

Since 1994

Inter-University Consortium



ALMALAUREA

Connecting Universities, the Labour Market and Professionals

AlmaLaurea Working Papers - ISSN 2239-9453

ALMALAUREA WORKING PAPERS no. 74

March 2015

16th ALMALAUREA REPORT ON ITALIAN UNIVERSITY GRADUATES' PROFILE

Opportunities and Challenges for Higher Education in Italy

by

Andrea Cammelli, Giancarlo Gasperoni

AlmaLaurea, University of Bologna

This paper can be downloaded at:

AlmaLaurea Working Papers series

<http://www2.almalaurea.it/universita/pubblicazioni/wp/index.shtml>

Also available at:

REsearch Papers in Economics (RePEC)

The **AlmaLaurea working paper series** is designed to make available to a wide readership selected works by AlmaLaurea staff or by outside, generally available in English or Italian. The series focuses on the study of the relationship between educational systems, society and economy, the quality of educational process, the demand and supply of education, the human capital accumulation, the structure and working of the labour markets, the assessment of educational policies.

Comments on this series are welcome and should be sent to pubblicazioni@almalaurea.it.

AlmaLaurea is a public consortium of Italian universities which, with the support of the Ministry of Education, meets the information needs of graduates, universities and the business community. AlmaLaurea has been set up in 1994 following an initiative of the Statistical Observatory of the University of Bologna. It supplies reliable and timely data on the effectiveness and efficiency of the higher education system to member universities' governing bodies, assessment units and committees responsible for teaching activities and career guidance.

AlmaLaurea:

- facilitates and improves the hiring of young graduates in the labour markets both at the national and international level;
- simplifies companies' search for personnel, reducing the gap between the demand for and supply of qualified labour (www.almalaurea.it/en/aziende/);
- makes available online more than 1.5 million curricula (in Italian and English) of graduates, including those with a pluriannual work experience (www.almalaurea.it/en/);
- ensures the optimization of human resources utilization through a steady updating of data on the careers of students holding a degree (www.almalaurea.it/en/lau/).

Each year AlmaLaurea plans two main conferences (www.almalaurea.it/en/informa/news) in which the results of the annual surveys on Graduates' Employment Conditions and Graduates' Profile are presented.

AlmaLaurea Inter-University Consortium | viale Masini 36 | 40126 Bologna (Italy)

Website: www.almalaurea.it | E-mail: pubblicazioni@almalaurea.it

The opinions expressed in the papers issued in this series do not necessarily reflect the position of AlmaLaurea

© AlmaLaurea 2015

Applications for permission to reproduce or translate all or part of this material should be made to:
AlmaLaurea Inter-University Consortium
email: pubblicazioni@almalaurea.it | fax +39 051 6088988 | phone +39 051 6088919

16th ALMALAUREA REPORT ON ITALIAN UNIVERSITY GRADUATES' PROFILE

Opportunities and Challenges for Higher Education in Italy

by

Andrea Cammelli¹ and Giancarlo Gasperoni²

Abstract

The 16th ALMALAUREA Report on Italian University Graduates' Profile was presented at the Conference in Pollenzo-Bra – hosted by the University of Gastronomic Sciences.

The data on which this Report is based refers 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 in 2013 – which is almost 80% of students who graduated from Italian universities.

This Report devotes particular attention to a number of issues which characterize 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; the significance of 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.

An overview of the outcomes achieved by graduates in 2013 confirms – despite the country's negative economic and social context – an overall promising situation. Indeed, 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.

Keywords: graduates, university system, human capital.

¹ University of Bologna. Founder and director of ALMALAUREA Interuniversity Consortium. E-mail: andrea.cammelli@almalaura.it

² University of Bologna. Member of ALMALAUREA Scientific Committee. E-mail: giancarlo.gasperoni@unibo.it

1. Introduction

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'³. 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.

³ 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 'literary' part of the test or in the 'scientific-quantitative' one, but, on average, few students score well in both'.

Finally, the first Report on the State of the University and Research System (ANVUR, 2013) 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 it 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 Bologna⁴, it is an important tool to assess education opportunities in Italian universities and its 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 programmes⁵, 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 Graduate 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 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

⁴ The outcomes of the 16th ALMALAUREA Survey on Graduates' Employment Conditions were presented on March 10, 2014, at the Alma Mater Studiorum-University of Bologna, during the conference 'Imprenditorialità e innovazione: il ruolo dei laureati' (www.almalaurea.it/universita/occupazione).

⁵ 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.

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-year-olds). 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%)⁶.

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 more⁷) – 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 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 poorer (Cammelli, 2010). 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 considered (Cammelli & Gasperoni, 2008; Cammelli, 2011; Cammelli, 2012) 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

⁶ For more information <http://dati.istat.it/>, 'Lavoro' section.

⁷ 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.

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

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 system⁹, but it has been also 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 to 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 time¹⁰.

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, 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 year¹¹ – a rate which gets even higher in scientific degree programmes¹².

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

⁹ 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 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’.

¹⁰ For more information www2.almalaurea.it/universita/pubblicazioni/biblio/.

¹¹ The percentage of students who did not enrol on their second year was 20% in the first half of the last decade and later decreased (ANVUR, 2013).

¹² 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: ALMADIPLOMA (www.almadiploma.it) and ALMAORIENTATI (www.almorientati.it).

study are largely 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 schools (Chiesi & Cristofori, 2013). 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 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 awarded (ANVUR, 2013), 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 100 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% (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 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 average (Cammelli, 2013).

An overview of the outcomes achieved by graduates in 2013 does confirm – despite the negative context – an overall promising 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 equal (Noè & Galeazzi, 2013). 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 subjects¹³.

2. Graduates' features – an overview

The analysis will focus on the features of the human capital produced by the Italian university system in 2013¹⁴. Some comparisons will be drawn with pre-reform graduates from 2004¹⁵, regardless of the degree type and level of studies attended within 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 graduates¹⁶. 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.

¹³ Women account for 62% of all single-cycle graduates (Medicine and Surgery, Dentistry, Veterinary Medicine, Pharmacy, Architecture, Law, Preservation and Restoration of Cultural Heritage).

¹⁴ 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.

¹⁵ 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.

¹⁶ In this Report, single-cycle courses and 2-year courses which can only be accessed after a first-level degree are described as 'second-level' courses. The same adjective is used for these programmes' 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 sciences¹⁷.

In interpreting the following findings one should keep in mind that within each of the three subgroups there is considerable variation tied to specific fields of studies. We will not always touch upon the differences among disciplinary areas, but any interested reader can explore them on the ALMALAUREA website.

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, reaching the threshold of 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 and 54% for single-cycle graduates. The percentage of young people from less advantaged social backgrounds, that was 20% of the total in 2004, increased to 26% in 2013. If only few single-cycle graduates come from working-class families (17%), among first-level graduates this value reaches 28%. Vice versa graduates coming from relatively advantaged social backgrounds are 20% among first level and 35% of single-cycle graduates. Social and family backgrounds of second-level graduates are similar to those of first-level graduates. The pursuit of a 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 stemming from a surge in enrolments (Altbach, 2010). 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.

Another aspect to take into account is school background. There are differences between types of degree and different degree groupings: 52% of first-level graduates earned their secondary-school certificate from a humanities or sciences lyceum, 56% among second-level and 77% of single-cycle graduates; technical or vocational secondary schools are 27% of first-level, 11% of the single-cycle and 25% of second-level graduates.

Unsurprisingly, a strong connection is found between the kind of upper secondary school students attend and the field of university study they choose. Often the media suggest that graduates come mostly 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%). Overall, the relation between school background and choice of degree subject seems to remain constant over time.

In 2013, the average final grade achieved at the end of upper secondary education was 80.2 out of 100 among first-level graduates as a whole, but it tends to vary appreciably in different types of degree programmes and fields of study. Among single-cycle graduates it is higher (86.4 out of 100), also due to the selection for access to limited enrolment programmes; while it is 84.6 out of 100

¹⁷ 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.

among the second-level graduates, higher than the first-level graduates, which suggests that the continuation of studies after a first-level degree involves students who are better than average.

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%). Moving to a different geographic area is more frequent among second-level graduates: 32% of them earned this credential in a province other than – and not adjacent to – the one where they completed their secondary education (against 22% of first-level and 25% of single-cycle).

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 (Cameroon 4.6%) and the Maghreb¹⁸. Foreign 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 countries¹⁹. 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 100 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 by a renovated range of degree programmes, but it then dropped back to 17% among graduates of 2013²⁰, with differences between first-level (17%) and second-level (42%) programmes.

¹⁸ It needs to be pointed out that, more and more often, these are young people from immigrant families residing in Italy.

¹⁹ 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 (OECD, 2013). For a comparative framework of first-level graduates' mobility in 10 European countries, see (Schomburg & Teichler, 2011). As for the Italian situation, see (Cammelli, Antonelli, di Francia, Gasperoni, & Sgarzi, 2010).

²⁰ 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 (ISTAT, 2014).

As far as age at graduation is concerned, pre-reform graduates from the class of 2004 earned their degree at the average age of 27.8, while the 2013 cohort did so at 26.3. The average age at graduation is 25.5 for first-level graduates; 26.8 among single-cycle and 27.8 among second-level graduates. Such a drop is particularly meaningful since, as mentioned above, the access of new population segments to university studies raised the average enrolment age.

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 100²¹), but it has now almost trebled, reaching 43% in 2013. The proportion of students who graduate “on time” remains quite high among first-level (41.5%), 34% among single-cycle and more than half of second-level (52%) graduates. There are large differences between the subject areas. 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 programme types – 99.6 for first-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 consideration (Gasperoni & Mignoli, 2010; Mignoli, 2012).

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 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%, with no significant geographical differences (Mondin & Nardoni, 2013).

The diversity of academic performances can be effectively recorded by the time to graduation and degree grades. On average, working-students²² take 94% longer than the prescribed time while that delay goes down to 23% among graduates who did not work during their studies²³. The average

²¹ When the reform was introduced, in 2001, only 9.5% of graduates gained their title on schedule.

²² 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.

²³ The association between working during one’s studies and delay to graduation is fully manifest in all three degree course types (first-level, second-level and single-cycle degree).

degree grade among graduates who did not work during their studies is 103.9 out of 110, while it is 100.6 among worker-students.

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 (due to the single-cycle law grouping, where only 37% of graduates attended at least three quarters of prescribed classes), 68% of first-level 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 students²⁴ – 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.

Compared to other graduates' cohorts, second-level graduates had more work experiences during their studies (72%), with a considerable incidence of working students (10%). Slightly less elevated values are reported among the first-level graduates, 69% (but only in 21% of cases was such experience consistent with their field of study); while 7% of them were working students. On the other hand 58% of the single-cycle graduates worked during their studies and only 2.7 were working students, perhaps due to their higher social origins.

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% (AlmaLaurea, 2013). The proportion of graduates who carried out these important work experiences has significantly increased, up to 57 graduates out of 100 in 2013, against 20 among pre-reform graduates in 2004. Such progress is just as positive when the quality of the experience is considered. It involves 61% of first-level (two thirds of all traineeships were carried out outside universities); 56% of second-level (15% 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%); 41% of single-cycle graduates.

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 aspects²⁵. In 2013, 20 graduates out of a 100 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

²⁴ '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.

²⁵ On this, see the feedback given by 12 generations of graduates from the University of Bologna: 134 thousand graduates (AlmaLaurea; University of Bologna Statistical Observatory, 2008).

considered *always or almost always adequate* by 25% of graduates; 30% of graduates of the 2013 class thought that library services deserved a *definitely positive* feedback, and 35% of them stated that IT workstation facilities were *available in adequate number*.

Asked to evaluate the experience they were about to conclude – partly through the question *Would you enrol 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 was 8.4 months, while it dropped to 5.5 months in 2013). This applies both to first-level graduates (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 (who 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: the proportion of graduates who have an 'at least good' knowledge of English and IT skills are soared by over 10 percentage points (2004-2013).

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 go abroad – under Erasmus or other programmes accredited for the purposes of their 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 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 – 4.8% of all graduates, with a 9.0% peak among second-level graduates. International mobility 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 perspective²⁶.

In 2004, before the reform, 55 graduates out of 100 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

²⁶ 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 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.

graduates (76%). The vast majority of them (59%) intend to enrol 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 PhD (Bonafé, 2014). 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 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 courses.

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 10 (Cammelli, 2014).

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.

3. 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 it²⁷.

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

²⁷ Empirical evidence of the reality of these risks, in a country with high student mobility such as the US shows 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 (Bound, M.F., & Turner, 2010).

their access to the job market – as is currently being done for graduates from ALMALAUREA member universities²⁸.

This strengthened information framework not only contributes to ANVUR's assessments; 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 policies²⁹.

4. 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 reeducation in older student 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 ANVUR (ANVUR, 2013). 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

²⁸ 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. (AlmaLaurea, 2013).

²⁹ 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.

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 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. 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 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.

References

- AlmaLaurea (a cura di). (2013). *XVI Rapporto sulla condizione occupazionale dei Laureati*. Bologna, www.almalaurea.it/sites/almalaurea.it/files/docs/universita/occupazione12/almalaurea_indagine2013.pdf.
- AlmaLaurea; University of Bologna Statistical Observatory. (2008). *L'università, la sua capacità formativa e le sue infrastrutture nella valutazione di 12 generazioni di laureati dell'Alma Mater*. www.almalaurea.it/universita/altro/12generazioni2008.
- Altbach, P. (2010). Access Means Inequality. In *International Higher Education*, no.61.
- ANVUR. (2013). Rapporto sullo stato del sistema universitario e della ricerca. Rome: [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%20e%20RICERCA_integrale.pdf).
- Bonafé, E. (2014). Il terzo livello: profilo dei dottori di ricerca. Paper delivered at the Conference for the presentation of the XVI Rapporto AlmaLaurea sul Profilo dei Laureati, 'Opportunità e sfide dell'istruzione universitaria in Italia'. Pollenzo-Bra.
- Bound, J., M.F., L., & Turner, S. (2010). 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 (p. 129-157).
- Cammelli, A. (2010). *Perchè la riforma universitaria non è fallita*, no.5.
- Cammelli, A. (2011). Al di là della media: l'università alla prova dei numeri. *Scuola democratica*, no. 2 .
- Cammelli, A. (2012). Le performance dei laureati figli della riforma. In G. Vittadini, *L'università possibile. Note a margine della riforma*. Milan: Guerini e Associati.
- Cammelli, A. (2013). La favola dei troppi laureati. In *Scuola Democratica*, no.1.
- Cammelli, A. (2014). Imprenditorialità e innovazione: il ruolo dei laureati. In *XVI Rapporto AlmaLaurea sulla condizione occupazionale dei Laureati*. Available online at www.almalaurea.it/universita/occupazione.
- Cammelli, A., & Gasperoni, G. (2008). Più diversi che uguali. Origini sociali, retroterra formativo e riuscita negli studi dei laureati. In A. Cammelli, & G. Vittadini, *Capitale umano: esiti dell'istruzione universitaria*. Il Mulino.
- Cammelli, A., Antonelli, G., di Francia, A., Gasperoni, G., & Sgarzi, M. (2010). *Mixed outcomes of the Bologna Process in Italy*. www.almalaurea.it/universita/biblio/pdf/2010/cammelli_antonelli_et_al_2010b.pdf.
- Chiesi, A., & Cristofori, D. (2013). Esperienza universitaria dei diplomati dell'istruzione tecnica e professionale. In AlmaLaurea, *XV Rapporto sul Profilo dei Laureati 2012 'Scelte, processi, esiti nell'istruzione universitaria'*. Milan.
- Gasperoni, G., & Mignoli, G. (2010). Votazioni agli esami e pratica della valutazione nei percorsi di studio universitari. In AlmaLaurea, *XI Profilo dei Laureati italiani. Valutazione dei percorsi formativi nell'università a dieci anni dalla Dichiarazione di Bologna* (p. 217-241). Bologna: Il Mulino.
- ISTAT. (2014). *Forze di lavoro. Media 2013*. Rome.
- Mignoli, G. (2012). Ripensare le votazioni. In *'Laurearsi in tempi di crisi. Come valorizzare gli studi universitari'*. Naples: within the Conference for the presentation of the XIV Rapporto AlmaLaurea sul Profilo dei Laureati.
- Mondin, P., & Nardoni, M. (2013). Servizi per il diritto allo studio e performance dei laureati. In *Scelte, processi, esiti nell'istruzione universitaria*. Milan: within the Conference for the presentation of the XV Rapporto AlmaLaurea sul Profilo dei Laureati.
- Noè, C., & Galeazzi, S. (2013). Genere e scelte formative. In AlmaLaurea, *XIII Profilo dei Laureati italiani. Qualità e valutazione del sistema universitario*. Bologna: Il Mulino (forthcoming).
- OECD. (2013). *Education at a Glance 2013: OECD Indicators*. OECD Publishing.
- Schomburg, H., & Teichler, U. (2011). *Employability and Mobility of Bachelor Graduates In Europe. Key results of Bologna Process*. Sense Publishers.