The Employment Prospects of Young Graduates in Italy during and after the 2008 Crisis

Raffaella Cascioli*

Abstract – The school-to-work-transition in Italy suffers a number of critical issues. This paper documents the employment prospects of young Italians graduates during the economic recession (2008-2014) and in the subsequent period of recovery (2015-2017). The analysis, based on data from the European Labour Force Survey, focuses on the employment rate of recent graduates in the 20-34 age group, an indicator adopted by Europe to monitor transitions from school to work. We distinguish temporary employment, and examine in parallel the employment rates of those beyond three years after graduation. Logit model estimations of the probability to be employed, accounting for educational attainment and time spent in the labour market, show that seniority did not provide significant protection during the crisis, and that tertiary graduates were less affected by the crisis than upper secondary graduates, and have benefited more from the recovery. An analysis of pseudo-cohorts' trajectories suggests no evidence of a scarring effect but, for upper secondary graduates only, the changes in temporary employment rates evoke cohort effects.

JEL Classification: I26, J13, J21, J22, J23, J24
Keywords: school-to-work transition, youth labour market, temporary jobs, Italy

**ISTAT (racascio@istat.it)*
The author wishes to thank three anonymous reviewers whose comments and suggestions have helped improving this article.
Received in October 2018, accepted in July 2020.

Citation: R. Cascioli (2021). The Employment Prospects of Young Graduates in Italy during and after the 2008 Crisis. *Economie et Statistique / Economics and Statistics*, 522-523, 43–59. https://doi.org/10.24187/ecostat.2021.522d.2038

Historically, some European countries have been more successful than others in integrating young people into the labour market. Italy, with a remarkably long time to access a first job and one of the lowest youth employment rate in the European Union (EU), is an extreme example of the critical issues affecting the school-to-work transition in Southern Europe. Disparities in the school-to-work transition and employment prospects after graduation across countries depend on the education and training system (study programs and orientation, path flexibility, etc.), the degree of integration between educational paths and the labour market (internships, apprenticeships, etc.) and labour market institutions (employment protection legislation, flexibility, etc.). In all these dimensions, Italy has been showing wide differences compared to many other EU countries for a long time. Besides "structural" aspects of the school-to-work transition, youth employment is highly sensitive to economic trends, and was affected by the global economic crisis of 2008 – however with differences in magnitude and length across countries. The Italian economy was hit more than other OECD countries, and the recovery was somewhat slower and moderate (OECD, 2019a). In addition, a major (and much debated) reform of the labour market was initiated in 2014, with a number of legislative acts usually referred to collectively as the *Jobs Act*. The past decade in Italy was then characterized by a crisis, a modest recovery, and a labour market reform. How have the employment prospects of young Italians changed in this context? Can we sort out between age, period and generation effects? We address these questions by examining recent graduates' employment rates in Italy over a period of recession (2008-2014) and a period of recovery (2014-2017).

Young people's disadvantages when entering the labour market are well known, and can be summarized as follows: Firstly, and independently from the condition of the labor market, despite their education level on average higher than that of the population already employed, young graduates lack work experience, and suffer an "experience gap", as termed by e.g. Pastore (2015). Bell & Blanchflower (2015) note that this lack of work experience may generate an experience trap, when firms are in search for experienced workers, which prevents young people from gaining the work experience that firms require. Secondly, whether because they are more often working in temporary jobs or because they are the "last in", they are more likely to be the first out if the economy slows down. This is why young people's employment has been found the most vulnerable segment in the labour market in many European countries (Brada & Signorelli, 2012). Regarding the context of labour market entry, the contributions of school-to-work transition processes and labour market institutions to young people's integration in employment have been extensively analyzed (e.g., Ryan, 2001; Quintini *et al.*, 2007; Quintini & Manfredi, 2009; van der Velden & Wolbers, 2008; Barbieri *et al.*, 2018). Ryan (2001) examined in particular the impact of employment protection legislation in general *vs.* special programs aimed at young people. He concluded that deregulation could contribute to a less uneven distribution of unemployment, while specific programs could have the effect of replacing regular employment with insecure jobs, making all young workers worse off. Other aspects of labour market institutions have been much debated. One is the role of temporary employment, highlighted since the 1990s as a means to provide young people with the work experience they need and shorten the average duration of unemployment (OECD, 1994; Krugman, 1994). However, temporary contracts do not allow young people to accumulate specific human capital, and their effect on youth employment rate are different depending of the context, as shown from a comparison between Europe and the United-States (Quintini & Manfredi, 2009). More generally, several studies show that deregulating temporary employment does not reduce unemployment (Noelke, 2016), or that it does so but at the price of a deterioration in job quality (Goffette & Véro, 2015) or at the price of increased job instability (e.g. in Spain, cf. Ianelli & Soro-Bonmati, 2003). It is also debated whether temporary jobs are stepping-stones (Booth *et al.*, 2002; Scherer, 2004), with some works underlining the risk of entrapment in temporary jobs (Barbieri *et al.*, 2019). For some authors, a reduction in the protection afforded to permanent workers would contribute to reduce the inequality between insiders and outsiders (Gebel & Giesecke, 2016; Passaretta & Wolbers, 2016). Finally, another strand of literature has investigated more specifically the impact of recessions on youth labor market outcomes and the long-term effects of having entered the labor market in bad times, highlighting the risks of scarring effects and "lost generations" (e.g. Scarpetta *et al.*, 2010; Gaini *et al.*, 2013).[1]

Youth employment prospects can be approached through various indicators: the unemployment rate, the employment rate, the NEET rate (share of youth not in education, employment or training), and youth to adults unemployment rate. In this paper, we focus on the employment rate of recent graduates who are not in education or training, one of eight benchmarks of the EU 2020 strategic framework for European cooperation in education and training (ET2020[2]), which set four strategies objectives, amongst which "Improving the quality and efficiency of education and training" (Council of the European Union, 2009). The indicator on recent graduates' employment rate was developed as a proxy for youth employability (for details, see Garrouste, 2011; Boeteng *et al.*, 2011; Arjona Perez *et al.*, 2010a; 2010b).

More precisely, the indicator, based on data from the European Labour Force Survey, measures the share of employed upper secondary and tertiary graduates (20-34 year-olds) amongst graduates who have left education or training 1 to 3 years before the reference year, and are not enrolled in any further education and training programmes. The target for 2020 was set at 82%[3] (Council of the European Union, 2012). The indicator has been used in particular to analyse the determinants of young graduates' employability in Europe (Garrouste & Rodrigues, 2012; 2014), and then for analyses to set the future employability benchmark of the European indicator under ET2025 (Suta *et al.*, 2018).[4]

The analysis of the indicator is of particular interest in the case of Italy, where the share of young people not in education, employment, or training (NEET) has been an increasing concern (ISTAT, 2018; 2010). This indicator will be used throughout the paper.

In complement, we will apply the same indicator to less recent graduates, i.e. who have graduated for over three years (in the same age group).[5] Therefore, the analysis takes into account several cohorts of graduates and the joint use of the indicator for recent and less recent graduates allows to observe the entire group of young people no longer in education and training. We also distinguish temporary employment, particularly given that during the observed period Italy introduced a labour market reform with a potentially significant effect on temporary employment (*infra*).

Using these indicators, we document the changes in young upper secondary and tertiary graduates' employment during the crisis and whether their seniority into the labour market protected or penalized them in the economic downturn. We examine the association between the temporary employment trend and the introduction of the Italian *Jobs Act* in 2014. Moreover, we investigate a generation effect and explore the possible existence of a scarring effect due to unfavourable economic conditions at the time of entry in the labour market through a pseudo-panel analysis.

The rest of the article begins with a brief overview of the Italian context regarding the school-to-work transition, the 2014 labour market reform, and the Italian-EU gap in youth employment rate over the period analysed. The second section examines the changes in young graduates' employment rates, and the third section examines the trajectories of generations of graduates from 2005 to 2017.

1. The Italian Case

The financial crisis of 2008 had a dramatic impact on the Italian economy, its main effects being a reduction in Gross Domestic Product (GDP), a loss of jobs, and a reduction in productive capacity. Over the observed period, Italian GDP dropped by 7.1% and the country's productive capacity fell by 25% (OECD, 2019b). Over the same period, the Italian unemployment rate nearly doubled, from 6.7% in 2008 to 12.7% in 2014. Regarding school-to-work transitions,

---

1. During the economic crisis, debates on the 'scarring effect' and concerns expressed in that respect prompted the Council of the European Union to issue a Recommendation, calling the Member States for the implementation of measures to boost the integration of young generations into the labour market, the so-called "Youth Guarantee" (cf. Council of the European Union, April 2013).

2. See https://ec.europa.eu/eurostat/web/education-and-training/eu-benchmarks

3. "By 2020, the share of employed graduates (20-34 year olds) having left education and training no more than three years before the reference year should be at least 82% (as compared to 76.5% in 2010)" (Council of the European Union, 2012). The indicator is one of the key figures presented in the annual publication of the European Commission on Education and Training Monitor (https://ec.europa.eu/education/policy/strategic-framework/et-monitor_en); it has also been periodically analyzed by the Italian National Institute of Statistic (ISTAT, 2019c; 2018; 2014; 2013).

4. Other European comparisons of the school-to-work transition have used longitudinal data from EU-SILC (Berloffa et al.*, 2015; Carcillo* et al.*, 2015). However, the use of EU-SILC data for labour market analysis of cohorts of graduates is limited by excessively small sample size. Other studies have used data from two ad hoc surveys carried out within the framework of the European Labour Force Survey, in the years 2000 and 2009 (Kogan & Muller 2003; Passaretta & Wolbers, 2016).*

5. In this age group (20-34 years), the percentage of graduates who completed their education more than three years before is much higher among upper secondary graduates than among tertiary graduates (85.0% compared with 59.9%). Another part consists of upper secondary and tertiary graduates not in education or training, who graduated 1-3 years before: 14.2% and 33.8% respectively. A remaining part graduated less than one year before: 0.9% and 6.3% respectively. In Italy, among young graduates, less than one in three were still in education or training in 2017: 30.6% of those with an upper secondary school diploma and 31.7% of those with a higher education degree.

comparative studies have, for a long time, singled out Italy within a Mediterranean cluster characterized by low youth employment and activity rates, significantly high unemployment rate and a slow process to access employment. Despite a major labour market reform in 2014 (the *Jobs Act*), the Italian young graduates employment rate remains the lowest of the EU28 (just after Greece), and lower than in 2008. This section briefly presents this context.

1.1. School-to-work Transition

Italy is a typical example of the critical issues affecting the school-to-work transition in Southern Europe, suffering from a remarkably long period of transition (Pastore, 2017), longer than the European average (EUROSTAT, 2012), and rising: from around 3.5 years in 2006, the mean duration of school-to-work transition reached around 5.5 years in 2017 (Pastore *et al.*, 2020). Compared to European non-Mediterranean countries, Italy is characterized by a historically low (albeit rising) proportion of tertiary graduates (-16 percentage points, cf. OECD, 2017), huge regional discrepancies, a major role of family structure to support young people (the 'famiglia lunga' model, cf. Cicchelli & Merico, 2007; see also Barbieri *et al.*, 2015 and Berfolla *et al.*, 2016), and a rigid education system weakly connected to the labour market. The system is struggling to provide young people with the work experience they need, to develop general and job-related competences, and delays the labor market entry for a large number of individuals who enroll at the university. On the other hand, the share of people with a tertiary degree in the 30-34 age group is around 25%, well below the EU-28 (around 40%). The education and training system leaves most of the experience of work to after graduation, an almost direct opposite of the so-called "dual" system which increases early employment rates (Muller & Gangl, 2003), and allows a better matching of education with labour market demand (Ryan, 2001 - who also notes that the effects are less clear on long-term employment outcomes).[6]

Furthermore, the school-to-work transition is affected by a labour market characterized by strong protection of permanent workers, based on national collective agreements, and weak protection of temporary employees (OECD, 2010). Since the early 90s, a number of flexible forms of employment and related salary packages was introduced, aimed to support both competitiveness of the Italian industry and entry of young people into the labour market (Pastore, 2017). Nevertheless, Italian youth labour market indicators did not improve significantly: compared to other European countries, youth employment and activity rates have remained low, and their unemployment rates have been significantly high (Iannelli & Soro-Bonmati, 2003). The percentage of young NEET, and the persistence in this status has been markedly high (Quintini *et al.*, 2007). Moreover, the recovery after the 2008 crisis, less marked in Italy than in other European countries, has also had a different impact on the school-to-work transition (ISTAT, 2019a; Cascioli, 2016).

1.2. The *Jobs Act*

Following other labour market reforms (the previous one being the "Fornero" reform of 2012, see Tiraboschi, 2012) the Italian government initiated in 2014 another major labor market reform, aimed to increase employment, help re-launching growth, and reduce the dualism of the labour market between workers employed on indefinite contracts and those employed in "atypical" contracts by encouraging employers' to offer permanent jobs.

The reform resulted in a number of legislative acts usually referred to collectively as the *Jobs Act*.[7] Decree Law no. 34 of 20 March 2014 (the *Poletti Decree*) was the first part of the *Jobs Act*. It reviewed the legislative framework governing temporary contracts and apprenticeships. It allowed an increase in the number of times an employment contract could be renewed, as well as the maximum overall duration of such contracts, and it reduced the number of circumstances required (*causalità*) to justify a temporary contract. This was followed by Italian Law no. 183/2014, passed in December 2014, which modified the legal framework for permanent employment protection and the use of atypical contracts. This law paved the way for eight legislative decrees, adopted up to September 2015, including: Legislative Decree no. 23 of 4 March 2015 repealing workers' reinstatement rights (Article 18 of the Statute of Workers), in cases of dismissal without just cause in companies with more than 15 employees, and introducing a new type of permanent employment contract (applying only to new hires) characterized by increasing dismissal costs based on workers' seniority; Legislative Decree no. 81 of 15 June 2015,

6. In 2015, a reform of the education and training system (Law 107-2015, known as "The Good School") revived the Alternanza scuola lavoro *(ASL) – a system allowing alternating between school and practical work experience.*
7. All the documentation is downloadable from the Italian Ministry of Labour website: http://www.jobsact.lavoro.gov.it/documentazione/Pagine/default.aspx.

restricting the use of atypical contracts and eliminating some of them (such as the *contratto di collaborazione coordinata e continuativa a progetto*, a type of project-based – hence temporary – employment contract).

The government backed up these reforms by fiscal incentives to encourage employers to offer new permanent contracts, through temporary and dwindling national insurance contributions cuts: a three-year total exemption period for national insurance contributions (*Legge di Stabilità 2015,* i.e. an Italian budget law); this was changed by the *Legge di Stabilità 2016,* to a 40% exemption for a period of two years, and also limited to a territorially-defined program, the so-called Employment for the South, by the *Legge di Stabilità 2017*.

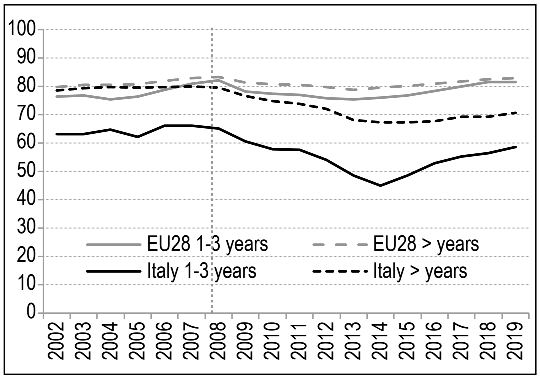
1.3. The Italian-European Gap in Young Graduates Employment Rates

The Italian-European gap in youth employment rate was already substantial prior to the economic crisis: in 2008, the employment rate of Italian recent graduates (having left education and training 1-3 years before) was around 65%, 17 points lower than the European average, slightly higher than in the early 2000s. With the downturn, the employment rate of recent Italian graduates dropped by 20 points in six years, almost doubling the gap (Figure I). The trend reversed after 2014, with the employment rate rising by about 10 points, yet without returning to its pre-crisis level. The gap is less pronounced for graduates with greater labour market seniority (those having graduated since more than three years).

This comparison also highlights that the school-to-work transition can be considered to be completed three years after leaving education in the EU on average, whereas it takes a much longer time in Italy. By education level, the decrease in the Italian youth employment rate is observed for both upper secondary and tertiary recent (1-3 years) graduates (Figure II-A). The crisis has also widened the gap in employment rates between upper secondary and tertiary graduates and this gap remains a long way off its pre-crisis level, while it remained substantially unchanged at EU level.

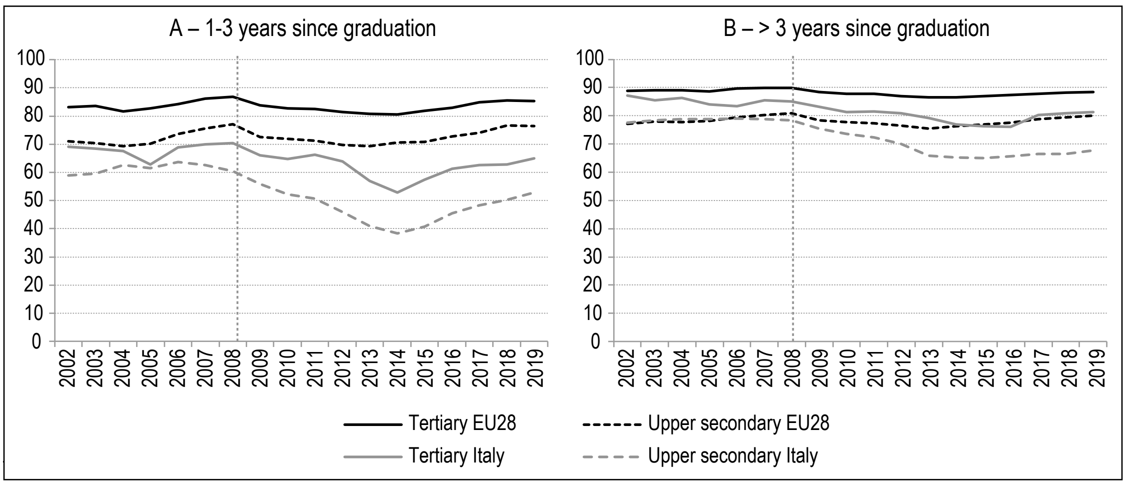
For less recent graduates, the initial Italian-European gaps in youth employment rates are much less pronounced, but again the economic crisis had a greater impact in Italy, with almost no recovery for upper secondary graduates (Figure II-B). All in all, the Italian-European youth employment gaps, between recent or less recent graduates as well as between upper secondary or tertiary graduates, already substantial in 2008, have become and remain wider than before the crisis.

Figure I – **Employment rates of graduates aged 20-34 having left education and training**



Sources: *European Labour Force Survey.*

Figure II – **Employment rates of graduates aged 20-34 having left education and training by educational attainment**



Sources: *European Labour Force Survey.*

2. Empirical Analysis of the Changes in Graduates Employment Prospects

In this section, we focus on the impact of the period of entry (economic crisis/recovery) on the employment prospects of graduates, according to the length of time since graduation (i.e. their seniority in the labour market, proxied by the time since graduation).

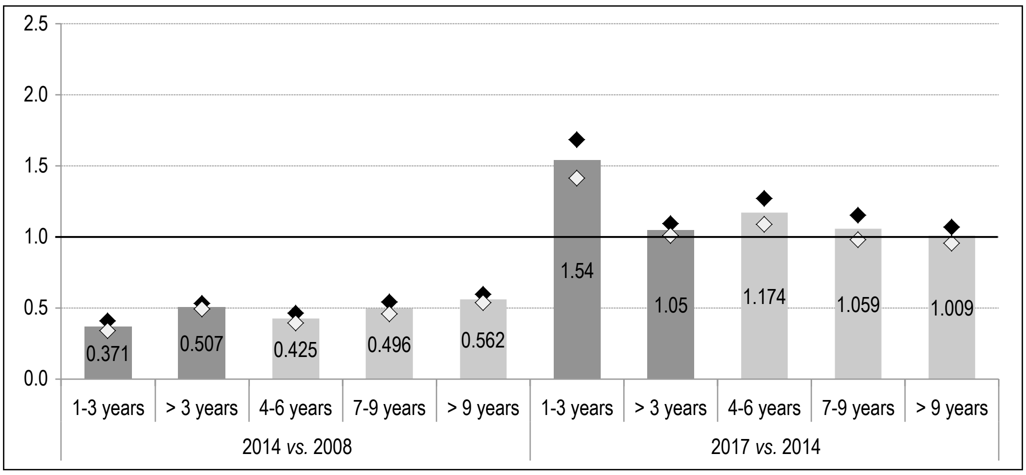
We use multivariate logistic models to estimate the conditional distribution of the probability of being employed for upper-secondary graduates and tertiary graduates. We control for gender, geographical area (North, Center and South) and citizenship (Italian, foreign); we also control for the type of diploma of upper-secondary graduates (general, technical, vocational, three-year vocational qualification) and for the main field of study of tertiary graduates' university degree (humanities, social sciences and law, technical-scientific). The models are estimated for subgroups of graduates broken down according to the number of years since graduation – i.e. of presence (or seniority) in the labour market (up to three years, over three years, the latter refined by spans of three years since graduation: 4-6 years, 7-9 years, and over 9 years). We consider the joint populations of graduates from years 2008 and 2014, and years 2014 and 2017, and estimate the odds ratios (thereafter OR) of employment and temporary employment in 2014 *vs.* 2008 (crisis), then in 2017 *vs.* 2014 (recovery).

Among recent upper secondary graduates, employment opportunities in 2014 were reduced to about one third (OR 0.371) of their level in 2008 (Figure III). Among their peers out of education for more than three years, employment prospects were "only" halved (OR 0.507). This clearly confirms that recent graduates are penalized the most by cyclical downturns. However, the impact of the crisis on employment prospects was only slightly lower for those who had been in the labour market the longest. This holds true for young people observed in 2014 who had left school 4-6 years before, and who had begun their transition from school to work during the economic crisis, as well as for those who in 2014 had left education more than six years before, and who have been exposed to the pre-crisis positive economic situation for a certain period of time (Figure III). This suggests that seniority in the labour market has not significantly protected young people from the negative impact of the economic crisis.[8]

The factors accounting for the higher "reactivity" of young people's probability of being employed include the high proportion of temporary contracts (allowing to reduce the number of employees simply by not retaining people at the end of these contracts). So the higher business-cycle sensitivity observed also among young Italian graduates with greater labour-market seniority would also be accounted for by the slower transition from temporary to permanent jobs that typifies employment in Italy.[9][10]

8. In other countries, the sensitivity to the economy cycle decreases more quickly as labour market seniority increases; e.g. in France it becomes relatively weak from the fifth year of seniority onwards (Fondeur & Minni, 2004).
9. OECD, 2008.
10. In Italy the overall incidence of temporary jobs is higher than the one calculated on employees only; this is due to the widespread phenomenon of hidden self-employment among young people, that is, self-employed workers providing services to a single work provider in a continuous manner, hence acting as de facto employees (OECD, 2010). Moreover, the contracts often governing these employment relationships are generally of a rather limited duration.

Figure III – **Upper secondary graduates (aged 20-34). Change in the probability of being employed in 2014 *vs.* 2008, and in 2017 *vs.* 2014 (odds ratios, multivariate logistic models)**



Number of observations for each of the ten models (from left to right): 9,628; 61,964; 12,795; 13,433; 35,736; 8,830; 51,062; 11,543; 11,577; 27,942.
Notes: Black and white diamonds represent, respectively, the upper and lower 95% Wald Confidence Limits.
Sources: ISTAT, *Italian Labour Force Survey.*

The economic recovery had a considerable positive impact on the employment prospects of recent upper secondary graduates: compared to their peers in 2014, their employment prospects were higher by 50% (OR 1.54). Even those graduates who had been out of education 4-6 years before had a greater chance of being employed than their peers with the same level of seniority in 2014 (Figure IV). The former, despite the fact that entered the labour market close to 2014, which was the most critical moment for entry into the labour market (see also Figure VII below), have recovered thanks to the economic upturn, and their employment prospects 4-6 years after leaving education were greater than those of their peers who entered the labour market around 2011. On the other hand, in 2017, the employment prospects of those who had left education more than six years before were similar to those with the same seniority in 2014.[11] This result shows once again that the crisis had the greatest impact on young graduates with a shorter experience on the labour market; however, they were also the ones who benefited the most from the subsequent economic upturn. The dynamic during the recovery, strongly related to labour market seniority, is dissimilar to that during the crisis, where the changes were more even among upper secondary graduates, regardless of the length of time since graduation.

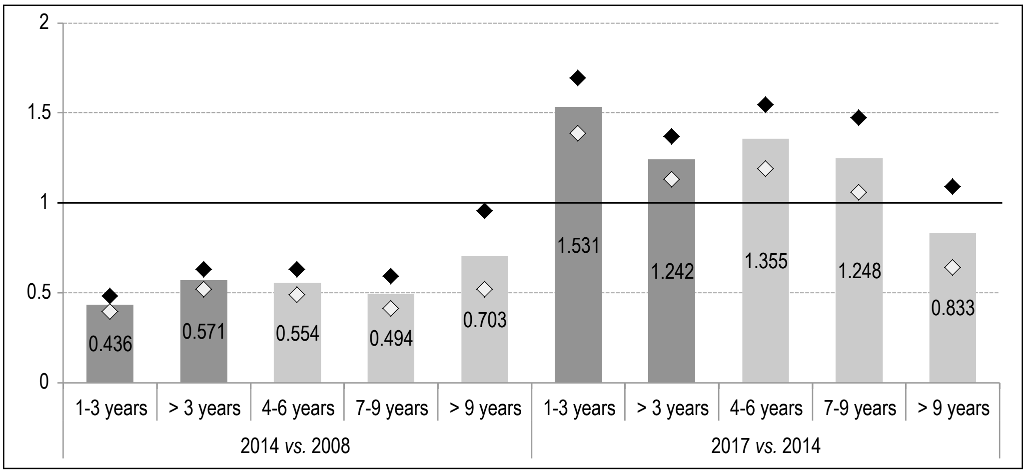
The results also show a sudden, substantial reduction in the employment prospects of tertiary graduates: from the beginning of the crisis up until 2014, the employment opportunities of recent graduates were more than halved (OR 0.436) while it was slightly less than halved among less recent graduates (OR 0.571).

In the latter three-year period examined above, those having benefitted the most of the period of recovery were the most recent tertiary graduates, with an increase in employment probability of 50%, which is similar to what has been estimated for upper secondary graduates. On the other hand, differently from upper secondary graduates, less recent graduates also had significantly better job prospects in 2017 than their peers in 2014; this holds true in particular for those who had left university 4-6 years before (OR 1.355) and 7-9 years before (OR 1.288).[12] Hence, the economic upturn affected tertiary graduates in a more homogeneous manner, regardless of their seniority in the labour market. In general, especially with regard to graduates with greater seniority, tertiary graduates appeared relatively more protected during the crisis, and more favoured during the economic upturn, than upper secondary graduates.

The younger generations are those most involved in temporary work (as fixed-term employees and project workers). In 2017, of those young people no longer in education and training, 28.5% of upper secondary graduates and 29.5% of tertiary graduates were working in temporary jobs. Moreover, although the incidence of temporary employment usually decreases over time, the proportion of young workers employed on such contracts remains remarkable even after several years have elapsed.[13]

11. However, there was also a favourable impact of the economic upturn for young people with higher labour market seniority. In fact, some of the graduates observed in 2017 who had finished their education over six years before, entered the labour market during the economic crisis – at a time of very low entry employment rates – while their peers observed in 2014 had benefited from the pre-crisis labour market with higher employment rates.
12. The results for tertiary graduates who graduated more than nine years previously, are not very reliable due to the limited number of such cases.
13. See above: Trajectories for generations of entrants into the labour market.

Figure IV – **Tertiary graduates (aged 20-34). Change in the probability of being employed in 2014 *vs.* 2008, and in 2017 *vs.* 2014 (odds ratios, multivariate logistic models)**



Number of observations for each of the ten models (from left to right): 7,705; 11,975; 6,142; 4,245; 1,588; 7,140; 11,607; 5,490; 4,256; 1,861.
Notes: see Figure III.
Sources: ISTAT, *Italian Labour Force Survey.*

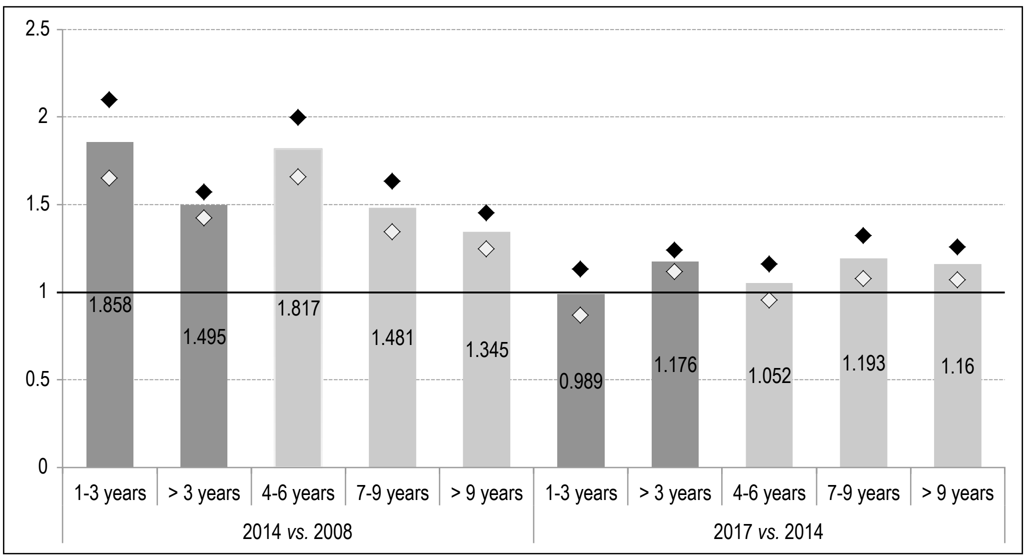
Comparing cohorts of young people with same labour market seniority during the crisis period and in the period of economic recovery provides an insight into how temporary employment evolves over time. Between 2008 and 2014, there was a sharp increase in the share of temporary employment among those upper secondary graduates who had finished their education 1-3 years before: the probability of finding a temporary job almost doubled during that period (OR 1.858) (Figure V). Lower, albeit important, was also the increase in temporary jobs, estimated around 50% among the young people who were out of studies for a longer time (OR 1.495). This seems to have particularly affected those who had graduated 4-6 years earlier. As already mentioned, those who, in 2014, had left school 4-6 years before entered the labour market during the crisis, at the same time as those who had graduated more recently.

The persistence of weak labour demand, together with the uncertainty that characterized the lengthy economic crisis has inevitably led to people being hired on temporary contracts; moreover, due also to the legislation governing the renewal and maximum duration of temporary contracts, young people who had been in the labour market for a shorter period were the ones most likely to end up in temporary jobs.

In the 2015-2017 period, the significant increase in the probability of being employmed among recent upper secondary graduates, and less recent graduates (having left school since 4-6 years) was not associated with an increase in temporary employment. This is a rather unexpected result: generally, temporary contracts are the quickest way to respond to increasing labour demand, thus adapting labour input to the cyclical movements of production, but also showing the persistence of a certain degree of insecurity about the enduring nature of the upturn – and, as mentioned earlier, the contraction of economic activity was only partially reversed between 2014 and 2017. Under these conditions, companies' strategies are usually very cautious and designed to implement easy-to-terminate short-term contracts while observing whether there is a true turnaround rather than a purely temporary improvement (Dell'Aringa *et al.,* 2018). Moreover, the first law of the *Jobs Act* (Decree Law no. 34 of 20 March 2014) aimed to encourage temporary hiring by simplifying the applicable rules. However, other parts of the *Jobs Act* introducing flexible termination of permanent contracts and incentives to employers to offer permanent employment – in the form of reduced employers' social contributions[14] – prevailed.

14. A recent paper, interpreting data published by the National Social Security Institution (INPS), identifies the Jobs Act and the related fiscal incentives as of the reasons for the substantial increase in the number of new permanent contracts, partly resulting from the transformation of previous temporary contracts, and partly the outcome of firms deciding to hire new employees in advance in order to qualify for the incentives (Leonardi & Nannicini, 2016). Another study, available on the INPS website, estimates the specific positive effect of the new type of permanent contract with increasing dismissal costs in proportion to seniority, introduced by the Jobs Act, pointing out that the expected increase in hiring was higher than the increase in layoffs (Boeri & Garibaldi, 2018). A recent study would seem to indicate that the increase in permanent contracts has been more the effect of the reduction in contributions than of the flexibility introduced by the "Jobs Act" (reducing firing costs and rendering them less uncertain) (Sestito, 2016).

Figure V – **Upper secondary graduates (aged 20-34) and employed. Change in the probability of being employed in a temporary job in 2014 *vs.* 2008, and in 2017 *vs.* 2014 (odds ratios, multivariate logistic models)**



Number of observations for each of the ten models (from left to right):.4,854; 44,364; 8,232; 9,407; 26,725; 3,896; 33,216; 6,632; 7,274; 19,310.
Notes: see Figure III.
Sources: ISTAT, *Italian Labour Force Survey.*

This analysis still seems consistent with recent reports finding that the reforms aimed at encouraging the use of permanent contracts have had a significant impact on both contract transformation and new hiring (Sestito & Viviano, 2016; Leonardi & Nannicini, 2016); yet, they had a greater impact on the hiring of young people on permanent contracts in their first job, than on the transformation of existing temporary contracts into permanent contracts (INPS, 2016).

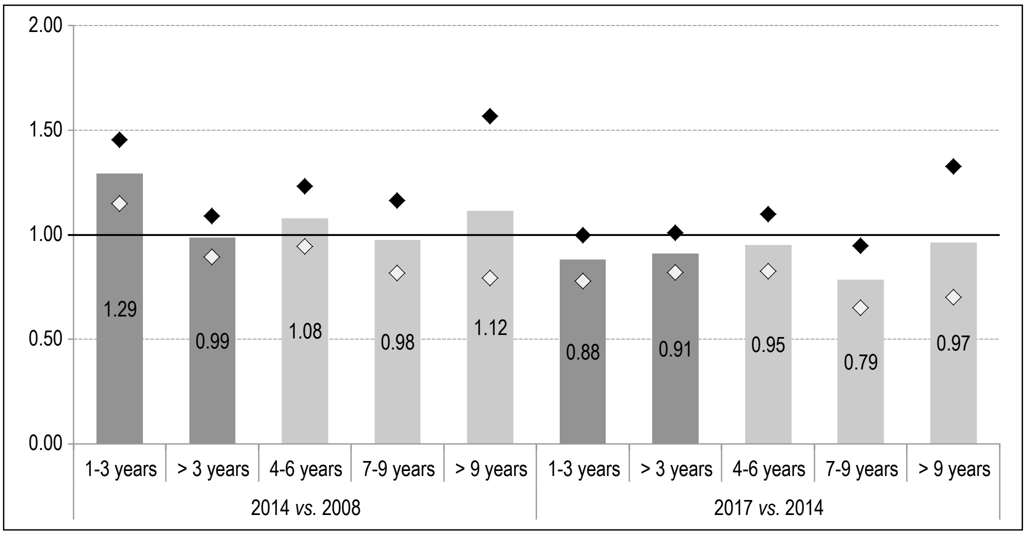
One exception is the case of the less recent upper secondary graduates (out of education for over six years): in 2017 their employment prospects were similar as those of their peers in 2014, but with a greater share of temporary jobs. The *Jobs Act* and cuts in employers' contributions then do not seem to have fostered the provision of permanent contracts to these young people. Given that tertiary graduates have not been penalized in the same manner (in terms of both the quantity and quality of employment), the peculiar dynamic of upper secondary graduates may be seen as a consequence and sign of the rapid obsolescence (and consequent lack of appeal) of upper secondary qualifications. This result further suggests the existence of an entrapment effect in "bad" jobs in a secondary market: in a segmented labour market the flow between the two sectors is more limited for upper secondary graduates.

Among tertiary graduates, temporary employment increased to a lesser degree during the crisis, in general affecting only the most recently entered in the labour market (OR 1.292) (Figure VI). In the years from 2014 to 2017, both those recent tertiary graduates, and those having graduated for a longer time (for whom there was a significant increase in employment prospects as mentioned above) saw a slight reduction in the risk of temporary employment. The *Jobs Act*, together with the cuts in employers' contributions in the period 2005-2016 aimed to foster permanent employment, have certainly played a part in this outcome. The impact of education on job prospects is also clear however: tertiary graduates were better protected during the crisis and were favoured to a greater extent by the economic upturn. Labour demand, also supported by recent changes in the production system, would seem to indicate that employers have become more interested in hiring young tertiary graduates, and in offering them permanent contracts more frequently.

This can be explained by a growing polarization of the Italian labour market, as in several other countries, driven by technological progress and globalization, and unfavourable to medium-skilled jobs.[15] However, polarization in Italy is different from that in other countries, since the highly qualified segment of employment is growing at a slower rate (OECD, 2019c). Given the expansive dynamic of tertiary education in Italy in recent decades (ISTAT, 2018), it is possible that we are observing the result of the unavoidable competition between graduates with different levels of educational achievement. In particular, given the limited demand

15. *The share of medium-skilled jobs has significantly decreased compared to high-and low-skilled occupations (OECD, 2019c).*

Figure VI – **Tertiary graduates (aged 20-34) and employed. Change in the probability of being employed in a temporary job in 2014 *vs.* 2008, and in 2017 *vs.* 2014 (odds ratios, multivariate logistic models)**



Number of observations for each of the ten models (from left to right): 4,654; 9,538; 4,738; 3,469; 1,331; 4,015; 8,903; 4,035; 3,365; 1,503.
Notes: see Figure III.
Sources: ISTAT, *Italian Labour Force Survey.*

of highly qualified occupation, jobs done by upper secondary graduates could be taken by people with higher educational qualifications, resulting in the crowding-out of the least qualified, and their transition towards unemployment, unstable employment or less qualified jobs.[16] In turn, this may result in an issue of downgrading occupation: while the better educated seem to access more easily permanent jobs, these jobs could be inadequate to their level of education (see ISTAT, 2019b).

Finally, the trend in temporary contracts displays a clear discontinuity over the latter three years: after the strong decline in the share of temporary jobs among upper secondary and tertiary recent graduates in the 2015-2016 period (-4.6 and -7.7 points, respectively), that share increases in 2017 (+4.7 and +4.2, respectively).[17] A similar, albeit less pronounced, trend was also observed among less recent graduates. It is difficult not to link this trend with the termination of the de-contribution scheme for permanent employment contracts; expectations of new benefits for the permanent employment of young people in the 2018 budget law also played a role.[18] This would suggest that the recent review of the legislative framework governing temporary employment has not at all reduced recourse to temporary contracts, since the termination of incentives to companies offering permanent employment contracts or transforming existing temporary contracts into permanent ones, has led to an increase in recourse to temporary contracts once again.

3. Trajectories of Generations of Entrants into the Labour Market

We now turn to an analysis of the trajectories of graduates through the employment rate of pseudo-cohorts over time: the "2008" cohort, aged 20-34 and in its 1st to 3rd year after graduation in 2008, aged 21-35 and in its 2nd to 4th year after graduation in 2009, etc., and we repeat the construction for previous and subsequent cohorts (with, of course, a shorter window of observation for the latter). Their trajectory, in terms of employment rate, is represented using a Lexis diagram, which allows highlighting period and generation or cohort effects, that is, the effect of experiencing the same events at the same time since leaving school.[19] As previously, we distinguish between upper secondary and tertiary graduates, and we also examine the rate of temporary employment.

Figure VII-A represents the employment rates for each cohort of recent upper secondary graduates during the period 2005-2017, and their evolution in the following years. The curves show a high degree of variability in the employment rate upon entry into the labour market, and a high level of sensitivity to the economic cycle during this phase. The curves show a more or less rapid increase in employment rates, depending on the economic conditions that each cohort experiences at the point of entry, and in the following years. In particular, the figure shows that from 2008 to 2014 – a period of unfavorable economic circumstances – the employment rates of the upper secondary graduates cohorts progressively decreased (from 60% to 38%), the curves showing a very slow increase, or in some cases even a fall. Even several years later – also as a result of the length of the economic crisis – a difference in the curve's levels between cohorts entering the labour market before the crisis and those entering during the crisis, remains. However, in more recent years, characterized by an economic upturn, the employment rates increased rapidly also for the older cohorts. Therefore, besides a clear period effect, there are also signs of a cohort effect, albeit only for reduced seniority. The worst labour market conditions at the time of entry and/or in the years immediately thereafter, do not seem to have penalized the employment path of young graduates in the long-term, hence the possibility of a scarring effect due to adverse economic conditions at entry is not corroborated by the analysed data.

The picture is slightly different for tertiary graduates (Figure VII-B). For the cohorts entering the labour market during the economic crisis, the curves only get closer to the ones of those who were already out of education before the crisis struck (i.e. around 7-9 years after graduation). In the latter years, the employment rate curves per generation tend to converge more, which would suggest that the economic upturn has helped to further reduce the original disadvantage of those entering the labour market during

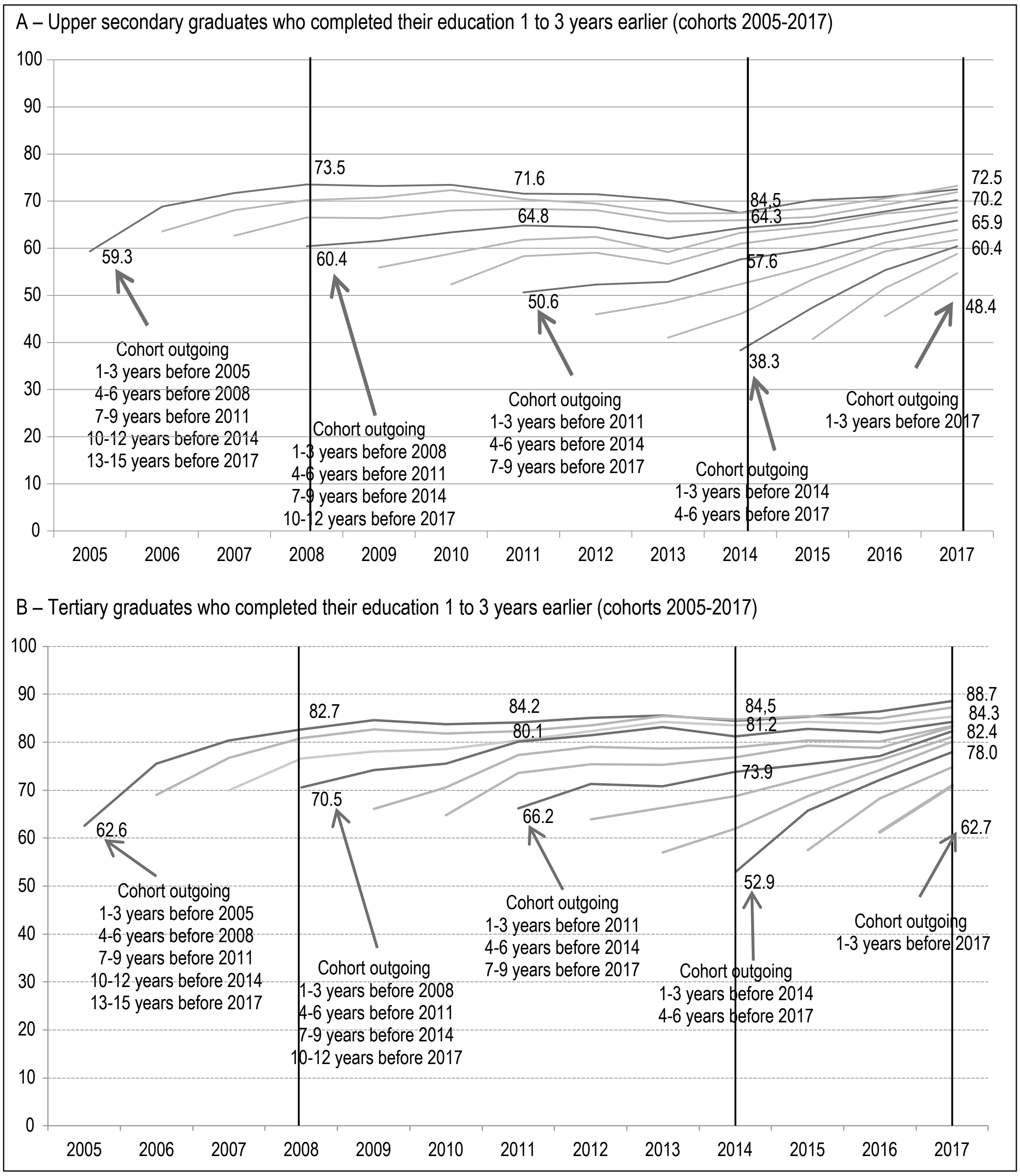
16. See Iannelli & Soro-Bonmati, 2003. The article compares the Italian and Spanish school-to-work transition approximately two decades ago. The authors attribute the greater disadvantage of Spain's low-educated young people compared to those of Italy to the faster expansion of tertiary education in Spain during that period.

17. In 2017, the positive trend of the employement rate of recent graduates saw a slight slowdown after two years of strong growth (cf. Figure II).

18. Recent total employment figures (ISTAT, 2019) also seem to confirm this trend, with a sharp decrease in permanent contracts in 2017 and a corresponding growth in the numbers of people hired on temporary contracts.

19. This approach, based on the construction of pseudo-panels, was used for example by Fondeur & Minni (2004) and Jugnot & Minni (2018). Fondeur & Minni, analysing youth employment in France over a long period (1975-2001), found that the economic cycle affects young people's integration in the labour market as a period effect, but does not engender a generation effect.

Figure VII – **Employment rates of cohorts**

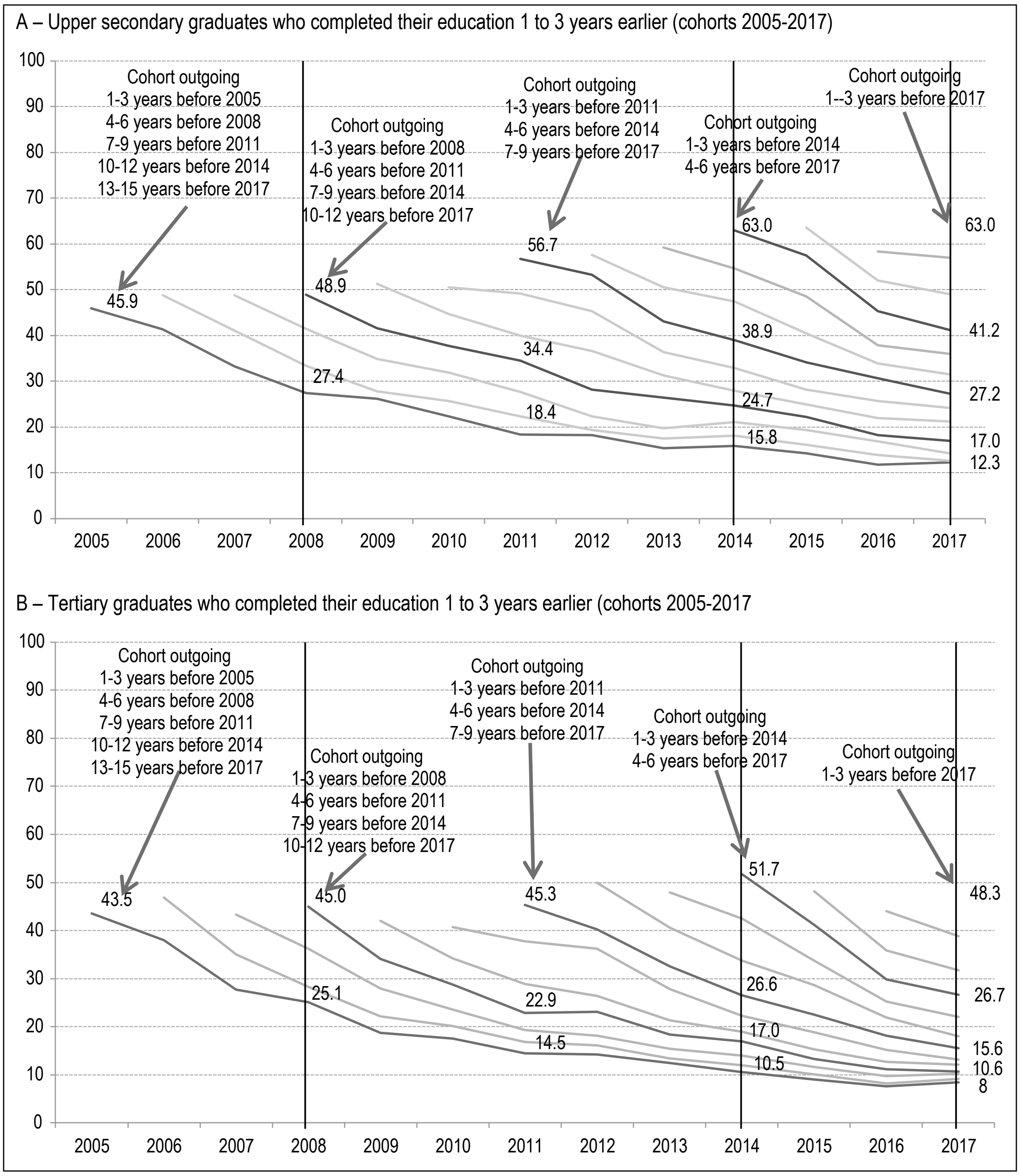


Sources: ISTAT, *Italian Labour Force Survey.*

the crisis. In summary, only a period effect is evident, there being no evidence of any cohort effect or scarring effect. These results are similar to those of Junot & Minni (2018), who analyse the same economic period in France. However, some differences remain: when the economic situation improves, the trajectories of the French generations converge, whereas the Italian ones only get closer; this suggests that, in Italy, sensitivity to the economy downturn decreases less quickly with increasing labour market seniority.

As regards upper secondary graduates, the share of new entrants (1-3 years after having left the school) employed in temporary jobs has increased over the years, with the only reduction being that seen in 2016 (Figure VIII). The slope of the curves differs from one cohort to the next due to the high sensitivity of temporary employment to the economic cycle; however, there is also an evident structural slowdown in the curves per generation. In fact, unlike what was observed for the employment rate, differences between generations persist throughout the period of observation: the curves do not overlap, and each successive generation has a smaller share of stable work than the previous one. It seems that an effect independent of the economic cycle exists, with new cohorts persisting in temporary employment to a greater extent than previous

Figure VIII – **Share of employed in temporary work**



Sources: ISTAT, *Italian Labour Force Survey.*

cohorts over time.[20] Therefore, we cannot refer to a scarring effect, in the sense that rather than long lasting traces left on professional trajectories by an economic downturn, this seems to reflect structural changes in the labour market; this would rather evoke a cohort effect, and an "entrapment effect" (Barbieri & Scherer, 2009, and Barbieri *et al.*, 2019).

Unlike upper secondary graduates, tertiary graduates' curves by cohort show a much less evident period effect and no clear cohort effect: for example, 7-9 years after leaving school, respectively in 2011, 2014 and 2017, the share of young people of the 2005, 2008 and 2011 cohorts in temporary jobs remains rather similar: 15%, 17.0% and 16%, respectively (Figure VIII-B).

Overall, a period effect is obvious for employment for all, but more marked for upper secondary graduates, together with a temporal effect, for this category only, linked to structural changes in the labour market, in particular due to the changes in employment standards introduced over the years. These effects seem to be associated with cohort effects for upper secondary graduates only,

20. *Fondeur & Minni (2004) find that in France too, changes in employment standards have worsened the employment conditions of young people and increased the persistence of temporary employment.*

with the persistence of low employment rates and new cohorts remaining longer in temporary employment.

* *
*

Youth employment rate is highly sensitive to the economic situation. Young people are overrepresented among those hired and laid off. The two main reasons for this are the large number of new graduates looking for their first job every year, and the large share of temporary employment at the entry.

In this paper, we examine how the employment prospects of young Italians have changed in a context of crisis, recovery and reform of the labour market. Three types of effects contribute to their employment (and temporary employment) probabilities: age effects (linked to seniority in the labor market), period effects (linked to the economic crisis and the subsequent, even if weak, recovery) and cohort effects (linked to the year of labour market entry). In the absence of panel data, these effects are very difficult to disentangle, so we focuses on one dimension at the time. The first part of the analysis (odds-ratio analysis) gives an insight on variations linked to seniority effects, and the second part focuses on cohort effects, more precisely the combined effect of age and period effects on a trajectory.

Our analysis first confirms the sensitivity of young Italian graduates' employment rates to economic downturns, those having graduated the most recently the most penalized. However, less recent graduates were not spared from the effects of the crisis.

The upturn in the employment prospects of recent graduates after 2014 confirms also that youth labour market is more reactive to the economic cycles. Indeed, the increase in the employment rate was less pronounced among those who had left education more than three years before, in particular for upper secondary graduates. However, the dynamic during the recovery, which strongly depends on the labour market seniority, is dissimilar to that of the crisis, which had been more evenly distributed among graduates, regardless of their seniority on the labour market. Nevertheless, the economic upturn after 2014 was not accompanied by an increase in temporary employment (with the only exception of upper secondary graduates who had graduated more than six years earlier), and there was even a slight reduction in the share of temporary jobs among tertiary graduates in this same period. This result is quite unexpected insofar as, generally speaking, even at the beginning of an economic upturn, an increase in temporary employment is the first sign of response, when there is still a certain degree of uncertainty regarding the strength of the recovery. Moreover, the first law of the *Jobs Act* scheme (Decree Law no. 34 of 2014), which made the use of temporary contracts easier for employers should have encouraged temporary hiring.[21] Therefore, other parts of the *Jobs Act*, which introduced flexibility in the termination of permanent contracts, together with concurrent fiscal incentives to permanent contracts (introduced in 2015 and 2016) without doubt positively affected these trends.[22] The analysis also confirms the difference between education levels, with tertiary graduates less affected than upper secondary graduates in general, and recovering in a more homogeneous manner, regardless of their seniority in the labour market. As for cohort analysis, it highlights a clear period effect, no scarring effect and, for upper secondary graduates only, the changes in temporary employment evoke cohort effects (each next generation of graduates with a smaller share of stable employment) and an entrapment effect (more recent cohorts staying longer in temporary employment).

These results open further points of discussion. Firstly, that persistent critical issues plague young Italians' transition from school to work urgently need addressing, by reducing barriers to the labour supply, increasing the quality of education and investing in educational sectors offering greater returns in terms of the employability, strengthening the synergy between the educational system and the labour market, including public spending in education.[23] Secondly, that labour market policies can influence employment and job quality trends, but that temporary incentives are in fact rather ineffective if they remain unsupported by structural measures to stimulate the demand for qualified labour.[24]

21. Although Legislative Decree no.81 of 15 June 2015 has restricted the use of certain temporary contracts, overall the reform seems to have facilitated the use of temporary contracts (see Ludovico, 2017).

22. Indeed, in 2017, with the loss of the de-contribution scheme for permanent contracts, and the expectation of new benefits for permanent hiring to be introduced by the 2018 Italian budget law, the temporary employment rate rose once again.

23. Italy spends about 3.6% of its Gross Domestic Product on education, from primary school to university: this is lower than the OECD average (5%) (OECD, 2019d).

24. The structural weakness of labour demand in Italy prior to the crisis, is accounted for by the weakness of the productive system (small sized companies and lack of innovative capacity), and by the limited development of public services (education, health, social services) which usually require a large share of qualified workers (see Reyneri, 2017).

The health crisis linked to the COVID-19 that we are experiencing will undoubtedly revive the analysis of youth employment. For the OECD (2020), "Young people are confronted with a tough job market that could compromise their futures". It is likely that the impact of the pandemic on youth employment will be different from that of the 2008 crisis, if only in terms of magnitude. Especially, the COVID-19 crisis could also affect more generally the length of school-to-work transition because of reduced employment opportunities, while the lockdowns may have exacerbated inequalities between tertiary and upper secondary graduates. It will then be particularly interesting to compare the impacts of the two crises, and the subsequent impact of policy responses – and perhaps answer the doubts expressed by Suta *et al.* (2019, p. 30) in a discussion on the ET strategy for 2025: "[…] should another downturn arrive, it is not clear whether recent graduates are now better equipped to achieve a better outcome than in the previous crisis." ☐

BIBLIOGRAPHY

Arjona Perez, E., Garrouste, C. & Kozovska, K. (2010a). Towards a Benchmark on the Contribution of Education and Training to Employability: a discussion note. EUR24147 EN. Luxemburg: Publications Office of the European Union.
https://op.europa.eu/en/publication-detail/-/publication/e448a780-7f71-48fe-bcd4-7acc8ef2289d/language-en

Arjona Perez, E., Garrouste, C. & Kozovska, K. (2010b). Towards a benchmark on the contribution of Education and Training to Employability: In-depth analysis of key issues. EUR 24624 EN. Luxemburg: Publications Office of the European Union.
https://op.europa.eu/en/publication-detail/-/publication/0d85ae5c-9f41-4b92-b3bc-711f7b208586/language-en

Barbieri, P. & Scherer, S. (2009). Labour Market Flexibilization and its Consequences in Italy. *European Sociological Review,* 25, 677–692. https://doi.org/10.1093/esr/jcp009

Barbieri, P., Cutuli, G. & Passaretta, G. (2018). Institutions and the school-to-work transition: disentangling the role of the macro-institutional context. *Socio-Economic Review*, 16(1), 161–183.
https://doi.org/10.1093/ser/mww019

Barbieri, P., Cutuli, G., Luijkx, R., Mari, G. & Scherer, S. (2019). Substitution, entrapment, and inefficiency? Cohort inequalities in a two-tier labour market. *Socio-Economic Review*, 17(2), 409–431 (preprint 2016).
https://doi.org/10.1093/ser/mww035

Bell, D.N.F. & Blanchflower, D.G. (2015). Youth Unemployment in Greece: Measuring the Challenge. *IZA Journal of European Labor Studies*. https://doi.org/10.1186/2193-9012-4-1

Berloffa, G., Matteazzi, E., Mazzolini, G., Sandor, A. & Villa, P. (2015). Youth School-To-Work Transitions: from entry jobs to career employment. STYLE *Working Papers* WP10.2. CROME, University of Brighton.
http://www.style-research.eu/publications/working-papers/

Boateng, S.K., Garrouste, C. & Jouhette, S. (2011). Measuring Transition from School to Work in the EU: Role of the data source. International Conference *Catch the Train: Skills, Education and Jobs*, Brussels, June 20-21.
https://www.semanticscholar.org/paper/Measuring-Transition-from-School-to-Work-in-the-EU/7d1aef55124ae49f89ea24a76ee319cac4a1fe6b

Boeri, T. & Garibaldi, P. (2018). Graded Security and Labor Market Mobility. Clean Evidence from the Italian Jobs Act. INPS *Working Paper* N°10.
https://www.sipotra.it/wp-content/uploads/2018/05/Graded-Security-and-Labor-Market-Mobility-Clean-Evidence-from-the-Italian-Jobs-Act.pdf

Booth, A., Francesconi, M. & Frank, J. (2002). Temporary jobs: Stepping stones or dead ends? *The Economic Journal*, 112, 189–213. https://www.jstor.org/stable/798372

Brada, J. C., & Signorelli, M. (2012). Comparing Labor Market Performance: Some Stylized Facts and Key Findings. *Comparative Economic Studies*, 54, 231-250. https://doi.org/10.1057/ces.2012.20

Carcillo, S., Fernandez, R., Königs, S. & Minea, A. (2015). NEET Youth in the Aftermath of the Crisis: Challenges and Policies. OECD *Social, Employment and Migration Working Papers* N° 164.
http://dx.doi.org/10.1787/5js6363503f6-en

Cascioli, R. (2016). Le prospettive occupazionali dei giovani al termine dei percorsi di istruzione e formazione in Italia e in Europa alla luce dell'indicatore europeo sulla transizione scuola-lavoro. *Politiche Sociali* N°2/2016, pp. 287–310. https://doi.org/10.7389/84005

Cicchelli, V. & Merico, M. (2007). Le passage tardif à l'âge adulte des Italiens : entre maintien du modèle traditionnel et individualisation des trajectoires biographiques. *Horizons stratégiques*, 2(4), 70–87. https://www.cairn.info/revue-horizons-strategiques-2007-2-page-70.htm

Council of the European Union, (2013). Council recommendation of 22 April 2013 on establishing a Youth Guarantee. *Official journal of the European Union,* C120/01. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013H0426(01)&from=EN

Council of the European Union, (2012). Council conclusions of 11 May 2012 on the employability of graduates from education and training. *Official journal of the European Union,* C169/04. http://csdle.lex.unict.it/Archive/LW/EU%20social%20law/EU%20political%20addresses/Council%20of%20the%20EU%20conclusions/20120622-120952_2012_169_04enpdf.pdf

Council of the European Union, (2009). Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (ET 2020), C 119/02. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XG0528(01)&from=EN

Dell'Aringa C., De Novellis, F., Barbini, M. & Comegna, V. (2018). L'esplosione dei lavori temporanei: fattori ciclici o strutturali? Monografia AREL. https://www.arel.it/ricerche/monografie/lesplosione-dei-lavori-temporanei-fattori-ciclici-o-strutturali

European Commission (2017). Education and Training Monitor. Luxemburg: Publications Office of the European Union. https://ec.europa.eu/education/content/summary_it

EUROFOUND (2012). NEET's – Young people not in employment, education or training: Characteristics, costs, and policy responses in Europe. Luxemburg: Publications Office of the European Union. https://www.eurofound.europa.eu/fr/publications/report/2012/labour-market-social-policies/neets-young-people-not-in-employment-education-or-training-characteristics-costs-and-policy

EUROSTAT (2012). School-to-work transition statistics. *Statistics explained.* https://ec.europa.eu/eurostat/statistics-explained/index.php/Archive:School-to-work_transition_statistics

Fondeur, Y. & Minni, C. (2004). L'emploi des jeunes au cœur des dynamiques du marché du travail. *Economie et Statistique*, 378-379, 85–104. https://www.insee.fr/fr/statistiques/fichier/1376673/es378-379e.pdf

Gaini, M., Leduc, A. & Vicard, A., (2013). Peut-on parler de « générations sacrifiées » ? Entrer sur le marché du travail dans une période de mauvaise conjoncture économique. *Economie et Statistique*, 461-463, 5–23. https://www.insee.fr/fr/statistiques/fichier/1377802/ES462A.pdf

Garrouste, C. (2011). Towards a benchmark on the contribution of Education and Training to Employability: Methodological Note. EUR 24616 EN. Luxemburg: Publications Office of the European Union. http://mpra.ub.uni-muenchen.de/37153/

Garrouste, C. & Rodrigues, M. (2014). Employability of young graduates in Europe. *International Journal of Manpower*, 35(4), 425–447. https://doi.org/10.1108/IJM-05-2013-0106

Garrouste, C. & Rodrigues, M. (2012). The employability of young graduates in Europe: Analysis of the ET2020 benchmark. Laboratoire d'Economie d'Orleans (LEO), European Commission Joint Research Center. http://mpra.ub.uni-muenchen.de/49919/

Gebel, M. & Giesecke, J. (2016). Does Deregulation Help? The Impact of Employment Protection Reforms on Youths' Unemployment and Temporary Employment Risks in Europe. *European Sociological Review*, 32(4), 486–500. https://doi.org/10.1093/esr/jcw022

Goffette C. & Vero J. (2015). Youth unemployment and job quality in times of crisis: a European overview. *Training and Employment*, 115, 1–4. https://www.cereq.fr/en/youth-unemployment-and-job-quality-times-crisis-european-overview

Iannelli C. & Soro-Bonmati, A. (2003). Transition Pathways in Italy and Spain: Different Patterns, Similar Vulnerability? *In:* W. Muller and M. Gangl (eds). *Transitions from Education to Work in Europe: The Integration of Youth into EU Labour Markets*, Ch. 8, pp. 212–250. Oxford University Press.

INPS (2017). Le imprese e i lavoratori beneficiari della decontribuzione. XV Rapporto annuale. https://www.inps.it/nuovoportaleinps/default.aspx?itemdir=46888

ISTAT (2019a). Il mercato del lavoro: un bilancio degli ultimi dieci anni. *Il mercato del lavoro 2018. Verso una lettura integrata*, Ch. 1. https://www.istat.it/it/archivio/227606

ISTAT (2019b). Il sottoutilizzo del lavoro in Italia. Domanda di lavoro delle imprese e disallineamento formativo, *Il mercato del lavoro 2018. Verso una lettura integrata*, Ch. 2 & 3. https://www.istat.it/it/archivio/227606

ISTAT (2019, 2018). Livelli di istruzione della popolazione e ritorni occupazionali: i principali indicatori. *Statistica Report*.

ISTAT (2014). Il mercato del lavoro negli anni della crisi: dinamiche e divari Prf. 3.4.1. I giovani tra difficoltà di ingresso e scarse opportunità in Italia e in Europa. *Rapporto Annuale - La situazione del Paese nel 2013*, Ch. 3.

ISTAT (2013). Il mercato del lavoro tra minori opportunità e maggiore partecipazione. Prf. 3.4.1. Opportunità di occupazione dei giovani diplomati e laureati. *Rapporto Annuale – La situazione del Paese nel 2012*, Ch. 3.

ISTAT (2010). La crisi e la sostenibilità. Prf. 4.3.2.2.I giovani che non lavorano e non studiano: un fenomeno in crescita. *Rapporto Annuale – La situazione del Paese nel 2009*, Ch. 4.

Jugnot, S. & Minni, C. (2018). Quelques trimestres de mauvaise conjoncture à l'entrée du marché du travail ne suffisent pas à dégrader durablement les conditions d'insertion des jeunes. *In: Couppié T.* et al. (eds). *20 ans d'insertion professionnelle des jeunes : entre permanences et évolutions,* pp.33-40. Céreq Essentiels. https://www.cereq.fr/20-ans-dinsertion-professionnelle-des-jeunes-entre-permanences-et-evolutions

Kogan, I. & Muller, W. (Eds.). (2003). School-to-Work Transitions in Europe: Analyses of the EU LFS 2000 Ad Hoc Module. MZES, Mannheim.
http://www.mzes.uni-mannheim.de/publications/books/school_to_work_2ed.pdf

Krugman, P. (1994). Past and prospective causes of high unemployment. *Economic Review*, Federal Reserve Bank of Kansas City, IV(1), 23–43. http://www.kc.frb.org/publicat/econrev/pdf/4q94krug.pdf

Leonardi, M. & Nannicini, T. (2016). I primi risultati del Jobs Act. *L'Unità*, 17 febbraio.

Ludovico, G. (2017). Contratto a tempo determinato versus contratto a tutele crescenti. ADAPT University Press, *Working paper* N°14.
https://moodle.adaptland.it/pluginfile.php/30566/mod_resource/content/0/wp_14_2017_ludovico.pdf

Müller, M. & Gangl, W. (2003). *Transitions from Education to Work in Europe: the Integration of Youth into EU Labour Markets*. Oxford: Oxford University Press.

Noelke, C. (2016). Employment Protection Legislation and the Youth Labour Market. *European Sociological Review*, 32(4), 471–485. https://doi.org/10.1093/esr/jcv088

OECD (2020). Employment Outlook – Facing the Jobs Crisis. Paris: OECD Publishing.
http://www.oecd.org/employment-outlook/2020/

OECD (2019b). Economic Surveys: Italy 2019. Paris: OECD Publishing. https://doi.org/10.1787/369ec0f2-en

OECD (2019a). Recent trends in the Italian Labour Market. In: *Strengthening Active Labour Market Policies in Italy.* Paris: OECD Publishing. https://doi.org/10.1787/575fd92c-en

OECD (2019c). Employment Outlook. Ch. 2. Paris: OECD Publishing.
https://www.oecd-ilibrary.org/employment/oecd-employment-outlook-2019_9ee00155-en

OECD (2019d). Education at a Glance. Paris: OECD Publishing.
https://www.oecd-ilibrary.org/education/education-at-a-glance-2019_f8d7880d-en

OECD (2010). Off a good start? Jobs for Youth. Ch. 3. Paris: OECD Publishing.
https://www.oecd-ilibrary.org/fr/off-to-a-good-start-jobs-for-youth_5km63dtc5q43.pdf?itemId=%2Fcontent%2Fpublication%2F9789264096127-en&mimeType=pdf

OECD (2008). Employment Outlook. Ch. 1. Paris: OECD Publishing.
https://www.oecd-ilibrary.org/employment/oecd-employment-outlook-2008_empl_outlook-2008-en

OECD (2000). From Initial Education to Working Life. Making Transitions Work. Paris: OECD Publishing.
https://www.oecd-ilibrary.org/education/from-initial-education-to-working-life_9789264181816-en

OECD (1994). The OECD Jobs Study. Paris: OECD Publishing.
https://www.worldcat.org/title/oecd-jobs-study-evidence-and-explanations/oclc/31389050?referer=di&ht=edition

Passaretta, G. & Wolbers, M. (2016). Temporary employment at labour market entry in Europe: Labour market dualism, transitions to secure employment and upward mobility. *Economic and Industrial Democracy,* june 2016. https://doi.org/10.1177/0143831X16652946

Pastore, F. (2017). Why so slow? The School-to-Work Transition in Italy. GLO *Discussion Paper* N° 65.
http://hdl.handle.net/10419/157538

Pastore, F. (2015). *The Youth Experience Gap. Explaining National Differences in the School-to-Work Transition*. Heidelberg: Physica Verlag.

Pastore, F., Quintano, C. & Rocca, A. (2020). Stuck at a Crossroads? The Duration of the Italian School-To-Work Transition. IZA *Discussion Paper* N°13462. http://ftp.iza.org/dp13462.pdf

Quintini, G., Martin, J.P. & Martin, S. (2007). The Changing Nature of the School-to-Work Transition Process in OECD Countries. IZA *Discussion Paper* N°2582. http://ftp.iza.org/dp2582.pdf

Quintini, G. & Manfredi, T (2009). Going Separate Ways? School-to-Work Transitions in the United States and Europe. OECD Social, Employment and Migration Working Papers N° 90.
https://doi.org/10.1787/221717700447.

Ryan, P. (2001). The school-to-Work Transition: A Cross-national Perspective. *Journal of Economic Literature*, 39(1), 34–92. https://www.jstor.org/stable/2698454

Reyneri, E. (2017). Occupazione in ripresa. Però di bassa qualità. *Lavoce.info.* https://www.lavoce.info/archives/48649/occupazione-ripresa-la-qualita-bassa/

Scarpetta, S., Sonnet, A. & Manfredi, T. (2010). Rising youth unemployment during the crisis: How to prevent negative long-term consequences on a generation? OECD *Social, Employment and Migration Working Papers* N° 106. https://doi.org/10.1787/5kmh79zb2mmv-en

Scherer, S. (2004). Stepping-stones or traps? The consequences of labour market entry positions on future career in West Germany, Great Britain and Italy. *Work, Employment and Society*, 18(2), 369–394. https://doi.org/10.1177/09500172004042774

Sestito, P. & Viviano, E. (2016). Hiring incentives and/or firing cost reduction? Evaluating the impact of the 2015 policies on the Italian labour market. *Collana Questioni di economia e finanza – Occasional papers, Banca d'Italia, 325***.** https://www.bancaditalia.it/pubblicazioni/qef/2016-0325/QEF_325_16.pdf?language_id=1

Suta, C., Barbieri, L. & May-Gillings, M. (2019). Recent graduates in employment – Understanding EU targets and drivers. ROA Workshop on Dynamics of Skills Supply and Demand, Maastricht 17-18 Nov. 2018. Brussels: Cambridge Econometrics. https://www.camecon.com/what/our-work/recent-graduates-in-employment-understanding-eu-targets-and-drivers/

Tiraboschi, M. (2012). Italian Labour Law after the so-called Monti-Fornero Reform (Law No. 92/2012). ADAPT University Press, *E-Journal of International and Comparative Labour Studies*, 1(3-4). https://www.semanticscholar.org/paper/Italian-Labour-Law-after-the-So-Called-Reform-(Law-Tiraboschi/793fe045e0e3fbcb1818a7d23238e4cd6831fd44

van der Velden, R.K.W. & Wolbers, M.H. (2008). A Framework for Monitoring Transition Systems. OECD *Education Working Papers* N° 20. https://doi.org/10.1787/221381866820