

Opportunities and Challenges for Higher Education in Italy

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The 16th ALMALAUREA Report on Graduates' Profile comes at a moment when the whole university system is bustling with a number of activities and events which have major relevance in terms of its performance assessment.

To begin with, autumn 2013 saw the publication of the 2004-2010 Research Quality Assessment (VQR) outcomes. Carried out by the Italian National Agency for the Evaluation of the University and Research System (ANVUR), this was the most comprehensive attempt ever made to assess the scientific research work performed by state and private universities, public research institutes and other public or private entities committed to research activities. The assessment outcomes highlighted both centres of excellence and areas of mediocrity, but they also triggered controversies about the methods applied for the assessment itself, the variations it reported as well as its practical consequences.

Over the last few months, the work for the first round of the National Scientific Qualification (ASN) was largely concluded. After the reform introduced by former minister Gelmini was implemented, this has been a necessary step to recruit full and associate professors and thus also support young talents in academia. Within such work there was much controversy on many items which, however – as was the case for the Research Quality Assessment –

had the effect of highlighting issues, challenges and deficiencies in the assessment of the Italian university and research system.

Recent months have also seen the launch of intense activities related to the system of Self-Assessment, Periodic Assessment and Accreditation (AVA) – again, within ANVUR. Such activities are mainly related to the setting up and periodic assessment of teaching centres and degree or PhD programmes and the launch of the experimental phase of the Single Annual Report on Departmental Research. In the short term, these activities will certainly help shape the education opportunities that Italy offers to students and their families, as well as to other stakeholders – including employers. And again, they contribute to the public debate on the university system performance.

In addition, the outcomes of a study on the general skills of students approaching graduation were published in recent months. The project saw the voluntary participation of 6 thousand students from 12 Italian universities – all in the 3rd or 4th year of their first-level degree programme – and was carried out within the OECD's AHELO (*Assessing Higher Education Learning Outcomes*) project. The outcomes showed that 'young Italians perform better than their international peers in terms of writing effectiveness and technique as well as in critical analysis, but they achieve lower results when addressing scientific and quantitative problems. Figures show an ongoing separation between science and humanities areas in Italy'¹.

1 Fiorella Kostoris, study coordinator and member of ANVUR Board of Directors, as quoted in the ANVUR press release of March 11th, 2014, www.anvur.org.

As pointed out in the same text, 'Regardless of the average level of competences they have acquired at the end of their studies, it appears that Italian graduates' logical skills are much more separated between humanities and science, compared to what is observed in other countries. Specifically, Italian students achieve excellent results either in

The study is key to assessing students' skills in a robustly comparative context – including at an international level – without the distortions characterizing the marks that students achieve in different subject areas, due to different assessment styles.

Finally, the first Report on the State of the University and Research System² was published by ANVUR in March, providing a comprehensive overview of the Italian tertiary education and scientific sector. Specifically, the report focuses on the following aspects: Italian graduates compared to their international peers; performance of newly enrolled students, other students and graduates; degree programmes and outcomes of different academic careers; international mobility; traineeships; graduates within the labour market; teaching facilities, education provision and governance; resources, institutional features and research funding, quality and impact. The report also draws on the outcomes of the ALMALAUREA surveys.

Therefore, the Graduates' Profile Report is in this context of greater sensitivity towards the need to boost evidence-based decision-making and reporting processes on the use of public resources that is set. The Report provides comprehensive and up-to-date material and, combined with the graduates' employment data which was recently presented in Bologna³, it is an important tool to assess education opportunities in Italian universities and its

the 'literary' part of the test or in the 'scientific-quantitative' one, but, on average, few students score well in both".

2 [www.anvur.org/attachments/article/644/Rapporto ANVUR 2013_UNIVERSITA e RICERCA_integrale.pdf](http://www.anvur.org/attachments/article/644/Rapporto%20ANVUR%202013_UNIVERSITA_e_RICERCA_integrale.pdf) [ITA]

3 The outcomes of the 16th ALMALAUREA Survey on Graduates' Employment Conditions were presented last March, 10th, 2014, at the Alma Mater Studiorum-University of Bologna, during the conference 'Imprenditorialità e innovazione: il ruolo dei laureati'. All documents are available on the website page www.almalaurea.it/universita/occupazione.

outcomes – not only in terms of employment with the aim of improving universities and providing better guidance to students completing their upper secondary studies. Now that ANVUR has stepped in, and following the decision to base part of the ordinary public funding allocation on merit-based criteria and renovate the accreditation systems for degree programmes⁴, assessment will play an increasingly important role in decision-making processes within universities.

It is also important to look at the more general situation of the national and international labour market. The title of this Report points to the opportunities and challenges of higher education in the context of an ongoing economic crisis, which must be taken into account when examining graduates' study outcomes and experiences. The crisis is affecting students' choices and behaviours and casting a shadow on their future as new graduates. Indeed, a careful analysis of the Graduates' Profile documentation is all the more necessary in light of the ongoing economic and social crisis, which has been affecting Italy for years and might be just starting to ease now.

The feeble signs of an economic recovery cannot wipe away a difficult year in terms of employment, as the unemployment rate rose well above 12%. Bearing the brunt of the complex European and Italian economic situation are the weakest segments of the population, the young in particular. The toll young people have to

4 Through the implementation of the already-mentioned Self-Assessment, Periodic Assessment and Accreditation System (AVA), under law no. 240 of 20/12/2010 and legislative decree no. 19 of 27/01/2012. This system consists of initial and periodic assessments of study programmes and universities, ongoing assessments of the quality, effectiveness and outcomes of each university as well as an enhanced system of self-assessment of the quality and effectiveness of university teaching and research activities.

pay is particularly high because entering the labour market during a recession produces persistent negative effects on their whole job career. This is why more decisive actions should be taken, based on the principle that *prevention is better than cure*.

As underlined during the presentation of the 16th ALMALAUREA Survey on Graduates' employment conditions, graduates are still at an advantage compared to secondary school certificate holders, throughout their working life and even more so during a recession. Leaving aside workers with compulsory education only – who are most affected by the economic downturn – we find that during the recession the unemployment rate has increased by 6.5 percentage points among recent graduates (aged 25-34) and 14.8 points among recent secondary school certificate holders (aged 18-29). Between 2007 and 2013, the gap between recent graduates' and recent secondary school certificate holders' unemployment rate soared from 3.6 percentage points – in favour of the former group – to 11.9 points. The persisting unemployment issue is accompanied by that of a high number of economically inactive people, especially the so-called NEETs – namely, young people aged 15-29 who are neither studying, nor in training, nor working. This reflects the huge difficulties and mistrust experienced by young people when approaching a labour market that offers them few access opportunities. In 2013, the share of NEETs increased by a further 2.1 points, hitting 26.0% (in 2007, they only accounted for 18.9% of 15-29-years-old). It is the highest rate recorded within EU countries. Even more likely to be in a situation in which they neither work nor study are women (27.7%) and young people in the southern regions of Italy (35.4%)⁵.

5 <http://dati.istat.it/>, 'Lavoro' section.

The main point made by the 16th ALMALAUREA Survey on Graduates' employment conditions is that, if Italy is to recover, economic policies and institutional reforms aimed at capitalising on Italy's human resources are needed, and, to this end, the ruling class needs to be urgently reformed, too.

The analysis of the quality and assessment of the university system (and more⁶) – which are highlighted by the Graduates' Profile survey – is the crucial starting point for any analysis or project. The available documentation, which refers to graduates from the class of 2013, must necessarily be analysed without rushing to hasty conclusions or being influenced by approximations or prejudices. The data contained in this Report refer to 64 universities (out of the 65 which are part of the consortium) which have been part of ALMALAUREA for at least one year and almost 230 thousand graduates – almost 80% of students who graduated from Italian universities. (Since the previous Profile was published, the University of Macerata has joined the consortium. The analysis does not take into account the University of Milan-Bicocca, as it has only recently joined the consortium).

For many years we have pointed out that, because of the transition from the old degree system to the new '3 plus 2' system, analyses of Profile data need to take into account the coexistence of graduates who had begun their studies after the reform and graduates who had switched from the old system (and whose

⁶ It is important to underscore that a number of Institutes of Higher Education in Art and Music (AFAM) have now joined ALMALAUREA. The aim is to help young graduates access the labour market, while also providing academies and music conservatories with more comprehensive and timely information on the quality of the education they provide, from the point of view of graduates and of the labour market. The initial agreement, which was reached in March 2012, has already been signed by 27 institutes. The first young graduate artists have already joined the ALMALAUREA database.

performance tended to be less smooth). As these two cohorts were considered together, despite their fundamentally different features, the performance of post-reform graduates appeared poorer⁷. But this has now ceased to be an issue, as graduates who enrolled before the reform are only 2% of the total⁸.

Summary findings referring to the whole graduate pool are not sufficient to reflect on the outcomes of university education. A more detailed analysis is needed to take account of the diversity of all aspects considered⁹ and appreciate where they are found, how significant they are and what their possible causes are. This is the only way to avoid misleading conclusions and distinguish among important aspects, including: virtuous and poor examples, programmes which have led to positive results and other which have not, differences determined by gender, previous studies or socio-economic background, best outcomes in absolute terms or in terms of added value.

In order to achieve this aim, ALMALAUREA has not just been providing timely data on the whole system¹⁰, but it has been also

7 A. Cammelli, *Perché la riforma universitaria non è fallita*, il Mulino, no. 5, 2010.

8 Understandably, these are students whose university careers were particularly troubled, as witnessed by their much delayed graduation, achieved at an older age.

9 A. Cammelli, G. Gasperoni, *Più diversi che uguali. Origini sociali, retroterra formativo e riuscita negli studi dei laureati*, in A. Cammelli, G. Vittadini (edited by), *Capitale umano: esiti dell'istruzione universitaria*, il Mulino, 2008; A. Cammelli, *Al di là della media: l'università alla prova dei numeri*, "Scuola Democratica", no.2, 2011; A. Cammelli, *Le performance dei laureati figli della riforma*, in G. Vittadini (edited by), *L'università possibile. Note a margine della riforma*, Guerini e Associati, Milano, 2012.

10 As previously mentioned, universities within the ALMALAUREA Consortium include almost 80% of all graduates each year and can be highly representative of the whole Italian graduate population in its most significant aspects. In the choice of indicators and parameters for the monitoring and assessing of university programmes in the 2013-2015 period (ministerial decree no.104 of 14/02/2014), it is pointed out that

delving into the most interesting issues by means of targeted statistical studies, partly in cooperation with external researchers. For each issue under consideration, the goal is to look at which processes are contributing to 'average' trends and analyse the way they vary and their possible causes. The importance of this effort is two-fold – it helps gather statistically sound data on the issues under investigation and, at the same time, it contributes to improving data quality over time¹¹.

This Report devotes particular attention to a number of issues which characterize (or should do so) the debate on higher education. These include: graduates' features at the beginning of their university studies; working students and class attendance; traineeships; study experiences abroad; degree completion times; exam and graduation grades; graduates' evaluation of their university experience; student support services; student living conditions in university towns; study and employment prospects after graduation; adults at university; graduates with foreign citizenship.

The scope and structure of the available documentation allow for more punctual and consistent conclusions and more useful indications on what could be rewarded or improved. Available online since the very day it was presented at the Conference in Pollenzo-Bra – hosted by the University of Gastronomic Sciences – all the information is broken down by programme type, university,

the outcomes of ALMALAUREA employment surveys will be used at ministerial level to assess 'guidance activities at different stages of the study experience (at the beginning, during the programme and upon completion), with the aim of reducing drop-out rates and facilitating access to the labour market'. They will also be used to inform decision on 'merging or cancelling degree courses at a regional, macro regional or national level, based on demand, sustainability and employability factors'.

11 Cf. www2.almalaura.it/universita/pubblicazioni/biblio/

faculty/department/school, degree subject area, grouping and specific programme, and it provides each member university with comprehensive, prompt and reliable data on the their graduates' features. Such data can also successfully address the requirements that universities received from both the Education Ministry and the National Agency for the Evaluation of the University and Research System (ANVUR).

This kind of data has long been an important tool for Italian and foreign firms – both public and privately-owned – to assess potential candidates for recruitment, whether among new graduates or among graduates with work experience. It has also been supporting effective guidance programmes for students, whether at the end of their secondary school, during their university years or upon graduation. Such guidance is particularly needed since almost 3 students out of 4 still come from families in which parents hold no university degree and 16 students out of 100 leave university after their first year¹² – a rate which gets even higher in scientific degree programmes¹³.

The available documentation allows for fundamental assessments and analyses to be carried out by university governing bodies, social partners, teachers and professors providing guidance to students and researchers. This is especially true since the groups of graduates who are considered in the study are largely

12 The percentage of students who did not enroll on their second year was 20% in the first half of the last decade and later decreased. See ANVUR, *Rapporto sullo Stato del Sistema Universitario e della Ricerca*, Rome, p.59.

13 To rein in this problem and the social and economic costs it entails, as well as the disappointment of many young people and their families, ALMALAUREA has been taking targeted actions for some years, involving students who approach the end of their upper secondary studies and their schools. See ALMADIPLOMA (www.almadiploma.it) and AlmaOriëntati (www.almaorientati.it).

representative of the whole population of Italian graduates in its most significant aspects.

In Italy, between 1984 and 2012, the number of 19-year-olds dropped by almost 389 thousand – or 40% of the initial number. Nor is the situation likely to improve, as the number of 19-year-olds will not increase over the next 10 years, despite the significant input from the immigrant population. Over the same period, the number of students achieving an upper secondary-school diploma has gradually increased, bringing the share of 19-year-olds obtaining the title from 40% in 1984 to 75% in 2012.

Enrolments fell by 20% between 2003 – when the all-time high of 338 thousand was recorded – and 2012 – when they dropped to 270 thousand. This decline is the consequence of several combined factors: demographic decline, fall in older-student enrolments (this particularly applies to the numerous new students aged 23-30 and, a few years after the reform, older than 30) and a drop in the number of university students coming from technical secondary schools¹⁴. More factors include the deterioration of graduates' employment conditions, the increasing difficulties faced by many families in bearing the direct and indirect costs of university education, the high percentage of young people of foreign origins, as well as the lack of effective student support policies.

Adding to all these factors, some media campaigns point to the idea that degrees are useless and encourage the young – sometimes covertly, but more and more often explicitly – not to 'waste time' earning a degree if they want to be successful in life. In

¹⁴ On this topic, see the analysis by A. Chiesi and D. Cristofori, *Esperienza universitaria dei diplomati dell'istruzione tecnica e professionale*, within the Congress for the presentation of the 15th Graduates' Profile survey outcomes, 'Scelte, processi, esiti nell'istruzione universitaria', Milan, 29 May 2013.

May 2013, for example, the then mayor of New York Michael Bloomberg encouraged young people not to go to university unless they were brilliant students and train as plumbers instead. In the United States, where, significantly, the rate of graduates is twice as high as the rate of Italian graduates in all segments of the population, young people are currently less attracted by university studies, partly because of the large debts that many students need to incur to pay for their tuition fees.

Such an unfavourable situation might have been further compounded by the false perception that the '3 plus 2' reform has led to a substantial increase in the number of graduates. What has actually surged in recent years, in Italy, is not so much the number of graduates, but the number of degrees awarded¹⁵, since whoever obtains a two-year second-level degree must have previously obtained at least a three-year first-level degree. It has been repeatedly suggested – including over the last 10 years – that this increase might reflect a surplus of graduates – an argument which has been challenged by ALMALAUREA reports again and again.

The low schooling level of the Italian society is reflected in the very low number of graduates in older population segments. In 2011, only 11 out of a hundred 55-64 year-olds held a degree, less than half the rate recorded in OECD countries (24; they were 19 in France, 26 in Germany, 31 in the United Kingdom and 41 in the United States). Italy's ranking hardly improves when we look at 25-34 year-olds – 21% of graduates, against an OECD average of 39%¹⁶.

15 ANVUR, *Rapporto sullo Stato del Sistema Universitario e della Ricerca*, Roma, par. I.1.4.

16 OECD, *Education at a Glance 2013: OECD Indicators*, Paris, OECD, 2013.

With regards to graduates in the 30-34 age bracket, Italy has not caught up with Europe, especially as far as men are concerned – with a 15.9% rate against 25.2% among women, a difference which does not appear in the 45-54 age bracket. Gender differences do matter when it comes to finding an adequate employment. Women are so disadvantaged that they actually need to be more qualified when they approach the labour market. This is true throughout Europe, but particularly so in Italy. The partial upswing observed in graduate shares within younger population cohorts is only moderately reassuring, because what is really beneficial to a country's well-being, in conditions of equally good learning outcomes, is the average educational attainment of its population as a whole, not just that of its youth. The gap between Italy and its current and potential competitors might persist or even get wider, partly due to the ongoing demographic trends and the fact that fewer employment opportunities are being offered to women. This, in turn, would keep affecting the country's dynamism.

Indeed, the improvement recorded among new generations does not hold up in comparative terms, as most of the countries which used to be close to the Italian situation have been advancing much faster over the last few decades. The goal set by the European Commission for 2020 – namely, 40% of graduates in the 30-34 age bracket – is now out of reach for Italy. It is needless and sad to add that Italy, together with Romania, is thus the country with the least ambitious objective, a long way from the European average¹⁷.

An overview of the outcomes achieved by graduates in 2013 does confirm – despite the negative context – an overall promising

¹⁷ Cfr. A. Cammelli, *La favola dei troppi laureati*, in "Scuola Democratica", no. 1, 2013.

situation. In fact, more students have completed their studies within the prescribed time frame, class attendance has improved, students have carried out more traineeships and internships and continue to take advantage of opportunities to study abroad.

Special attention needs to be drawn to the better results that female graduates achieved compared to their male counterparts - other factors being equal¹⁸. This finding is not limited to degree programmes where women have traditionally outnumbered men and obtained higher grades, but rather, it applies to an increasingly wide range of degree subjects¹⁹.

Graduates' features – an overview

The analysis will focus on the features of the human capital produced by the Italian university system in 2013²⁰. Some comparisons will be drawn with pre-reform graduates from 2004²¹, regardless of the degree type and level of studies attended within

18 Cfr. C. Noè, S. Galeazzi, *Genere e scelte formative*, in ALMALAUREA Inter-University Consortium (edited by), *XIII Profilo dei Laureati italiani. Qualità e valutazione del sistema universitario*, Bologna, Il Mulino, 2013 (forthcoming).

19 Women account for 62% of all single-cycle graduates (Medicine and Surgery, Dentistry, Veterinary Medicine, Pharmacy, Architecture, Law, Preservation and Restoration of Cultural Heritage).

20 No distinction is made based on whether the degree course they attended was established under Ministerial Decree 509/1999 or under Ministerial Decree 270/2004.

21 Starting from 2004, significant changes were introduced in the ALMALAUREA survey questionnaire, based on directions provided by the National Committee for the Evaluation of the University and Research System (CNVSU). For many years, understandably, this led to comparability issues. After a transition period which followed the 1999 Reform introduction, to allow for a uniform comparison extended to all aspects under consideration, 2004 was adopted as the benchmark, starting from the 2010 Graduates' Profile Report.

the old or the new system. Such comparisons are inevitably influenced by the enduring negative economic situation Italy is going through, which has certainly affected the expectations and behaviours of students, graduates and their families.

The 2013 graduates' portrait sums up the different performances of three different subgroups – first level, second-level and single-cycle graduates²². For the first time, pre-reform degree programmes will not be considered, as they are now about to disappear and, as mentioned above, they only produce 2% of the total number of graduates. Graduates from the non-reformed 4-year degree programme in Primary Education Sciences, who account for 1.5% of the total number, will not be included in the analysis either. More in-depth considerations of the single cohorts of post-reform graduates will follow.

In universities, too, **women** have long been holding more than half of the sky. In 1991, for the first time in Italy, the number of female university students exceeded that of their male counterparts, and their proportion has further increased since then, hitting 60% of all graduates in 2013.

Among graduates, **young people from socially and culturally advantaged backgrounds are overrepresented**, with no particular geographical differences. Overall, 74% of first-level graduates of 2013 were **the first to graduate in their families of origin**, although this rate drops to 69% for second-level graduates and 54% for single-cycle graduates. The percentage of young people from **less advantaged social backgrounds** was 20% of the total in 2004, increased to 26% in 2013. The pursuit of a

²² In this Report, single-cycle programmes and 2-year programmes which can only be accessed after a first-level degree are described as 'second-level' programmes. The same adjective is used for these programmes' graduates.

broader access to university studies must continue, without neglecting its practical consequences and the impact of the measures which will be needed to mitigate the problems stemmed from a surge in enrolments²³. This is also an important aspect to be taken into account when choosing criteria for the assessment of the university system and the allocation of resources.

As in the past, **geographical mobility for study reasons remains low**. While this is partly attributable to a more widespread presence of universities, it is also probably linked to the need for less well-off families to reduce costs. In 2013, almost half of graduates – 49.0%– obtained their degrees from a university which was located in their province of residence. This particularly applies to first-level and single-cycle graduates (almost 52%), while a bit less to second-level graduates (43%). The lack of mobility may also be a negative indicator for the expansion of opportunities, in terms of growth, degree course choice and cultural development.

Not to be neglected, within Italian universities, is the presence of young **graduates who came from other countries** – over 7.3 thousand in ALMALAUREA universities in 2013, up from 2.2 thousand in 2005. Over two-thirds of graduates with foreign citizenship come from Albania – country of origin for 16% of them – or other European countries. The number of Chinese students has been surging over the last few years, turning them into the second largest foreign cohort (9.0% of the total, up from 2.9% in 2009). One-eighth of graduates with foreign citizenship come from Africa – particularly from Cameroon (4.6%) and the Maghreb²⁴. Foreign

23 P.G. Altbach, *Access Means Inequality*, in 'International Higher Education', no. 61, 2010.

24 It needs to be pointed out that, more and more often, these are young people from immigrant families residing in Italy.

students tend to choose certain degree subject areas – namely languages, medicine and dentistry, chemistry and pharmacology, economics and statistics, engineering and architecture – as well as second-level degree and single-cycle degree programmes. In terms of its ability to attract foreign students, Italy is still lagging well behind other countries²⁵. But some optimism is probably allowed, if considers the impact that language barriers, red tape and the lack of resources – accommodation facilities in particular – still have on universities which make positive efforts on this front.

As is known, **academic performances** depend on many variables which have to do with the students' social and cultural backgrounds (previous school performance, their parents' education level and employment status, the need to work while studying and so on). This report looks at academic performance as the result of a combination of different factors, including enrolment age, prescribed and actual time to graduation, age at graduation and final grades.

In 2004, 11 graduates out of a hundred **enrolled at least two years later** than the standard enrolment age. This rate went up in the following years, due to the increased number of adults attracted

25 In 2011, students with foreign citizenship accounted for 3.7% of the total in the Italian university system. The equivalent rate in the United Kingdom was 16.8%, while it was 11.9% in France and 6.9% within OECD countries as a whole. In France and Italy, these values refer to university students with foreign citizenship, while in most OECD countries they refer to individuals who crossed a national border for study reasons, regardless of their citizenship. See OECD, *Education at a Glance 2013: OECD Indicators*, Paris, OECD, 2013. For a comparative framework of first-level graduates' mobility in 10 European countries, see H. Schomburg and U. Teichler (Eds.), *Employability and Mobility of Bachelor Graduates in Europe. Key Results of Bologna Process*, Sense Publishers, 2011. As for the Italian situation, see A. Cammelli, G. Antonelli, A di Francia, G. Gasperoni, M. Sgarzi, *Mixed Outcomes of the Bologna Process in Italy*, edited by ALMALAUREA, www.almalaurea.it/universita/biblio/pdf/2010/cammelli_antonelli_et_al_2010b.pdf.

by a renovated range of degree programmes, but it then dropped back to 17% among graduates of 2013²⁶.

As far as **age at graduation** is concerned, pre-reform graduates from the class of 2004 earned their degree at average age of 27.8, while the 2013 cohort did so at 26.3. Such a drop is particularly meaningful since, as mentioned above, the access of new population segments to university studies raised the average enrolment age. If, therefore, we were to deduct the enrolment delay, age at graduation would be 26.8 in 2004, while in 2013 it would go down to 23.9 for first-level degrees, 25.2 for second-level degrees and 26.2 for single-cycle degrees.

At the same time, a surge has been recorded in the share of **under-23 graduates** almost nil in 2004 and now up to 18%.

The proportion of students who **graduated within the prescribed time frame** was very low in 2004 (15 graduates out of 100²⁷), but it has now almost trebled, reaching 43% in 2013. Only 13 graduates out 100 obtained their degree 4 or more years behind schedule – an all-time low.

The **delay in degree completion time** – i.e. the extra time students take to graduate – dropped from 65% over the prescribed completion time, as it was in 2004, to 42%.

Final degree grades remain pretty much unchanged in terms of overall average value (102.4 out of 110 in 2013), although they significantly vary in different programmes types – 99.6 for first-

26 In 2013, the population of 30-44 year-olds who possessed a qualification allowing for access to university studies exceeded 5.1 million. On the same front, we need to consider lifelong learning, continuing skill development, dissemination of new knowledge, etc., which involve the almost 2.6 million graduates in the same age bracket. Cf. ISTAT, *Forze di lavoro. Media 2013*, Rome, 2014.

27 When the reform was introduced, in 2001, only 9.5% of graduates gained their title on schedule.

level, 104.0 for single-cycle and 107.5 for second-level graduates – and, especially, in different subject areas and universities.

The **variability in academic grades** results from a combination of several more or less transparent factors, including: standards applied for examination grades, criteria applied for final degree grades and any additional acknowledgements, assessment criteria, complexity of examinations, etc. The significant academic grade variability justifies some doubts about the idea that degree grades should play a role in the admission to open competitions or be seen as reliable recruitment selection criteria. Such high variability in examination and degree grades, both between different programmes and different universities – for the same field of study – will necessarily require further consideration²⁸.

With regards to **student support services**, it is important to note that the Italian legislative decree no.68 of 2012 ('Revision of the Basic Legislation relating to the Right to Education and the Enhancement of Legally Recognized University Colleges') significantly renovated the relevant legislative framework and set up a National Observatory on the Right to Higher Education, which is to monitor the implementation of the right to education. Among the services provided by the institute for the right to education, those which were used by most 2013 graduates, at least once, are meals/canteen services (55%), library loans (39%) and scholarships (22%, 27% in the southern regions of Italy). Students from

28 G. Gasperoni and G.P. Mignoli, *Votazioni agli esami e pratica della valutazione nei percorsi di studio universitari*, in *XI Profilo dei Laureati italiani. Valutazione dei percorsi formativi nell'università a dieci anni dalla Dichiarazione di Bologna*, edited by ALMALAUREA Inter-University Consortium, Bologna, Il Mulino, 2010, pp. 217-241; G.P. Mignoli, *Ripensare le votazioni*, within the Conference for the presentation of the 14th ALMALAUREA Graduates' Profile Survey, 'Laurearsi in tempi di crisi. Come valorizzare gli studi universitari', Naples, 22 May 2012.

working-class families tend to benefit the most from accommodation facilities and scholarships, but they take less advantage of international mobility contributions. Graduates who benefited from accommodation facilities during their studies are 4% of the total number, with no significant geographical differences²⁹.

Not only does the analysis need to be broken down by degree level, but it also requires another important parameter to be taken into account, in order to fully appreciate the outcomes. Indeed, three different graduates' profiles should be considered, depending on **whether they worked or not** during their studies, more or less regularly. This partition allows to assess the variety of students' educational needs and to better understand the inevitable performance differences, but it also helps analyse the scope and causes of the poor academic performances which emerged even among graduates who never worked during their studies.

The diversity of academic performances can be effectively recorded by the **time to graduation** and **degree grades**. On average, working-students³⁰ take 94% longer than the prescribed time (ranging from 21% in the medical and healthcare profession grouping to 145% in the law grouping) while that delay goes down to 23% among graduates who did not work during their studies³¹. The average degree grade among graduates who did not work

29 Also see P. Mondin and M. Nardoni, *Servizi per il diritto allo studio e performance dei laureati*, within the Conference for the presentation of the 15th ALMALAUREA Graduates' Profile Survey, 'Scelte, processi, esiti nell'istruzione universitaria', Milan, 29 May 2013.

30 For the purpose of the ALMALAUREA Survey, working students are graduates who reported having had a continued full-time job throughout at least half of their studies, both during term and non-term time.

31 The association between working during one's studies and delay to graduation is fully manifest in all three degree programme types (first-level, second-level and single-cycle degree programmes).

during their studies is 103.9 out of 110, while it is 100.6 among worker-students (ranging from 95.0 out of 110 in the law grouping to 106.2 in the letters grouping).

An analysis of **study conditions** shows that **class attendance** rates have increased compared to pre-reform levels, with 68% of graduates from the class of 2013 having attended more than a quarter of prescribed classes (63% of single-cycle graduates, 68% of first-level graduates and 72% of second-level graduates). The same amount of classes was attended by only 55% of graduates from the class of 2004.

After having previously increased, the share of graduates who had some **work experience** during their studies has recently dropped. This is likely to be due both to the economic crisis and to the end of a trend which saw adults returning to university, after the introduction of the '3 plus 2' reform. In 2013, 8 graduates out of 100 **worked** regularly during their studies. These are mainly concentrated in the teaching (18%) or political and social fields of study (17%). This is certainly just the visible tip of a much deeper need for education, which would become fully manifest if universities were able to grasp its cultural and political importance.

On the other hand, the option of enrolling as non-full-time students³² – as envisaged by the reform – has not been very successful so far. Conversely, the proportion of graduates who never worked during their studies increased from 22% in 2004 to 31% in 2013.

32 University regulations, in compliance with the statutes, also regulate common aspects of the organization of teaching activities, particularly with regards to [...] the possible introduction of specific organization plans for students who do not take full-time courses'. Art 11, par.7, letter h of ministerial decree no. 509/1999.

Traineeships and internships accredited for the purposes of programme completion are another strategic goal which saw a step forward in the collaboration between universities and the professional world (public and private sector). More in-depth analyses on the impact of traineeships show that, all other things being equal, traineeships boost the likelihood of finding a job by as much as 14%³³. The proportion of graduates who carried out these important work experiences has significantly increased, up to 57 graduates out of a hundred in 2013, against 20 among pre-reform graduates in 2004. Such progress is just as positive when the quality of the experience is considered.

Based on the feedback that new graduates of all levels provided over time, recent graduates are now more satisfied with their **study experience** in its different aspects³⁴. In 2013, 20 graduates out of a hundred stated that they were *definitely satisfied* with the relationship they had with the **academic staff**. An even higher level of satisfaction was recorded with regards to **classrooms**, which were considered *always or almost always adequate* by 25% of graduates - 30% of graduates of the 2013 class thought that **library** services (loans/consultation, opening hours, etc.) deserved a *definitely positive* feedback, and 35% of them stated that **IT workstation facilities** were *available in adequate number*.

33 Cf. ALMALAUREA, *XVI Rapporto sulla condizione occupazionale dei laureati*, Bologna, 2013, p. 31.

www.almalaura.it/sites/almalaura.it/files/docs/universita/occupazione/occupazione12/almalaura_indagine2013.pdf.

34 On this, see the feedback given by 12 generations of graduates from the University of Bologna (134 thousand graduates). See ALMALAUREA Inter-University Consortium - University of Bologna Statistical Observatory, *L'Università, la sua capacità formativa e le sue infrastrutture nella valutazione di 12 generazioni di laureati dell'Alma Mater*, 2008. www.almalaura.it/universita/altro/12generazioni2008/.

Asked **to evaluate the experience** they were about to conclude – partly through the question *Would you enroll again on the same programme?* – over two thirds of the whole graduate pool (67%) answered positively. This proportion does not significantly change before and after the reform and is higher among second-level graduates. An even more positive feedback was recorded with regards to the *overall university experience*, with almost 86% of positive opinions. Overall, all satisfaction indicators related to specific aspects of the degree programme were higher among second-level and single-cycle graduates.

Based on a comparison with the 2004 Graduates' Profile, graduates from the 2013 class spent less time in preparing their **dissertation/ final examination** (in 2004, the average time for pre-reform graduates was 8.4 months, while it dropped to 5.5 months in 2013). This applies both to first-level graduates – as expected, since their final assignment may consist of writing a paper or a traineeship report, which takes an average of 4.0 months – and second-level and single-cycle graduates, despite the fact that they are required to write a proper dissertation, which takes an average of 7.3 months in the former cohort and 7.8 in the second. New graduates can boast much more advanced **foreign language and IT skills** compared to their elder peers who graduated before the reform, probably owing not only to formal university class teachings, but also to the diversity of education providers operating on this front as well as to the greater sensitivity towards the acquisition of these skills. Between 2004 and 2013, the proportion of graduates who have an 'at least good' knowledge of English and of multimedia tools, spreadsheets, operative systems and word processors soared by over 10 percentage points.

The proportion of Italian graduates who participated in a **study experience abroad** had shrunk in the few years following the reform, but it then gradually recovered and reached 12% in 2013. The majority of these experiences were related to EU programmes (mainly, Erasmus) or other programmes accredited by universities (Overseas and others), or else were carried out on a personal initiative. This can be seen as the result of two opposite trends. On the one hand, first-level graduates acquire less study experiences abroad (9.9%, partly owing to shorter degree programmes) compared to pre-reform graduates. On the other hand, almost 18% of second-level graduates go abroad – under Erasmus or other programmes accredited for the purposes of their degree programmes, including during their undergraduate years – a share which comes rather close to the European goal set for 2020. The number of graduates who take exams abroad which are then validated for their degree programme has slightly increased, to involve 6.9% of all graduates. A similar increase was recorded with regards to the number of students who carry out part of their final thesis work abroad, although they are not numerous yet – 4.8% of all graduates, with a 9.0% peak among second-level graduates. International mobility – an extremely topical and interesting issue – was the focus of a targeted in-depth analysis, which was carried out through a specific online survey and explored a set of features of these experiences and the relevant feedbacks – within a comparative perspective³⁵.

35 It must be noted that 2.8% of graduates from the 2013 class gained some experience abroad under personal initiative, but the length and contents of these experiences are sometimes difficult to assess, since they were carried out in so many different ways. One of the goals of the targeted analysis was studying this aspect more in details. The analysis found that most students who left under personal initiative or whose experience was not recognized by the university went abroad to attend

In 2004, before the reform, 55 graduates out of a hundred intended or needed to pursue some kind of **post-graduate training** – after a 4, 5 or 6 year-long degree programme – mainly through post-graduate specialization schools (medicine and surgery), traineeships or training practice (law, psychology, among other fields). This proportion went up in 2013, reaching over three-quarters of first-level graduates (76%). The vast majority of them (59%) intend to enroll in a second-level degree programme. Particular attention should be called to the high percentage of second-level and single-cycle graduates (66% and 38%, respectively) who plan to pursue further education after their whole university cycle – 12% of them intend to start a PhD³⁶. In both cases, the question is: does this intention to pursue further studies – both among first and second-level graduates – reflect a true interest in attaining further education, or is it to be attributed to the lack of adequate opportunities on the labour market? The latter seems more likely, especially since the intention to keep studying is particularly strong among graduates in the southern regions of Italy (81% of first-level graduates, 51% of second-level and single-cycle graduates).

The available data partly contradicts the predominant idea that the vast majority of first-level graduates continue their studies on a second-level degree programme, potentially because first-level degrees are perceived as less valuable. Moreover, many first or

language courses. The two reasons why students engaged in a personal initiative rather than choosing an accredited programme were that they thought the chance could not be missed or the fact that their university offered few international study opportunities.

³⁶ Cf. E. Bonafé, *Il terzo livello: profilo dei dottori di ricerca*, paper delivered at the Conference for the presentation of the 16th Graduates' Profile Survey outcomes, 'Opportunità e sfide dell'istruzione universitaria in Italia', Pollenza-Bra, 29 May 2014.

second-level graduates who continue their education take up professionally-oriented forms of training, aimed at facilitating access into the labour market, such as first- or second-level master's degree programmes.

A matter of concern – which deserves the attention of those in charge of providing guidance to students – is the proportion of students whose choices in terms of education are neither motivated by cultural factors nor by employment opportunities, which is stable at 15% and peaks to 18% among second-level graduates.

While the traditional study or work-related South-North **mobility** continues to characterize the Italian system, a new form of mobility **towards foreign countries** is becoming an increasingly significant trend, attracting more and more recent graduates (who consider studying or seeking employment abroad). Struggling to find an adequate employment in their country, Italian post-reform graduates are more likely than their elder peers – graduates from the 2004 class – to be willing to cross the Alps and even the ocean: 48% of graduates are willing to work abroad (a 14 percentage-point increase compared to 2004), and this proportion exceeds 50% in some fields of study, namely languages, engineering, architecture and geo-biology.

In 2013, as also in the past, the main aspect recent graduates look at when seeking employment is the opportunity to **acquire professional skills** (as stated by 76% of graduates). More and more graduates, moreover, aim at finding a stable and secure job (first-level graduates in particular) or hope to find a position where they can enjoy job autonomy and career-growth opportunities. Although half of graduates do not express any preference with regards to working within the private or the public sector, in 2013 the proportion of graduates who seek employment in the public

sector is higher than it was in 2004, up to 1 of 5 graduates. This is probably because contracts are perceived as more stable in that sector, despite the limited opportunities of finding a permanent position. Proportionally, fewer students stated a preference for the private sector (less than 1 graduate out of 5), while the share of graduates who aim at being self-employed is stable, although low – 1 graduate out of 10³⁷.

Mention has already been made of the willingness to move abroad in search for a job. Contrary to what is commonly believed, many new graduates (30%) are willing to travel on frequent business trips and as many as 47% of all graduates are even willing to move their permanent address abroad for work. Only 3% of graduates state they are not willing to travel. Work flexibility is more widely accepted by graduates, as reflected by the increased willingness to accept part-time jobs and short-term contracts.

In short, the available documentation confirms an extremely diverse Profile for Italian graduates involved in the ALMALAUREA survey. This is an important point from a methodological perspective, which should be taken into account both when discussing performance issues within the Italian university system – which is often considered as something uniform – and when assessing single universities.

First-level graduates

³⁷ For a detailed analysis of self-employed graduates and on the role of entrepreneurship, see the outcomes of the 16th ALMALAUREA Survey on graduates' employment conditions and, within the relevant Conference material, the paper 'Imprenditorialità e innovazione: il ruolo dei laureati', available online at www.almalaurea.it/universita/occupazione.

First-level graduates come from a wider range of **school backgrounds**, compared to second-level and single-cycle graduates. Although half of first-level graduates (52%) earned their secondary-school certificate from a humanities or sciences lyceum, this share is even higher within the other two cohorts. 27% of first-level graduates attended technical or vocational secondary schools.

Unsurprisingly, a strong connection is found between the kind of upper secondary school students attend and the degree subject they choose. While first-level graduates who attended a sciences lyceum are 39% of the total number, they account for the majority within the engineering (63%), geo-biology (58%), science (58%) and chemistry (54%) degree groupings. Conversely, former sciences-lyceum students account for less than one graduate out of four in the teaching degree grouping (17%), as also in the language (22%) and law (24%) groupings. The association between school background and university degree course is also witnessed by the diverse presence of graduates with a technical secondary-school diploma – who account for 24% of the total – in different subject areas. Indeed, they account for a larger proportion in the law grouping (40%), as well as in the economics and statistics (39%) and agriculture (35%) groupings, whereas their number drops within the letters (10%), psychology (11%) and geo-biology (13%) groupings.

Traditionally, it was thought that graduates came from humanities lyceums, but this is actually the case for 'only' 13% of first-level graduates – less than half the share reached among single-cycle graduates (as many as 29%). Among first-level graduates, former humanities-lyceum students are more likely to be found within the letters (33%) and psychology (22%) degree groupings, and much less within the engineering (6%), science

(7%) and agriculture (7%) groupings. Overall, the relation between school background and choice of degree subject seems to remain constant over time.

The average final grades that first-level graduates achieved at the end of their upper secondary-school tend to vary quite sensitively in different degree groupings, for the most part consistently with the school types that the students of each grouping mostly attended. In 2013, the final secondary-school leaving grade was 80.2 out of 100 among first-level graduates as a whole. It was, however, significantly lower within the physical education degree grouping (73.4) as well as in the healthcare professions (77.1), political and social sciences (77.2) and law (77.2) groupings, while it peaked in others, such as the science (86.1) and engineering (86.6) groupings – both characterized by a high number of sciences-lyceum diploma holders.

Looking at first-level graduates' **social and family backgrounds**, a significant number of them come from non-privileged social backgrounds. A limited proportion of graduates (24%) come from families in which at least one parent holds a degree, and an equal percentage of graduates were born from parents who do not hold any upper secondary school leaving certificate. 28% of first-level graduates come from working-class families. Both these indicators point to less advantaged social backgrounds among first-level graduates, compared to second-level and single-cycle graduates.

69% of first-level graduates acquired some **work experience during their studies** – but only in 21% of cases was such experience consistent with their field of study – while 7% of them were working students. Graduates who acquired work experiences are particularly numerous in the physical education degree grouping

(86%) as well as in the law (80%) and political and social sciences (78%) grouping. Conversely, their share is relatively lower in the medical-healthcare professions, geo-biology, engineering, science and chemistry and pharmacology groupings (55-62%). The latter groups are also characterized by very few working students (3-4%), who are more numerous in the law grouping (21%) as well as in the teaching (15%) and political and social sciences (15%) groupings.

It is worth noting the two degree subject groupings in which work experiences were particularly consistent with the field of study – namely, the physical education and the teaching groupings, where, respectively, 62% and 49% of graduates who worked reported that their experience was highly consistent with the main subjects of their degree course. This is indeed an important aspect, which mitigates the potentially negative impact of students' work commitments on their academic performances.

Among the over 132 thousand first-level graduates from the class of 2013, the average **age at graduation** is 25.5. If we were to deduct older students' enrolment delay, age at graduation **would go down to 23.9** (against 26.8, the age recorded among pre-reform graduates in 2004).

Clearly, this fall in the average age is partly due to shorter degree courses, but also to graduates taking less time to complete their studies. The gap between age at graduation before and after deducting the delay is partly attributable to the interesting presence of a share of graduates who enrolled later than the standard age. Specifically, 17% of first-level graduates enrolled at least 2 years later than the standard age of 19.

In terms of **time to graduation**, the proportion of students who graduate on time remains quite high among first-level graduates (41.5%, which is over four times the 9.5% rate recorded

among all graduates when the reform entered into force). Within the health professions degree grouping, as many as 67% of graduates achieved their degrees on schedule. At the other end of the spectrum, only 24% of law students graduated on time, with 1 out of 3 gaining their degrees at least 5 years later than scheduled.

Class attendance rates hold up above pre-reform levels, with 68 graduates out of a hundred stating that they regularly attended more than 75% of prescribed classes. Here, too, differences between degree subject groupings are quite sharp. Attendance rates are particularly high – with over 80% of graduates attending three quarters of classes – within the health professions grouping (94%) as well as the chemistry and pharmacology and the engineering groupings. Conversely, less classes were attended by graduates from the law grouping (38%) and the teaching (47%) and psychology (50%) groupings.

While it had dropped in the few years that followed the reform introduction, the number of **study experiences abroad** is picking up. In the pre-reform class of 2004, 8.4% of graduates had studied abroad under the Erasmus programme or other European Union programmes. In 2013, the same opportunities were taken by 5.5% of first-level graduates. Overall, 7% of graduates gained some study experience abroad – including under non-EU programmes – which was accredited for the purposes of their degree course. Their percentage peaks within the language degree grouping (32%) and reaches a relatively high value in the political and social sciences grouping (9%). Study experiences abroad involved less than 3% of graduates within the teaching, law, medical/healthcare professions, chemistry and pharmacology and physical education degree groupings. If students who went abroad to study under personal

initiative are added, experiences abroad come to involve 10% of first-level graduates.

Traineeships and internships accredited for the purposes of degree completion involve 61% of first-level graduates, which testifies to the strong commitment taken by universities and to their collaboration with the professional world. Two thirds of all traineeships were carried out outside universities. Traineeships involve more than 85% of graduates within the teaching, health professions and agriculture degree groupings, while they only involve a minority of graduates in the law, engineering, economics and statistics, letters and science degree groupings. It is important to point out that traineeships and internships are associated with a higher employment rate. As previously mentioned, the latest graduates' employment conditions survey found that, all other things being equal, graduates who acquired this kind of experience during their studies are 14% more likely to find a job than their peers who did not³⁸.

Graduates' **satisfaction with their university experience** remains stable on high levels. Out of a hundred graduates, 31 reported to be *definitely satisfied* with their degree course, and 54 more are still (although less fully) satisfied. The most *definitely* satisfied graduates can be found in the law, agriculture and teaching groupings (38%), while the least satisfied come from the architecture, language and physical education groupings (20-25%). 19% of first-level graduates stated that they were *definitely satisfied* with their relationship with the academic staff, and another 65% were quite satisfied. In this respect, the highest satisfaction levels emerge from the medical-health professions, agriculture, law

38 Cf. ALMALAUREA, *XVI Rapporto sulla condizione occupazionale dei laureati*, 2013.

and chemistry and pharmacology groups, while the lowest levels are recorded among architecture and engineering graduates. A majority of positive feedbacks was given with regards to relationships with other students (93%), classrooms (67%), IT workstation facilities (78%), libraries (77%) and study workload (87%).

If they had the chance to go back in time, 65 graduates out of a hundred would be willing to **repeat the same study experience**, taking the same degree course in the same university. 11 more would choose a different degree course but within the same university, while 13 of them would do the opposite – same course, different university. Graduates who would change both course and university are 8% of the total, while only 3% would not enroll at all. The proportion of graduates who would repeat the same experience is 75% within the science degree grouping, 70% among engineers and 69% in both the agriculture and the economics and statistics degree groupings. Those who are least satisfied and would not repeat the same choice are languages (50%) and architecture (56%) graduates.

As in the past, a vast majority of recent first-level graduates – 76% – **intend to pursue further studies**. This intention appears particularly strong within the psychology (93%), geo-biology sciences (88%) and engineering (87%) groupings. Conversely, a relatively high number of law (45%), teaching (40%), health professions (35%) and agriculture (34%) graduates stated that they had reached the end of their studies³⁹.

39 Cf. C. Filippucci e F. Figari, *Corsi di laurea triennali a vocazione professionalizzante*, within the Conference for the presentation of the 15th Graduates' Profile Survey outcomes, 'Scelte, processi, esiti nell'istruzione universitaria', Milan, 29 May 2013; S. Galeazzi, *Prosecuzione degli studi dopo la laurea di primo livello*, within the Conference for the presentation of the 14th Graduates' Profile Survey

Among first-level graduates who intend to continue their studies, not everyone is planning to start a 2-year **second-level degree course** – although this is the most popular plan, chosen by 59 graduates out of a hundred. Aiming at this second degree are psychology (87%), engineering (83%) and geo-biology sciences (82%) graduates in particular. On the other hand, 8% of recent graduates plan to take a master's degree course, especially in the health professions grouping (27%) and – in lower numbers – in political and social subjects (9%) or languages (8%).

Single-cycle graduates

Single-cycle and first-level degree programmes are the only programmes which can be accessed immediately after upper secondary-school completion. Single-cycle programmes last at least 5 years and can be found in few degree subject areas – namely, pharmacology, architecture, medicine and dentistry, veterinary medicine, law, preservation of cultural heritage and, more recently, primary education sciences⁴⁰. In 2013, within the ALMALAUREA university system, single-cycle graduates increased to over 24 thousand, thus accounting for 10.5% of all graduates. In recent years, following some changes introduced by the Italian Ministerial Decree 270/2004, an increasingly large share of this number is taken by law graduates. In 2013, over 42% of single-cycle degrees

outcomes, 'Laurearsi in tempi di crisi. Come valorizzare gli studi universitari', Naples, 22 May 2012.

⁴⁰ There were only 45 graduates from the single-cycle degree course in Preservation of cultural heritage in 2013, and still none from the Primary Education Sciences programme, which is why these two courses will not be considered in this Report.

were obtained in law, 25% in medicine and dentistry, 16% in the pharmacology grouping, 13% in architecture and 3% in veterinary medicine.

The single-cycle graduates' cohort is characterized by a clear majority of female graduates – 62% of the total number, more than the share recorded among first-level or second-level graduates – in all subject areas (ranging from 71% in the pharmacology grouping to 57% in the medical grouping).

Compared to other graduates' cohorts, single-cycle graduates tend to enroll at about the standard age – 92% of them enroll on time or one year later at the most – despite the fact that access to single-cycle programmes is restricted and many candidates retake admission tests multiple times. In particular, within the medical group, 22% of graduates reported they had gained previous incomplete university experiences, which suggests that they had enrolled in a different degree course while waiting to resit the admission test.

Single-cycle graduates tend to come from relatively advantaged **social backgrounds**. In 45% of cases, at least one of their parents holds a university degree – and actually, in 21% of cases both parents do – compared to 24% of cases among first-level graduates. 35% of single-cycle graduates come from the middle class and only 17% of them come from working-class families, against 20% and 28% respectively among first-level graduates. Affluent social backgrounds characterize the medical degree grouping in particular.

In terms of **school backgrounds**, levels tend to be relatively high. In the single-cycle cohort, 77% of graduates come from humanities (29%) or sciences (48%) lyceums, against 52% of first-level graduates – 13% and 39% from humanities and sciences

lyceums respectively. Partly due to the selection involved in restricted access courses, this cohort is characterized by relatively high secondary-school leaving grades – an average of 86.4 out of 100, against 80.2 among first-level graduates.

The proportion of recent single-cycle graduates with **foreign citizenship** is 3.2%, not far from the 3.1% share recorded among first-level graduates. However, foreign graduates are relatively numerous in the medical (4.6%) and pharmacology groupings (6.9%), while they are pretty rare in the law grouping (1.2%).

Given that single-cycle degree programmes are usually quite demanding and that they attract young people from more well-off families, it is not surprising that fewer graduates **worked during their studies** – 58% of the total number, against 69% of first-level graduates. Out of a hundred recent single-cycle graduates, only 2.7 were working students – almost one third of the share recorded among first-level graduates.

Overall, single-cycle graduates' **class attendance rates** are not higher than first-level graduates'. However, such rates are strongly affected by the relatively low attendance which characterizes the single-cycle law grouping – where only 37% of graduates attended at least three quarters of prescribed classes, against 78%-87% of graduates in other degree subject areas.

Academic performances appear to be very good in this cohort, based on final graduation grades (104 out of 110 on average, against an average of 100 among first-level graduates). Average final grades range from 100-101 in the pharmacology and law degree groupings to 109.5 among medicine and dentistry graduates⁴¹. Age at graduation is 26.8, and 26.2 after enrolment

41 Not to be forgotten is that, for the purposes of calculating average degree grades, ALMALAUREA considers 110 cum laude equal to 113.

delay deduction. Only 34% of single-cycle graduates obtain their degree within the prescribed time frame – although this rate goes up to 47% within the medical group – but the majority graduate less than a year after scheduled, and almost 3 out of 4 earn their degree within 2 years from the scheduled deadline.

The **assessment of university experience** reveals good satisfaction levels, as 67% of recent single-cycle graduates would choose the same course and university again. 18% of them would choose the same course but within a different university, while only 13% of first-level graduates would do this. The reason behind this higher rate might be that, due to admission restriction policies applied to single-cycle programmes, it is often the admission test which determines which university a student will attend. Yet, single-cycle graduates do *not* appear to be more prone to study-related mobility upon enrolment, compared to first-level graduates. Also compared to first-level graduates, single-cycle degree holders are less satisfied with the workload – although they still provide a widely positive feedback (78% of them are satisfied, against 87% of first-level graduates). The lowest rate of satisfied students was recorded among veterinary medicine graduates (65%). Another weak point is the poor feedback given by recent architecture graduates with regards to the suitability of classrooms – only 37% of them gave a positive feedback.

Two-thirds of single-cycle graduates stated that they intended to **pursue further studies**, against 76% of first-level graduates. This intention varies sensitively in different subject areas – it is stronger in the medical group (93%, 79 of whom intending to attend a post-graduate specialization school) and weaker among architects (43%, half of whom were considering a master's degree course or a PhD) and pharmacology graduates (45%, 13 of whom

were considering a PhD, 9 a master's degree course and 9 more a post-graduate specialization school). A relatively high percentage of law graduates intended to start a period of training practice (26%).

Second-level graduates

More than half of second-level graduates – who completed a 2-year course which they could access after achieving *at least* a 3-year degree – belong to four degree groupings, namely the economic and statistics (18%), engineering (17%), political and social (12.5%) and letters (11%) groupings. No other degree grouping was attended by more than 10% of graduates.

Social and family backgrounds are similar to those of first-level graduates, although the balance is slightly tipped, with a somewhat higher rate of graduates whose parents hold a degree and/or from the middle class.

Overall, second-level and first-level graduates had similar **school experiences**, as they mostly come either from humanities or sciences lyceums or from technical schools. However, second-level graduates can usually boast better school results, as witnessed by their average secondary school-leaving grade – 85 out of 100 on average, against 80 among first-level graduates. This suggests that it is the best students who continue their studies after their first degree.

Moreover, second-level graduates are more inclined to **move to a different geographic area** to study, as 32% of them gained this title within a province other than – and not adjacent to – the one where they completed their secondary education (against 22% of first-level graduates and 25% of single-cycle graduates).

Further proof of the quality and partial (self-) selection of these graduates is their particular likelihood of **graduating on time**. More than half of them (52%) graduated on time, or, in 8 cases out of 10, within a year after the deadline – although obviously, these courses are shorter, which contributes to this outcome. The average **age at graduation** is 27.8, with variations in different degree groupings – while the age is 34.4 in the health profession grouping, 31.3 in the teaching and 30.9 in the law grouping, it goes down to 26.1 in the chemistry and pharmacology grouping and 26.7 in the engineering and economics and statistics groupings. When older students' enrolment delay is deducted, age at graduation goes down to 25.2 among second-level graduates, which is fairly lower than the age of pre-reform graduates from the 2004 class – namely, 26.8. Contributing to the actual age at graduation – before deducting the delay – is the significant number of graduates who started their second-level degree course at an older-than-standard age⁴², since as many as 42% of second-level graduates enrolled with a delay of at least 2 years.

Among second-level graduates, the average **final grade** is very high (107.5 out of 110), especially compared to other graduates' cohorts. Such high grades suggest that the university system tends not to highlight the different levels of preparation and competence existing among second-level graduates. Only a few degree groupings recorded average grades below 107 – namely, the law (100), economics and statistics (106) and engineering (106) groupings.

42 Standard enrolment age for second-level degree programmes is considered to be 22, which is respected if both pre-university and first-level studies were completed on time.

Looking at second-level graduates' experiences, **class attendance rates** are found to be particularly high, as 72% of graduates state they regularly attended more than three quarters of prescribed classes. These rates, however, do vary in different subject areas, ranging from 26% of graduates in the law grouping to 89% in the architecture grouping.

Traineeship experiences are fairly frequent, involving 56% of second-level graduates. Moreover, 15% of graduates carried out some traineeship during their first-level degree, which takes the overall rate of second-level degree holders who gained this kind of experience to 71%.

Graduates who took the opportunity to study abroad under programmes which were accredited for the purposes of their second-level degree course account for 13% of the total number (15% when adding those who went on a personal initiative). Moreover, an additional 5% of graduates took part in EU study abroad programmes during their first-level degree programmes. Not only are experiences abroad during second-level university studies particularly frequent within the foreign languages grouping (33%) but they are also numerous in the engineering (21%), architecture (16%), sciences (16%) and political and social (16%) degree groupings.

Compared to other graduates' cohorts, second-level graduates gained more **work experiences** during their studies (72%), with a considerable rate of working students (10%). Such experiences were more frequent among health professions (57%) and teaching (27%) graduates.

Out of a hundred second-level graduates, 37 are *definitely satisfied* with their degree course, while 50 more still expressed a positive feedback. The **overall levels of satisfaction with the**

university experience tend to be higher than they are among other graduates. However, second-level graduates seem to be more satisfied than the others with their relationship with the academic staff and the suitability of classrooms. Therefore, it might be partly because of these aspects that a high percentage of graduates would choose the same course and the same university again – 72%, higher than among first-level and single-cycle graduates.

Second-level graduates who intend to **pursue further studies** are relatively few, accounting for 38% of the total cohort. In other words, the share of those who wish to attain more qualifications is half the one recorded among first-level and single-cycle graduates. With regards to the type of further qualifications, most graduates look at PhDs (14%) and master's degree programmes (9%). Most of those who are interested belong to the psychology grouping (75%) as well as the health professions (60%), geo-biology (58%), sciences (51%) and letters (51%) groupings.

Assessing higher education – a matter of methods

The plan to assess the university system and use the outcomes to strengthen a merit-based resource allocation system is indeed a step forward. Its success depends, on the one hand, on the access to a wide amount of up-to-date and reliable information. On the other, it requires that the implemented methods suitable for the Italian university context.

Not only does ALMALAUREA data, which was gathered over almost 20 years of activities, contribute to provide an information framework on about 80% of Italian graduates, but it also suggests methodological guide-lines to be followed when performing an

assessment and implementing merit-based mechanisms. This is particularly important in the light of recent trends in the assessment of the education system performance in Italy, which tends to mostly look at output measures: examination results, success rates, dropout rates, and so on.

But doing so means underestimating two fundamental issues. On the one hand, students are both the fundamental input and output of higher education processes. On the other hand, contextual factors cannot be neglected, as they influence both education processes and employment opportunities.

With regards to the quality of students who access tertiary education – which is obviously most affected by the quality of previous education – any approach which does not take it into account will necessarily lead to distortions. Clearly, the more diverse school backgrounds are and the more limited geographic mobility is, the more significant these distortions become. As mentioned before, ALMALAUREA data testify to the diversity of graduates' features upon enrolment and shows how limited their study-related mobility is.

First of all, neglecting these aspects might lead to rewarding universities which enjoy more favourable conditions, compared to others located in less advantaged contexts, their educational ability being equal. Secondly, without effective tools to support the right to education and create equal access opportunities – including scholarships and an adequate housing policy – the education system could become increasingly polarized. The brunt would be borne by students with the least mobility potential and the least advantaged social backgrounds, regardless of their talent, as well as by schools

and universities located in less advantaged contexts, regardless of their staff's merit or lack of it⁴³.

Yet, assessing universities *on equal terms* clearly requires that graduates' features and performances be gathered and analysed across the university system and throughout their university career – until their access to the job market – as is currently being done for graduates from ALMALAUREA member universities⁴⁴.

This strengthened information framework not only contributes to ANVUR's assessments; rather, it can also be advantageous for a range of activities, including guidance programmes, job placement, internal monitoring, assessment and self-assessment of university programmes. In addition, it can improve the information framework that families and businesses need to make their choices and set their recruitment policies⁴⁵.

43 Empirical evidence of the reality of these risks, in a country with high student mobility such as the US, is provided by J. Bound, M.F. Lovenheim and S. Turner (*Why Have College Completion Rates Declined? An Analysis of Changing Student Preparation and Collegiate Resources*, in 'American Economic Journal: Applied Economics', vol. 2, no. 3, 2010, pp. 129-157), who showed how the extension of the weakest population segments' time-to-graduation is largely attributable to the reduction of resources available for public education institutions in that country.

44 The growing interest in the model that ALMALAUREA first introduced in 1994 has led the European Union to support three projects for the 2013-2015 period – in Armenia, Morocco and Tunisia, Serbia, Bosnia, Croatia and Montenegro. For further details on these projects, see the 16th ALMALAUREA Survey on Graduate's Employment Conditions, available online at www.almalaurea.it/universita/occupazione.

45 As was pointed out by the ALMALAUREA director during the audition at the 11th Committee of the Italian Chamber of Deputies (Public and private employment, *Indagine conoscitiva sul mercato del lavoro tra dinamiche di accesso e fattori di sviluppo* - Survey on the Labour Market, its Access Mechanisms and Development Factors), on 22 June 2011.

Some final considerations

The analysis provided in this 16th Report shows how the overall outcomes from previous years have consolidated – confirming improvement compared to pre-reform outcomes – and how graduates’ features remain very diverse. In other words, there is no single graduates’ profile, but rather, *a variety of profiles*. Differences are associated with a number of factors, which include: family background, area of origin, secondary school background, degree subject area, range of degree programmes available, territorial features related to the dynamism of the local job market.

All this considered, analysis needs to go beyond aggregated data and take into account the extreme variability which characterizes all aspects under consideration. It must also distinguish between programmes which have led to positive results and programmes which have not and take into account the students’ different starting points in distinct university contexts, in order to appreciate their added value.

No future scenario can neglect recent enrolment trends, with a 20% drop between 2003 and 2012. Such a decline is the consequence of several combined factors, which include: demographic decline and reduction in older students enrolments; reduction in the number of secondary-school leavers who go to university; weakened interest in university studies among 19-year-olds – which might have been compounded by some media campaigns maintaining that university education is useless; increasing difficulties faced by many families in bearing the direct and indirect costs of university education without adequate student support policies; growing incidence, among youth, of first and second-generation immigrants, who tend not to pursue higher

education qualifications; the unfavourable economic situation; 'severe cuts to incentives for working students', as denounced by ANVUR⁴⁶. This situation is not likely to improve, considering how the young Italian population is evolving and in view of the country's economic prospects. Between now and 2020, the number of 19-year-olds will not increase, despite the significant input from the immigrant population.

The reported improvements in terms of age at graduation and time to graduation – historically, two weak spots of the whole Italian university system – are becoming stable. Indeed, if enrolment delay is deducted, age at graduation drops from 26.8 (in 2004) to 23.9 among first-level graduates, 25.2 among second-level graduates and 26.2 for single-cycle graduates. The proportion of students who graduate on time has strongly improved, jumping from 15% to 43% between 2004 and 2013 – and up to 52% among second-level graduates.

Compared to pre-reform graduates from the class of 2004, class attendance rates are significantly improving. The knowledge of English has significantly improved, with over seven graduates out of ten stating their knowledge is at least 'good'. The growing and positive cooperation between universities and the business and professional world is reflected by traineeship and internship experiences, which are mainly carried out outside the university environment. While these experiences were very limited among pre-reform graduates, they now involve a high percentage of young people, who also tend to express positive feedbacks on the quality of these experiences. Out of 100 recent graduates, 57 carried out a traineeship during their studies, which testifies to the cooperation

⁴⁶ ANVUR, *Rapporto sullo Stato del Sistema Universitario e della Ricerca*, Rome, pp. 17-18.

between the most attentive and far-sighted segments of universities, businesses and the professional world.

While study experiences abroad had declined just after the reform was introduced, they involve 12% of graduates from the 2013 class. Experiences abroad are less frequent among first-level graduates than they were among pre-reform graduates, but they involve over six graduates out of ten in the second-level and single-cycle cohorts – a rate which comes close to the European goal for 2020.

Still disappointing is the improvement of the attractiveness of Italian universities to foreign students, who account for 3.7% of all students (see footnote number 25). On this front too, the delay compared to other countries is a matter of concern. On the contrary, the number of Italians who decide to study abroad is on the rise, also pushed by concerns about employment prospects in the country. Yet, at the same time, students still tend not to move away from home and attend a nearby university, regardless of the available range of degree programmes. This not only applies to first-level degrees, but often to further studies, too. While the lack of territorial mobility is partly due to its costs – which many families are unable to bear – it is probably also due to a failure to discern the different quality levels of the programmes that each university provides.

The large proportion of first-level graduates who decide to pursue further studies – a trend which also involves second-level and single-cycle graduates – raises questions on the capability of the country to make the most of the human capital produced by universities.

Some final thoughts must be devoted to the near employment prospects of recent graduates, whose past and present have been

described so far. As discussed in a more extensive and detailed fashion during the presentation of the 16th ALMALAUREA Survey on Graduates' Employment Conditions outcomes, in March 2014, Italian graduates are experiencing a downturn which is affecting their employability and remuneration prospects. Even though young university graduates are safer on the labour market compared to secondary school-leaving certificate holders, the difficult economic situation threatens to discourage young people and their families from undertaking university studies. In this context, effective guidance programmes become particularly important, in order to provide accurate information to aid education and career choices. This report aims at providing support on this front, too.

The shortage of resources allocated to the university system is a heavy burden on the development of human capital on which the national economy will have to be based. In this regard, it needs to be pointed out that, despite the clear benefits which ALMALAUREA brings to several stakeholders through its activities, the resources it receives have been drastically cut over the last few years.