

2019 REPORTS ON THE PROFILE AND OCCUPATIONAL CONDITION OF GRADUATES IN ITALY

The AlmaLaurea Interuniversity Consortium presents its **2019 Reports on the Profile and Occupational Condition of Graduates in Italy** (21st edition) for the Conference "*University and Job Market*" at the **Sapienza University of Rome** on Thursday, 6 June 2019. The surveys involved graduates from 75 universities belonging to the Consortium*. The **AlmaLaurea Report on the Profile of Graduates** analysed the educational performance of **over 280,000 graduates in 2018: 160,000** first-level graduates, **82,000** two-year masters and **37,000** single-cycle masters.

The **AlmaLaurea Report on Occupational Condition** analysed about **640,000 first- and second-level graduates in 2017, 2015 and 2013** contacted respectively one, three and five years after graduation.

ENROLMENTS: CONTEXT DATA

After the considerable drop that lasted until the 2013/14 academic year, there was **a recovery in enrolments in 2014/15** that was confirmed in the subsequent years, in 2017/18 reaching +9.3% compared to 2013/14 (source: MIUR). Despite this, **from 2003/04 to 2017/18 universities lost more than 40,000 new students**, a contraction of 13.0%. The drop in enrolments is more pronounced in the South (-26.0%), among technical and professional graduates and among those who come from lower class families, with obvious risks of polarisation.

The trend of enrolments by MIUR field of study shows interesting results: compared to the 2003/04 academic year the trend is decreasing for all areas with the exception of science, where there was an increase of 13%.

GRADUATE PROFILE - REPORT 2019

The graduates in 2018 involved in the **2019 Graduate Profile Report** are **more than 280,000**. These include **160,000** first-level graduates (57.1%), **82,000** two-year masters (29.2%) and **37,000** single-cycle masters (13.1%). The remaining are pre-reform graduates (including those of Primary Education Sciences).

MOBILITY FOR STUDIES. TWO-YEAR MASTER GRADUATES MOST INCLINED TO MOVE, THE FLOW IS NORTHWARD. THE SOUTH LOSES A QUARTER OF ITS HIGH SCHOOL GRADUATES.

In 2018, **nearly half of the graduates (45.9%)** earned their degree in the **same province** in which they received their secondary school diploma. 25.9% of graduates experienced limited mobility, earning their degree in a province adjacent to the province where they earned their high school diploma. 12.7% experienced medium-range mobility, graduating in a province that was not adjacent but still within the same macro region (North, Centre, South), while another 13.3% got their degrees in a macro region different from where they earned their high school diploma. Finally, 2.3% completed their university studies at an Italian university but have a high school diploma from abroad.

Two-year masters are the most inclined to move for their studies: **37.0%** earned their degrees in a **different province** not adjacent to where they got their high school diplomas (compared to 24.3% of first-level graduates and 25.9% of single-cycle graduates).

Focusing on the direct comparison between the regions where high school diplomas were earned and macro regions of the degrees, it is evident that migrations for studies are almost always **from the South to the Centre-North**. Almost all graduates who have received their high school diploma in the North choose a university in the same macro region (97.2%). The graduates from Central Italy remain in the same macro region in 87.8% of cases, of the remaining 12.2% the majority (9.5%) opted for universities in the North. The migration figures are much higher for the young people of the **South and the Islands: 26.4% decide to study in universities of the Centre and the North**, split equally between the two areas. Another interesting aspect concerns graduates originating from abroad: more than 90% choose a university in the Centre-North.

Setting the number of graduates who earned their high school diplomas in each of the three macro regions equal to 100, the migration balance – calculated by comparing the macro region of the high school diploma to that of the university degree – is equal to **+21.2% for the North, +21.4% for the Centre and -24.3% for the South**. Therefore, apart from the very few graduates from the Centre-North who choose a university in the South, the South loses almost a quarter of its high school graduates who leave to study elsewhere.

2018 graduates: geographical distribution of the university by macro region of the high school diploma

macro region of the high school diploma	macro region of the university		
	North	Centre	South and Islands
North	97.2	2.5	0.3
Centre	9.5	87.8	2.7
South and Islands	13.7	12.7	73.6
International	62.8	28.3	8.9
TOTAL	45.0	24.3	30.7

Comparing families of origin, there is an increase in the North of graduates with families having a solid socio-economic and cultural background (high social class and at least one parent with a degree) compared to the macro region of the high school diploma and a specular decline in the southern region. In essence, in the transition from high school to university the North "gains" human capital with a more solid cultural and economic background, to the detriment of the South.

FOREIGN GRADUATES ARE 3.5%. THE SHARE OF FOREIGN GRADUATES WHO ARE CHILDREN OF IMMIGRANTS RESIDING IN ITALY IS GROWING

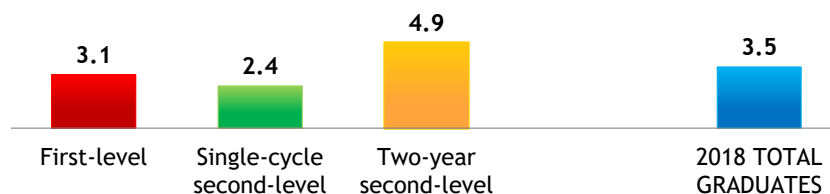
The share of **foreign-citizen graduates** is **3.5%** (corresponding to 9,890 graduates from AlmaLaurea universities in 2018, excluding graduates from the Republic of San Marino), with a **peak of 4.9% in two-year masters** and values of 3.1% among first-level graduates and 2.4% among single-cycle masters. The graduates of foreign citizenship is growing: according to AlmaLaurea data they accounted for 2.6% in 2008.

These are **increasingly young people coming from immigrant families residing in Italy**. Indeed, 43.5% of the non-Italian citizens graduated from high school in our country, while in 2011 this figure was 28.2%.

Regarding **origin**, 52.2% of foreign graduates come from Europe, in particular 12.6% from Albania and 11.4% from Romania. 25.6% come from Asia and Oceania. More specifically, 9.2% from China (a share that has grown significantly in recent years, having been 1.6% in 2008) and 3.5% from Iran. 12.8% came from the African continent (especially from Cameroon, 3.6%, and northwest Africa, 3.2%) and 9.4% from the Americas (particularly from Peru, 1.9%).

Foreign graduates tend to focus on specific fields of study like architecture, linguistics, business-statistics, political and social sciences and engineering. In contrast, in four fields of study (physical education, psychology, teaching and law) foreign graduates account for less than 2% of the total.

2018 graduates: foreign citizenship by programme type
 (percentage values)



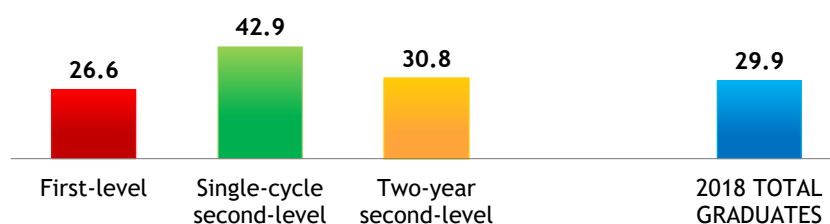
UNIVERSITY ENROLMENT: THE FAMILY AND PARENTS' EDUCATION INFLUENCE YOUNG PEOPLE'S CHOICES.

Family background has a strong impact on the opportunities to complete a university education: among graduates, in fact, there is an over-representation of young people from socially-favoured family environments.

29.9% of graduates with at least one parent with a university degree (in 2008 they were 25.5%).

The cultural and social context of the family also affects the **choice of the degree programme**: graduates from families with higher educational levels have chosen more single-cycle degree courses (42.9% have at least one parent) than graduates who opted for a "3+2" programme (26.6% for the first-level graduates and 30.8% for the two-year masters).

2018 graduates: at least one parent with a university degree by programme type
 (percentage values)

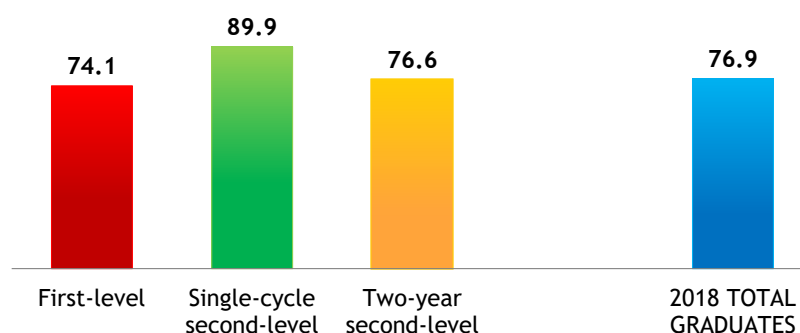


THE EDUCATIONAL BACKGROUND OF THE GRADUATES: TRADITIONAL HIGH SCHOOL DIPLOMAS PREVAIL

As regards the educational background of 2018 graduates, there is a prevalence of **traditional high school diplomas (liceo)** (76.9%), and in particular of a scientific diploma (43.7%) and classical diploma (16.0%), followed by 18.8% with a technical diploma, while the incidence of professional diplomas was residual (2.0%). The share of graduates with a high school diploma has increased considerably over the last ten years, rising from 67.8% in 2008 to 76.9% in 2018 (+9.1 percentage points), particularly at the expense of graduates with a technical diploma, which fell from 27.0% to 18.8%.

In terms of composition by type of diploma, there are differences between first-level and two-year master graduates (high school graduates are 74.1% and 76.6% respectively), while single-cycle graduates are characterised by a high incidence of high school diplomas: 89.9% have a high school education, especially scientific (48.5%) and classical (29.9%).

2018 graduates: high school diploma (classical, scientific, linguistic, human sciences, artistic and musical and choreographic) by programme type
(percentage values)



SUCCESS IN UNIVERSITY STUDIES: GRADUATION AGE AND DEGREE COMPLETION TIME IMPROVE, MARKS REMAIN STABLE. THOSE WHO GRADUATE FROM THE SOUTH AND ISLANDS TAKE LONGER

The **average age of graduation** for the graduates of 2018 is equal to **25.8 years**: 24.6 years for three-year graduates, 27.0 for single-cycle graduates and 27.3 years for two-year masters. A figure that also takes into account the **delay in enrolment** at the university (this is a delay compared to the "canonical" age of 19 years for the three-year and the single-cycle degree and 22 years for the two-year master's degree), which for 2018 graduates on average is 1.4 years.

The age at graduation **has fallen** to an appreciable extent with respect to the pre-reform situation and has continued to decline in recent years: the average age was 27.0 in 2008, more than one year higher than the current situation.

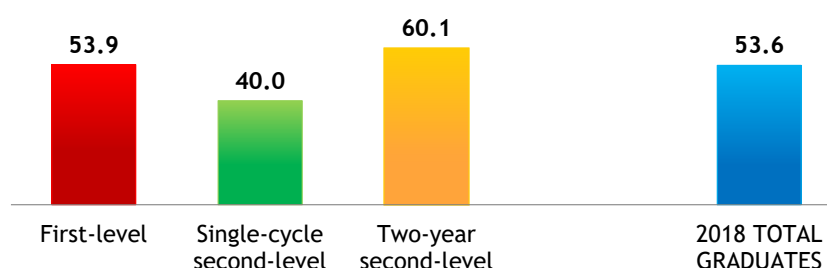
The **degree completion time**, which measures the ability to complete the degree programme in the time set by the regulations, has **markedly improved** in recent years. While in 2008 39.4% of

graduates completed their current studies within prescribed degree completion time, in 2018 the **percentage reached 53.6%**, in particular 60.1% among two-year masters, 53.9% among first-level graduates and 40.0% among single-cycle masters.

Furthermore, while 10 years ago those completing studies with four or more supplementary years were 17.1%, nowadays that figure has been almost halved (8.7%).

There are significant differences with regard to the geographic location of the university: all things being equal, compared to those who graduate in the North, those who earn their degree in the **Centre take 10.1% longer** and those who graduate in the **South or the Islands 19.5% longer**.

2018 graduates: completion of the programme within the prescribed degree completion time by programme type
 (percentage values)



The **average graduating mark** has basically remained unchanged in recent years (102.9 out of 110 in 2018 compared with 103.0 in 2008): 100.0 for first-level graduates, 104.8 for single-cycle graduates and 107.9 for two-year masters. Among the two-year master graduates the final mark is very high, especially for an incremental effect compared to the performance achieved at the end of the first-level course (in 2018 the average increase in the mark compared to the first-level programme is 7.6 out of 110) .

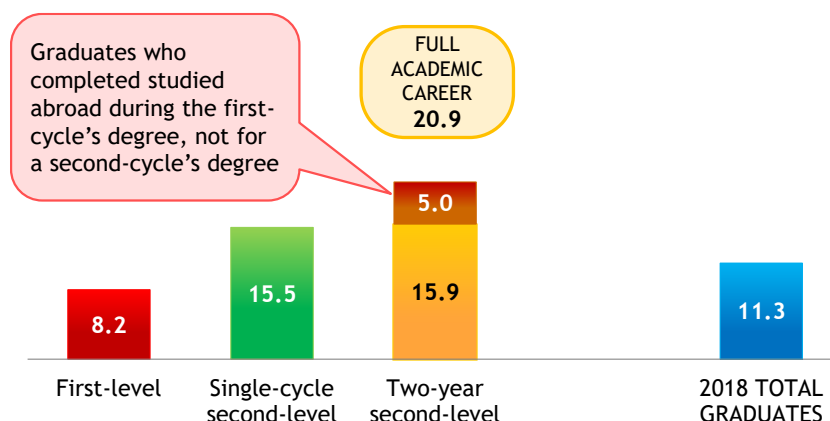
INCREASING STUDY ABROAD EXPERIENCES

11.3% of graduates in 2018 **participated in recognised foreign educational programmes** (8.0% in 2008): more in detail, 8.9% participated in European Union programmes (Erasmus in first place) and 2.4% through other experiences recognised by their course of study (Overseas, etc.).

First-level graduates tend to be less involved in such types of experience (8.2%) compared to single-cycle graduates (15.5%) and two-years (15.9%). Furthermore, this latter group adds a further share of graduates who participated in study programmes abroad only during the first-level course and thus leads to a total of 20.9% within the 3+2 range: a value exceeding the target set at a European level for 20% by 2020.

Among the graduates who have studied abroad in programmes recognised by the university, 80.0% took at least one exam that was validated when they returned to Italy. 27.8% of those who have completed a period of study abroad have also prepared a significant part of their theses (a share that rises to 46.3% among two-year masters).

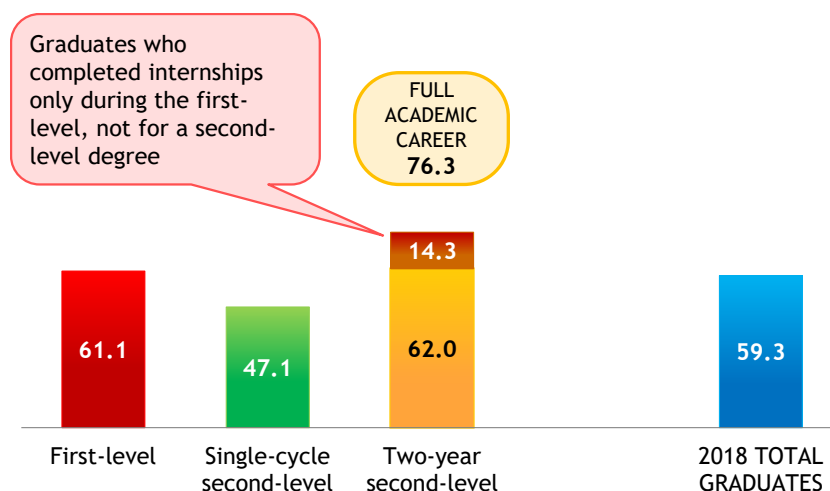
2018 graduates: study abroad recognised by the degree programme by programme type
 (percentage values)



CURRICULAR INTERNSHIPS INCREASING

59.3% of graduates (53.3% in 2008) **completed an internship recognised by their degree programme.** In detail, 61.1% of first-level graduates (41.2% outside the university), 47.1% of single-cycle master graduates and 62.0% of two-year master graduates did internships. To the latter are added 14.3% of graduates who only had internship experience during their first-level degree, bringing the total share of two-year master graduates with internship experience to 76.3%. 68.6% of graduates who have had these experiences express a **definitely positive opinion** of the internships actually organised by the degree programme.

2018 graduates: internship activity recognised by the degree programme by programme type
 (percentage values)



CURRICULAR INTERNSHIPS AND STUDY ABROAD WITH EUROPEAN PROGRAMMES INCREASE THE CHANCES OF FINDING WORK

A training and guidance internship or study abroad with a European programme are winning cards to play in the job market. In fact, all things being equal an internship is associated with a **9.1% greater probability of finding a job one year** after the end of the course of study, while study abroad increases employment opportunities by **12.7%**.

WORK DURING STUDIES DROPS

Over the last 10 years there has been a **decrease in the share of graduates with work experience during studies** (from 74.7% in 2008 to 65.4% in 2018), probably due both to the economic downturn and the gradual shrinking of adult enrolment at the university.

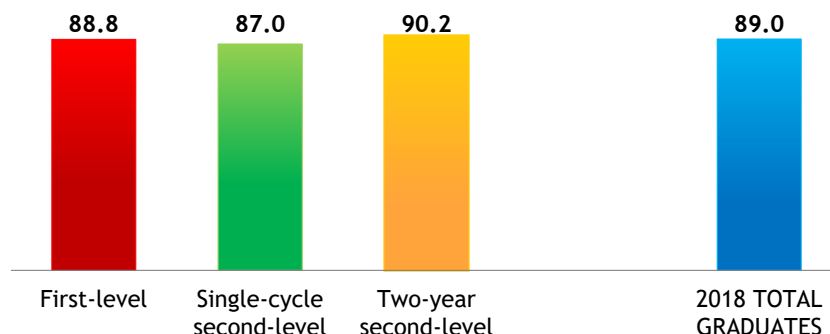
More in detail, 6.1% of graduates earned a degree by working steadily during their studies (studying-workers), and another 59.2% graduates had occasional work experience (working-students).

In contrast, the incidence of graduates achieving the degree without any type of work experience has increased over the past 10 years and in 2018 it reached 34.5% (+10.1 percentage points compared to 2008 graduates).

SATISFACTION WITH THE COMPLETED UNIVERSITY EXPERIENCE REMAINS HIGH

To analyse the **satisfaction** of the recently completed university experience, the opinions expressed by graduates on certain aspects were taken into consideration. Overall, **89.0%** of graduates are generally satisfied with their recently completed university experience (in 2008 it was 86.7%). In particular, 88.8% of the first-level graduates, 87.0% of the single-cycle masters and 90.2% of the two-year masters.

2018 graduates: overall satisfaction of the programme by programme type
 (percentage values)



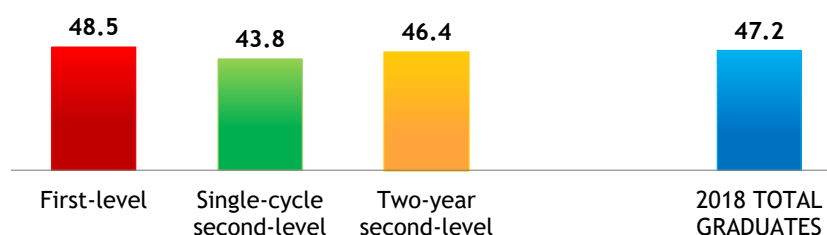
86.5% of graduates are satisfied overall with the relationship with **teachers**. This percentage is the same for first-level graduates, drops to 79.0% for single-cycle masters and rises to 89.9% for two-year masters. With regard to the **infrastructure** made available by the university, 73.6% of graduates who have benefited from it consider the classrooms to be adequate: 72.4% among first-level graduates, 67.9% among single-cycle master graduates and 78.4% among two-year masters.

And how many **would repeat the same programme at the same university**? 70.0% of graduates would choose the same programme again and the same university (similar to what was observed in 2008); 12.1% would repeat the same course but in another university; 9.3% would change programme but would choose the same university, 6.0% would change both programme and university and only 2.4% would no longer enrol at the university (for two-year masters reference is made only to the final two-year period). Among the first-level and single-cycle graduates, both programme and university are confirmed by 68.4% and 66.5% respectively, while the two-year master graduates rise to 74.8%.

POSTGRADUATE: ALMOST HALF OF THE GRADUATES ARE WILLING TO MOVE ABROAD FOR WORK AND A THIRD TO ANOTHER CONTINENT

With regard to the prospects of work, the consolidated south/north migration for study and work that yet persists in Italy for some time now has expanded to include movement towards Europe and other non-European countries. Indeed, these non-European destinations are of interest to a growing number of young graduates, not just for study but also for work. In all likelihood, the difficulty of finding an appropriate job in their own country encourages graduates to consider crossing the Alps.

2018 graduates: definitely willing to work abroad by programme type
(percentage values)



The **willingness to work abroad** is declared by **47.2% of graduates** (39.9% in 2008): 48.5% for first-level graduates, 43.8% for single-cycle masters and 46.4% for two-year masters. Moreover, 32.1% are even ready to move **to another continent**. There is a widespread willingness to travel frequently (27.8%), but also to move place of residence (49.3%). Only 2.9% are not willing to travel.

2019 REPORT THE OCCUPATIONAL CONDITION OF GRADUATES

The population of reference for the 2019 Occupational condition Report is approximately **640,000 graduates**. In detail, the survey involved all first- and second-level graduates – two-year and single-cycle master's degrees – from 2017 (273,000), contacted one year after graduation, and second-level graduates from 2015 (110,000) and 2013 (110,000) contacted respectively three and five years after graduation. Finally, two specific surveys focused on the first-level graduates from 2015 and 2013 who did not continue with higher university education (respectively 75,000 and 71,000), contacted three and five years after graduation.

THE EMPLOYMENT RATE ONE YEAR AFTER GRADUATION INCREASED, BUT THE CONTRACTION RECORDED BETWEEN 2008 AND 2014 HAS YET TO BE OVERCOME. NON-STANDARD CONTRACTS (FIXED-TERM) ARE INCREASING, PERMANENT EMPLOYMENT CONTRACTS ARE DROPPING

The comparison with previous surveys shows an **improvement** in the employment rate one year after graduation, which, compared to 2014 – the year when the first signs of improvement were observed – increased by 6.4 percentage points for first-level graduates and 4.2 points for second-level graduates.

Specifically, the **employment rate** one year after graduation (which also includes those engaged in paid training) was equal to 72.1% among first-level graduates and 69.4% among second-level graduates in 2017. Among two-year graduates the employment rate rose to 73.7% while for single-cycle masters it is 59.8%.

These are positive signs that to a limited extent were also confirmed in the most recent year (the employment rate has increased by 1.0 percentage point for first-level graduates and by 0.4 points for second-level graduates). However, these results are not yet sufficient to recover from the significant contraction in the employment rate observed between 2008 and 2014 (-17.1 percentage points for the former; -15.1 percentage points for the latter).

Compared to 2008, there was a marked **increase in non-standard employment**, up 16.0 percentage points among first-level graduates and 14.5 points among second-level graduates, while there was a **decrease in permanent employment** of 17.3 percentage points among first-level graduates and 6.9 points among second-level graduates. Other changes are more limited. In particular, compared to 2008 there was an increase in self-employment of 4.3 percentage points among first-level graduates and 2.4 points among second-level graduates.

FIVE YEARS AFTER GRADUATION THE EMPLOYMENT RATE IS SLIGHTLY HIGHER, BUT THE JOB MARKET IS STILL FRAGILE. NON-STANDARD CONTRACTS (FIXED-TERM) ARE ON THE RISE, WHILE THE NUMBER OF PERMANENT CONTRACTS FOR FIRST-YEAR GRADUATES IS DECREASING.

Five years after graduation, the employment rate is 88.6% for first-level graduates and 85.5% for second-level graduates. These rates have increased by 3.0 percentage points and 0.8 points respectively compared to 2015. It remains true, however, that these positive signs come after years of significant contraction in the employment rate, which between 2012 and 2015 decreased by 5.0 percentage points for first-level graduates and by 5.7 points for second-level graduates. The comparison with last year's survey shows a certain fragility of the job market since for first-level graduates there was an increase in the employment rate of 0.8 percentage points, while for second-level graduates there was a contraction of 1.3 points. Compared to the 2012 survey, there was **an increase in non-standard work** (+9.0 percentage points for first-level graduates and +3.0 points for second-level graduates). **Permanent employment** recorded a **contraction for first-level graduates of 9.7 percentage points and an increase of 2.0 points for second-level graduates**. Self-employment remained substantially constant (+0.5 and +1.2 points, respectively).

2017 and 2013 graduates interviewed at one and five years: employment results.
Survey year 2018.

	First-level graduates		Second-level graduates	
	One year after graduation	Five years after graduation	One year after graduation	Five years after graduation
Employment rate (%)	72.1	88.6	69.4	85.5
Net monthly salary (average values in euros)	1,169	1,418	1,232	1,459

Note: for the first-level, only graduates who are not enrolled in another degree course are considered.

The data presented below focus on the performance analysis of first- and second-level graduates released in 2017 and 2013, interviewed one and five years after graduation.

GRADUATES AFTER ONE YEAR FROM GRADUATION.

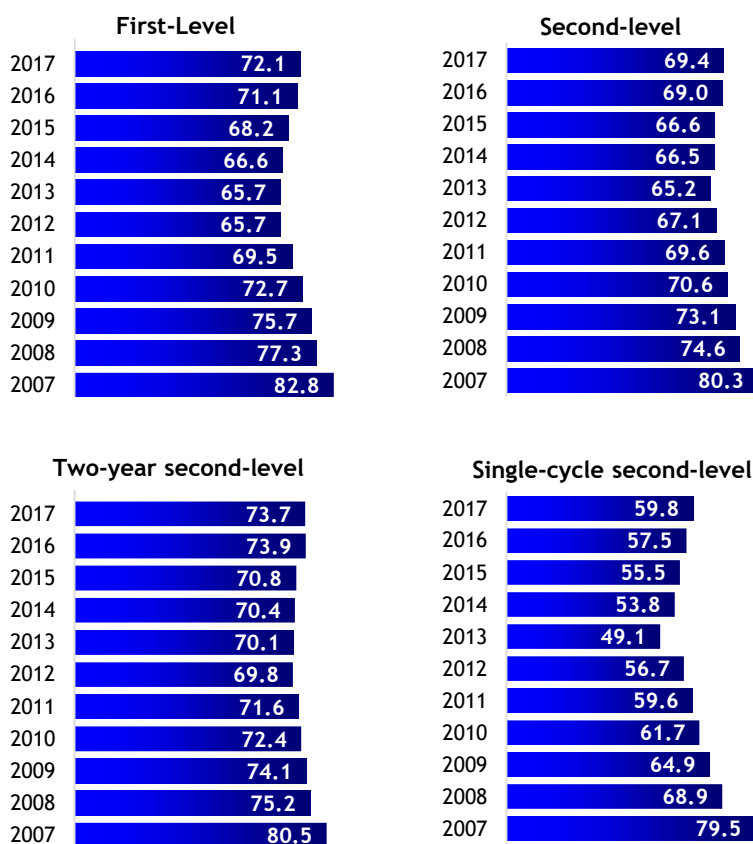
72.1% OF FIRST-LEVEL GRADUATES AND 69.4% OF SECOND-LEVEL GRADUATES ARE EMPLOYED

The survey involved **156,000 first-level graduates** and more than **116,000 second-level graduates** in 2017 interviewed in 2018 after a year from graduation.

61.9% of first-level graduates decide to continue their education after graduating by enrolling in a second-level degree programme (the proportion of those enrolling in a three-year course is marginal). After one year 61.1% are still enrolled. For a more precise analysis, therefore, the employment performance of first-level graduates who have chosen **not** to continue their university studies but to enter the job market directly after earning their degree (37.2%) is described below.

One year after graduation, the employment rate, which also takes into account those involved in paid educational activities, is 72.1% among first-level graduates and 69.4% among second-level graduates. Among two-year master graduates the employment rate rises to 73.7% while for single-cycle masters it is 59.8%. A comparison with previous surveys shows improvement in the employment rate which over the last four years has increased by 6.4 percentage points for first-level graduates and by 4.2 points for second-level graduates. These are positive signs that to a limited extent are also confirmed in the most recent year (the employment rate increased by 1.0 percentage points for first-level graduates and by 0.4 points for second-level graduates), but that are not yet able to make up for the significant contraction between 2008 and 2014 (-17.1 percentage points for the former; -15.1 points for the latter).

2007-2017 graduates interviewed one year after graduation: employment rate by programme type.
Survey years 2008 -2018.
 (percentage values)

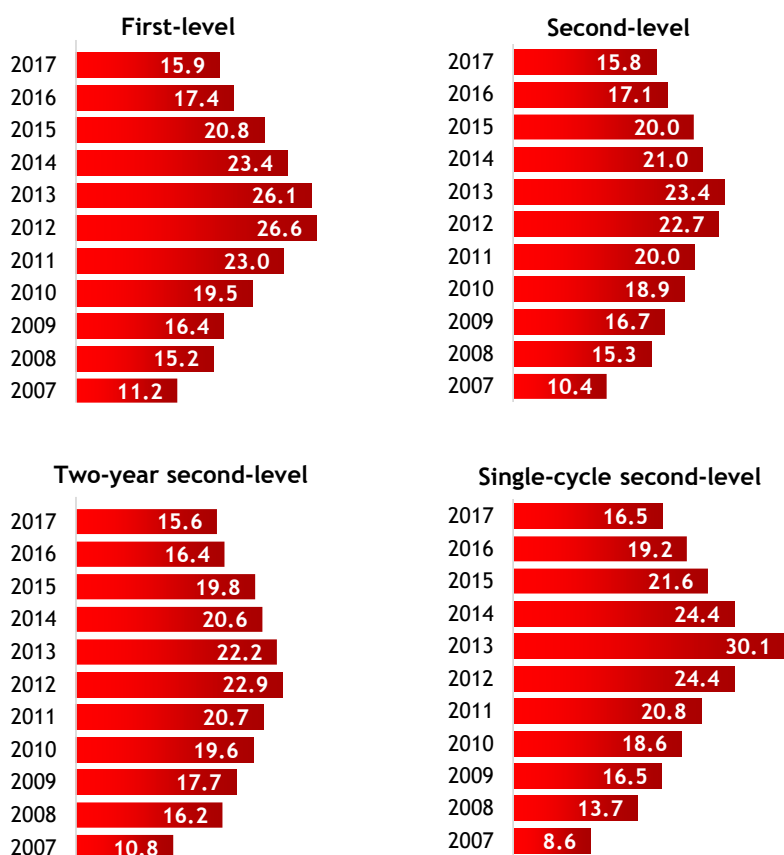


Note: For the first-level, only graduates who are not enrolled in another degree course are considered; second-level graduates also include graduates from the pre-reform course in Primary Education Sciences.

One year out, the **unemployment rate** (calculated on the basis of the labour force, i.e. those who are already in the job market or looking for a job) is **15.9% among first-level graduates and 15.8% among second-level graduates**, with only a small difference between two-year (15.6%) and single-cycle (16.5%) master graduates.

For the fourth consecutive year there has been a **decrease in the unemployment rate**. Compared to the 2014 survey, the decrease is 10.2 percentage points for first-level graduates and 7.6 points for second-level graduates (in the past year the contraction was observed for both populations and equal to -1.5 and -1.3 points, respectively). However, the improvement seen in recent years has not yet reduced the unemployment rate back to pre-recession levels. In fact, between 2008 and 2014 the unemployment rate increased by 14.9 percentage points for first-level graduates and 13.0 points for second-level graduates.

2007-2017 graduates interviewed one year after graduation: unemployment rate by programme type.
Survey years 2008 -2018
 (percentage values)



Note: For the first-level, only graduates who are not enrolled in another degree course are considered; second-level graduates also include graduates from the pre-reform course in Primary Education Sciences.

TYPES OF EMPLOYMENT: AN INCREASE IN NON-STANDARD CONTRACTS

Self-employment (freelance professionals, self-employed workers, entrepreneurs, etc.) accounts for **13.7% of first-level graduates and 10.9% of second-level graduates** (the percentage stands at 7.4% for two-year master's degrees, while due to the very nature of these programmes – oriented towards a career as self-employed professionals – it rises to 23.6% for single-cycle master's degrees).

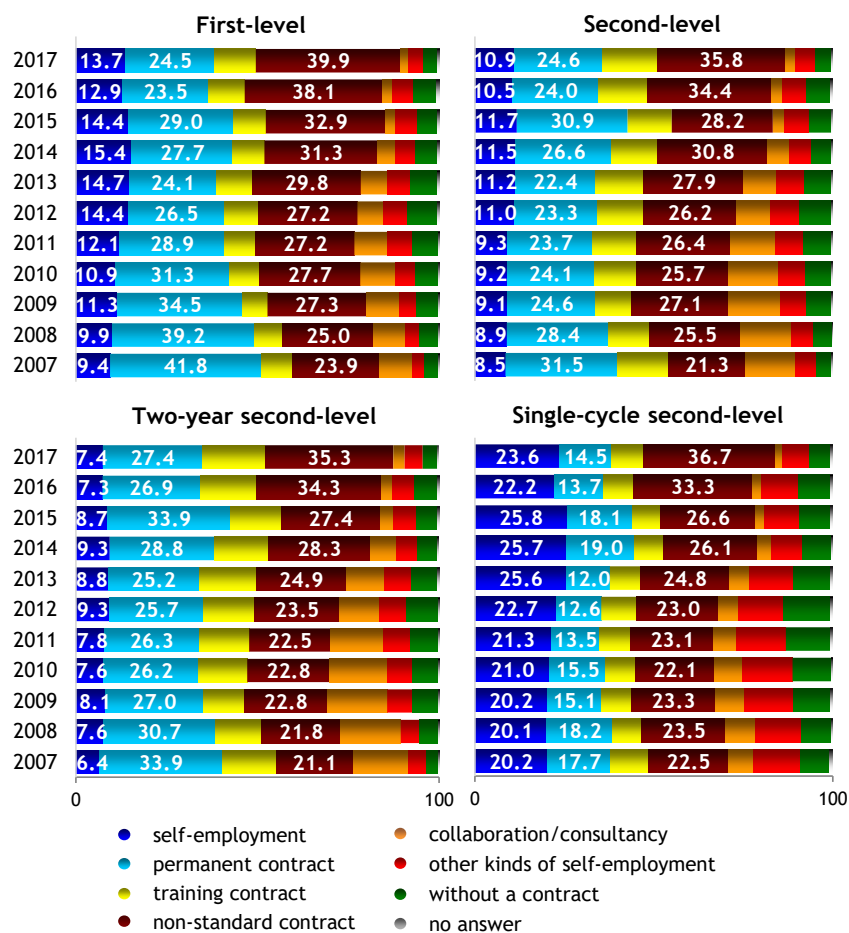
24.5% of first-level graduates and 24.6% of second-level graduates are **employed with permanent contracts**. Again in this case, the differences between two-year (27.4%) and single-cycle (14.5%) masters are significant.

Graduates hired with **non-standard contracts** (in particular with **fixed-term contracts**) represent 39.9% of first-level graduates and 35.8% of second-level graduates, with no obvious differences by programme type: 35.3% for two-year masters and 36.7% for single-cycle masters.

Compared to 2008, there was a **marked increase in non-standard employment**, up 16.0 percentage points among first-level graduates and 14.5 points among second-level graduates, while there was a decrease in permanent employment of 17.3 percentage points among first-level

graduates and 6.9 points among second-level graduates. Other changes are more limited. In particular, compared to 2008 there was an increase in self-employment of 4.3 percentage points among first-level graduates and 2.4 points among second-level graduates.

2007-2017 graduates employed one year after graduation: employment type by programme type.
Survey years 2008 -2018
 (percentage values)



Note: For the first-level, only graduates who are not enrolled in another degree course are considered; second-level graduates also include graduates from the pre-reform course in Primary Education Sciences.

SALARIES ON THE RISE

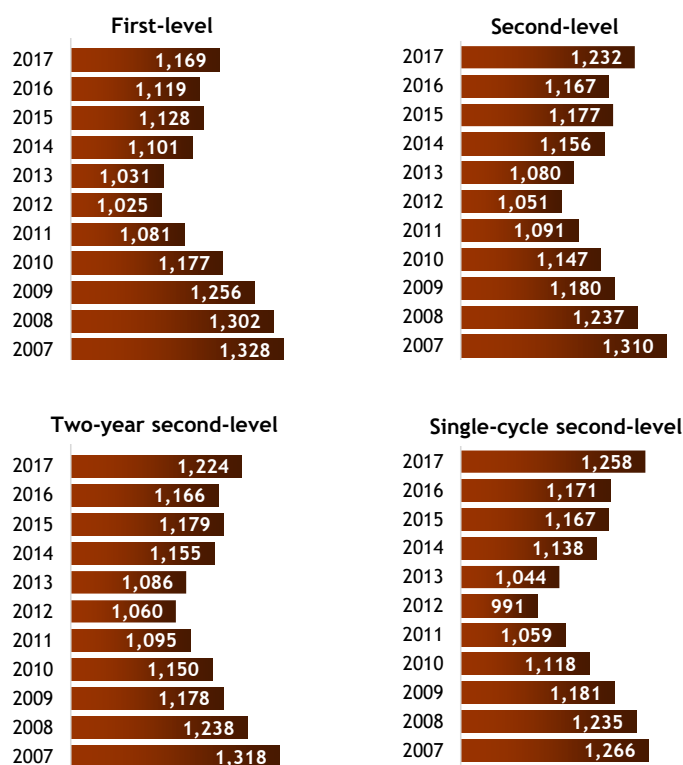
On average, the **net monthly salary** one year from graduation is **€ 1,169 for first-level graduates** and **€ 1,232 for second-level graduates**. There are no significant differences between the salaries received by two-year graduates, equal on average to € 1,224 net per month, and those of single-cycle masters, which amount to € 1,258. Compared to the 2014 survey, real salaries (i.e. taking into account the change in purchasing power) one year after graduation are on the rise: +13.4% for first-level graduates, +14.1% for second-level graduates.

The improvement in pay was particularly marked over the past year: +4.5% for first-level graduates and 5.6% for second-level graduates. However, the increase observed is not yet able to make up for the significant loss of salary recorded during the most difficult period of the economic crisis that hit recent graduates, i.e. between 2008 and 2014 (-22.4% for the first-level, -17.6% for the second-level).

2007-2017 graduates employed one year after graduation: net monthly salary by programme type.

Survey years 2008-2018

(values recalculated based on ISTAT consumer prices, average values in euros)



Note: For the first-level, only graduates who are not enrolled in another degree course are considered; second-level graduates also include graduates from the pre-reform course in Primary Education Sciences.

WORK CONSISTENT WITH STUDIES: DEGREE EFFECTIVENESS ON THE RISE

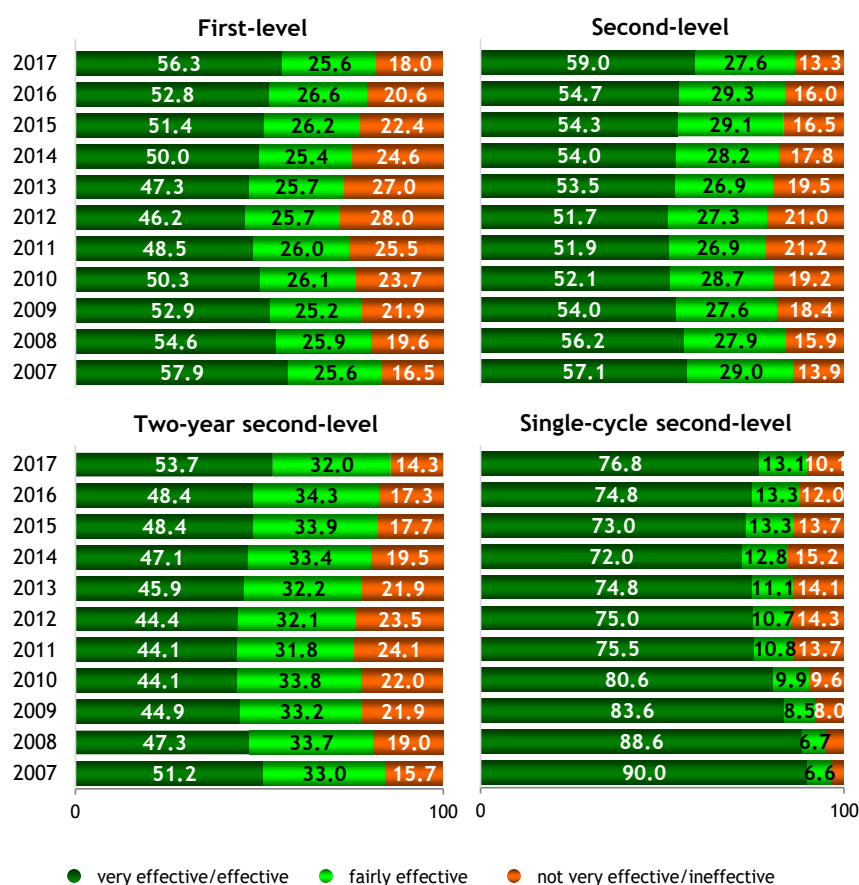
But how many people have a job that is consistent with the degree earned? To answer this question, AlmaLaurea considers the degree's effectiveness, which combines the need for the degree by the current job (formal or substantive) and the use of skills acquired at the university.

For **about half of graduates who are employed after one year**, the degree is considered **"very effective or effective"**: **56.3% for first-level graduates and 59.0% for second-level graduates**.

There are significant differences between the two-year master graduates, among whom the degree is "very effective or effective" for 53.7% of the employed, and the single-cycle master graduates, for whom effectiveness rises to 76.8%. Compared to last year's results, the effectiveness is **increasing** both for first-level graduates (+3.5 percentage points) and second-level graduates (+4.3 points).

Compared to the 2014 survey, there has been an **increase** of 9.0 percentage points for first-level graduates and 5.5 points for second-level graduates. The improvement observed in recent years has almost completely overcome the contraction that occurred during the years of the crisis (2008-2014) for first-level graduates, while for second-level graduates 2018 actually saw the highest value of effectiveness.

2007-2017 graduates employed one year after graduation: degree effectiveness by programme type.
Survey years 2008-2018
 (percentage values)



Note: For the first-level, only graduates who are not enrolled in another degree course are considered; second-level graduates also include graduates from the pre-reform course in Primary Education Sciences.

GRADUATES FIVE YEARS AFTER GRADUATION.

88.6% OF FIRST-LEVEL GRADUATES AND 85.5% OF SECOND-LEVEL GRADUATES ARE EMPLOYED

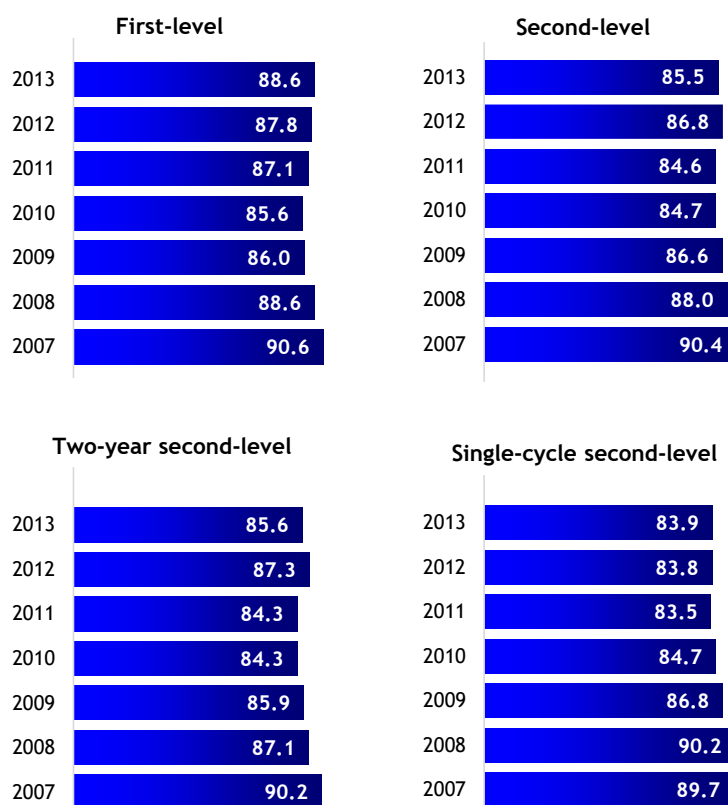
The survey of the graduates after five years from earning their degree involved **71,000 first-level graduates** from 2013 who did not pursue further studies and **110,000 second-level graduates** from 2013.

Five years after graduation, employment performance improves despite the critical experiences of those who entered the job market in the dark years of the crisis. In fact, for these graduates signs of a recovery in the job market have only become apparent in recent years. In detail, five years after graduation the **employment rate** (those paid for their continued studies are also considered employed) is **88.6% among first-level graduates and 85.5% among second-level graduates** (85.6% among two-year masters, a value slightly higher than the 83.9% found among single-cycle masters). These values are higher than in 2015 (+3.0 and +0.8 points, respectively). The comparison with last year's survey shows an increase of 0.8 percentage points among first-level graduates, while in contrast among second-level graduates there is a decrease of 1.3 points.

However, it is true that these positive signs come after years of significant contraction in the employment rate, which between 2012 and 2015 decreased by 5.0 percentage points for first-level graduates and by 5.7 points for second-level graduates.

2007-2013 graduates interviewed five years after graduation: employment rate by programme type.

Survey years 2012-2018 (percentage values)



Note: For the first-level, only graduates who are not enrolled in another degree course are considered; second-level graduates also include graduates from the pre-reform course in Primary Education Sciences.

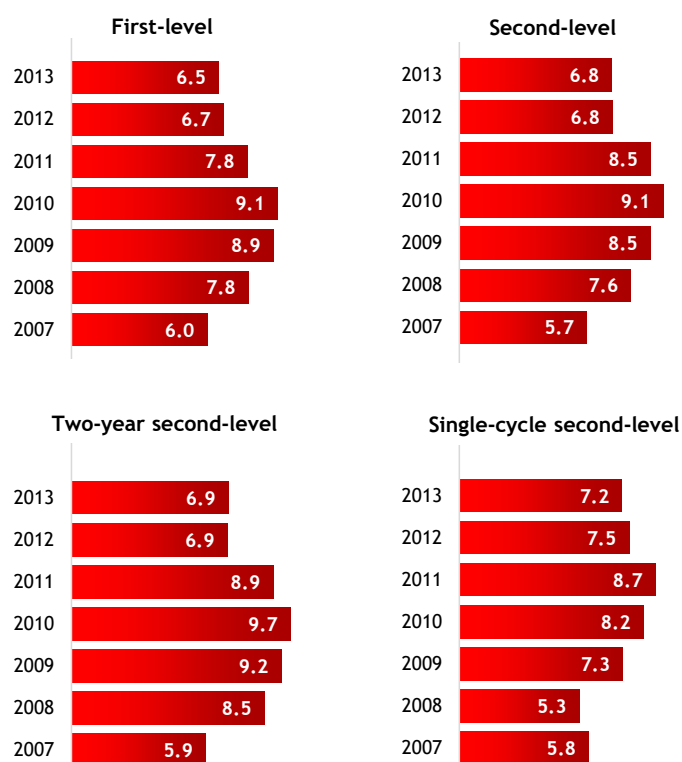
Five years after graduation, the **unemployment rate** (calculated on the basis of the labour force, i.e. those who are already in the job market or are looking) affects **6.5% of first-level graduates and 6.8% of second-level graduates** (6.9% among two-year masters, a value slightly lower than the 7.2% found among single-cycle masters).

Compared to the 2015 survey, the unemployment rate has fallen by 2.6 percentage points for first-level graduates and by 2.3 points for second-level graduates. These are significant values, although they are the result of a contraction that occurred in particular in the period 2015-2017 given the substantial stabilisation of rates in 2018. However, this contraction comes after a period of progressive increases in the unemployment rate which, between 2012 and 2015, increased by 3.1 percentage points for first-level graduates and by 3.4 points for second-level graduates.

2007-2013 graduates interviewed five years after graduation: unemployment rate by programme type.

Survey years 2012 -2018

(percentage values)



Note: For the first-level, only graduates who are not enrolled in another degree course are considered; second-level graduates also include graduates from the pre-reform course in Primary Education Sciences.

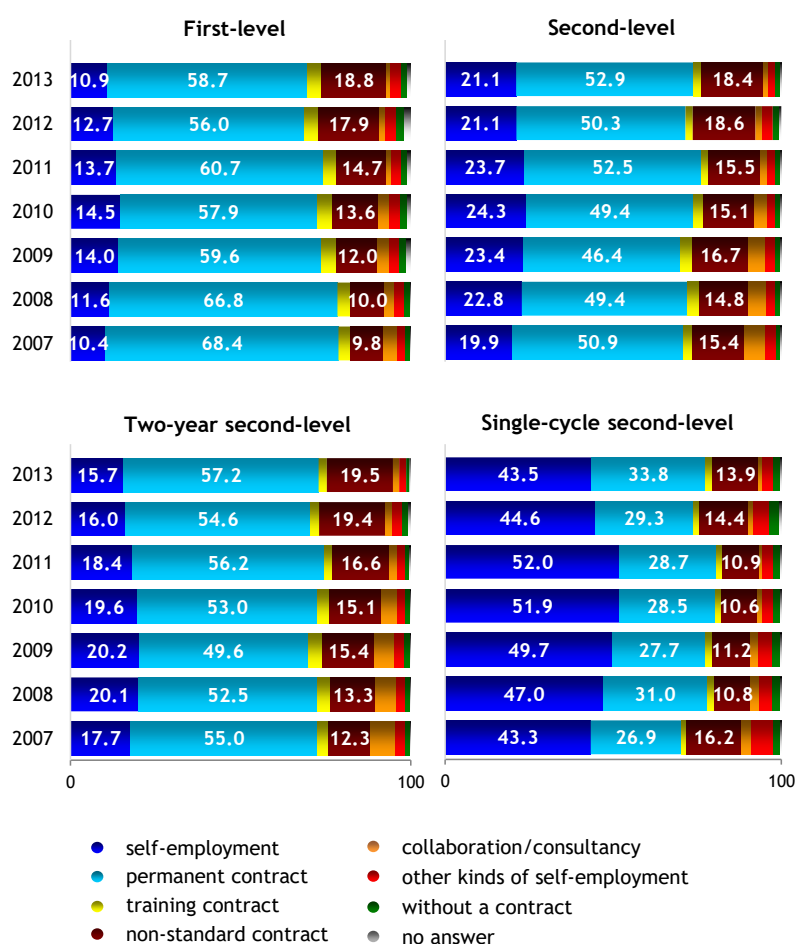
TYPES OF EMPLOYMENT: NON-STANDARD CONTRACTS ARE INCREASING, PERMANENT CONTRACTS FOR FIRST-LEVEL GRADUATES ARE DECREASING

For 2013 graduates, five years after graduation **self-employment** (freelancers, self-employed workers, entrepreneurs, etc.) stands at **10.9% among first-level graduates and 21.1% among second-level graduates** (15.7% among two-year masters and 43.5% for single-cycle masters).

The share of those employed with **permanent contracts** is 58.7% among first-level graduates and 52.9% among second-level graduates (57.2% among two-year masters and 43.5% among single-cycle masters).

18.8% of first-level graduates and 18.4% of second-level graduates (19.5% and 13.9%, respectively, for two-year masters and for single-cycle masters) are employed with a **non-standard contract** (specifically **fixed-term contracts**).

2007-2013 graduates employed five years after graduation: employment type by programme type.
Survey years 2012-2018
 (percentage values)



Note: For the first-level, only graduates who are not enrolled in another degree course are considered; second-level graduates also include graduates from the pre-reform course in Primary Education Sciences.

Compared to the 2012 survey, there was **an increase in non-standard work** (+9.0 percentage points for first-level graduates and +3.0 points for second-level graduates). **Permanent contracts dropped** for first-level graduates by 9.7 percentage points and **increased** by 2.0 points for second-level graduates. Self-employment remained substantially constant (+0.5 and +1.2 points, respectively).

SMART WORKING AND REMOTE WORKING FOR 3.0% OF FIRST-LEVEL GRADUATES AND 4.1% OF SECOND-LEVEL GRADUATES ONE YEAR OUT

For the first time, the 2018 survey focused more intently on the spread of **smart working and remote working**, solutions that allow greater flexibility in the organisation of working time and methods.

These working methods are still not widespread among graduates, **involving a total of 3.0% of first-level graduates and 4.1% of second-level graduates employed one year after graduation**. More specifically, among first-level graduates 1.1% declared that they participate in smart working and 1.9% in remote working. Among second-level graduates, these figures are slightly higher, respectively equalling 1.5% and 2.6%.

Five years after graduation these working methods reach a total of **4.7% of first-level graduates and 4.2% of second-level graduates** who declare themselves to be employed. Further breaking down first-level graduates, smart workers accounted for 3.1% while remote workers were 1.6% of the employed. Among second-level graduates, these percentages tend to be higher and respectively equal 1.8% and 2.4%.

The levels observed are consistent with the findings of Eurostat, although the definitions adopted do not entirely overlap. In 2018, 3.5% of all Italian workers aged 25-49 years old "usually work at home". This is a lower percentage than the 4.9% recorded for all European countries.

Both one and five years after graduation and for both smart working and remote working the solution is relatively more widespread among men. This may be surprising, but Eurostat has made similar findings.

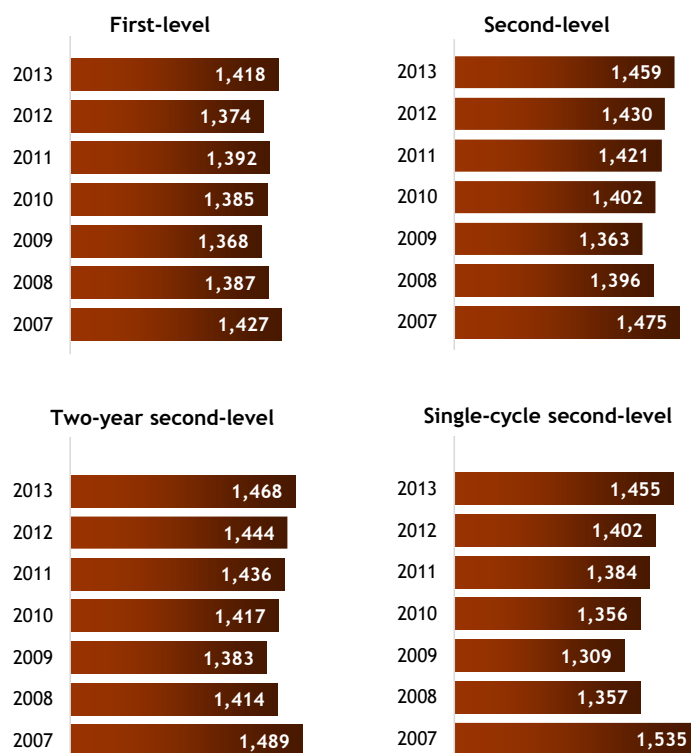
RISING SALARIES FOR BOTH FIRST- AND SECOND-LEVEL GRADUATES

Five years after graduation, the net monthly salary is **€ 1,418 for first-level graduates and € 1,459 for second-level graduates**. There is only a slight difference between two-year masters (€ 1,468) and single-cycle masters (€ 1,455).

Compared to 2015, there has been an increase in real salaries (i.e. taking into account the change in purchasing power) among both first-level graduates (+2.4%) and second-level graduates (+4.1%), which took place after the generalised contractions of previous years (just in the last year +3.2% and +2.0%, respectively). While the increase has not yet made up for the wage losses that occurred in the period 2012-2015 (equal to -3.0% and -5.0% respectively for first- and second-level graduates), the difference compared to 2012 is very small. Again, these trends are confirmed even taking into account the evolution of the share of part-time workers.

2007-2013 graduates employed five years after graduation: net monthly salary by programme type. Survey years 2012-2018

(values recalculated based on ISTAT consumer prices, average values in euros)



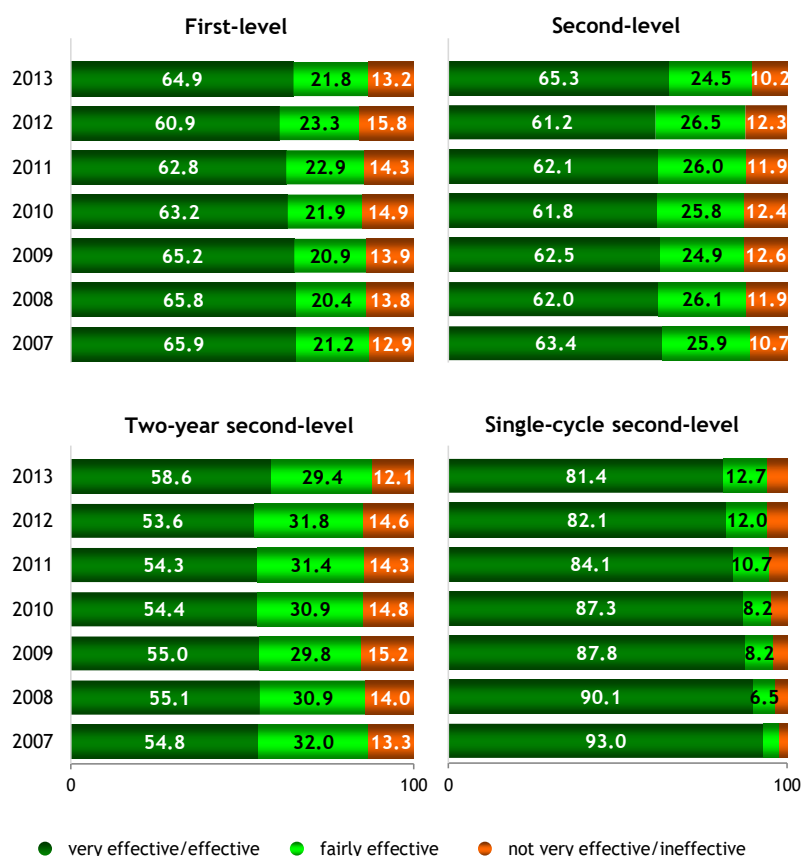
Note: For the first-level, only graduates who are not enrolled in another degree course are considered; second-level graduates also include graduates from the pre-reform course in Primary Education Sciences.

WORK CONSISTENT WITH STUDIES: DEGREE EFFECTIVENESS ON THE RISE

The correspondence between the degree earned and the work carried out is measured by the effectiveness of the degree, which, at five years out, is **"very effective or effective" for 64.9% and 65.3% of first- and second-level employed graduates** (58.6% for two-year masters and 81.4% for single-cycle masters).

A comparison with the 2015 survey shows **an increase** in levels of effectiveness, respectively of +1.7 and +3.5 percentage points, which is however entirely attributable to the improvement recorded in the most recent year (+4.0 percentage points for first-level graduates and +4.1 points for second-level graduates).

2007-2013 graduates employed five years after graduation: degree effectiveness by programme type.
Survey years 2012-2018
 (percentage values)



Note: For the first-level, only graduates who are not enrolled in another degree course are considered; second-level graduates also include graduates from the pre-reform course in Primary Education Sciences.

GEOGRAPHICAL MOBILITY FOR WORK

From the combined analysis of the geographical distribution of residence at graduation and the geographical distribution of work, it emerges that there is a **difference in mobility between second-level graduates from the North, the Centre and the South**. In particular, we found that:

- 1) **Among the employed graduates residing in the North** five years after graduation, **9.0% work in a different geographical area**. The main flow is abroad (6.5%).
- 2) **Among the employed graduates residing in the Centre** five years after graduation, **19.4% work in a different geographical area**, mainly in the North (11.9%) and abroad (5.7%);
- 3) **Among the employed graduates residing in the South** five years after graduation, **42.4% work outside their geographical area**. More specifically, 25.9% work in the North, 11.6% in the Centre, 4.9% abroad.

5.7% OF ITALIAN SECOND-LEVEL GRADUATES WORK ABROAD

Five years after graduation, **5.7%** of second-level graduates of Italian citizenship work abroad (this figure is on the rise partly because of the difficulties in finding a job during the recession). **Of these, 40.8% said they had moved abroad due to a lack of adequate employment opportunities in Italy**, and a further **25.4% said they had left Italy having received an interesting job offer from a company based abroad**. On the other hand, 10.3% stated that they had studied abroad (Erasmus, thesis preparation, postgraduate training, etc.) and that they had stayed or returned there for work. Finally, 9.8% moved for personal or family reasons, while 3.4% did so at the request of the company they worked for in Italy.

A further element taken into consideration to assess whether the choice of moving abroad is temporary or not is related to the **possibility of returning to Italy**. Overall, **33.2% of those employed abroad consider this scenario to be very unlikely**, at least in the next five years. On the other hand, only 12.9% are decidedly optimistic, considering a return to Italy very likely. 30.3% consider this hypothesis unlikely, while 13.6% are unable to express an opinion.

Those who decide to move abroad for work tend to have higher marks than those who decide to stay in Italy to work.

Five years after graduation, **85.6% of those employed abroad work in Europe**: 22.8% in the United Kingdom, 11.6% in Switzerland, 11.4% in Germany, 9.4% in France and 6.0% in Spain. The share of those with jobs in the Americas (5.9%) and Asia (4.8%) was lower, while the remaining continents accounted for just a few graduates.

Average salaries received abroad are considerably higher than those of graduates employed in Italy: five years after graduation second-level graduates abroad receive € 2,266 net per month, +61.0% compared to the € 1,407 for those who stayed in Italy.

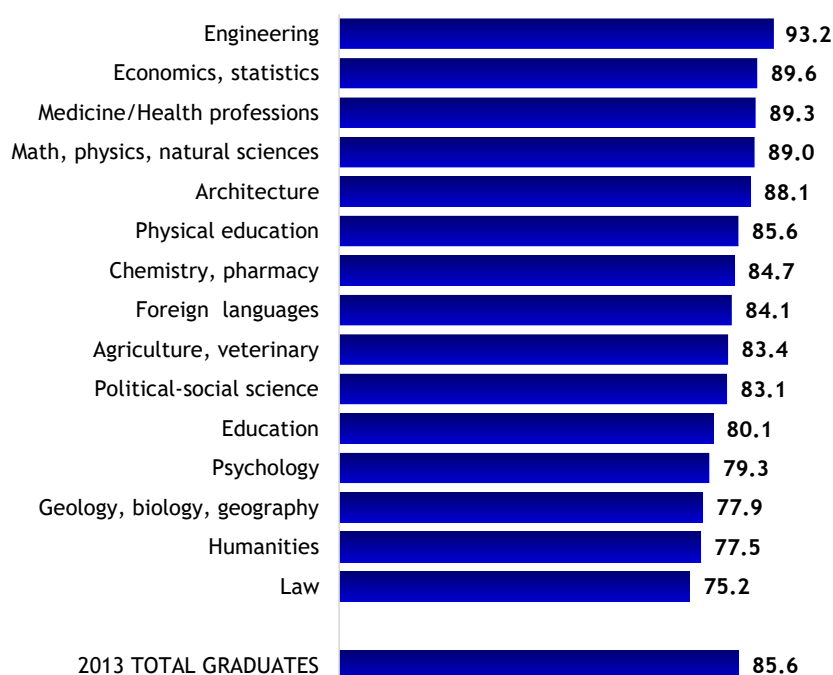
EMPLOYMENT BY FIELD OF STUDY

Among the **two-year masters of 2013 interviewed five years** after graduation, there are significant differences among the various fields of study. Graduates in engineering, economics and statistics and those in the healthcare professions are most likely to find jobs, the **employment rate** for all being greater than 89.0%.

On the other hand, the employment rates of graduates in law, literature, geography, biology and psychology are below the average (an employment rate below 80.0%).

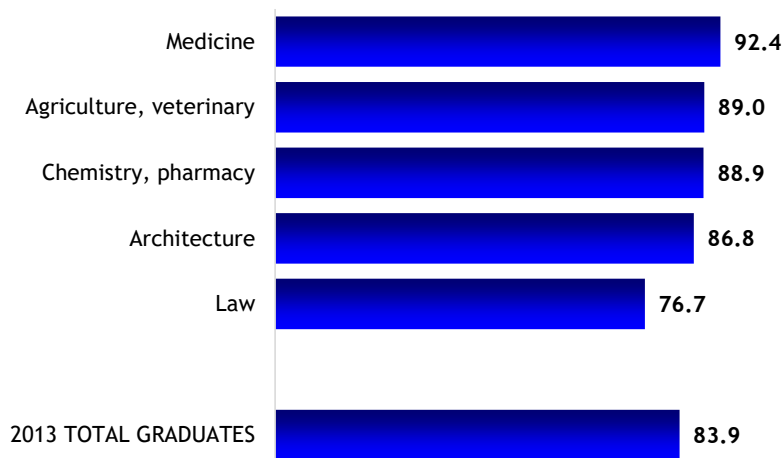
There are also important differences among the fields of study of single-cycle graduates interviewed five years after graduation. Graduates in healthcare areas have the best employment performance, enjoying an employment rate of 92.4%, most of them still engaged in paid educational programmes, i.e. specialisation schools. In contrast, law graduates had a performance that was below the average, with an employment rate standing at 76.7%.

**2013 two-year master graduates interviewed five years after graduation:
employment rate by field of study. Survey year 2018**
(percentage values)



Note: The Defence and Security field is not included.

2013 single-cycle masters interviewed five years after graduation: employment rate by field of study.
Survey year 2018
 (percentage values)



Note: the field of Humanities is not included.

The **unemployment rate** five years after graduation among two-year masters is 6.9%. It is higher for those who graduated in law (12.7%), humanities (11.8%), geology, biology and geography (10.9%) and psychology (10.6%). The unemployment rate for graduates in engineering (2.5%) and math, physics and natural sciences (3.7%) essentially reflects full employment.

Among the single-cycle master graduates, the unemployment rate is 7.2%, reaching maximum values among the law graduates (12.2%). Among the graduates of the other fields of study it is lower than average, in particular for medical doctors (0.9%).

77.1% of two-year engineering graduates and 73.2% of healthcare graduates are **employed with permanent contracts**. The same figure for economics-statistics graduates is 65.4%; 61.7% for graduates of math, physics and natural sciences.

At the other end of the range are graduates in psychology, architecture and law, all with less than 40% having open-ended contracts. However, it is also true that the graduates of these fields are the most **self-employed**: five years after graduation self-employment accounts for 42.5% of architecture graduates, 37.9% for psychology students and 36.2% for lawyers.

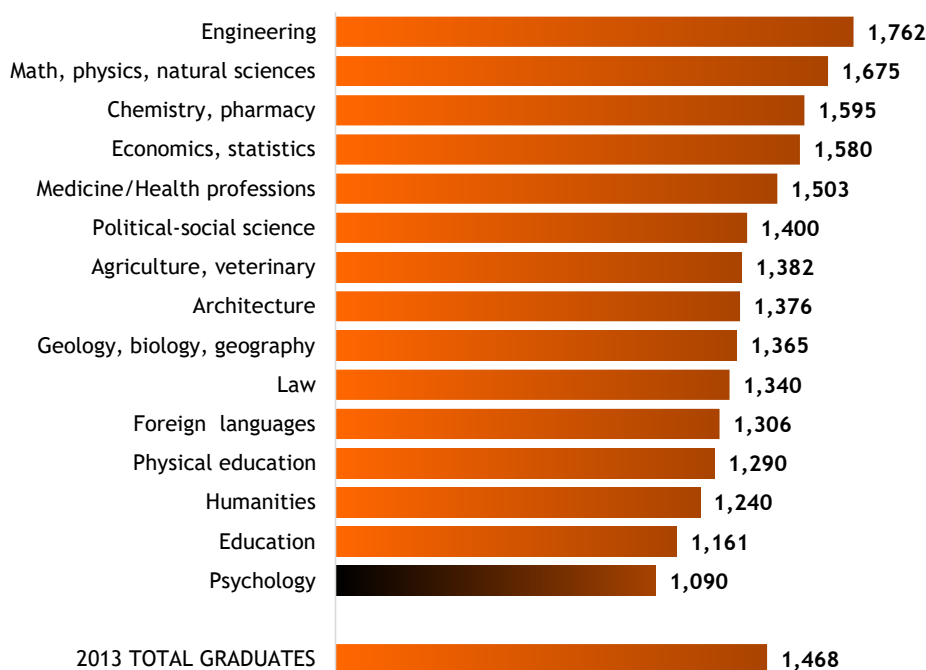
36.6% of the humanities graduates have a **non-standard contract** (mainly fixed-term), and the same is true for 35.8% of language students and 34.1% of those who studied physical education. This result is certainly affected by the high proportion of graduates in these disciplinary groups hired by the teaching sector.

Among the 2013 single-cycle graduates interviewed five years after graduation, 68.2% of the chemistry-pharmacy students are employed with **permanent contracts**. They are followed by graduates from the law and architecture faculties, with 29.7% and 25.7% respectively. In the agriculture and veterinary area self-employment is widespread, equal to 70.4%, followed by the field of study of medicine with 57.8%. 22.9% of the medicine students and 17.1% of the chemistry-pharmacy graduates have a non-standard contract.

Among the two-year masters the engineering, math, physics and natural sciences and chemistry-pharmacy graduates are the ones who can count on the highest **salaries**: respectively € 1,762, € 1,675 and € 1,595 net per month.

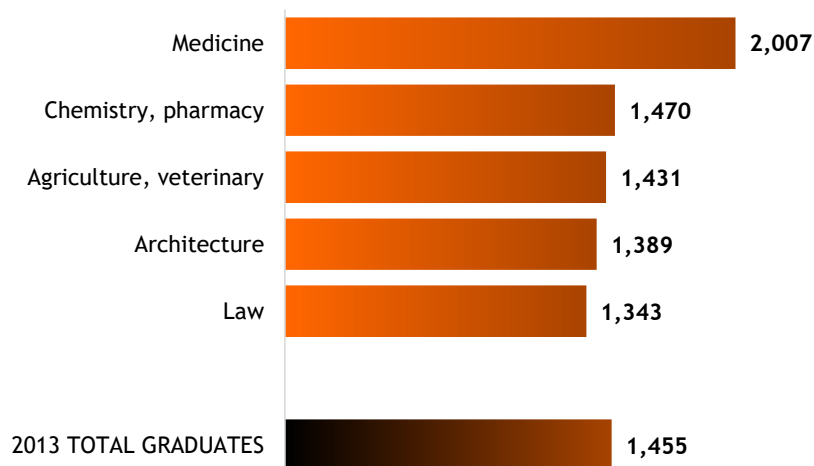
On the other hand, graduates in psychology and education do not exceed 1,200 euros per month. These are disciplines generally studied by young women who generally go on to the world of teaching, a sector known for its low salaries. Among the single-cycle masters, the highest salaries are earned by graduates of the medical field of study (€ 2,007). The law graduates' share is lower, reaching € 1,343 per month.

**2013 two-year master graduates interviewed five years after graduation:
net monthly salary by field of study. Survey year 2018**
(average values in euros)



Note: The Defence and Security field is not included.

2013 single-cycle masters interviewed five years after graduation: net monthly salary by field of study.
Survey year 2018
 (average values in euros)



Note: the Humanities field is not included.

Five years after graduation, the highest values of **effectiveness** are achieved among the two-year masters in physical education (73.5%) and architecture (68.6%). They are followed by those employed in psychology, agriculture, law, geology, biology and geography and math, physics and natural sciences, all with values higher than 65%.

Below average effectiveness was found by political-social science graduates (35%) and health professions (49.9% - these are two-year master graduates with careers in hospitals). The levels of effectiveness are decidedly higher among single-cycle master graduates, particularly among graduates in medicine, agriculture, veterinary sciences and chemistry-pharmacy, where more than 90.0% of those employed consider the single-cycle degree to be "very effective" or "effective".

UNIVERSITY DEGREE OR HIGH SCHOOL DIPLOMA: A UNIVERSITY DEGREE IS WORTH IT

The higher the degree achieved the lower the risk of being trapped in unemployment. Generally, graduates are able to better respond to changes in the labour market, having available to them more suitable cultural and professional tools. Graduates enjoy **significant employment advantages** compared to high school graduates: in 2018, the employment rate of the 20-64 age group is 78.7% for graduates, compared with 65.7% for those with a high school diploma.

In addition, in 2014 a graduate earned 38.5% more than a person with a secondary school diploma. Of course, the wage premium of the university degree compared to the high school diploma in Italy is not as significant as in other European countries (+52.6% in the UE22, +66.3% for Germany and +53.0% for the UK), but it is appreciable and significant.