

**14th ALMALAUREA REPORT ON
GRADUATES' EMPLOYMENT CONDITIONS**
**Young people cannot wait any longer:
Investments are needed in education,
research, innovation, and culture**
by Andrea Cammelli

1. INTRODUCTION

The world, and Europe in particular, are still grappling with economic crisis and macroeconomic uncertainty. Therefore, before introducing the results of the 14th survey of graduates' employment, some basic trends that recently affected Italy¹ should be analysed in an international setting. Of course, the aim of this paper is not to give a comprehensive account of the complex matters at play, but rather to suggest some possible interpretations of the links between structural and temporary changes of the domestic context on one hand, and graduates' employment prospects on the other.

Between 2008 and the beginning of 2010, during the first phase of the economic crisis, overall employment levels shrank by nearly 2% in the OECD countries², while unemployment soared by 50%, resulting in 17 million new unemployed. When discouraged and under-employed workers were added to the picture, the situation became even more worrisome. Unfortunately, it has not improved much since then. In the first quarter of 2011, youth unemployment in the 15-24 age group hit 17.4% in the OECD countries, whereas it stood at 7% among those aged over 25³.

Obviously, unemployment figures yield only a partial view of the difficulties that youth are facing on the labour market. In particular, the so-called NEET youth (*Not in Education, Employment or Training*) risk being marginalized and excluded from the labour market, especially if they stay out of it for long periods of time. In the fourth quarter of 2010, this group included 12.6% of young people aged 15-24 in the 30 OECD countries for which information

¹ On the same topic, see also Banca d'Italia-Eurosistema, *Relazione Annuale*, Roma, Maggio 2011.

² OECD, *Employment Outlook 2010: Moving beyond the Jobs Crisis*, Paris, 2010.

³ OECD, *Employment Outlook 2011*, Paris, 2011.

is available, this percentage being higher than in 2008, when it was 10.6%. In other words, a whopping 22.3 million youth are at risk. 14.6 million of them are economically inactive and not in education or training, and 7.7 million are unemployed⁴.

Italy's previous imbalances had already put the country at a disadvantage vis-à-vis the economic crisis; the lingering economic weakness worldwide is now taking a higher toll here than elsewhere⁵.

A remarkable, growing percentage share of youth (including some profiles who would easily find a job in better times) risk being stalled in long-term unemployment or inactivity, a situation that might cause irreversible consequences such as enduring difficulties in finding a new job, and lingering wage differences⁶. The potential effects of prolonged unemployment on graduates' motivation and skills obsolescence are particularly insidious.

These concerns and difficulties are further magnified in Mediterranean countries, especially those on its southern shore, which have been severely hit by the general and employment-related consequences of the economic downturn. Their vast population of highly educated youth has been particularly affected⁷.

The long-lasting economic crisis exacerbated the difficulties already faced by national economies in taking up growing stocks of labour supply, especially highly qualified workers. This, in turn, has led and will lead to large scale emigration and brain drain, even with growing GDP levels. While on one hand this outflow will alleviate social pressure, on the other it will result in a loss of human capital in the affected countries. These matters should be thoroughly dealt with by the international community in order to offer a positive response to the legitimate aspirations of those peoples to change and improve their socio-economic status.

⁴ On the same topic, see also G. Provenzano, *Le nuove generazioni: "frontiera" tra opportunità e declino. Analisi e proposte a partire da Sud*, Roma, 2011 e Studio I-Com per La Scossa, *Giovani chi li ha visti? Il PIL mancato di una generazione fantasma*, Settembre 2011.

⁵ See ISTAT, *Rapporto annuale. La situazione del Paese nel 2010*, Roma, 2011.

⁶ Eurostat, European Union Pocketbooks 2011, *Key figures on Europe*, Brussels, 2011.

⁷ European Commission. Directorate-General for Economic and Financial Affairs, *Labour Markets Performance and Migration Flows in Arab Mediterranean Countries: Determinants and Effects*, Brussels, 2010.

According to very recent data (January 2012), youth unemployment in Italy exceeds 31%⁸. At the same time, as was already mentioned, in certain areas young people who are not engaged in school or training programmes nor with a job risk being marginalized from society⁹. In 2010 this was the case for more than two million young Italians (over 22% of the population aged 15-29). In this regard, Italy's position at the top of the European ranking is particularly alarming, and the difference with the main European countries is striking (Germany 10.7%, UK and France 14.6%).

The data on the changes of Italy's employment structure between 2004 and 2010, together with those on investments in fixed assets (capital goods such as plants, machinery and buildings) for the same period, and the projection of these data for 2012 and 2013 offer an interesting explanation for the causes of negative trends affecting highly qualified employment¹⁰, as well as grounds for concern over the future (*Fig. 1*). In particular, the variation of the share of people in highly qualified occupations¹¹ is ascribable to a number of factors which are both structural and pertaining to the economic situation, the latter being particularly worrisome. Between 2004 and 2008, that is, *before* the crisis erupted, Italy's population in highly qualified professions decreased, except for a short-lived moderate growth phase. This was a countertrend compared to the EU as a whole. The gap widened during the crisis, when declining employment was accompanied by rising shares of highly qualified professionals in the EU whereas in Italy the opposite happened.

Current trends are also linked to the crisis of the middle class, a widely debated topic in many countries. The recent economic situation exacerbated the gap between wealthy, upper-class people and the socially/economically marginalized (let alone the blatantly

⁸ ISTAT, *Occupati e disoccupati* (provisional data – January 2012), Rome, 2012.

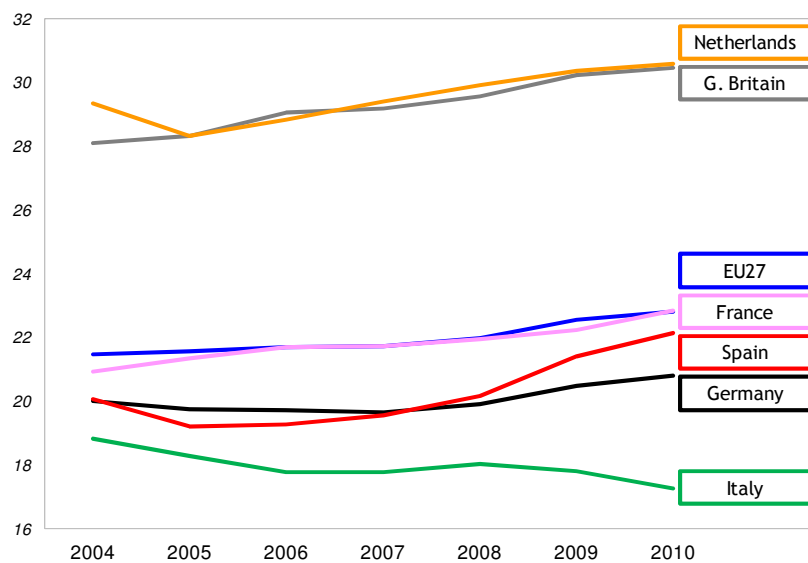
⁹ See ISTAT, *Noi Italia. 100 statistiche per capire il Paese in cui viviamo*, Rome, 2012.

¹⁰ According to the international standard classification of occupations, highly qualified professions include 1. Managers; 2. Professionals. In Italy, this classification is as follows: 1. legislators, senior officials and managers; 2. intellectual, scientific and highly specialised professions. See www.istat.it/it/archivio/18132.

¹¹ On the same topic, see also ISFOL, *Formazione, competenze e competitività delle imprese. Professioni e livelli di competenze in Italia e in Europa*, Roma, 11 Novembre 2011.

poor), and caused the middle class to shrink. The latter is a phenomenon which is bound to worsen in Italy as many families will have to tap into their savings. In addition, a weakening middle class might belittle the value of education as an instrument of upward social mobility, contrary to what had been the case for many generations.

Fig. 1 Share of people in employment in highly qualified occupations* (percentage values)



* See note 6.

Source: ALMALAUREA elaboration on Eurostat data.

OECD data on private investments in fixed assets seem to confirm there is a link between employment trends and the behaviours and strategies adopted by companies which are not growth-oriented nor inclined to fully exploit their human capital. In the 2004-2008 period, investments in capital goods grew, on average, by 0.9% in Italy¹² as opposed to 4% in the EU-27 and

¹² This trend was partly affected by the downturn of the building sector (Senato della Repubblica-Servizio del Bilancio, Camera dei Deputati-Servizio

4.9% in the OECD countries. Expected rates of capital accumulation for 2012 and 2013 confirm the above differences, with an average value close to 0 for Italy as against +1.8% in the EU and +3.8% in the OECD countries.

On one hand, the above data can shed some light on the reasons for Italy's low productivity growth in recent years; on the other hand, though, they seem to question the country's ability to revamp its economic system in the midterm and get back to growth.

Possibly, at least a portion of the graduates who left Italy¹³ in the past few years have become part of the human capital that is strengthening our competitors' production systems. A trend reversal in business strategies and performance, as well as in economic policies, is urgently needed if Italy wants to remain afloat in the sea of global competition.

This further underlines what an unforgiveable mistake it would be to underestimate the youth issue and the problem of full exploitation of human capital, or to put off addressing these topics decisively and taking measures in favour of those who, sometimes after long, hard and costly training, find it increasingly difficult to enter the labour market, achieve independence and plan a future¹⁴. This is particularly so in Italy, where young people are in scant supply compared to the most developed countries. In addition to that, with life expectancy rising and the reluctance of many of Italy's gerontocrats to relinquish their positions, young people are finding it difficult to be part of the necessary process of generational change¹⁵. The situation is worsened by the scarce political weight

Bilancio dello Stato-Servizio Studi, *Documento di Economia e Finanza*, Doc. LVII, n. 4).

¹³ A previous in-depth study showed that 45% of Italians in employment abroad deem it to be very unlikely that they will return to Italy. See A. Cammelli, *Il X Rapporto sulla condizione occupazionale dei laureati*, in Consorzio Interuniversitario AlmaLaurea (edited by), *X Rapporto sulla condizione occupazionale dei laureati. Formazione universitaria ed esigenze del mercato del lavoro*, Il Mulino, 2008.

¹⁴ See C. Dell'Aringa, and T. Treu (edited by), *Giovani senza futuro? Proposte per una nuova politica*, il Mulino, Bologna, 2011.

¹⁵ "The ageing of the Italian ruling class far exceeds the increase of life expectancy. In 1990, the average age of the élite was 51 years, in 2005 it was 62. Their age increased by 11 years, while life expectancy only grew by approximately 4 years in the same period. This figure clearly testifies the country's rigidity and high gerontocracy rate". P. Balduzzi, and A. Rosina, *I*

that young Italians carry compared to the rest of Europe. Indeed, due to the combined effects of the demographic decline and the age requirements to vote and stand in elections to the upper house, Italy ranks last in Europe in terms of potential political power of citizens under 40 years of age¹⁶. In the past 20 years, in countries like the United States or Spain, every newly elected administration brought a significant generational and leadership change. In turn, this led to changes in other areas of political representation and social life too. On the contrary, Italy is one of the few European countries in which people of age do not enjoy full rights to vote and to be elected as members of Parliament¹⁷.

The 14th ALMALAUREA report on graduates' employment conditions confirms that the overall situation remains very difficult. The latest ALMALAUREA survey involved some 400,000 graduates from 57 universities (3 more than one year before: Bari Polytechnic, Naples Oriental Studies, and Rome S. Pio V) that had been members of the Consortium for at least one year¹⁸. The response rate was extremely high, reaching 88% among graduates interviewed one year on from degree completion, 83% three years on, and 74% five years on.

In addition, three separate pilot online surveys were conducted on first-level graduates from the 2008 and 2006 classes, who were interviewed at three and five years from graduation respectively, and on pre-reform graduates from the 2000, 2001 and 2002 classes, who were interviewed approximately 10 years after degree

giovani italiani nel quadro europeo. La sfida del «degiovanimento», RicercAzione, vol. 2, issue 2, 2010, p. 210.

¹⁶ P. Balduzzi, and A. Rosina, *I giovani italiani nel quadro europeo. La sfida del «degiovanimento», op. cit.*

¹⁷ Last year a draft constitutional bill was approved by the Lower House and subsequently got to a standstill at the Upper house. The bill called for lower age limits to stand for elections, although an inexplicable difference was maintained between the two Houses. Current negotiations on constitutional reforms seem not to include changes to the minimum age to stand for elections to the Upper House. This age threshold is 40, which is approximately the same age that virtually all Spanish and British Prime Ministers of the last three decades were when they took office.

¹⁸ ALMALAUREA is a consortium of 64 Italian universities (March 2012) which represent almost 80% of all the graduates that leave the Italian university system every year. In 2011, the Universities of Macerata and "Kore" of Enna became members of the Consortium.

completion¹⁹. This Report thoroughly went through all the aspects that ALMALAUREA has taken into consideration for fourteen years. To allow broader dissemination and enable an external analysis of university performance, as well as to promote an assessment of data interpretation contained in the report, full details are available on the Consortium website²⁰. This disclosure also complies with the principle of transparency. In addition, the information available is complete and timely published in order to support university curriculum counselling, as well as to promote better knowledge of graduates' modes of entry into professions and the labour market among employers, professional associations and policy makers too.

The long transitional period between the old and the new university system, which had hampered any in-depth comparison for the past decade²¹, has finally come to an end, thus allowing the survey to provide an increasingly accurate picture of post-reform graduates' employment conditions.

This paper merely introduces the most significant aspects and brings them in a bigger picture, enabling comparability between purposely harmonized populations²². An overview of the main results is given in the next chapter, whereas the following ones feature in-depth analyses of employment status by degree course type.

Unemployment was seen to be on the rise among first-level degree holders, and to a higher extent compared to the previous year: its rate grew from 16% to 19%, while an increase of a little more than 1 percentage point had been observed one year earlier.

¹⁹ The first, smaller-scale pilot survey on employment conditions in the long run was carried out in 2006 on the graduates from the class of 1997/98. See A. di Francia, G. Gasperoni, S. Ghiselli, *La condizione occupazionale nel lungo periodo: il lavoro attuale dei laureati del 1997-1998*, in Consorzio interuniversitario Alma Laurea (edited by), IX Rapporto sulla condizione occupazionale dei laureati. Dall'università al lavoro in Italia e in Europa, Bologna, Il Mulino, 2007.

²⁰ Full details can be found on (www.almalaurea.it/universita/occupazione). Data can be broken down by various criteria, from university to degree course (the latter being available for post-reform graduates only).

²¹ See A. Cammelli, G. Antonelli, A. di Francia, G. Gasperoni, M. Sgarzi, *Mixed Outcomes of the Bologna Process in Italy*, in H. Schomburg e U. Teichler, *Employability and Mobility of Bachelor Graduates in Europe. Key Result of the Bologna Process*, Rotterdam, Sense Publishers, 2011.

²² Only graduates who did not subsequently enrol in another degree course were considered as "first-level graduates".

Unemployment was also found to swell considerably among second-level graduates, i.e. those who completed a longer training period²³, their rate growing from 18% to 20% (an upsurge of less than 2 percentage points had been reported in the previous survey). Finally, single-cycle second-level degree holders' unemployment rate (e.g. graduates in medicine, architecture, veterinary medicine, law, etc.) also increased from 16.5% to 19% (whereas the previous report had shown a 3 percentage points growth), partly because of a different breakdown of this population. This trend was generally observed in all study courses and geographical areas of residence; it affected even those graduates who had traditionally had few difficulties in finding a job (for instance, engineers), and it also involved pre-reform graduates interviewed five years on from degree completion²⁴.

The number of graduates in permanent employment at one year from graduation decreased, with the only exception of single-cycle, second-level graduates. Concomitantly, *non-standard* employment contracts, *bogus self-employment* (that is, economically dependent self-employed work) and *off-the-book employment* swelled. Job security was enjoyed by 42.5% of first-level graduates and 34% of second-level graduates in employment, with a 4 and 1 percentage points fall respectively compared to the 2010 survey. Job security was also found to fall among pre-reform graduates at five years from completion of their studies, although to a lesser extent. However, as will be explained in greater detail in the following chapters, job security levels were found to increase considerably with time after achievement of the qualification.

Earnings at one year from graduation – already modest at 1,105 euros for first-level graduates, 1,050 for single-cycle second-level graduates, and 1,080 euros for second-level graduates – continued to lose purchasing power compared to previous surveys, with reductions of 2% to 6% only over the past year. Nonetheless, remuneration and employment conditions of graduates were still

²³ Second-level graduates attended university for 5 years (3+2), one year more than pre-reform graduates who attended 4-year courses in 50% of cases.

²⁴ Employment conditions of pre-reform graduates were included in the analysis in order to enable assessment of medium term trends (at 5 years from graduation, in this case) in the labour market. Due to the short time span after the implementation of the Reform, it will be possible to carry out an in-depth analysis of these trends affecting longer post-reform courses from the next Report on.

better than those of secondary school-leaving certificate holders. According to official data sources like the Italian Statistical Board ISTAT and the OECD, to date, graduates have enjoyed an over 11 percentage points higher employment rate than secondary school-leaving certificate holders throughout their overall working life (76% versus 65%)²⁵. The same data sources show that higher education qualifications are also rewarding in terms of earnings: in the 25-64 age group, graduates' wages proved 50% higher than those of secondary school-leaving certificate holders²⁶. This wage gap is in line with findings in Germany, the U.K., and France²⁷. When the above-mentioned trends of investments in capital goods and Italy's employment structure (with scant supplies of highly qualified human capital) are considered, it is questionable whether the overall benefits of having a university-level qualification will still be the same in the future.

The main indicators on young people's access to the labour market (employment and unemployment rates, job security, remuneration, etc) monitored by ALMALAUREA surveys since the class of 2000 reveal a progressive worsening. This seems to be due to structural aspects resulting from little propensity to take up and make the most of graduates, in a framework of an economy that is reluctant to invest, innovate and grow. Temporary economic factors linked to the recent crisis also play a part, as the crisis magnified the impact of pre-existing structural weaknesses on the graduates' employment conditions.

This worsening situation is clearly perceivable when special attention is paid to the outcomes of second-level graduates at one year from completion of studies in the years immediately before and after the crisis. Let us assume that the employment, unemployment and remuneration levels of graduates from the 2007 class interviewed at one year had a value of 100 each, and let us calculate index numbers for 2010. In the time span under consideration, employment fell considerably to 89 for men and 92 for women; unemployment soared and hit 208 among men and 168 among women, while remunerations (when purchasing power variations were considered) declined to 89 for men and 86 for women.

²⁵ ISTAT, *Forze di lavoro. Media 2010*, Rome, 2011.

²⁶ See also ISFOL, *La laurea paga: occupazione e salari migliori. Buone opportunità anche per i diplomi tecnici e professionali*, Roma, 2011.

²⁷ OECD, *Education at a Glance 2011: OECD Indicators*, Paris, 2011.

The situation worsened as a whole, and in particular gender differences widened in favour of men as for unemployment (from 6.3 percentage points among graduates from 2007 to 7.7 points among those from 2010) and remuneration (in 2007, male graduates were earning 24.6% more than women, whereas this percentage rose to 28.7% three years later). It is a cold comfort to note that, in the same period, the employment-related gender gap narrowed from 10 to 6.8 percentage points.

Conversely, the geographical differences between northern and southern Italy were exacerbated across the board²⁸. Employment levels among second-level graduates from the class of 2007 one year on from graduation were seen to be 13.5 percentage points higher in northern Italy than in southern regions. Among graduates from the 2010 class, this difference rose to 17 percentage points. Concomitantly, the unemployment rate, which was 11.7 percentage points higher among southern residents than among northern ones in 2007, hit a 17.8 percentage points gap in 2010. Geographically-related remuneration differences were seen to increase even more. Among graduates from the class of 2008, northern residents were earning 8.2% more than their southern colleagues. Among graduates from 2010, this differential almost doubled and hit 17.6%. It is no coincidence that work-related geographical mobility (often caused/anticipated by study-related mobility) is negligible in the north of Italy, where the only significant flow is represented by the 3% moving abroad, while it involves a remarkable share of graduates residing in the south, over one third of whom have moved to other regions (18% to the north and 12% to central Italy). These figures will be analysed in depth in a dedicated paragraph.

It is worth repeating that this trend unfolds against a backdrop of young population decrease in Italy – which paradoxically saved the country from an even worse employment situation. Despite considerable contribution from the immigrant population, the number of youths aged 19 dropped by 38% over the last 25 years.

When analysing the conditions of young people, it is useful to look beyond the Alps and the Mediterranean Sea. One should not forget that the population aged 20-24 grew by a whopping 80% between 1985 and 2010 in southern Mediterranean countries.

²⁸ See also SVIMEZ, *Rapporto Svimez 2011 sull'economia del Mezzogiorno*, Roma, 2011.

The next decade is expected to be completely different. In the EU-27 as a whole, the population aged 20-24 will decrease by approximately 5 million, from 32 million in 2009 to projected 27 million in 2020, which means that the ratio of this age group to the overall population will shrink from 6.4% to 5.4%. A similar trend, albeit to a lower degree, might be observed in the countries of the southern shore of the Mediterranean, where the youth population in that age bracket should decrease by only 2 million (from 17 to 15 million) in the same timeframe. The ratio of this age group to the overall population will decline from 10% to less than 8%.

Anyway, according to relevant projections²⁹, the southern Mediterranean countries will find it difficult to take up the labour supply in the coming years, even with strong economic growth. This will particularly hold true for qualified jobs, therefore governments should put specific governance mechanisms in place aimed at cooperating with Europe on aspects like migration flows and the creation of a common higher education area.

As was mentioned above, in Italy youth are few and, besides, have low schooling levels. Italy still lags behind the most developed countries, as is shown by the fact that only 20 Italians in the 25-34 age bracket have an academic qualification, as against an OECD average of 37³⁰. This figure is 26% in Germany, 41% in the United States, 43% in France, 45% in the United Kingdom, and 56% in Japan. This gap goes back a long way³¹: only 10 out of 100 people aged 55-64 hold a university degree, less than half the OECD countries number (in France this figure is 18 out of 100, in Germany 25, in the United Kingdom 29, in the USA 41). Entrepreneurs and managers from public and private businesses are no exception to the rule³², although with differences. This situation is gradually improving, however.

²⁹ European Commission. Directorate-General for Economic and Financial Affairs, Labour Markets Performance and Migration Flows in Arab Mediterranean Countries: Determinants and Effects, op. cit.

³⁰ OECD, Education at a Glance 2011, op. cit.

³¹ I. Visco, *Investire in conoscenza: giovani e cittadini, formazione e lavoro*, speech at the 30th AIMMF National Congress, Catania, 25th November 2011.

³² Undoubtedly, a better picture will emerge from the results of the 2011 Census, which are not available to date. It is useful to remind, though, that the previous census (2001) had showed that some 86% of all entrepreneurs and managers in both the public and private sectors did not have any university training.

Italy is also lagging behind in higher education attainment levels within the adult population, as was previously mentioned. This is so much so that, even today, 75% of first-level graduates are the sons and daughters of parents with no university qualification³³. In addition to that, a large number of adult employees aged 35-54 (supposedly 2.6 million) need retraining to update their knowledge and skills. This population represents a “new frontier” that the university system should consider with greater attention. If adult graduates went back to university, the growth of Italy’s economic and academic systems might be boosted; besides, this might effectively encourage university teachers to make the most of certain teaching methods that are currently under-exploited. In turn, such methods may strengthen those cross-disciplinary skills that students so often describe as lacking³⁴.

The number of degrees awarded over the past decade swelled from 172,000 in 2001 to 289,000 in 2010, with a 68% rise. The increase in the actual number of graduates, though, is lower because a considerable percentage of students achieve two degrees³⁵. When the spread of university-level education is more accurately analysed as a function of the number of completed university training years, a lower increase (+19%) is observed over the same period. This growth has of course contributed to improving the population’s educational attainment and has made it easier to single out talents and bank on them, but it is nevertheless smaller than what has long been claimed³⁶.

³³ Consorzio Interuniversitario ALMALAUREA (edited by), *XIII Profilo dei laureati italiani. Qualità e valutazione del sistema universitario*, Bologna, Il Mulino, 2012 (forthcoming). The full report’s data are broken down by criteria ranging from university to degree course. The report can be downloaded from www.almalaurea.it/universita/profilo.

³⁴ See Cedefop, *What Next for Skills on the European Labour Market?*, Thessaloniki, 2011.

³⁵ Second-level graduates are counted twice in official statistics, having been awarded a three-year first-level degree and a 2-year second-level degree.

³⁶ The opinion spread in influential circles that, with the university reform, the number of Italian graduates not only had outweighed their demand, but was even higher than the OECD average. See A. Cammelli, *A dieci anni dalla Riforma: il profilo dei laureati italiani*, in Consorzio Interuniversitario ALMALAUREA (edited by), *XII Profilo dei laureati italiani. L’istruzione universitaria nell’ultimo decennio. All’esordio della European Higher Education Area*, Bologna, Il Mulino, 2011.

This is corroborated by recent trends involving the population of degree holders aged 30-34: in 2010, Italy was fourth from the last among the EU-27 countries, 14 percentage points below the European average. Between 2004 and 2010 the graduate share rose from 15.6% to 19.8%, but this figure is a long way away from 40%, i.e. the European Commission's strategic objective to be reached by 2020 (almost half of the EU countries have already hit the mark).

The spread of university-level education has been slower than what was needed at European level; in Italy, it has even magnified imbalances between northern and southern areas of the country (to the detriment of southern regions) as well as between men and women (to the detriment of the male population)³⁷.

Yet the growth of university qualifications awarded, after reaching its peak in 2005, has stopped. The number of graduates, which remained stable until 2007, started declining in 2008 and is expected to further decrease as a result of the reduction of enrolments, which fell by over 13% in the past six years. This fall is due to several factors, such as the demographic decline, the decline in older-student enrolment in university (a particularly substantial phenomenon in the years immediately following the start of the reform), and the lower numbers of school leavers passing to higher education (from 74.5% in 2002 to 66% in 2009). A general climate

³⁷ In 2010 the percentage of graduates aged 30-34 among southern residents was 15.6% of the population in that age bracket. This share was 22.2% in Italy's north-west and 19.8% in the north-east. In the same year and age group, the percentage share of women holding a university-level qualification was 9 percentage points higher than men: 24.2% vs. 15.5% respectively. This difference may be attributable to several factors such as "more women than men enrol in secondary schools that normally lead to further university-level training (high schools specialising in humanities, sciences, or teaching); less financial resources are needed to complete a three-year university training cycle, thus enabling young people from less favoured families to pursue higher education studies too (apparently, women were particularly benefited by this factor); youth tend to postpone their access to the labour market, which is felt to be troublesome (especially for women)". A. Cammelli, A. di Francia, *L'universitarizzazione femminile più recente*, in M. Malatesta (edited by), *Atlante delle professioni*, Bologna, Bononia University Press, 2009, p. 256. The latest ALMALAUREA statistics (based on 110,257 first-level graduates from the 2010 class, i.e. over two thirds of the overall university system in Italy) show that female graduates often come from less favoured families, as 77.4% of them are the daughters of parents with no university-level qualification, whereas this is the case for only 71.5% of male graduates.

in which the severe, albeit justified, criticism of the Italian university system turned into a campaign of gratuitous denigration for a number of years has also played a part. In addition, one should not overlook the growing difficulties experienced by many families with bearing the direct and indirect costs of university education. Lacking student support policies make things worse in this respect.

As already mentioned, this scenario is not destined to improve, given the demographics of Italian youth; besides, the new generations of immigrants will represent an increasingly large share of the country's student population (in the short-to-mid term, though, they might pursue higher education studies to a lesser extent compared to the overall population).

As was mentioned above, only a small percentage of Italy's adult population (including entrepreneurs and managers) holds a university qualification³⁸. This low educational level may be the reason why the strategic importance of investments in higher education and research for the development of the country and its competitiveness on the global scene is so often underestimated³⁹. Underestimation and lack of foresight, together with a culpably self-referential attitude of the university system, translate into inadequate allocation of resources for higher education and research⁴⁰. In both areas, Italy invests much lower GDP shares compared to its main global competitors. The latest official data show that, of the 31 OECD countries considered, Italy's public and private expenditure on higher education exceeds only that of the Slovak Republic and Hungary (Italy allocates 1% of its GDP as against 1.2% by Germany and the UK, 1.4% by France and 2.7% by the United States).

Nor is the picture any brighter in the strategic area of Research and Development, which was allotted 1.26% of GDP in 2009 (the latest year for which data are available; this figure is in line with findings from previous years⁴¹). This puts Italy last among the most developed European countries, which often allocate GDP shares

³⁸ I. Tinagli, *Talento da svendere*, Einaudi, Turin, 2008.

³⁹ Eurostat data show that low attainment levels are particularly prevalent in the private sector, where the share of people in employment holding only a compulsory education qualification is almost twice as high in Italy compared to the EU-12 average.

⁴⁰ See OECD, *The High Cost of Low Educational Performance. The Long-Run Economic Impact of Improving PISA Outcomes*, Paris, 2010.

⁴¹ ISTAT, *Noi Italia. 100 statistiche per capire il Paese in cui viviamo*, op. cit.

around or in excess of 2% to R&D (Sweden 3.62%, Germany 2.82%, France 2.21%, and United Kingdom 1.87%). In such a crucial sector for the country's international competitiveness, private businesses' contribution is feeble too. In Italy, companies account for a little more than half of overall investments, that is, 0.67% of GDP – much less than in the most developed countries⁴².

Looking beyond commonly held beliefs, the actual amount of resources allocated to universities is clearly stated in the latest OECD report⁴³. The resulting picture looks completely different, and sometimes at odds, with the image projected by the media. The total expenditure for each student who completes university training, inclusive of the costs associated with actual duration of studies and students dropping out of university, is considerably lower (-31%) in Italy compared to the European average. If a comparison is made with equally developed countries, the difference is even more striking. To top it all, these figures refer to 2008, i.e. before heavy cuts in funding to the university system were approved. The comparison with the countries which are usually taken as a performance benchmark for Italy's state university system is disheartening. In conditions of equal purchasing power, while our country spends 43,194 US dollars per student, Sweden spends two-and-a-half times more, Germany spends over twice as much, and Spain 79% more than Italy. Then, in the 2000-2008 period, the total expenditure per student increased by 8% in Italy as opposed to +14% in the OECD and a good +19% in the EU-19 countries. This is probably one of the few sectors in which our country's international competitiveness has grown over the past years!

In this regard, more merit-based criteria for the allotment of funds might contribute to improving the internal and external effectiveness of the university system, if minimum overall resource requirements are established according to international parameters on the costs of teaching and research.

Recent talks on the need for "the value of culture, scientific research, innovation and education to become the focus of political

⁴² In most of such countries, private businesses' contribution is at least twice as high: 1.37% in France, 1.92% in Germany, and 2.55% in Sweden.

⁴³ OECD, *Education at a Glance 2011*, op. cit.

debate with a view to fostering the development of our country"⁴⁴ seem to hint at an encouraging reversal.

As was previously mentioned, youth holding a university degree are a small number in Italy. Even so, they are not in great demand on the domestic labour market. The results of the latest Unioncamere survey on the employment requirements of Italian companies⁴⁵ (not including the public sector) show that graduates represent an increasingly large share of expected recruitments (12.5% in both 2010 and 2011 as against 9% in 2007). Despite this, the demand for graduates stood at 74,000 in 2011 as against 88,000 in 2008, before the economic crisis erupted. A 16% decrease is observed, whereas the overall expected recruitment share plummeted by 28%. These figures further reaffirm that employees with university qualifications are still under-utilized. In the U.S., according to the latest forecasts for the 2008-2018 decade, graduates will make up 31% of all new recruitments⁴⁶.

The analysis of the above Unioncamere data broken down by subject grouping reveal that the demand for graduates from the economics, medicine/healthcare, and engineering groupings have regained momentum to the tune of +10%, +8%, and +4% respectively.

According to the same source, businesses are finding it difficult to procure labour for some jobs (both high-skill and low-skill). The companies involved in the survey, especially those from some central and northern areas of the country, estimated this labour shortage to be approximately 120,000 employees, i.e. one fifth of all expected recruitments in 2011. These data seem to challenge the commonly held belief that these difficulties depend entirely on youth's unwillingness to do certain jobs.

Recent findings concerning Italy show that the characteristics of the country's businesses have a crucial impact on the demand for graduates. A few aspects of particular importance are the technological focus of businesses and the entrepreneurs' educational level, as well as the company management structure

⁴⁴ L. Ornaghi, C. Passera, and F. Profumo, *Cultura: necessario tornare a investire*, "Il Sole24Ore", 24th February 2012.

⁴⁵ Unioncamere-Ministry of Labour and Social Policies, *Sistema Informativo Excelsior. I fabbisogni occupazionali e formativi delle imprese italiane nell'industria e nei servizi per il 2011*, Rome, 2011.

⁴⁶ US Department of Labor, *Employment Projections: 2008-2018*, Washington, 2009.

(family-owned or professional). The demand for graduates is higher in technology-intensive companies and in those whose entrepreneurs attained high education levels, whereas it is lower in family-owned ones. In businesses run by degree holders there are three times as many graduate employees than in other companies⁴⁷.

Last year, 57% of recent graduates complemented their studies with an internship accredited for the purposes of degree course completion (this share tripled since the reform was implemented). This should be seen as the beginning of a new phase of interaction and cooperation between the most far-sighted segments of the academic, businesses, and professional worlds. Elaborations made on ALMALAUREA data confirm that curricular internships are an important tool for young people to approach the labour market. One year after completion of studies, second-level graduates who had performed an internship are 13.6% more likely to be in employment compared to those who had not⁴⁸. All the curricula should include and fully exploit quality internships combining theoretical knowledge with practical know-how.

The mismatch between graduates' skills and those sought by the labour market is still a key issue in the international debate over the reform of tertiary education and the specific role of vocational training. This topic has been widely discussed in Italy as well, and ALMALAUREA contributed to the debate with in-depth studies⁴⁹.

⁴⁷ F. Schivardi, and R. Torrini, Cambiamenti strutturali e capitale umano nel sistema produttivo italiano, QEF no. 108, Bank of Italy, 2011. G. Antonelli, R. Antonietti, and G. Guidetti, Misurazione del capitale umano dal lato della domanda di lavoro. Un'analisi empirica sulle scelte d'investimento in formazione nelle imprese manifatturiere italiane, in L. Tronti, Definizione e misurazione del capitale umano, Padua, Cedam-Kluwer, 2012.

⁴⁸ A logistic regression model was applied that included all the aspects determining the probability of being employed, based on extensive literature as well as on previous in-depth analyses by ALMALAUREA. This model also shows that certain personal propensities (for instance, propensity to mobility) associated with possession of cross-disciplinary skills also boost the probability to find employment. See § 2.3.

⁴⁹ F. Ferrante, S. McGuinness, and P. J. Sloane, Esiste «overeducation»? Un'analisi comparata, in Consorzio Interuniversitario ALMALAUREA (edited by), XII Rapporto sulla condizione occupazionale dei laureati. Investimenti in capitale umano nel futuro di Italia ed Europa, Bologna, Il Mulino, 2010.

The 13th Report highlighted that international surveys seem to challenge the idea that the graduates' skills mismatch is worse or more heavily felt in Italy than in the other European countries⁵⁰. This does not mean that there are no shortcomings, especially as regards cross-disciplinary skills. These issues should be concretely tackled at the relevant level, without preconceived ideas, and the different roles of all the stakeholders should be taken into account. This would in turn allow creating and effectively making the most of the country's human capital.

The above considerations inevitably draw the focus of attention to the "brain drain" issue, which is caused by imbalances between the supply and demand for qualified labour. Due to the lack of reliable, broad, and comparable data⁵¹ it is difficult to understand the scale of a phenomenon which is particularly significant in the southern Mediterranean countries but also affects many others. An analysis of the Italian situation in terms of inbound and outbound flows of highly educated persons yields a bleak picture. However, the worrying element in this respect is not outbound mobility, whose extent is similar to that of the other European countries, but rather the tiny magnitude of inbound flows, an aspect that testifies to the scarce attractiveness of our country as a whole and results in a very negative balance⁵². This is further confirmed by the low number of foreign students in Italian universities⁵³ as well as of

⁵⁰ A Eurobarometer survey involving human resources managers from over 7,000 companies with more than 50 employees showed that 89% of interviewees (85% of Italian respondents) thought that the degree holders they had hired in the past 3-5 years had the skills required to accomplish their tasks. In confirmation of this, Italian companies were found to hire foreign graduates to a much lower extent (18%) compared to the European average (27%) See European Commission, *Employers' Perception of Graduate Employability*, Eurobarometer 304, Brussels, 2010.

⁵¹ J.C. Dumont, G. Lemaître, *Counting Immigrants and Expatriates in OECD Countries: A New Perspective*, in OECD, *Trends in International Migration*, 2004.

⁵² According to specific in-depth analysis, in Italy "for each brain that comes in, one and a half leave the country". See L. Beltrame, *Realtà e retorica del brain drain in Italia. Stime statistiche, definizioni pubbliche e interventi politici*. Quaderno 35, Department of Sociology and social research, University of Trento, 2007.

⁵³ In 2009 they were slightly less than 60,000, 3.3% of the enrolled students (ten years before, foreign students were 26,000, i.e. 1.5% of enrolled students). In 2008, foreign students were 19.9% in the United Kingdom, 11.2% in France, 10.9% in Germany, and 8.5% in the OECD countries as a

foreign researchers in the country's public and private research centres which, as previously pointed out, receive much less investments than what is the case in other most developed countries⁵⁴.

As was repeatedly pointed out, part of the reason why human capital is not fully exploited is due to the characteristics of our economic system. This obviously causes the brain drain too. The AlmaLaurea findings seem to reaffirm this hypothesis by showing that Italian graduates in employment abroad receive greater appreciation than in their homeland (incidentally, this year's survey considered a broader range of aspects). According to recent surveys, this greater appreciation does not depend on remuneration differentials, and translates into better exploitation of the qualification achieved, greater spread of permanent work contracts, and higher satisfaction with the various aspects of the job carried out. If the situation is as described, the (much needed) actions aimed at improving the quality of our university system and our graduates might paradoxically lead to a greater *brain drain*, if they are not accompanied by measures intended to foster full exploitation of graduates in Italy's domestic economy.

1.1. Some considerations on the debate regarding training models

In recent years, the debate on the effectiveness of the university reform heated up over the issue whether a general or a specialized approach to higher education training was to be favoured. This issue is of course relevant to a different extent in the various education tiers. "Good graduates come from good universities, but good universities primarily need good students who are capable of learning, thinking critically and originally, facing and solving problems. These skills should be developed in previous educational levels"⁵⁵. There are several reasons to opt for a kind of university training which is not based on extremely early specialization or a hyper professional-oriented approach: Andreas

whole. In Italy, foreign-born graduates were 7200 in 2010, i.e. 2.5% of all graduates.

⁵⁴ M. C. Brandi, and M. L. Segnana, *Lavorare all'estero: fuga o investimento?*, in Consorzio Interuniversitario AlmaLaurea (edited by), *X Rapporto sulla condizione occupazionale dei laureati. Formazione universitaria ed esigenze del mercato del lavoro*, Bologna, Il Mulino, 2008.

⁵⁵ I. Visco, *Investire in conoscenza: giovani e cittadini, formazione e lavoro*, op. cit., p. 11-12.

Schleicher, head of the Indicators and Analysis Division of the OECD Directorate for Education, believes that “today, schools need to prepare students for jobs that have not yet been created, to use technologies that have not yet been invented, to solve problems that we do not yet know will arise”⁵⁶.

Recent data reveal that there is a trade-off between general and specialized training vis-à-vis short-term versus long-term employability⁵⁷. Indeed, professional-oriented training increases youth employability when they first access the labour market, but risks jeopardizing it at later stages in default of suitable investments in training. This issue is all the more important in the light of a trend towards rapid obsolescence of knowledge and technology combined with longer life expectancy and working life.

The topic of effectiveness of lifelong learning in different types of training has obvious consequences on the physiological duration of working life as well as on the possibility (and cost-effectiveness) of retraining adult people in employment or redundant⁵⁸.

It is vital to consider these matters when making decisions affecting education and training policies, but also when analysing other aspects such as the social costs, feasibility and implementation schedule of reforms affecting the labour market and the welfare system⁵⁹.

Contrary to what has been the case in these years, the planned reform of Italy’s labour market should offset the greater flexibility required from young (and less young) graduates with higher wages.

In brief, as a result of rapid knowledge obsolescence combined with longer working lives, we face the challenge of creating education systems which are able to produce flexible human capital with general, cross-discipline skills. Besides, it is necessary to build effective *lifelong learning* tools to accompany workers during their entire working life. In Italy, this challenge goes hand in hand with that of improving the country’s educational attainment.

⁵⁶ A. Schleicher (interview), *Comparare per apprendere. La sfida di PISA ai sistemi educativi nazionali*, in *Scuola Democratica*, no 2, 2011.

⁵⁷ E.A. Hanushek, L. Woessmann and L. Zhang, *General education, vocational education, and the labor-market outcomes over the life cycle*, NBER Working Paper, n. 17504. 2011.

⁵⁸ L. Aburrà, E. Donati, *Nuovi cinquantenni e secondi cinquant’anni. Uomini e donne in transizione verso nuove età*. Franco Angeli, 2008.

⁵⁹ F. Ferrante, *Riforme del welfare, struttura demografica e preferenze della popolazione*, nel *Merito*, 13 January 2012.

1.2. Some considerations on the assessment of the university system: information requirements and the contribution of AlmaLaurea.

As the 13th ALMALAUREA Report already highlighted, economic theories and evidence show that information plays a paramount role in the labour market in that it can facilitate or hamper the match between demand and supply of labour and skills⁶⁰. Data banks as ALMALAUREA's (which has come of age this year as it was created 18 years ago) can reduce frictions in the job search process and improve the matching between graduates and job vacancies⁶¹.

Another important advantage of upgrading graduate recruitment data banks is that these tools promote the use of formal recruitment channels as opposed to informal ones, which are generally associated to lower degrees of matching between required skills and skills possessed by graduates, as well as to a greater role played by networks of relationships in the recruitment process. Therefore, while it helps reducing the mismatch between graduate demand and supply, a more extensive use of data banks also contributes to lowering the barriers to social mobility and expanding the role of tertiary education as a social ladder.

Upgrading graduate data banks to a supra-national level is an ambitious target, yet it should be pursued. This is something that AlmaLaurea has done for years by means of some specific projects⁶²; because of this work, the Consortium was internationally

⁶⁰ The motivation for the recent Nobel prize awarded to Peter A. Diamond, Dale T. Mortensen, and Christopher A. Pissarides testifies to the importance of this finding. "On many markets, like for instance the labour market, buyers and sellers do not always make contact with one another immediately. This concerns, for example, employers who are looking for employees and workers who are trying to find jobs. Since the search process requires time and resources, it creates frictions in the market. On such search markets, the demands of some buyers will not be met, while some sellers cannot sell as much as they would wish. Simultaneously, there are both job vacancies and unemployment on the labor market". nobelprize.org/nobel_prizes/economics/laureates/2010/press.html

⁶¹ In that regard, a paper by Sylos Labini shows that graduates who are registered with the ALMALAUREA data bank have an advantage in terms of time-to-first-job and employment rate compared to their colleagues. F. Bagues and M. Sylos Labini, *Do Online Labor Market Intermediaries Matter? The Impact of AlmaLaurea on the University-to-Work Transition*, in D. H. Autor (edited by), *Studies of Labor Market Intermediation*, p. 127-154.

⁶² The first international experimental project was called EAL-NET, and it was carried out in Europe in collaboration with the Maastricht, Paris-Est, Warsaw

acknowledged for setting best practices in higher education monitoring as well as creating tools to facilitate the match between supply and demand of graduates⁶³.

In the future, the evaluation of universities and allocation of resources based on training performance and timely disclosure of quality information will require evaluators to pay greater attention to contextual factors in order to assess performance on equal terms. Wise policy makers will need to focus on allocating public resources according to each university's capability of making the most of its students, instead of relying only on students' final outcomes (for instance, study and/or work-related performances) This becomes all the more important as higher education systems, which used to be characterised by highly harmonised cohorts of new enrolments, become more open and more similar to those that were adopted in European and OECD countries over the past 20-30 years. The objectives set by the European Commission for 2020 (40% of degree holders in the 30-34 age bracket) also point to the same direction. National and international surveys on learning processes quality (e.g. INVALSI, PISA) have not only reaffirmed the importance of the social and economic background, but also that there are remarkable differences between geographical areas as well as specific types of schools within Italy's educational system⁶⁴.

and Budapest-ELTE universities. After that, another international project called GrInsA (Graduate's Insertion and Assessment as tools for Moroccan Higher Education Governance and Management), funded by the European Commission under the TEMPUS programme, was started. This experimental work aimed at setting up a graduates' data bank like AlmaLaurea's in the Moroccan universities of Meknes, Oujda, Marrakech, and El Jadida. This initiative is AlmaLaurea's contribution to the Euro-Mediterranean cooperation; the Union for the Mediterranean and the World Bank (Center for Mediterranean Integration) also gave their support. More recently, further possible areas of action have been identified in the Mediterranean basin (Spain, Tunisia) as well as in other parts of the world (Chile, Armenia).

⁶³ AlmaLaurea received an important European award called EUNIS (European University Information System; Elite Award for Excellence in Implementing Information Systems for Higher Education). Further reward came from the international press: for instance, in March 2001 the Times Higher Education Supplement featured an article on ALMALAUREA whose title was *Bella figura: Italian model sets trend with expert fitting service*.

⁶⁴ G. Gasperoni, *Le variazioni territoriali dei livelli di competenza degli studenti nelle Regioni italiane nella rilevazione 2009 di PISA*, Le Istituzioni del Federalismo, XXXII, 2011. P. Montanaro, *I divari territoriali nella*

Such a differentiation traces back a long time and may be linked to schooling⁶⁵ and above all literacy delays, with inevitable consequences on higher education performance.

Supporting excellence does not necessarily imply giving up a socially inclusive university system, as both strategies can coexist.

The idea of thoroughly measuring education system performance based on its added value is more commonly found in those countries where the culture of evaluation is more deeply rooted and widespread⁶⁶. AlmaLaurea has recently embarked on this process too⁶⁷. In order to deliver adequate information for evaluation purposes, a system is needed to gauge the performance of students and graduates when they leave university, but also during their job market insertion. All universities should be involved. Such a system is already up and running for the 64 ALMALAUREA member universities; it has been continuously in place for a number of years and offers reliability, timeliness and completeness of data. As hoped for already in 1995 and later laid down by ad-hoc Ministerial Decrees, it is nation-wide in its scope⁶⁸.

preparazione degli studenti italiani: evidenze dalle indagini nazionali e internazionali, Bank of Italy, Questioni di Economia e Finanza, no. 14. 2008.

⁶⁵ In 2010, in the 25-64 age bracket, a one year schooling gap was observed between northern/central Italy and southern Italy (on average, the number of completed years of education is 11.1 versus 10.2 respectively) See G. Bertola, and P. Sestito, *A comparative perspective on Italy's human capital accumulation*, Banca d'Italia, Quaderni di storia economica (Economic History Working Papers), n. 6, 2011.

⁶⁶ On the topic of tertiary education assessment, see in particular D.V. Kreutzer and W.C. Wood, *Value-Added Adjustment In Undergraduate Business School Ranking*, *Journal of Education for Business*, 357-361, (2007). The authors of this work rank US *Undergraduate Business Schools* according to their added value; the ranking they obtain is remarkably different from the one compiled by the renowned *Business Week* publication.

⁶⁷ F. Ferrante, *Qualità in ingresso e performance in uscita. Il caso delle facoltà di Ingegneria*, in *Consorzio Interuniversitario Alma Laurea* (edited by), XIII Profilo dei laureati italiani. Qualità e valutazione del sistema universitario, Bologna, Il Mulino (forthcoming).

⁶⁸ "With a view to strengthening the tools aimed at monitoring activities and results of the university system, and in order to allow evaluation of the results achieved by universities in terms of their graduates' time-to-entry into the labour market, the Ministry fully implements a "Graduates' Register" through the activities and survey methods adopted by the inter-university consortium ALMALAUREA, pursuant to Art. 1-bis of the Italian decree-law dated 9 May 2003, which became law no. 170 of 11 July 2003, and in

An improved information framework could also benefit a wide range of activities such as career guidance, job placement, internal monitoring, assessment and self-assessment of the study opportunities offered by the universities. In addition to that, it could optimize the overall information framework in which families and businesses make their choices and define their recruitment policies⁶⁹.

1.3. Final considerations

This ALMALAUREA survey on graduates' employment conditions is true to life in its depiction of the difficulties faced by young Italians. Within a generally negative framework, the economic crisis exacerbated gender and geographical differences in employment outcomes.

As all the data unmistakably show, the national and international economic situation offers no ground for optimism. Nevertheless, we cannot afford just to wait and see, because such an attitude could only extend the crisis: our future depends on what we sow today. The previous sections highlighted some structural bottlenecks that might hamper the country's efforts to weather the crisis, and have long been an obstacle to the full activation of graduate human capital. In order to eliminate these bottlenecks, a broad, coordinated action targeting a multiplicity of matters is needed. However, this Report cannot analyse in depth the necessary action.

The university system has to play its part by improving the quality of research and training, with a view to satisfying the needs of the most advanced, innovative sectors of the economy. In

compliance with Ministerial Decree (D.M.) of 30 April 2004" (D.M. 23 December 2010, no. 50).

The same objective was pursued by an agenda proposed by Silvano Moffa (signed by Cazzola, Antonino Foti, Ceccacci Rubino, and Vassallo) to the Italian Lower House on 28 January 2010, session no. 275. The agenda called on the government to "take the AlmaLaurea experience [...] into account in order to optimise resource use and avoid wasting precious, qualified energy in its efforts in favour of youth employment and Italy's domestic economy".

⁶⁹ These considerations were presented during a Hearing at the Italian Lower House, XI Committee (Public and private sector employment, Survey on the labour market, modes of access and development factors) on 22 June, 2001. The same topics were dealt with during an informal hearing at the VII Committee (Culture) whose topic was the draft decree no. 396 on "*maximising university efficiency [...]*", on 25 October 2011.

addition to that, cross-disciplinary skills should be enhanced, and the international integration of education systems should be boosted. The adoption of merit-based criteria for the allotment of funds might contribute to achieving this result if adequate evaluation techniques are implemented in order to assess performance on equal terms. At any rate, minimum overall resource requirements must be established based on the estimated cost of teaching and research; such an estimate must be carried out according to international parameters. As was seen, an international comparison of the total expenditure for each student (based on OECD data) puts Italy at the bottom of the standings.

For a scrupulous assessment to be conducted, data must be comparable, and therefore absolutely transparent, well-timed, up-to-date, reliable, complete and system-wide. In addition to that, data should be referred both to graduates' university career and to their entry into the labour market, at least in the first years after degree completion. This is exactly what ALMALAUREA has provided to its member universities for 18 years.

The difficulties and slowness faced by the business sector to invest and regain pre-crisis employment levels, coupled with the fewer employment opportunities available in the public sector on account⁷⁰, among other things, of government spending cuts, have often made self-employment and entrepreneurship the only alternative to unemployment for those seeking to enter the labour market or who have been expelled from it. However, self-employment should be viewed as something more than a passive response stemming from necessity, especially among highly educated youth, or in technology- and knowledge-intensive sectors. In less mobile societies (like Italy's, for instance) where employment and career opportunities are fewer and conditioned by networking practices, self-employment should be seen as an opportunity for income and self-fulfillment.

What's more, graduates' self-employment could also contribute to speeding up the overhaul of the country's businesses sector, in order to give it a better position internationally.

⁷⁰ According to Eurostat, in 2007 in Italy, at the edge of the crisis, the rate of workers with HE degree in the public sector was 35.6% against the 10.9% of private sector. In Europe (EU15, excluding Italy), the same figures were respectively at 54.6% and 23.4%. In the same year, in Italy, the public sector absorbed the 19.9% of whole workers population and the 45.3% of graduates (Eurostat, LFS).

Besides requiring ad-hoc initiatives from the academia, the promotion of graduates' self-employment (and entrepreneurship in general) calls for removing the numerous institutional barriers that still exist as well as for improving the country's tangible and intangible infrastructure. Some of the measures that the Government has recently adopted seem to be aimed at this goal.

In recent times, three topics have been widely debated by the public and are worth mentioning here. They are: significance of the degree grade; older age at graduation; and willingness to accept mobility. These topics will be the subject-matter of specific in-depth analysis during the presentation of the 14th Report on graduates' profile.

Degree grade. ALMALAUREA data reveal a very complex framework in which several factors come into play (different evaluation criteria, social background, gender, secondary studies pursued, etc). These factors are differently arranged in the various universities and even in degree courses belonging to the same subject grouping⁷¹. Therefore, significant differences in average degree grade can be observed between two universities focusing on the same subject matter and located in the same geographical area, as was the case for the first-level degrees in Economics and Business Economics, where the average degree grade among graduates from the 2010 class was 22 points higher (out of 110) in the former degree course than in the latter. In conditions of equal secondary school-leaving certificate grade, the degree grade difference observed was smaller, albeit still significant, at 8 points. As final degree grades normally tend to be in the higher bracket, an analysis of the average examination grade might yield more significant results and represent a better indicator of the skills that graduates acquired and/or possess. Consequently, it seems advisable to attach less importance to the final graduation grade during recruitment and personnel selection processes, particularly in the public sector.

⁷¹ See A. Cammelli, G. Gasperoni, Più diversi che uguali. Origini sociali, retroterra formativo e riuscita negli studi dei laureati, in A. Cammelli and G. Vittadini (edited by), Capitale umano: esiti dell'istruzione universitaria, Bologna, il Mulino, 2008. A. Cammelli, Al di là della media: le università alla prova dei numeri, "Scuola Democratica", n. 2, 2011.

Age at graduation. The reform implemented in 2001 has had a radical impact on this indicator. Pre-reform graduates used to achieve their degree at 28 years of age, whereas the average graduation age among the graduates from the 2010 class was 26.9. Although this improvement was predictable due to the introduction of three-year degree courses, it is nevertheless remarkable as the reform allowed new population segments to pursue university studies, thus raising the average enrolment age from 20 to 21 years of age. Between 2001 and 2010, the share of those who enrolled later than standard age⁷² (late enrolments) rose considerably. When these enrolments are left out of the analysis, the average age at graduation for the overall graduate population dropped from 27.2 in 2001 to 24.9 in 2010. An even more complex picture results from the analysis of age at graduation by degree course type: when leaving late enrolments out, first-level graduates from the class of 2010 were found to graduate at 23.9 years of age; second-level graduates at 25.1; and single-cycle second-level graduates at 26.

Unfortunately, it is impossible to carry out reliable comparisons at international level due to the lack of official data. At any rate, Italy's pre-university education system is still one year longer than in the main European countries.

Willingness to accept mobility⁷³. Despite what is commonly believed, 38% of the graduates from the 2010 class were willing to take up residency elsewhere in order to find a job. A further 33% were willing to accept frequent business travels. The above figures grew over time, as finding a job matching one's training and skills became more and more difficult. Men showed greater propensity to mobility than women; in particular, the share of men who were willing to set up their residency elsewhere was 10 percentage points higher than women's. Willingness to work abroad also soared over

⁷² In 2001, 11% of graduates had enrolled at least two years above standard age. After nine years this share rocketed to 23%. The increase in the share of those who enrolled at least ten years above what has traditionally been considered the standard age is even more striking: from 2.8% to 6% between 2001 and 2010.

⁷³ From the outset, in 1994, the commonly held belief among employers that graduates were not willing to move far from home led ALMALAUREA to include questions in its surveys aimed at ascertaining whether they were willing to "accept business travels (frequently; with or without taking up residency elsewhere) or to "work in another geographical area (province, region, country)".

the past few years. 41% of the graduates from the 2010 class stated that they were willing to work abroad, whereas only 33% were in 2004. 31% were willing to move further away to non-European countries, as against 23% six years before. Only less than 4% stated that they were not willing to accept business travels.

Specific in-depth analyses show that, other things being equal, willingness to accept travels is an advantage as it brings about better employment opportunities.