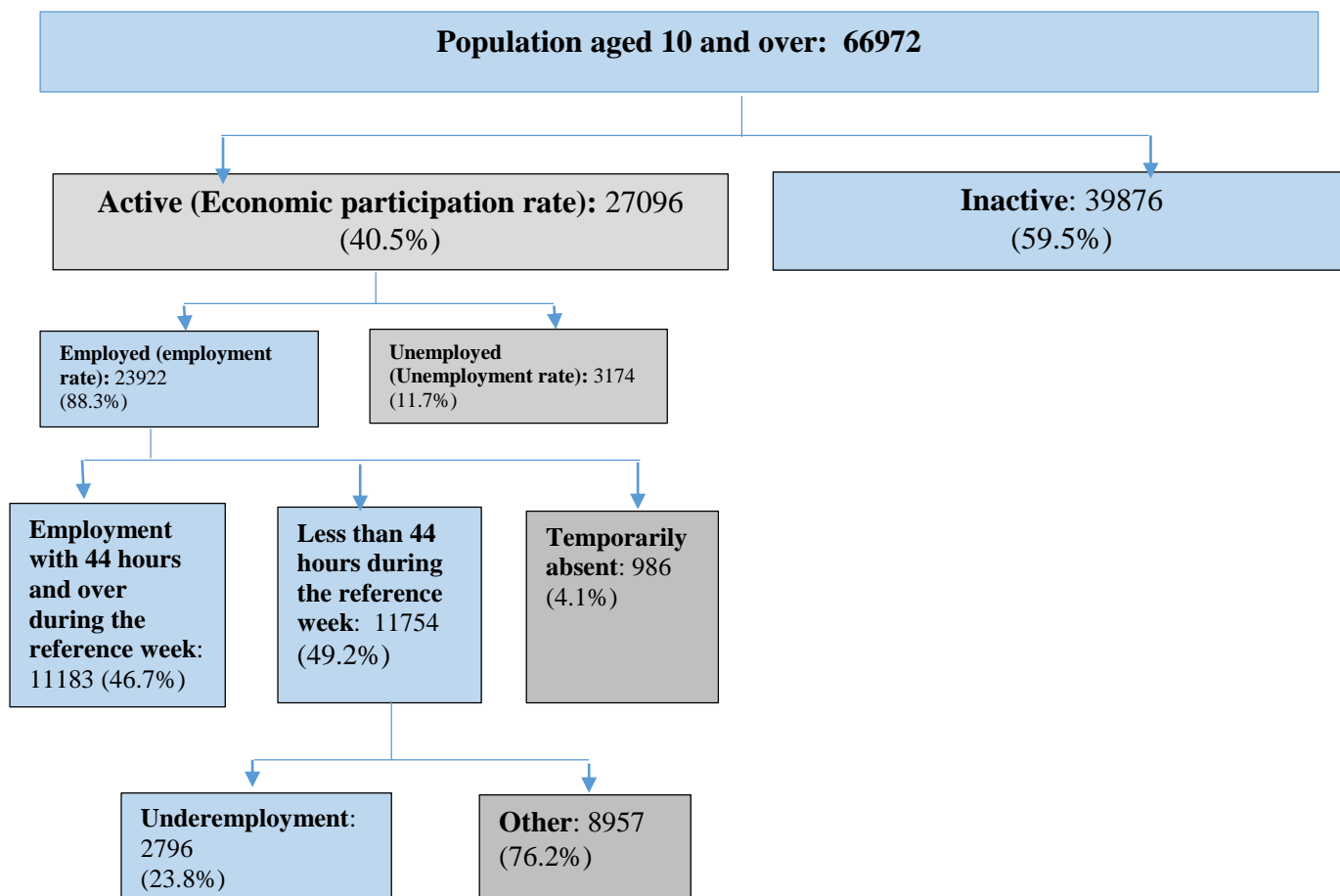
It should be cited that since the spring of the year 1397, the confidence interval %95 for the unemployment rate has been release. In view of the statistical methodology, the confidence interval means that if several samples are selected from the target population by using the same sampling method, and 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

## Findings

Table 1 provides the major indicators of labour market and its changes in the autumn of the year 1397 compared to the autumn of the year 1396. Table 2 also provides major labour force indicators by province.

Figure 1 shows the major indicators of labour market in the autumn of the year 1397.

**Figure1. Major Indicators of Labour Market- Autumn, the Year 1397  
(Thousand people)**



A review of the economic participation rate for the population aged 10 and over (activity rate) reveals that 40.5 % of the population at working age (10 years or 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 changes trend in economic participation rate of the total country shows that this indicator increased by 0.6% as compared with the last corresponding season (autumn, the year 1396). The review of employment rate of population aged 10 and over shows that 35.7 percent of working age population (10 years and over) were employed. This indicator stands higher for men and rural areas compared to women and urban areas.

**Table 1. Major labor force indicators by sex, urban and rural areas; autumn, the year 1397 compared to the autumn, the year 1396**

(Number= person, rate, share and ratio= percent)

Labor Force Indicators*		Total country			Male			Female		
		Autumn, the year 1397	Autumn, the year 1396**	Changes	Autumn, the year 1397	Autumn, the year 1396**	Changes	Autumn, the year 1397	Autumn, the year 1396**	Changes
Population aged 10 and over	Number	66972270	66194080	778190	33579656	33207916	371740	33392615	32986164	406451
Economic participation of population aged 10 and over	Rate	40.5	39.9	0.6	64.4	64.0	0.4	16.4	15.6	0.8
	Number	27096070	26415818	680252	21635217	21260820	374397	5460853	5154997	305856
Employment of population aged 10 and over	Rate	35.7	35.2	0.5	57.9	57.6	0.3	13.4	12.7	0.7
	Number	23922028	23313421	608607	19441753	19138406	303347	4480275	4175015	305260
Unemployment of population aged 10 and over	Rate	11.7	11.7	0.0	10.1	10.0	0.1	18.0	19.0	-1.0
	Number	3174042	3102396	71646	2193463	2122414	71049	980578	979982	-596
Unemployment of population aged 15 and over	Rate	11.7	11.8	-0.1	10.1	10.0	0.1	18.0	19.1	-1.1
	Number	3165108	3097644	67464	2184530	2119284	65246	980578	978360	2218
Unemployment of population aged 15-24	Rate	27.0	28.3	-1.3	23.6	24.4	-0.8	38.4	42.1	-3.7
	Number	760534	816245	-55711	514096	553667	-39571	246438	262578	-16140
Unemployment of population aged 15-29	Rate	24.5	25.0	-0.5	20.8	21.2	-0.4	37.1	38.2	-1.1
	Number	1670548	1689206	-18658	1094745	1105307	-10562	575803	583898	-8095
Unemployment of higher education graduates aged 10 and over	Rate	18.3	18.3	0.0	13.4	12.4	1.0	27.9	29.5	-1.6
	Number	1286085	1150969	135116	617422	506270	111152	668661	644697	23964
Employment in agriculture sector	Share	17.2	17.1	0.1	16.9	16.1	0.8	18.5	21.8	-3.3
	Number	4105645	3983033	122612	3277904	3072103	205801	827741	910929	-83188
Employment in manufacturing sector	Share	32.9	32.9	0.0	33.6	34.5	-0.9	30.2	25.5	4.7
	Number	7879854	7662591	217263	6528162	6598481	-70319	1351691	1064109	287582
Employment in services sector	Share	49.9	50.0	-0.1	49.5	49.4	0.1	51.4	52.7	-1.3
	Number	11931813	11661924	269889	9631028	9462449	168579	2300784	2199474	101310
Underemployment	Share	11.7	11.0	0.7	12.9	12.1	0.8	6.3	5.6	0.7
	Number	2796404	2557262	239142	2511948	2322433	189515	284456	234829	49627
The share of the unemployed higher education graduates aged 10 and over out of the total unemployed population		40.5	37.1	3.4	28.1	23.9	4.2	68.2	65.8	2.4
The share of the employed higher education graduates aged 10 and over out of the total employed population		23.9	21.9	2.0	20.6	18.7	1.9	38.5	36.9	1.6

**Table 1. Major labor force indicators by sex, urban and rural areas; autumn, the year 1397 compared to the autumn, the year 1396 (continued) (Number= person, rate, share and ratio = percent)**

Labor force indicator*		Urban areas			Rural areas		
		Autumn, the year 1397	Autumn, the year 1396**	Changes	Autumn, the year 1397	Autumn, the year 1396**	Changes
Population aged 10 and over	Number	50579136	49741157	837979	16393135	16452923	-59788
Economic participation of population aged 10 and over	Rate	39.8	39.4	0.4	42.6	41.4	1.2
	Number	20107050	19598917	508133	6989020	6816900	172120
Employment of population aged 10 and over	Rate	34.5	34.3	0.2	39.4	38.2	1.2
	Number	17462002	17036603	425399	6460025	6276817	183208
Unemployment of population aged 10 and over	Rate	13.2	13.1	0.1	7.6	7.9	-0.3
	Number	2645047	2562314	82733	528994	540082	-11088
Unemployment of population aged 15 and over	Rate	13.1	13.1	0.0	7.6	8.0	-0.4
	Number	2637857	2558073	79784	527251	539571	-12320
Unemployment of population aged 15-24	Rate	31.1	32.2	-1.1	17.6	19.4	-1.8
	Number	608403	645904	-37501	152131	170341	-18210
Unemployment of population aged 15-29	Rate	27.5	27.4	0.1	16.4	18.0	-1.6
	Number	1370332	1381090	-10758	300216	308115	-7899
Unemployment of higher education graduates aged 10 and over	Rate	17.9	17.9	0.0	22.8	23.1	-0.3
	Number	1152075	1027248	124827	134008	123719	10289
Employment in agriculture sector	Share	6.1	5.6	0.5	47.0	48.2	-1.2
	Number	1070206	959501	110705	3035439	3023531	11908
Employment in manufacturing sector	Share	34.4	35.0	-0.6	29.1	27.0	2.1
	Number	6001347	5968299	33048	1878507	1694291	184216
Employment in services sector	Share	59.5	59.3	0.2	23.9	24.8	-0.9
	Number	10385861	10104514	281347	1545951	1557409	-11458
Underemployment	Share	10.0	9.9	0.1	16.2	13.7	2.5
	Number	1749206	1694278	54928	1047198	862983	184215
The share of the unemployed higher education graduates aged 10 and over out of the total unemployed population		43.6	40.1	3.5	25.3	22.9	2.4
The share of the employed higher education graduates aged 10 and over out of the total employed population		30.2	27.6	2.6	7.0	6.6	0.4

\* Difference is due to rounding.

\*\* Figures are updated according to the population projections based on the results of the 2016 Population and Housing Census

A review of employment in major economic sectors indicates that the services sector holds the biggest share of employment with 49.9% of the total, followed by manufacturing sector with 32.9% and agriculture sector with 17.2%. The contribution of the employed people in the agriculture sector in autumn of the year 1397 had a 0.1 percent rise in comparison with the last corresponding season (autumn, the year 1396) but the contribution of the employed people in the manufacturing sector experienced no change and the contribution of the employed people in the service sector had a 0.1 percent fall.

Review of the unemployment rate among the population aged 10 and over shows that 11.7 percent of the economically active population were unemployed. Moreover, based on the confidence interval of 95%, the total unemployment rate of the country was between 11.3 and 12.1 with an 11.7 percent centre point. This means that with the confidence interval of 95 percent, this interval shows the real unemployment rate of the country. Based on the results, the unemployment rate was higher for women and urban areas than men and rural areas. A review of the changes trend happened in the indicator at national level shows that this indicator experienced no change compared to the last corresponding season (autumn, the year 1396).

The unemployment rate among population aged 15 and over mentions that 11.7 percent of the economically active population were unemployed. Based on the results, the unemployment rate was higher for women and urban areas than men and rural areas. This indicator in autumn of the year 1397 experienced a 0.1% fall compared to the last corresponding season (autumn, the year 1396).

The unemployment rate among the youths aged 15-24 indicates that 27% 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 changes trend in unemployment rate shows that the indicator decreased by 1.3% compared to the last corresponding season (autumn, the year 1396).

The unemployment rate among the youths aged 15-29 indicates that 24.5% of the active population were unemployed. This indicator stands higher for women and urban areas than men and rural areas. A review of the changes trend shows that this indicator fell by 0.5% compared to the last corresponding season (autumn, the year 1396).

Review of the unemployment rate among higher education graduates aged 10 and over shows that 18.3 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 changes trend shows that this indicator dropped by 0.1% compared to the last corresponding season (autumn, the year 1396).

The underemployment share tells that 11.7% of the total employed population were underemployed. The indicator stands higher for men and rural areas than for women and urban areas. This indicator in the autumn experienced a 0.7 percent rise compared to the last corresponding season (autumn, the year 1396).

A review of contribution of the employed population aged 10 or over with usual working hours of 49 and over shows that 36.5% of them work usually more than 49 hours a week. As a decent work

indicator, it reveals that a great share of the employed population of the country works more than the standard hours. This indicator experienced a 0.9 percent fall compared to the last corresponding season (autumn, the year 1396).

In the autumn of the year 1397, the share of the unemployed higher education graduates out of the total unemployed population was 40.5 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 3.4 percent rise compared to the last corresponding season (autumn, the year 1396).

The results indicate that in the autumn of the year 1397, the share of the employed higher education graduates out of the total employed people was 23.9 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 2.0 percent compared to the last corresponding season (autumn, the year 1396).

The figure.2 shows the changes of unemployment rate in the successive seasons during the years 1393 to 1397.

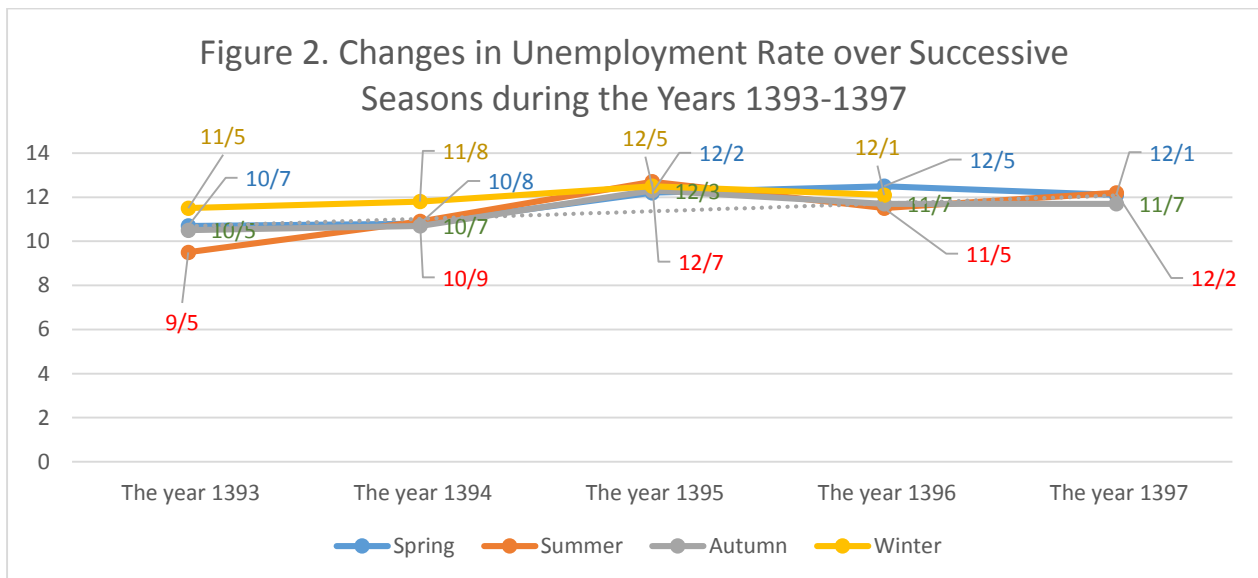


Table 2 shows some major labour force indicators in autumn, the year 1397 in comparison to autumn, the year 1396\* by province.

Province	Economic participation rate		Employment ratio		Unemployment rate		
	Autumn 1397	Autumn 1396	Autumn 1397	Autumn 1396	Autumn 1397		Autumn 1396
					Point to point estimation	Confidence interval 95%	
Total country	40 .5	39 .9	35 .7	35 .2	11 .7	(11 .3-12 .1)	11 .7
East Azarbaijejan	40 .4	40 .9	35 .9	36 .4	11 .0	(9 .6-12 .5)	10 .9
West Azarbaijejan	42 .0	42 .1	36 .3	35 .8	13 .6	(11 .6-15 .7)	15 .0
Ardebil	43 .4	44 .7	39 .6	40 .6	8 .7	(6 .8-10 .6)	9 .1
Esfahan	44 .9	41 .4	38 .5	35 .9	14 .1	(12 .5-15 .7)	13 .5
Alborz	38 .9	37 .4	32 .8	33 .5	15 .8	(13 .9-17 .7)	10 .3
Ilam	36 .1	33 .8	32 .2	30 .5	10 .6	(8 .5-12 .8)	9 .8
Bushehr	37 .0	37 .2	33 .0	32 .9	10 .8	(9 .1-12 .6)	11 .5
Tehran	39 .0	39 .4	34 .2	34 .9	12 .4	(10 .7-14 .2)	11 .3
Chaharmahal & Bakhtiari	37 .7	39 .5	31 .3	31 .1	17 .0	(13 .5-20 .5)	21 .2
South Khorasan	41 .7	41 .8	38 .3	36 .9	8 .2	(6 .7-9 .8)	11 .7
Khorasan-e-Razavi	46 .9	44 .0	42 .7	40 .1	9 .0	(7 .5-10 .4)	8 .7
North Khorasan	44 .6	46 .2	39 .8	42 .2	10 .7	(9 .1-12 .3)	8 .6
Khuzestan	39 .9	39 .5	34 .0	33 .8	14 .7	(13 .1-16 .3)	14 .4
Zanjan	41 .9	41 .8	38 .7	37 .8	7 .5	(5 .8-9 .3)	9 .5
Semnan	36 .7	37 .7	34 .3	34 .6	6 .6	(5 .0-8 .2)	8 .2
Sistan & Baluchestan	32 .0	30 .5	27 .1	27 .1	15 .5	(12 .5-18 .5)	11 .2
Fars	40 .2	40 .5	36 .7	35 .8	8 .7	(7 .5-9 .8)	11 .7
Qazvin	41 .9	39 .1	37 .3	35 .1	11 .1	(9 .3-12 .9)	10 .1
Qom	34 .0	36 .6	30 .2	32 .6	11 .4	(9 .5-13 .4)	11 .0
Kordestan	43 .5	42 .6	37 .2	37 .5	14 .5	(12 .4-16 .5)	12 .0
Kerman	39 .2	39 .5	35 .1	35 .1	10 .3	(8 .6-12 .1)	11 .1
Kermanshah	43 .3	40 .5	35 .4	30 .3	18 .2	(15 .5-20 .9)	25 .1
Kohgiluyeh & Boyerahmad	35 .7	36 .1	31 .2	32 .0	12 .7	(10 .1-15 .2)	11 .3
Golestan	38 .2	38 .0	34 .1	33 .1	10 .7	(9 .1-12 .3)	12 .7
Gilan	43 .1	41 .7	38 .2	36 .8	11 .3	(9 .1-13 .5)	11 .6
Lorestan	37 .1	36 .6	32 .4	32 .3	12 .8	(10 .6-15 .0)	11 .7
Mazandaran	39 .9	41 .0	36 .4	36 .9	8 .8	(7 .4-10 .2)	9 .9
Markazi	34 .9	36 .8	32 .5	33 .7	6 .9	(5 .2-8 .6)	8 .4
Hormozgan	38 .3	34 .8	34 .5	32 .2	10 .0	(8 .1-12 .0)	7 .4
Hamedan	40 .3	40 .8	37 .4	36 .6	7 .3	(5 .3-9 .2)	10 .4
Yazd	41 .9	41 .7	36 .5	36 .0	12 .9	(10 .7-15 .2)	13 .7

\* Figures are updated according to the population projections based on the results of the 2016 Population and Housing Census.



## Definitions and concepts

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

**Work:** This key term is used to determine the status of 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 10 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 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 10 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:** the total of employed and unemployed people is labour force.

### 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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<sup>1</sup> ILO, Thirteenth International Conference of Labour Statisticians (Geneva, 1983).

## Indicators

### *Economic participation rate (Economic activity rate)*

The ratio of the active population (employed & unemployed) 10 years of age and over (15 years of age and over) to the working age population 10 years of age and over (15 years of age and over) multiplied by 100.

$$\text{Economic participation rate} = \frac{\text{Economically active population aged 10 and over (aged 15 or over)}}{\text{Population aged 10 and over (aged 15 or over)}} \times 100$$

**Employment ratio:** The ratio of the employed population aged 10 and over (or 15 and over) to the total population at working age, 10 years old and over (or 15 years and over) multiplied by 100

$$\text{Employment ratio} = \frac{\text{Employed population aged 10 or over (or aged 15 and over)}}{\text{Population aged 10 and over (or aged 15 and over)}} \times 100$$

### **Unemployment rate**

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

$$\text{Unemployment rate} = \frac{\text{Unemployed population aged 10 and over (aged 15 and over)}}{\text{Active population aged 10 and over (aged 15 and over)}} \times 100$$

### **Employment rate**

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

$$\text{Employment rate} = \frac{\text{Employed population aged 10 and over (aged 15 and over)}}{\text{Active population aged 10 and over (aged 15 and over)}} \times 100 \text{ or } 100 - \text{unemployment rate}$$

### **Unemployment rate of the population aged 15-24 (or 15-29 years old)**

The ratio of the unemployed population aged 15 -24 (15-29 years of age) to the economically active population aged 15-24 (15-29) multiplied by 100.

$$\text{Unemployment rate aged 15-24 (15-29)} = \frac{\text{Unemployed population aged 15-24 (15-29)}}{\text{Economically active population aged 15-24 (15-29)}} \times 100$$

### **Unemployment rate of higher education graduates**

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

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

### **Share of unemployed higher education graduates aged 10 and over**

The ratio of unemployed higher education graduates aged 10 and over to the total unemployed population aged 10 and over multiplied by 100

$$\text{Share of unemployed higher education graduates aged 10 and over} = \frac{\text{Unemployed higher education graduates aged 10 and over}}{\text{Total unemployed population aged 10 and over}} \times 100$$

### **Share of employed higher education graduates aged 10 and over**

The ratio of employed higher education graduates aged 10 and over to the total employed population aged 10 and over multiplied by 100

$$\text{Share of employed higher education graduates aged 10 and over} = \frac{\text{Employed higher education graduates aged 10 and over}}{\text{Total employed population aged 10 and over}} \times 100$$

### **Underemployment share**

The ratio of the underemployed population to the employed population multiplied by 100

$$\text{Underemployment rate} = \frac{\text{Underemployed population}}{\text{Employed population}} \times 100$$