

Labour market

Third quarter of 2017

an integrated picture

In the third quarter of 2017 the Italian economy recorded a quarter-on-quarter 0.4% and a year-on-year 1.7% increase of Gdp. Overall, in the Euro area the economy grew by 0.6% over the previous quarter and by 2.5% over the same quarter of 2016. Acceleration in the economic activity growth, particularly in the industry and construction sectors, was associated with a labour absorption by the production system that continued to expand: total hours worked grew by 0.7% to the previous quarter and by 2.4% on an annual basis, showing a higher growth than that of the product.

On the labour supply side, in the third quarter of 2017 employment showed a new growth on a quarter-on-quarter basis (+79 thousand, 0.3%), due to a further increase of fixed term employees (+101 thousand, +0.6%), while permanent employees remained stable. The self-employed continued to decrease (-22 thousand, -0.4%). The employment rate grew to 58.1%, +0.2 points over the previous quarter. The most recent data, the seasonally adjusted ones for October 2017, showed a substantial stability in the number of employed persons compared to September.

The dynamics between the third quarter 2017 and the same period of the previous year led to an increase of 303 thousand employed persons (+1.3%) involving employees only (+2.3%), mostly with a fixed-term contract, while the self-employed continued to decrease (-1.8%). The increase in absolute terms was more significant for full-time employees. Part-time employment increased mostly in the voluntary component. Employment growth involved both genders and all geographical areas, and was more evident among women and in the South and Islands. In the third quarter of 2017 the number of young people aged 15-34 in employment and the corresponding employment rate started growing again, both on a quarterly and on a yearly basis.

Unemployment rate remained unchanged from the previous quarter and decreased by 0.4 percentage points year-over-year. In October 2017, the unemployment and inactivity rates (15-64 years) remained stable on a monthly basis.

The decrease in the number of the inactive aged 15-64 (-300 thousand in a year) and the corresponding inactivity rate (-0.6 points) strengthened on a yearly basis. Inactivity reduction was spread over territory and gender, and especially involved people over 50, and persons willing to work (potential labour forces).

Changes in stock suggested significant changes in people's conditions in the labour market, as measured by flow data over a twelve-month period. Overall, transitions from unemployment to employment increased especially among young people, highly-educated individuals and residents of the North area. Also transitions from inactivity to unemployment grew, especially for potential labour forces; the discouraged component, however, registered an increase also in transitions to employment.

As for enterprises, the signs of growth in labour demand were confirmed, with a 1% increase in employee jobs over the previous quarter, as a result of a rise in both industry and services. Hours worked per employee increased both on the previous quarter (+0.4%) and year-over-year (+0.1%), while short-time working allowance hours continued to decrease. Signs of growth from the vacancy rate continued with an increase by 0.1 percentage points on the previous quarter. On a quarterly basis, wages and salaries increased by 0.3%, social contributions by 0.7%, and together they produced a 0.4% increase of labour costs.

NEXT RELEASE: 13 March 2018

TABLE 1. LABOUR INDICATORS. Q3 2017, absolute values, percentage values and index numbers, percentage points changes

	Seasonally adjusted		Not seasonally adjusted data y-o-y (Q3 2017/Q3 2016)
	Value	Percentage changes (Q3 2017/ Q2 2017)	
LABOUR INPUT (a) (b)			
<i>National Accounts</i>			
Hours worked (thousands)	10,952,348	0.7	2.4
Agriculture	604,877	-1.8	-0.4
Industry excluding construction	1,896,444	0.9	3.6
Construction	693,991	1.6	2.5
Services	7,753,036	0.8	2.3
LABOUR SUPPLY			
<i>Labour force survey</i>			
Employed (thousands)	23,074	0.3	1.3
Employees	17,755	0.6	2.3
Permanent	14,971	0.0	0.4
Temporary	2,784	3.9	13.4
Self-employed	5,319	-0.4	-1.8
Employment rate (aged 15-64) (percent and percentage points changes)	58.1	0.2	0.8
15-34 years	40.8	0.3	1.0
35-49 years	73.2	0.1	0.6
50-64 years	59.2	0.2	1.0
Unemployed (thousands)	2,909	0.1	-2.5
Unemployment rate (percent and percentage points changes)	11.2	0.0	-0.4
Inactive population (aged 15-64) (thousands)	13,326	-0.8	-2.2
Inactivity rate (aged 15-64) (percent and percentage points changes)	34.4	-0.2	-0.6
EMPLOYEE LABOUR DEMAND (a) (c)			
<i>Oros, Large enterprises and Vela Surveys</i>			
Number of jobs (index 2010=100)	105.3	1.0	3.7
Temporary employment agency jobs (d) (index 2010=100)	184.0	5.7	22.8
Hours worked (e) (f) (index 2010=100)	107.4	1.5	5.0
Per capita hours worked (c) (e) (index 2010=100)	100.0	0.4	0.1
Short-time working allowance hours per 1,000 hours worked (e) (absolute changes per 1,000 incidence)	na	na	-5.3
Job vacancy rate (e) (percent and percentage points changes)	1.0	0.1	0.2
EMPLOYEE LABOUR COST			
<i>Oros, Large enterprises and Vela, Contractual Wages and Salaries Survey</i>			
Gross wages and salaries (a) (c) (index 2010=100)	109.9	0.3	0.8
Social security contributions (a) (c) (index 2010=100)	105.4	0.7	1.7
Labour cost (a) (c) (index 2010=100)	108.7	0.4	1.1
Cash wages according to collective labour agreements (monthly average in euros) (g)	1,945	-	0.6

(a) Provisional data.

(b) For the hours worked (National Accounts) the change over the same period of the previous year is computed on seasonally adjusted data.

(c) Section from B to S (excluding O) of the Nace Rev 2 classification of economic activities.

(d) Number of jobs relating to hires by employment agencies.

(e) Enterprises with at least 10 employees.

(f) The change over the same period of the previous year is computed on calendar day adjusted data.

(g) Not seasonally adjusted data calculated with a fixed employment structure (base December 2010).

Main results (third quarter of 2017)

In the third quarter of 2017, the labour market was characterized by growth in employment, stability of unemployment and decrease of inactivity. The labour input of the economic system (measured by hours worked from the National accounts) registered a 0.7% quarter-on-quarter and a 2.4% year-on-year increases.

Employment estimated by the Labour Force Survey, net of seasonal effects, was equal to 23 million 74 thousand people, a 79 thousand unit (+0.3%) increase compared to the previous quarter. The employment rate rose to 58.1% (+0.2 percentage points); the increase was more relevant for people aged 15-34 (+0.3 points) compared to 50-64year olds and 34-49year olds (+0.2 and +0.1 points respectively).

The quarter-on-quarter increase in the number of employed people was the result of an additional increase in employees (+101 thousand, 0.6%), due exclusively to the growth of fixed-term contracts compared with the stability of open-end contracts. On the other hand the decrease of self-employed was still going on even at a slower pace (-22 thousand, -0.4%). The growth for 15-34 year olds (+0.6%) was associated to the continuing growth of employment for 50-64 year olds (+0.8%). Moreover, employment growth regarded both genders, and the Centre and the South and Islands areas in the face of stability in the North.

The unemployment rate, after two falls in a row, in the third quarter remained at 11.2% compared to the previous quarter. The inactivity rate fell to 34.4% (-0.2 points) on a 3-month period.

Employee jobs in industrial and services enterprises increased by 1.0% on a quarterly basis and by 3.7% on an annual basis; total hours worked grew by 1.5% over the previous quarter and by 5.0% year-over-year, while hours worked per capita increased by 0.4% and 0.1%, respectively. At the same time short-time working allowance hours decreased from 12.3 to 7.0 per thousand hours worked on an annual basis. Temporary employment agency jobs continued to grow at a strong pace: 5.7% on a quarterly basis and 22.8% year-over-year.

The job vacancy rate in enterprises with 10 or more employees increased by 0.1 percentage points on the previous quarter and by 0.2 percentage points on an annual basis.

The seasonally adjusted labour cost index per full-time equivalent (fte) increased by 0.4% on a quarterly basis, as a result of a 0.3% growth in wages and 0.7% in social security contributions. On an annual basis, labour cost increased by 1.1%, due to a 0.8% growth in wages and 1.7% in social security contributions.

In this quarter 'The focus on' at page 5 considers the indicators based on enterprise data that can supply leading signals on the labour market, in particular on the unemployment rate and the number of employee jobs.

The methodological note presents the confidence intervals of sample estimates of non-seasonally adjusted key indicators on labour supply and some indicators on labour demand.

Starting from this quarter, the employment rate and the inactivity rate for the 15-64 year olds are presented also by geographical area in the time series on labour supply.

FIGURE 1. HOURS WORKED - TOTAL ECONOMY Q1 2012–Q3 2017, seasonally adjusted data, percentage change over the same quarter of the previous year

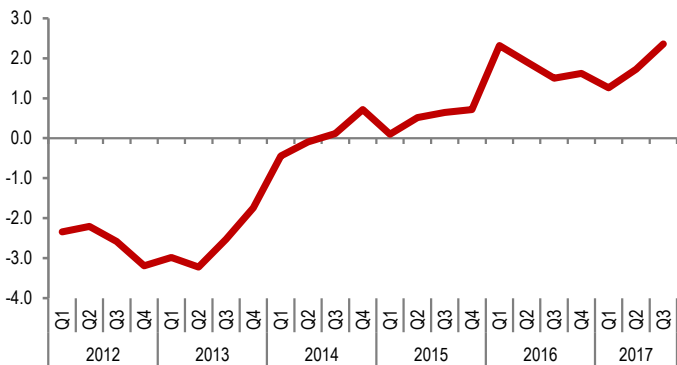


FIGURE 2. EMPLOYED (left scale) AND UNEMPLOYMENT RATE (right scale) Q1 2013– Q3 2017, seasonally adjusted data, thousand and percentage rates

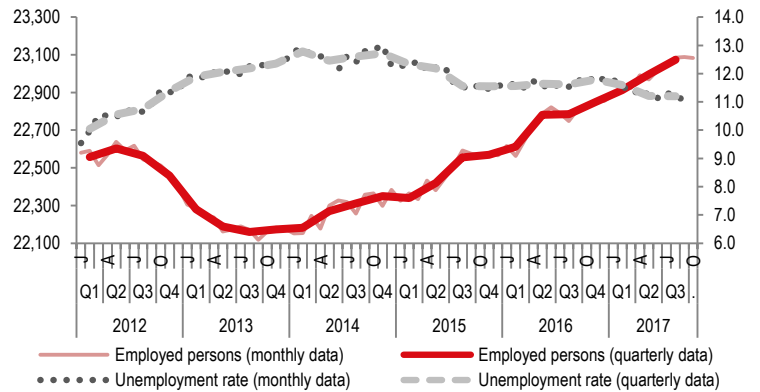


FIGURE 3. EMPLOYEES (PERMANENT AND TEMPORARY) AND SELF-EMPLOYED

Q1 2012–Q3 2017, seasonally adjusted data, values (left scale) and absolute changes over previous period (right scale)

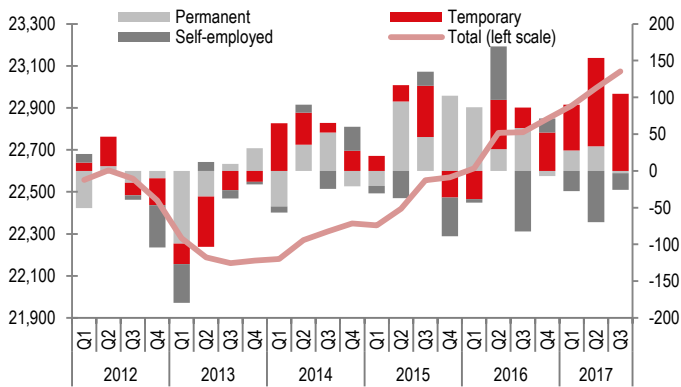


FIGURE 4. NUMBER OF JOBS IN INDUSTRY AND MARKET SERVICES (B-N) Q1 2012 – Q3 2017, not seasonally adjusted data, percentage change over the same quarter of the previous year (2010=100)

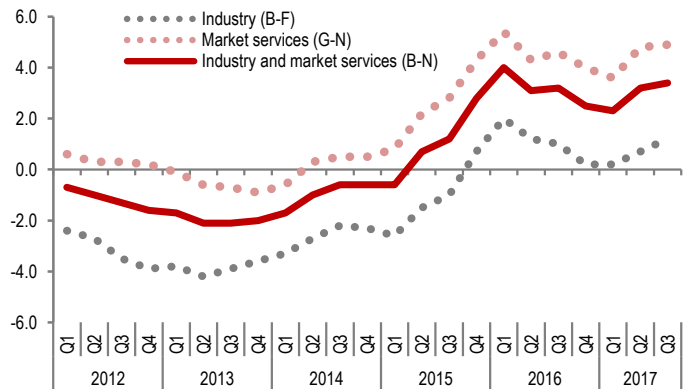


FIGURE 5. PER CAPITA HOURS WORKED (left scale) AND PERCENTAGE OF SHORT-TIME WORKING ALLOWANCE HOURS (right scale) FOR ENTERPRISES WITH AT LEAST 10 EMPLOYEES IN INDUSTRY AND SERVICES (B-S) Q1 2012 – Q3 2017, seasonally adjusted indices (2010=100) and percentage on 1,000 hours worked

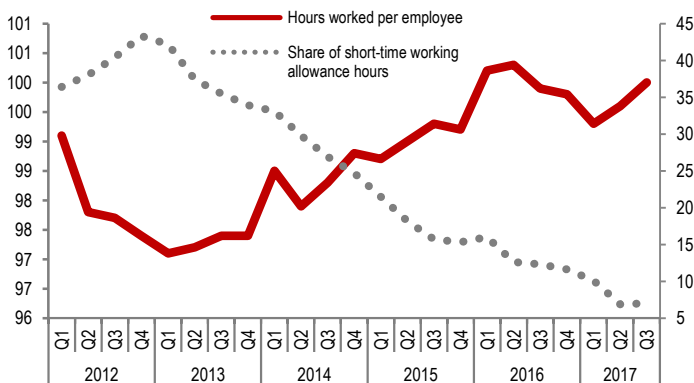
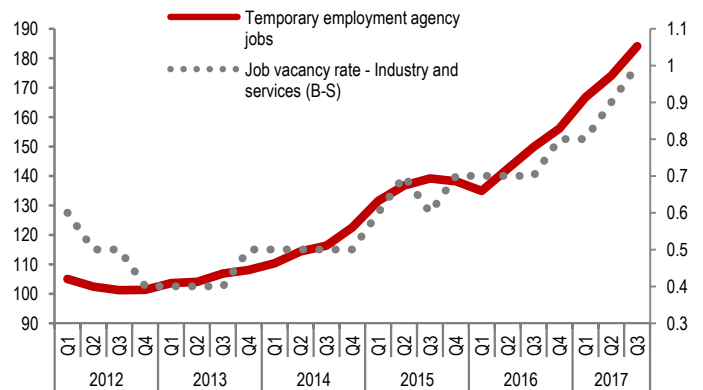


FIGURE 6. TEMPORARY EMPLOYMENT AGENCY JOBS (left scale) AND JOB VACANCY RATE FOR ENTERPRISES WITH AT LEAST 10 EMPLOYEES (right scale) IN INDUSTRY AND SERVICES (B-S) Q1 2012–Q3 2017, indices (2010=100) and seasonally adjusted percentage values



a focus on...

Predictive signals on the labour market from business data

Indices on the number of temporary employment agency jobs and the rate of vacancies provide interesting information on the economic cycle. These two indicators, strongly related between them (Figure 6 p.4) enable to anticipate with good approximation the labour market trends – their increase signals a further stage of expansion in employment and a reduction of unemployment. A joined reading of temporary employment agency jobs and total employee jobs (Figure 1), and of unemployment rate and vacancies (Figure 2) is provided below.

The number of temporary employment agency jobs, calculated by Istat on the basis of Inps data on the temporary employment agencies, is a component of labour demand which is particularly influenced by the cyclical evolution of the economy. Some enterprises as a response to an increased demand of goods and services may quickly adjust their labour input at lower costs, by making use of this type of contracts, and directly employing labour force only afterwards. The property of the number of temporary employment agency jobs as leading indicator, recognized also in other countries, clearly emerges in figure 1 in which by means of the comparison with employee jobs, over the total of industry and market services, a maximum correlation can be observed after three quarters have passed. In the analyzed period, this evidence is particularly clear close to the turning points of the economic cycle. The analysis of the link between the two indicators from the end of 2015 to the beginning of 2016 deserves to be commented. During this period the dynamics of temporary employment agency jobs, though keeping positive, recorded a significant decrease, in opposition to an exceptional boost of employment partially due to the new facilitated hiring of employees by enterprises. During 2016, the growth of total occupation recorded a slowdown against a rapid recovery in the temporary employment agency jobs dynamics.

Another indicator, potentially able to anticipate labour market trends, is the vacancy rate, which measures the share of all employee jobs, occupied and vacant, for which a personnel search is in progress. It corresponds, on the enterprise side, to the unemployment rate which measures the still unmet share of labour supply by individuals. In principle, the coexistence of unemployed people and vacancies at a given moment is in itself a sign neither of poor efficiency in the mechanisms for matching labour supply and demand, nor of a poor correspondence between the characteristics of workers searched for by enterprises and available among the unemployed. The presence of a limited share of unemployed and of vacancies is indeed an inevitable consequence of the permanent creation and destruction of jobs, entry and exit of workers from labour force, and their shifts from a job to another. Generally speaking during recession times the search for new personnel to be hired by enterprises decreases, while the number of people searching for a job increases. The opposite occurs during expansions. The relationship is evident in Italy although the vacancy rate considers just a portion of jobs which could be available for the unemployed (the indicator does not include either enterprises with less than 10 employees, the public and agricultural sectors, or the self-employed). Both indicators evidence the beginning of a time of economic contraction from the third quarter 2011. The following time of expansion is evidenced by the vacancy rate from the fourth quarter 2013. A permanent reduction of the unemployment rate could be observed from the first quarter of 2015 only (Figure 2). The early positive sign of the vacancy rate in comparison to the unemployment rate is a recurrent and expected phenomenon. Indeed searching for personnel by enterprises takes place before hiring personnel, and the latter contributes to reduce the unemployment rate. However, in this case the length of the time span between the cyclical inversion of the two indicators is also affected by the high decrease of inactivity and may also be a sign of a weaker correspondence between the characteristics of workers searched for by enterprises and available among the unemployed. This worsening event usually follows periods of economic crisis, especially when intense and long-lasting. However the short-term analysis of the economic context and the persisting positive trend in the vacancy rate seem to prefigure a further reduction of unemployment.

FIGURE 1. TEMPORARY EMPLOYMENT AGENCY JOBS (left scale) AND EMPLOYEE JOBS (right scale) IN INDUSTRY AND MARKET SERVICES (B-N) Q12010-Q22017, 3-term moving averages of percentage change over the same quarter of the previous year

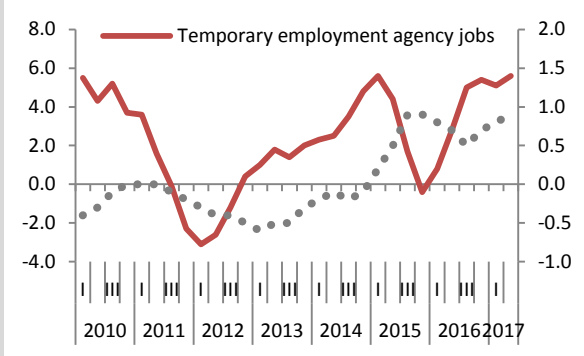


FIGURE 2. UNEMPLOYMENT RATE (left scale) AND JOB VACANCY RATE FOR ENTERPRISES WITH AT LEAST 10 EMPLOYEES (right scale) IN INDUSTRY AND SERVICES (B-S) Q12010-Q32017, seasonally adjusted percentage values



Sources: Labour force survey, Monthly survey on large enterprises, Quarterly survey on job vacancies and hours worked, Oros survey.

Glossary

Active persons: persons aged 15 years and over who during the reference week (the week the information refers to) had at least one of the following characteristics:

- worked for pay or profit in a job or business for at least one hour;
- worked unpaid in the family enterprise where they usually work;
- did not work as they were temporarily away from their jobs (for holidays or sickness). Out of service-employees are considered employed if the absence from work is no longer than three months, or if they keep on perceiving half of the wage at least. The self-employed persons out of service, except for family workers, are considered employed if they continue their activity during their absence. Family workers are considered employed if the absence from work is no longer than three months.

The previous conditions are independent of the signing of an employment contract and therefore the employed estimated through the sample Labour Force survey include also forms of irregular work.

Business surveys: OROS (Employment, wages and salaries and social charges), **GI** (Large Enterprises) **and Vela** (Job vacancies and hours worked): the Oros survey produces quarterly information on employment trends (Full-Time Equivalent - FTE), wages, salaries and social charges for employees of all size enterprises and private institutions. Oros indicators are estimated by integrating administrative data from INPS (the Italian National Institute for Social Security) and data from the monthly survey on Large Enterprises (GI). The Vela survey is a quarterly data collection on job vacancies and hours worked that measures - together with the monthly survey on employment, working hours, wages and salaries and labour cost in large enterprises - job vacancies, hours worked and hours paid in enterprises of the private sector with at least 10 employees, excluding agriculture.

Contractual wages and salaries in cash value: includes all compensation items used to calculate the monthly index of contractual wages and salaries plus any arrears and one-time bonuses. The amounts related to each compensation item (wage or salary) are allocated to the months of actual payment. Wages and salaries in cash value are calculated for all grades envisaged when defining the base (which is the same as that of the index of contractual wages and salaries). The aggregates are then determined according to a constant structure of employment, which allows for monitoring the pay trend, net of the effects due to changes in the structure of employment by professional status and grade.

Data adjusted for calendar reasons: working day adjusted data, Easter holidays and leap year.

Employment rate: Ratio between employed people of a given age group (usually aged 15-64) and the overall resident population of that given age group.

Full-time equivalent (FTE): a unit to measure the volume of work performed in all jobs. It is obtained by reducing to full-time equivalent (the unit value of) part-time jobs and temporary agency jobs. In the OROS survey FTEs include middle managers, employees, workers, salespersons, apprentices and home workers. Managers are excluded. Unlike the number of employed people, the calculation of FTEs excludes workers benefiting from the short time working allowance or job-security agreements.

Within the framework of national accounts, FTEs measure the number of full-time equivalent jobs and provide a measure of labour input used for the production of income in the economic territory of the country. This measure is calculated because hours worked may differ from a full-time standard depending on the kind of job: main activity or secondary jobs, working time (full-time, part-time), declared or undeclared to fiscal or social contributions authorities. Full time equivalent units are obtained as the ratio between the total amount of hours actually worked and the average number of hours worked by a full-time job.

Hours of job-security agreement: hours not worked due to job-security agreements.

Hours of short-time working allowance: total amount of ordinary, extraordinary, exceptional hours of short time working allowance, and hours of job-security agreement used by enterprises in the reference quarter.

Hours worked: total number of ordinary hours and overtime, worked by employees with an employment contract, excluding managers. Within the framework of national accounts, the hours actually worked – both paid and unpaid in any occupation (employed and self-employed) - provided they produce income. The calculation of hours worked includes the hours worked during ordinary working hours, the hours worked in addition to the ordinary working hours (overtime), the time needed for activities such as preparation of the workplace and the time corresponding to short breaks at work. The calculation excludes: hours paid but not actually worked (annual leaves, holidays and sick leaves, etc.), meal breaks and the way to and from work.

Hours worked per employee: average number of ordinary and extraordinary working hours of employees under contract.

Inactive persons: All persons not classified as employed or job seekers (unemployed).

Inactivity rate: Ratio between people that are not part of the labour force in a given age group (usually aged 15-64) and the **overall** resident population of that given age group.

Involuntary part-time work: individuals working part-time who accepted to work part-time because a full –time job could not be found.

Job-security agreement: job agreement between employer and trade unions aimed at reducing the working time, with the purpose to maintain the current employment levels in case of enterprise crisis or to hire new employees through a planned working time or wages reduction program (L.863/84).

Job vacancies are the posts, either newly created or already existing, unoccupied or about to become vacant, which the employer actively seeks to fill with - and is prepared to make further efforts to find - a suitable candidate from outside the enterprise. The data presented here refers to job vacancies for employees, available as of the last day of the reference quarter. Therefore, they measure the staff search which at that date has already started and not yet been completed (because a suitable candidate has not been already hired and the company has not decided to stop the search).

Job vacancy rate: ratio between the number of vacant posts and the sum of vacant and occupied posts. Therefore, the job vacancy rate measures the part of occupied and vacant jobs for which staff search is ongoing. The data used to calculate the job vacancy rate refers to the last day of the reference quarter.

Labour cost: total expenditure borne by employers for employing staff (including wages, salaries in cash and in kind, employers' social security contributions, vocational training costs).

Labour force: People in employment and unemployment.

Largest municipalities: municipalities that at 2001 Census had at least 250 thousand inhabitants (Roma, Milano, Napoli, Torino, Palermo, Genova, Bologna, Firenze, Bari, Catania, Venezia, Verona, Messina).

NACE Rev.2: classification of economic activities published in the Official Journal on 20 December 2006 (Regulation EC of the Council and the European Parliament No 1893/2006) and adopted by Istat on 1 January 2008.

Ordinary hours: all the hours worked, included at night and during holidays and excluding overtime, hours of Short time working allowance and hours not worked due to holidays, days-off and in general, hours not worked even if a compensation for them was received.

Overtime: time worked in addition to hours worked during normal periods of work, net of compensation of stored overtime credit systems, Working hours on Sundays, nights or public holidays are considered as overtime only if they are not included in the working time under contract or stored overtime credit systems.

Payroll job: employment contract between a single natural person and a production unit (enterprise), the object of which is the performance of work in return for compensation (pay).

Payroll jobs, therefore, are the number of jobs occupied by employees (both full- or part-time) regardless of the amount of hours worked on a given reference day. Just like the number of employees, payroll jobs are a stock variable at a certain moment in time. Workers, under regular contract by a production unit, are included even if they are not working due to holidays, parental leaves, short time working allowances, etc.

Permanent employees: workers under permanent contract where there is no end-date.

Reference week: in the Labour Force Survey, the week the information collected refers to (usually it is the week preceding the interview).

Seasonally adjusted data: data that have been adjusted for seasonal variations, including trading-day (working-day) effects and other regular calendar variations if present (including changes in weather, harvests, major holidays, and school schedules). These seasonal adjustments make it easier to observe the cyclical, underlying trend of a short term indicator.

Self-employed persons (workers): People working in an economic unit without subordination. The following are considered self-employed workers: holders, partners and managing directors of enterprises; or institutions respecting the following conditions: actually work in enterprises or institution, are not in the payroll, are not paid with invoice, do not have contracts as casual workers; members of producers' cooperatives who work in the enterprises but are not in the payroll; contributing family workers of the holder who work neither with pay nor with social contributions.

Short-time working allowance: State instrument that provides support when businesses are forced to downsize or suspend their activities as a result of legally-acknowledged crises or difficulties. The instrument consists in the provision by INPS (the Italian Social Security Institute) of compensation to substitute for the salaries of employees who have been laid off or whose working hours have been reduced.

There are three different forms of Short time working allowances:

- *ordinary*, which applies to enterprises in the industrial sector during lay-offs and contractions in productive activity due to temporary market situations or to temporary circumstances that do not depend on the employer, the employees;
- *exceptional*, which is a form of economic support for workers, employees and middle managers who have been laid off from work and have no access (or no longer have) to the ordinary or extraordinary short time working allowance. It also provides economic support for apprentices, temporary workers and homeworkers for enterprises using ordinary and extraordinary short-time working allowances;
- *extraordinary*, which applies to enterprises facing difficulties due to restructuring, reorganization, conversion, company crisis or for recruiting procedures.

Social security contributions: the amount of the social charges incurred by the employer to the social security funds as well as the amount set aside for severance pay.

Survey on contractual wages and salaries: statistics derived from the survey on contractual wages and salaries are based on the concept of "price of work." Thus they refer to a constant number of workers, characterized by a fixed structure of professional status (workers, employees, managers) and grade (base). The base currently in force is December 2010 = 100. They satisfy the need to assess the dynamic of earnings, net of the effects due to changes in the structure of employment by professional status, grade, working hours (full-time/part-time), seniority, overtime, decentralized bargaining, absences, conflicts etc.

Temporary (employment) agency jobs: workers under temporary contract, hired by a temporary employment agency that supply temporary work (supplier). The agency puts these persons at disposal of another legal-economic unit (enterprises or institution requiring) in order to cover a temporary productive need. In NACE Rev.2 this kind of contract falls in the category "Temporary employment agency activities" (group 78.2) included in section N "Administrative and support service activities".

Temporary workers: workers under a fixed-term contract where there is an end-date.

Unemployed (job seekers): unemployed people aged between 15 and 75 who: have looked for a job at least once in the 30 days before the survey and are willing to start work (or to start their own business) in the next two weeks; Will start work within three months since the interview and are

willing to work within the two weeks following the interview (or to start their own business), in case it is possible to start work.

Unemployment rate: ratio between unemployed people of a given age group (usually aged 15 and over) and the total number of the employed and unemployed (the labour force) of the same age group.

Voluntary part-time work: individuals working part-time who say they work part-time for reasons other than the lack of full-time employment opportunities.

Wages and salaries: They are defined as the total “de facto” remuneration in cash, payable to all persons counted on the payroll in return for work done during the accounting period. Wages in kind are excluded. They include the values of any social contributions, income taxes, payable by the employee even if they are actually withheld by the employer and paid directly to social insurance schemes and tax authorities on behalf of the employee. “De facto” wages differ from national contractual (agreed) wages because the last ones include only the components related to national labour agreements.

Note on the impact of the earthquake on estimates produced

The earthquake at the end of October 2016 hit 13 sampled municipalities (out of a total of 1,270) of the Labour Force Survey (LFS) (see Annexes 1 and 2 of the Decree Law 189/2016, as amended by Law No 229/2016 for the full list of municipalities affected by the earthquakes). It was therefore necessary to suspend the survey in these municipalities due to difficulties in the data collection operations.

The lack of interviews collection in these municipalities had an impact on estimates regarding response rates, especially in the provinces and regions most affected by the earthquake. Without the information regarding municipalities affected by the earthquake, the estimates disseminated today are to be considered as provisional and probably susceptible to future revisions for the provinces of Ascoli Piceno, Fermo, Macerata, Teramo and Chieti, and for their respective regions.

With regard to the fourth quarter of 2016, keeping into account the date of the earthquake and the definitions of employed and unemployed used by Istat and harmonised at European level (see glossary), the impact on the main aggregates estimates can be considered not to affect comparisons among estimates over time.

Istat sources on employment

	National accounts	Istat Labour Force Survey	Business indicators (Oros and Large Enterprises Surveys)
Type of source	Estimates of labour input are the result of integration and comparison of different statistical sources and indirect methods of estimation.	Estimates of the number of persons employed, unemployed and inactive are provided by a sample survey of households. The sample is composed of more than 250,000 households residing in Italy (a total of approximately 600,000 individuals) distributed in about 1,200 municipalities.	Census-type survey carried out by integrating: <ul style="list-style-type: none"> • Administrative data for small and medium-size enterprises from the National Social Security Institute; • Data from the monthly survey on large enterprises with 500 employees and over (GI).
Target universe	The total regular and non-regular labour input, employed in the production units residing in the economic territory of the country. Permanent members of cohabitation are included.	Members of households residing in Italy. People living permanently in institutions (religious institutions, barracks, etc.) are excluded.	Active small, medium and large enterprises and private institutions with employees residing in Italy.
Unit of analysis	Aggregate estimates of domestic employed, jobs, hours worked and full time equivalents.	Persons aged 15 and over residing in private households. Since the first quarter of 2007, data on persons aged 15 have not contained information on employment and unemployment because the age of compulsory education has been raised by Law No 296/2006. The number of 15 years old employed or seeking employment is however traditionally negligible. Therefore, the change in the legislation did not imply any break in time series for the 15-64 age group.	Functional unit for large enterprises, enterprises/private institutions with employees for the other enterprises
Coverage	Input from employment and self-employment in all sectors of economic activity.	Employees and self-employed (with or without contract) in all sectors of economic activity.	Enterprises/private institutions with employees that in the reference quarter paid taxable wages and salaries for social security purposes, in the sectors of industry and services (NACE rev. 2 sections B-S, excluding O).
Frequency of data dissemination and geographical breakdown	<ul style="list-style-type: none"> • on a yearly and quarterly basis: estimates of labour input at the national level; • yearly basis only: estimates of labour input at regional and provincial levels. 	<ul style="list-style-type: none"> • monthly and quarterly: estimates of indicators at national level; • quarterly: estimates of indicators at regional level; • yearly: estimates of indicators at local level 	<ul style="list-style-type: none"> • Quarterly estimates of the indicators only at the national level
Reference period for the measurement of employment	Average employment of the period (quarter and year).	Week the information refers to (usually the one preceding the interview). Information gathered through a uniform distribution of the sample of households in every week of the year.	Monthly survey on employment. In particular, all payroll jobs under employment contracts are surveyed even if under a one-day contract in the reference month.

<p>Definition of employment</p>	<p>The labour input that contributes to the product produced by the system during the reference period is measured using three different definitions of employment:</p> <ul style="list-style-type: none"> • domestic employees (residents and non-residents employed in domestic production units) • jobs (jobs held by domestic employees) • Full time equivalent (FTE) (jobs reduced to standard full time equivalents). <p>Furthermore, hours actually worked by all workers (total hours worked)</p> <p>Employed and jobs include workers temporarily absent from work since benefiting from short time working allowance (CIG). The FTEs are calculated net of the CIG. The hours actually worked include overtime and exclude the hours of CIG, holidays, sickness and leaves.</p>	<p>Employed: people aged 15 and over who during the reference week have, at least, one of the following characteristics:</p> <ul style="list-style-type: none"> • did at least one hour of work in any business (with or without a contract) that provides in return for remuneration in cash or in kind; • did at least one hour of unpaid work in the family business in which they work regularly; • are absent from work (for example, on leave, sickness or short time working allowance); • if absent from work for less than three months, or if during the absence they continue to receive at least 50% of wages or salaries. <p>Self-employed persons absent from work, excluding family workers, are considered employed if, during the period of absence, they continue to keep the business. Family workers are considered employed if their absence does not exceed three months.</p> <p>People without a contract (forms of illegal work) are also included.</p> <p>The labour force survey does not disseminate data on illegal work. Estimates on the basis of these data are disseminated within the framework of the National Accounts.</p>	<p>Payroll jobs are the number of jobs occupied by employees (both full- or part-time) with an employment contract regardless of the amount of hours worked. Workers under regular contract by a production unit are included even if they are not temporarily working due to holidays, parental leaves, short-time working allowances, etc.</p>
<p>Main indicators</p>	<p>Domestic employees, jobs, hours worked and full time equivalents (FTE).</p>	<p>Employed (employees and self-employed), unemployed, inactive persons and related rates with social-demographic and geographical breakdown.</p>	<p>Index of average monthly payroll jobs, of wages and salaries, of labour cost</p>