

ABSTRACT

2017 REPORT ON THE PROFILE AND OCCUPATIONAL STATUS OF GRADUATES

The AlmaLaurea Interuniversity Consortium presents the 19th Report on the Profile and Employment Status of Graduates at the conference "*University and skills in globalisation's second phase*" which will be held at the University of Parma on Tuesday, 16 May 2017.

The survey involved graduates from **71 universities** of the 74¹ currently belonging to the Consortium.

The AlmaLaurea Report on the Profile of Graduates investigated the educational performance of more than 270,000 graduates in 2016: specifically, 156,000 graduates of three-year programmes (or first level), 79,000 graduates of two-year master programmes and 34,000 single-cycle graduates. The response rate for the 2016 questionnaire regarding educational experience was more than 92% (in 2015 it was over 88%).

The AlmaLaurea Report on Employment Status surveyed 620,000 first- and second-level graduates from 2015, 2013 and 2011, interviewed respectively one, three and five years after earning their degrees. The response rates were 82% for those one year after the degree (in line with last year's survey), 73% among second-level graduates after three years (75% for the survey last year) and 69% for second-level graduates after five years (it was 72% for the survey of the previous year).

GRADUATE PROFILE

The graduates in 2016 involved in the **19th Graduate Profile Report** are **more than 270,000**. These include **156,000** three-years (57%), **79,000** two-year masters (29%) and **34,000** single-cycles (13%). The remaining are pre-reform graduates (including those of Primary Education Sciences). The total response rate is 92% and reaches 93% among three-year and single-cycle graduates.

GEOGRAPHICAL ORIGIN: FOREIGNERS INCREASE (3.5%).

In 2016, **nearly half of the graduates (47%)** earned their degree in the **same province** in which they received their secondary school diploma. 26% of graduates experienced limited mobility, earning a degree in a province close to that of their secondary school diploma, while for the remaining 27% there is a higher level of mobility, ranging from achieving the degree in non-neighbouring provinces to secondary school diplomas earned abroad. The two-year master students are most likely to be geographically mobile: **35%** earned a degree in a **different province** from where they earned their secondary school diploma (24% of three-year graduates and 25% of single-cycle graduates).

The proportion of graduates having **foreign citizenship** is 3.5% of all graduates (corresponding to 9,556 graduates in AlmaLaurea Universities in 2016) with a **peak of 4.6% in two-year master programmes** and close to 3% among single-cycle (2.7%) and three-year graduates (3.2%).

¹ Suor Orsola Benincasa in Naples, Scuola Normale Superiore in Pisa and Scuola Superiore Sant'Anna in Pisa joined the Consortium after the survey was distributed. The addition of three other universities is under deliberation.



It should be noted that in the last 10 years the share of graduates of foreign citizenship has appreciably increased (they were 2.3% in 2006).

Most foreign graduates (59%) arrived in Italy after graduating from high school. However, the share of young foreigners who come from families already resident in Italy is increasing, as evidenced by the fact that 41% of non-Italian graduates have completed secondary school in our country, while the total was 28% in 2011.

Regarding **origin**, 53% of foreign graduates come from Europe, in particular 14% are Albanian citizens and 10% Romanian. Chinese graduates, who have grown considerably in recent years, were 9% in 2016. 14% came from the African continent (especially from Cameroon, 4%, and Maghreb, 3%) and 10% from the Americas (particularly from Peru, 2%). The flows of foreigners are directed mainly towards specific disciplinary fields: languages, economic-statistical, architecture for three-year courses; pharmacology, medicine and dentistry for single-cycle; architecture, politico-social, engineering, languages for two-year master courses.

According to **UNESCO** data, Italy is in 10th place in the world for attractiveness of the university system: of 100 "mobile" students worldwide, i.e., university students who travel to a country other than their own home country, 2 choose Italy. Our country is preceded by the United States (19%), United Kingdom (10%), Australia (6%), France (6%), Germany (5%), Russia (3%), Japan (3%), Canada (3%) and China (2%).



EDUCATIONAL BACKGROUND: THE ROLE OF THE FAMILY IN THE CHOICES OF YOUTH.

As regards the educational background of 2016 graduates, there is a prevalence of **high school diplomas** (67%) and, in particular, of a scientific diploma (44%) and classical (16%), followed by 19% with a technical diploma and pedagogical-social diploma (8%); smaller numbers are associated with professional diplomas (2%), artistic education (2%) and qualifications earned abroad (2%).

In terms of composition by type of diploma, there are differences between three-year and two-year master graduates (high school graduates are 64% and 67% respectively), while single-cycle graduates are characterised by a high incidence of high school diplomas : 83% have a high school education, especially scientific (49%) and classical (30%).

It is noted that the **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.



Graduates with at least one parent holding a university degree are 29% (in the Italian male population between the ages of 45 and 64 university graduates account for only 13%).

The cultural and social context of the family also affects the **choice of the degree programme**: graduates from families with higher cultural levels have chosen more single-cycle degree courses (44% have at least one parent) than graduates who opted for a "3+2" programme (26% for the three years and 30% for the masters). These values are all similar to those observed in 2006, when the percentage of graduates with at least one parent who went to university was 24% for the three-years, 29% among the two-year masters and 45% among the single-cycle graduates.

2016 Graduates: high school graduates (classical, scientific, linguistic) by programme



AGE, COMMITMENT AND FINAL MARKS: THE SUCCESS IN UNIVERSITY STUDIES.

The **average age of graduation** for the graduates of 2016 is equal to **26.1 years**: 24.9 years for three-year graduates, 26.9 for single-cycle graduates and 27.5 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 programme and the single cycle and 22 years for the two-year master's degree), which for 2016 graduates on average is 1.5 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 27.1 in 2006, one year higher than the current situation.

The commitment to studies, which measures the ability to complete the degree programme in the time set by the regulations, has **markedly improved** in recent years.

While in 2006 34% of graduates completed their studies on time, in 2016 the **percentage reached 49%**, specifically 57% among the two-year masters, 48% for the three-years and 37% among the single-cycle students (the lower value mainly due to the lag of law school graduates).

Furthermore, while 10 years ago those completing studies with four or more supplementary years were 20%, nowadays that figure has been almost halved.



2016 Graduates: completion of the programme by course type

(percentage values)



The **average graduating mark** has basically remained unchanged in recent years, being **102.5** out of 110 in 2016 (compared with 102.8 out of 110 in 2006): 99.6 for three-year graduates, 104.2 for single-cycle graduates and 107.7 for two-year masters. Among the two-year graduates the final mark is very high, especially for an incremental effect compared to the performance achieved at the end of the three-year course (in 2016 the average increase in the mark compared to the three-year programme is 7 out of 110).

STUDY ABROAD EXPERIENCES, INTERNSHIPS AND WORKING DURING STUDIES INCREASE THE CHANCES OF FINDING A JOB.

Slightly less than 11% of graduates in 2016 participated in recognised foreign educational programmes: more in detail, more than 8% participated in European Union programmes (Erasmus in first place) and 2% through other experiences recognised by their course of study (Overseas, etc.).

Three-year graduates tend to be less involved in such types of experience (8%) compared to single-cycle graduates (15%) and two-years (15%). This latter group adds a further share of graduates who participated in EU study programmes abroad only during the three-year course and thus leads to a total of 19% within the 3+2 range: a value approaching the target set at a European level for 20% by 2020.

In addition, 8% of graduates took exams abroad that were then validated on their return, while 5% prepared a significant part of their thesis abroad (a figure that reaches 9% for two-year masters).

The report finds that graduates boast an **appreciable knowledge of languages**: the share of 2016 graduates with "at least good" knowledge of written English is around 76% and reaches 80% for the two-year graduates.





2016 Graduates: Study abroad recognised by the course of study by course type (percentage values)

56% of graduates (44% in 2006) completed an internship recognised by their degree programme.

In detail, 59% of three-years participated in internships (over two-thirds of which were held outside the university), 41% of single-cycle graduates (a value affected mainly by the characteristics of law graduates) and 58% of two-year masters. For the latter, to these must be added 12% who completed internships only during the three-year period, bringing the total number of two-year master graduates who participated in internships to just under 71%.

70% of graduates who have had these experiences express a **decidedly positive opinion** of the internships organised by the degree programme.



2016 Graduates: internship activity by course type



Over the last 10 years there has been a **decrease in the share of graduates with work experience during studies (from 75% to 65%)**, probably due both to the economic downturn and the gradual shrinking of adult enrolment at the university. Work experience was had by 65% of three-years, 58% of single-cycles and 67% of the two-years. More in detail, in 2016, 6% of graduates earned a degree by working steadily during their studies (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 2016 it reached 35% (+11 percentage points compared to 2006 graduates).

With specific studies AlmaLaurea has been able to show that participating in study abroad with a European programme or in a scholastic internship or having worked during studies, all else being equal, **increases the chance of finding a job within one year** of graduation. Specifically, study experiences abroad with European programmes increase employment opportunities by **12%**, internships by **8%** and having worked steadily during studies **74%**.

Furthermore, studying abroad or participating in an internship, all else being equal, not only does not lead to delays in the completion of the degree, but actually positively influences the probability of obtaining high marks at graduation.

SATISFACTION WITH THE UNIVERSITY EXPERIENCE.

To analyse the **satisfaction** of the recently completed university experience, it was decided to take into consideration the opinion expressed by graduates on certain aspects. Overall, **88%** of graduates are satisfied with the university experience as a whole (in 2006 it was 87%). In particular, 87% of the three-year graduates, 86% of the single-cycles and 89% of the two-year masters. There are variations in satisfaction with the university experience also based on the individual university attended, with values that all the same were quite positive, ranging from 82% to 98%.

2016 Graduates: overall satisfaction of the programme by course type



85% of graduates are satisfied with their relationship with the **teaching faculty** (with specific school variations ranging from 71% to 97%), the same percentage for three-year graduates, dropping to 77% for single-cycle graduates and rising to 89% for two-years. With regard to the **infrastructure** made available by the university, 70% of graduates consider the **classrooms** to be suitable (with scores of individual schools



reaching 98% and only in some cases falling below 50%): 69% among the three-year graduates, 65% of single-cycle graduates, and 75% of two-year graduates.

And how many **would repeat the same programme at the same university?** 68% of graduates would choose the same programme again and the same university (similar to what was observed in 2006); 13% would repeat the same course but in another university; 9% would change programme but would choose the same university. Among the three-year and single-cycle graduates, both programme and school are confirmed by 66% and 65% respectively, while the two-year graduates rise to 74%.

POSTGRADUATE: ALMOST HALF OF GRADUATES ARE WILLING TO STUDY ABROAD.

With regard to the prospects of work, the consolidated south/north migration for study and work that yet persists in our country for some time now has expanded to include movement towards foreign countries. This latter is an objective of interest to a growing number of young graduates, not only 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.



The **willingness to work in another European country** is declared by **49% of graduates** (it was 38% in 2006); 35% are even ready to move to another continent. Despite the common opinion that graduates are unwilling to move for work, there is even a widespread willingness to travel frequently (27%), and also to change residence completely (52%). Only 3% are not willing to travel.



THE EMPLOYMENT STATUS OF GRADUATES

The Employment Status survey covered a total of 620,000 graduates.

In detail, the 2016 survey involved all first- and second-level graduates - two-year masters and single-cycle graduates - from 2015 (262,000) interviewed one year after graduation, second-level graduates from 2013 (109,000) three years after earning their degree, and their colleagues from 2011 (103,000) contacted five years after graduation. Finally, two specific surveys focused on the three-year graduates from 2013 and 2011 who did not continue with higher university education (81,000 and 66,000 respectively), contacted three and five years after graduation. Response rates are 82% for one year after the degree (in line with last year's survey), 73% among second-level graduates after three years (75% in the previous survey) and 69% among second-level graduates after five years (72% for the previous survey).

The data presented below focus on the analysis of the performance of second-level graduates in 2015 and interviewed after one year and on three-years and two-years who graduated in 2011 and interviewed after five years.²

GRADUATES AFTER ONE YEAR FROM GRADUATION: 68% OF THE THREE-YEARS AND 71% OF THE TWO-YEARS ARE EMPLOYED.

The survey involved **153,000 three-year graduates** from 2015 and **76,000 two-year graduates** from 2015 interviewed in 2016 one year after graduation.

Since a high share of three-year graduates, altogether 56%, continues their education with a master, here we analyse the employment performance of those who have opted **not** to pursue their studies and to enter directly into the job market.

Adopting the ISTAT's definition of employment that includes those who are paid while studying, one year from graduation **68% of three-year graduates and 71% of two-year graduates are employed**.

The comparison with previous surveys shows an improvement, albeit slight, of this employment rate. After the significant contraction between 2008 and 2013 (-16 percentage points for the three-years; -11 for the two-years), over the last three years the employment rate has increased by more than 2 percentage points for the three-years and 1 point for the two-years.

 $^{^{2}}$ Given the nature of single-cycle graduates, characterised by a high level of continuing education with pre-formative training at the start of professional careers (e.g., specialisations, internships), for the purposes of brevity their employment status will not be analysed here.



2007-2015 graduates interviewed after one year from graduation: employment rate according to the ISTAT definition by course type. Survey years 2008-2016



Note: for the first level only graduates not enrolled in another degree programme are considered.

Three-year graduates after one year have an unemployment rate (calculated on the labour force, i.e., those who are already in or intend to enter the labour market) of 21%, while the two-year graduates have an unemployment rate of 20%. For the third consecutive year there has been a decrease in the unemployment rate. In particular, compared with the 2015 survey, the contraction is three points for three-years and one point for two-years. However, the comparison with 2008 is still negative. In fact, the unemployment rate has almost doubled in the last eight years (from 11% to 21% for the three-years and 11% to 20% for the two-years).







Note: for the first level only graduates not enrolled in another degree programme are considered.

WORK ACTIVITY: IN THE LAST YEAR OPEN-ENDED CONTRACTS INCREASE AND SELF-EMPLOYMENT DECREASES.

Self-employment (freelancers, self-employed workers, entrepreneurs, etc.) account for 14% of three-year graduates and 9% of two-year graduates. Both rates are slightly lower (-1%) compared to the survey done last year.

For three-year graduates, **open-ended employment contracts** have **increased** by 1% (including the so-called "a tutele crescenti"), increasing in one year from 28% to 29%. Such contracts for two-years have increased by 5%, growing from 29% to 34%.

On the other hand, compared to the 2008 survey, there was an increase in self-employment, respectively, of 5% for three-years and 3% for two-year masters. Open-ended contracts, however, have contracted significantly (-13%) for three-year graduates, while returning to the levels of eight years ago for two-year masters.

Furthermore, in the last year for three-years there was an **increase in non-standard contracts** (in particular fixed-term contracts), and, in parallel, a modest but comforting **decline in work not regulated by any contract**: the 2016 values are, respectively, 33% and 5%. The most recent trend is not fully confirmed among two-year masters, for which in the last year there was a slight decrease in non-standard contracts (in 2016 equal to 27%) and substantial stability of unregulated work (in 2016 6%). In general, the extension of the observation period to the 2008 survey confirms an increase in non-standard contracts and unregulated work both among three-years and two-years.



SALARIES TREND SLIGHTLY UPWARDS BOTH FOR TWO-YEARS AND THREE-YEARS.

Average salaries are an average \notin 1,104 net monthly for three-year graduates and \notin 1,153 net monthly for two-year masters. For the third consecutive year, the earnings of graduates after one year are increasing: in particular, real wages (taking into account actual purchasing power) have increased compared to the previous survey by about 2% (both for three-years and two-years). However, the increases in the last three years have not yet overcome the significant drops recorded in the five-year period 2008-2013 (-23% for the three-year graduates, -20% for the two-year masters).

2007-2015 graduates employed after one year from graduation: net monthly salary by course type. Survey years 2008-2016 (values recalculated based on ISTAT consumer prices, average values in euros)



Note: for the first level only graduates not enrolled in another degree programme are considered.



CORRESPONDENCE BETWEEN DEGREE EARNED AND CURRENT JOB.

But how many people have a job that is consistent with the degree earned? To answer this question, AlmaLaurea considers the degree's effectiveness indicator, which combines the need for the degree of the work done 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": 51% for three-year graduates, 48% for two-year graduates. This is an increase compared with last year (+1 percentage point for both groups).

However, once again the improvement recorded in recent years does not erase the difficulties encountered since the downturn: the effectiveness of the degree is still negative in comparison with 2008 data (-7 points for three-years, -3 for two-years).

EMPLOYMENT FIVE YEARS OUT: 87% OF THE THREE-YEARS AND 84% OF THE TWO-YEARS ARE EMPLOYED.

The survey of the graduates after five years from earning their degree involved **66,000 three-years** from 2011 who did not pursue further studies and **75,000 two-year graduates** from 2011.

The critical moments experienced by those who entered the job market in the dark years of the financial crisis have inevitably affected current employment performance. Specifically, five years after graduation, the **employment rate** (including those who are in paid for study) is equal to **87% of the three-year graduates** and **84% of the two-year graduates**. Compared to 2015, the employment rate has risen by nearly 2 percentage points for the three-years and is basically stable for two-years. Thought it is true that with respect to the 2012 survey, the employment rate at five years is lower: -4 percentage points for three-year graduates.

2007-2011 graduates interviewed after five years from graduation: employment rate according to the ISTAT definition by course type. Survey years 2012-2016

(percentage values)



Note: for the first level only graduates not enrolled in another degree programme are considered.



Five years after graduation, the unemployment rate (calculated on the labour force, i.e., those who are already in or intending to enter the labour market) is about 8% of three-year graduates and 9% of two-year masters.

Compared to last year's survey, these values are falling for both groups by 1%. This is the first decline seen after many years of increasing unemployment. Again, however, once again the unemployment rate is increasing compared to 2012: +2 percentage points for three-year graduates and +3 for two-year masters.



2007-2011 graduates interviewed after five years from graduation: unemployment rate by course type.

Note: for the first level only graduates not enrolled in another degree programme are considered.

WORK ACTIVITY: OPEN-ENDED CONTRACTS INCREASE, SELF-EMPLOYMENT DROPS.

The extension of the observation span to the first five years after graduation allows for a more complete assessment of the characteristics of the type of work being done by graduates. Among the 2011 graduates, five years after graduation, **self-employment** (freelancers, self-employed workers, entrepreneurs, etc.) accounts for **14% of three-year graduates, rising to 18% among masters**. The share of those who have been hired with an **open-ended contract** (including the so-called "a tutele crescenti") reaches **61% for the three-years and 56% for the two-years**. Compared to the previous survey, for both there was a **slight contraction in self-employment** (-1%) and an **increase in open-ended contracts** (+3%).

Five years after the degree, **15%** of three-years are hired with a **non-standard contract**, **17%** of two-years. These figures have been **increasing in recent years**, especially for three-year graduates. The number of graduates five years out without any contractual protection is very marginal.



IN THE LAST YEAR SALARIES STABLE FOR THREE-YEARS AND TWO-YEARS.

Five years after graduation, the net monthly salary is \pounds 1,362 for three-year graduates and \pounds 1,405 for twoyear graduates. The survey shows, after the increase recorded last year, a substantial stability of real wages (that is, taking into account the real purchasing power) for three-year graduates and a slight increase (+ 1%) for two-year masters. Despite the improvement in recent years, salaries recorded in 2016 are lower than in 2012.

2007-2011 graduates employed after five years from graduation: net monthly salary by course type. Survey years 2012-2016 (values recalculated based on ISTAT consumer prices, average values in euros)



Note: for the first level only graduates not enrolled in another degree programme are considered.

CORRESPONDENCE BETWEEN DEGREE EARNED AND CURRENT JOB.

Over time, the characteristics of the job and the effectiveness of the degree improve. Five years after graduation, the degree is "very effective or effective" for 63% of employed three-years and 54% of two-year graduates. A comparison with past surveys shows a substantial stability of effectiveness in the last year both for three-year graduates (compared to the 2012 survey, a drop of 3%), and for two-year masters (unchanged compared to 2012).



2015 and 2011 graduates interviewed at one or five years: employment results. Survey year 2016

	First-level graduates		Master graduates	
	One year	Five years	One year	Five years
	from	from	from	from
	graduation	graduation	graduation	graduation
Employment rate (%)	68.2	87.1	70.8	84.3
Unemployment rate (%)	20.8	7.8	19.8	8.9
Net monthly salary (average, in euros)	1,104	1,362	1,153	1,405
Degree effectiveness (%) ("very effective or effective")	51.4	62.8	48.4	54.3

Note: for the first level only graduates not enrolled in another degree programme are considered.

7% OF ITALIAN TWO-YEAR MASTERS WORK ABROAD.

Five years after graduation, **around 7%** of two-year graduates with Italian citizenship work abroad (slightly increasing over the last three years). Those who decide to move abroad for work reasons are generally more brilliant (especially in terms of marks in exams and commitment to studies) than those who decide to stay in Italy to work.

Five years after graduation, more than 80% of those working abroad are in Europe: 19% in the United Kingdom, 12% in Switzerland and the same share in Germany, 10% in France, 6% in Spain. The proportion of those in the Americas is lower than 10%, with an additional 5% employed in Asia. There is a residual proportion of two-year graduates working in Africa and Oceania (2% for both).

The **average pay** earned abroad is considerably higher than those of employees in Italy: two-year graduates five years from their degree earn \notin 2,202 net per month, 64% higher than the \notin 1,344 for colleagues employed in Italy.

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 graduates of secondary school during their working life: in 2016, the employment rate of the 20-64 age group is 78% for graduates, compared with 65% for those with a high school diploma.

In addition, in 2012 a graduate earned 42% 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% in the UE22, +58% for Germany and +48% for the UK), but it is appreciable and significant and similar to the difference found in France (+41%).



AlmaLaurea is an Interuniversity Consortium founded in 1994 that today includes 74 universities (the addition of other three universities is currently under deliberation) and that represents approximately 90% of Italian university graduates. The Consortium is supported by the member universities, the contribution of the Ministry of Education, University and Research (MIUR), by companies and institutions using the services offered.

Since 2015 AlmaLaurea is a member of Sistan, the Sistema Statistico Nazionale (Decree of the President of the Council of Ministers of 9 November 2015).

Every year AlmaLaurea analyses the profile and the employment status of graduates after 1, 3 and 5 years, providing participating universities, the Ministry of Education, the Agenzia Nazionale di Valutazione del Sistema Universitario e della Ricerca (ANVUR) reliable documentary basis to facilitate decision making and planning activities. It monitors the educational programmes of the students and analyses the characteristics and performance of graduates allowing for the comparison of different programmes and study locations. It analyses the internal and external effectiveness of the teaching of the universities, through monitoring the educational and graduate employment outcomes. It collects and makes available online the CVs of graduates (now 2.5 million) to facilitate the matching of demand and supply of skilled labour. It assesses the needs and professional profiles requested by public and private companies, Italian and foreign, and conducts research and selection of personnel.

AlmaLaurea internationalises its services, skills, experience and research to maintain a global perspective, working with European countries, for a knowledge-based growth, in line with the Lisbon Strategy, and outside Europe, focusing attention on countries in the Mediterranean area and more recently Asian countries.