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Apprentices and the training-to-work transition: an unqualified advantage?

Ever increasing numbers of apprentices, with increasingly high levels of education and training, are entering the labour market and, despite the crisis, under significantly more favourable conditions than young people who have taken the classroom-based route. However, the overall positive tone of this general picture conceals differences between levels of qualification and tracks and, above all, a selective entry process to this pathway whose effects have still to be assessed.

apprenticeship
occupational
integration
salary
unemployment
rate

Alberto **Lopez**
Emmanuel **Sulzer**
(Céreq)

For several decades, the expansion of apprenticeships has featured in successive political programmes. Once regarded as an educational pathway associated with certain occupations or as a form of educational remediation, apprenticeships have become established as a flagship measure in the fight against youth unemployment. Various quantitative targets have punctuated the drive to develop this pathway. As early as 1993, the very ambitious and voluntarist Quinquennial Act on employment and vocational training set a target of 500,000 apprenticeships by the year 2000. This target was never achieved but it was reaffirmed in 2005 and still features in the national pact for growth, competitiveness and employment of 5 November 2012, with the target date pushed back to 2017.

Given these targets and the multiple measures that have accompanied them, Céreq has since 2007 been reporting on an apprenticeship system whose status is being constantly enhanced. Introduced by the Séguin Act of 1987, the possibility of establishing apprenticeship-based training programmes in higher education in fact led in the 1990s to particularly sustained growth in the numbers of apprentices at these levels, a tendency that is still significant today. This phenomenon has been accompanied by a change in the social and educational morphology of the apprentice population, which is raising ques-

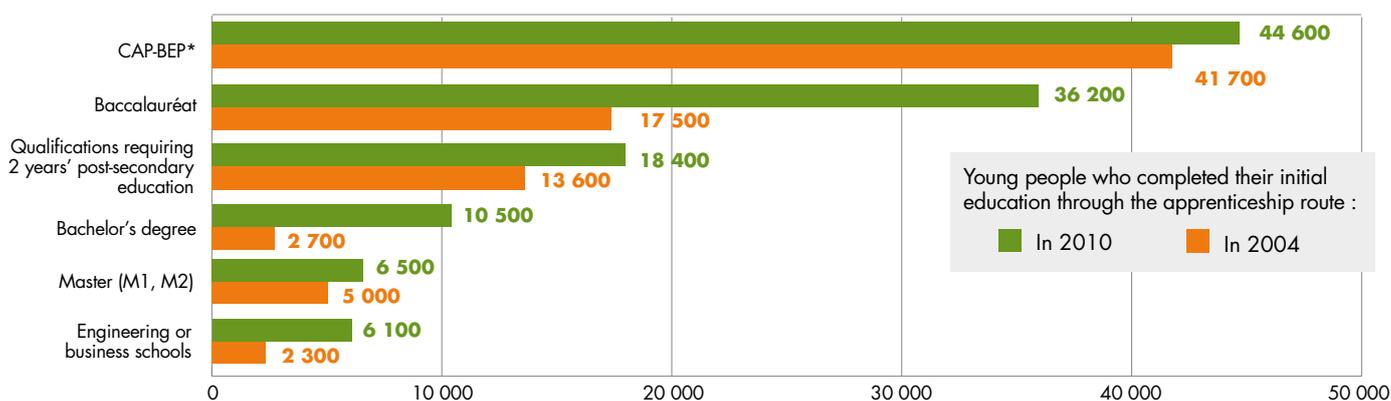
tions about the functions of apprenticeships in the new areas into which they have expanded.

Céreq's Génération surveys provide a means of observing the trajectories of young people who have completed their initial education through the apprenticeship route, and in particular of comparing them with their counterparts who have completed their education at the same level but through different routes. This comparison shows that, despite the harmful effects of the crisis, young people who complete apprenticeships enter the labour market under more favourable conditions than those who take the conventional classroom-based route. However, these differences in the education-to-work transition vary considerably depending on the level of qualification. Far from simply reflecting the virtues of the apprenticeship route in the education-to-work transition, they are also explained by the differences in destinations depending on the training specialisms and the selectiveness of recruitment.

More young people completing apprenticeships and at higher levels...

One fifth of the 700,000 young people who completed their initial education in 2010 had taken the apprenticeship route. This population was not only

Graphic 1 • Young people completing apprenticeships by level of qualification acquired



Source: Génération 2004 survey 2007, Génération 2010 survey 2013, comparable bases.
Field: young people having completed their initial education/training with an apprenticeship.

*CAP (*certificat d'aptitude professionnelle*) and BEP (*brevet d'études professionnelles*) are lower level vocational qualifications obtained in secondary school.

The data are taken from Céreq's Génération surveys.

The Génération surveys question young people leaving initial education at all levels in the same year. The surveys can be used to reconstitute these young people's trajectories during the first three years of their working lives and to analyse those trajectories in the light of their educational careers and qualifications obtained.

To find out more about the Génération surveys, go to www.cereq.fr

larger than its 2004 counterpart, having increased in size from 110,000 to 143,000, but also, and more importantly, significantly better qualified (cf. graphic 1).

The lowest level vocational qualifications [CAP-BEP] were still the most common, but numbers had increased little over the observation period. In contrast, and although the first graduates of the expanded 3-year vocational baccalauréat had not yet entered the labour market in 2010, the numbers leaving the education system at that level had more than doubled compared with 2004. In addition, there had also been particularly rapid expansion in certain segments of higher education. Although the absolute figures were lower than in the secondary sector, the relative increases were spectacular: a threefold increase in the numbers graduating with vocational bachelor's degrees and a 2.6 times increase in graduates from engineering and business schools. While a part of these increases could be attributed to a general trend towards an extension of the time spent in higher education, they reflected more than anything else the rapid increase in students' take-up of apprenticeships.

Thus in 2010, virtually one in three of those graduating with a vocational bachelor's degree and one in five of those graduating from a grande école completed their education on an apprenticeship contract. While these shares do not match the levels observed in the traditional bastions of apprenticeships (construction, catering, and hairdressing, where approximately three quarters of trainees are apprentices), the general trend was most definitely upwards.

The resultant heterogeneity was reflected in very different social profiles from one end of the qualifications hierarchy to the other and in fairly contrasting conditions faced by the various groups of young labour market entrants. These conditions had deteriorated for all levels of qualification because of the crisis; for some groups, the main problem was to an increased risk of unemployment, while others had seen a cut in their pay.

...but they are not immune to the effects of the crisis

Often presented as offering some protection against unemployment, apprenticeship-based training programmes do not always offer young people an escape route from the effects of a deteriorating economic situation. Thus former apprentices who had obtained their CAPs in 2010 were still beset by an unemployment rate of 26% three years later in 2013 (cf. Table 1). The rate for their predecessors who left education in 2004 was 11%. Although their position was in general not so bad, many young apprentices with higher-level qualifications saw their unemployment rate three years after leaving education double from one generation to the next. This was the case for those leaving with the baccalauréat, two-year degrees and vocational master's degrees. The only exceptions were those graduating with vocational bachelor's degrees, for whom the rate remained unchanged at 6%, and engineering school graduates, whose unemployment rate rose from 2 to 3%.

Young people who had taken the apprenticeship route also seem to have suffered the effects of the crisis in terms of pay as well. The median pay of holders of the vocational baccalauréat and of master's degrees declined. However, it was holders of vocational bachelor's degrees that saw the greatest reduction (150 euros per month), while engineers who had taken the apprenticeship route seemed to be little affected (cf. Table 2).

Apprentices' advantage confirmed

While the crisis has seriously disrupted the education-to-work transition for all apprentices, it has not spared young people leaving the classroom-based vocational streams – far from it. At each qualification level, this latter population continued to suffer from the 'excess' unemployment already observed in previous surveys, in some cases to an

even greater extent than earlier, while apprentices' 'wage premium' had far from disappeared.

For holders of a secondary-level vocational qualification, the 'unemployment gap' three years into their working lives was 10 percentage points. For holders of qualifications requiring between two and five years' post-secondary training, this gap between former apprentices and those who had taken the classroom-based route was six percentage points. For holders of vocational bachelor's degrees, whose numbers had increased considerably in both streams, the advantage enjoyed by apprentices was a new development. Nothing of the sort was observed in the most selective segment of the French higher education system, since for graduates of the elite engineering and business schools, the apprenticeship route was not associated with a significantly lower risk of unemployment, which remained very limited in both streams.

For a given level of qualification, former apprentices were paid more highly than their counterparts from the classroom-based streams. This differential widened as the level of qualification rose, up to master's level. Holders of the CAP or baccalauréat in service-sector specialisms remain

ned confined around the wage floors regardless of the training pathway they had followed. In contrast to holders of vocational master's degrees and business school graduates, the median salary for young engineers who had taken the apprenticeship route was the same as that of their counterparts who had taken the largely classroom-based route.

Thus the advantage obtained by taking the apprenticeship route seems to vary in nature and extent depending on the level of qualification and even specialism. The reduction in the risk of unemployment, measured in percentage points, seems to be much more pronounced for young people leaving education at secondary level. On the other hand, the apprenticeship route's impact on pay seems to increase with qualificational level, with the notable exception of the engineering schools, where labour market entry conditions for new graduates seem to be the same regardless of the route they have taken.

The limits of the comparison

However, comparisons between the apprenticeship and classroom-based routes should be interpreted with some caution. After all, the two

Table 1 • Evolution of the unemployment rate after three years for apprentices and those who followed the classroom-based route (%)

Highest qualification	Share of apprentices		Apprentices' unemployment rate			Unemployment rate for those who took the classroom-based route			'Excess' unemployment among those who took the classroom-based route	
	G2004	G2010	G2004	G2010	Evol.	G2004	G2010	Evol.	G2004	G2010
CAP-BEP	34	45	11	26	15	21	35	14	10	9
Vocational baccalauréat	24	31	6	11	5	13	24	11	7	13
Qualif. requiring 2 years' post-secondary educ.	14	23	4	10	5	9	16	7	5	6
Vocational bachelor's degree	25	31	6	6	0	5	12	7	-1	6
Vocational master's	7	11	3	7	4	7	13	6	4	6
Business schools	3	17	ns	8	ns	5	10	4	ns	2
Engineering schools	8	19	2	3	1	4	4	0	2	1

Table 2 • Evolution of the median wage after three years for apprentices and those who took the classroom-based route (euros)

Highest qualification	Share of apprentices		Median wage for former apprentices			Median wage for those who took the classroom-based route			Wage gap between apprentices and those who took the classroom-based route	
	G2004	G2010	G2004	G2010	Evol.	G2004	G2010	Evol.	G2004	G2010
CAP-BEP	34	45	1,320	1,300	-20	1,300	1,200	-100	20	100
Vocational baccalauréat	24	31	1,430	1,340	-90	1,320	1,250	-70	110	90
Qualif. requiring 2 years' post-secondary educ.	14	23	1,610	1,620	10	1,430	1,410	-20	180	210
Vocational bachelor's degree	25	31	1,880	1,730	-150	1,650	1,520	-130	230	210
Vocational master's	7	11	2,380	2,310	-70	1,980	1,840	-140	400	470
Business schools	3	17	ns	2,600	ns	2,560	2,220	-340	ns	380
Engineering schools	8	19	2,370	2,380	10	2,360	2,350	-10	10	30

Source: Génération 2004 survey 2007, Génération 2010 survey 2013, comparable bases.
Field: Young holders of vocational qualifications .

populations in question differ significantly on a number of criteria. Part of the differences observed can be attributed to differences in specialisms (with different prospects or openings), in social characteristics (differences in socio-cultural background) and in geographical location (more or less disadvantaged districts, more or less favourable local economies). These differences result from the guidance or selection processes that take place prior to entry to the various pathways.

In the case of those leaving at secondary level, for example, the advantage apprentices enjoy in the school-to-work transition can be explained in part by the prominent place in the apprenticeship pathway occupied by the traditionally male-dominated manufacturing specialisms, which offer better conditions for young labour market entrants. Conversely, the school-based route is dominated by female-dominated service-sector specialisms which, apart from health-related occupations, have lower employment rates. However, this composition effect does not explain all the difference observed. Within the 17 specialisms in which the apprenticeship and classroom-based routes exist alongside each other, the former's advantage is still evident in 13 of them, with a difference in the employment rate of some ten percentage points.

It remains the case that in many sectors apprentices may encounter discrimination in recruitment of the same kind as that faced by many young jobseekers. Thus the difficulties in accessing block-release training programmes that many young people from non-European backgrounds experience may lead to a concentration in the classroom-based route of young people whose education-to-work transition will, de facto, be more difficult. Similarly, young people who have taken a vocational bachelor's degree via the apprenticeship route have, on the face of it, an advantage over others with the same degree by virtue of their more favourable social backgrounds. After all, all other things being equal of course, the children of managers and executives generally find themselves in more highly paid jobs than young people from working-class backgrounds.

Thus the 'raw' differences between former apprentices and their counterparts who took the

classroom-based route to their qualifications, as calculated on the basis of the education-to-work transition indicators, are not simply a measure of the advantage a young person obtains by taking the apprenticeship route. Various econometric studies, in France and elsewhere, have found a positive net effect for apprenticeships in general, but one whose extent varies between countries and between men and women and which can affect different dimensions of the education-to-work transition depending on the level of qualification.

Apprenticeships as an employment policy instrument: concerns remain

Detailed investigation shows that the recent increase in the number of apprenticeships has been accompanied by some significant qualitative changes. While numbers have stagnated at secondary level, they have increased in higher education. This upward trend has gone hand in hand with a diversification of the apprentice populations and, consequently, of the roles apprenticeships play in the transition between initial education and employment. Thus the use of apprenticeships in public policies as a tool for combating youth unemployment is partially validated here. More significantly, however, our analysis raises concerns in three areas.

Firstly, the number of apprenticeships is tending to increase at the levels of qualification least exposed to the risk of unemployment and in those streams that already offer more favourable prospects.

Secondly, the crisis has had a dual impact on apprenticeships. Employers are offering fewer and fewer apprenticeship contracts and the transition into work for apprentices has become more difficult. Although the apprenticeship route seems to reduce the risk of unemployment on completion of training, it does not act as a bulwark against the cyclical deterioration of labour market conditions.

Thirdly, admission to apprenticeships is selective. Consequently, certain socially disadvantaged groups are likely to benefit little from the advantages procured by this training pathway.

Further reading

« L'apprentissage, au désavantage des jeunes fragilisées », P. Kergoat, *Diversité*, n° 180, 2015.

« Apprenticeship », S.C. Wolter et P. Ryan, in *Handbook of Economics of Education 3*, E. Hanushek, S. Machin and L. Woessmann, eds, Elsevier, 2011.

L'apprentissage, entre formation et insertion professionnelles, D. Abriac, R. Rathelot, R. Sanchez, *Insee Références*, 2009.

« Apprentissage : une singulière métamorphose », G. Moreau, *Formation Emploi*, n°101, 2008.

1995-2003, l'apprentissage aspiré vers le haut, J.-J. Arrighi, D. Brochier, *Bref* n°217, 2005.

L'apprentissage, une idée simple, des réalités diverses, J.-J. Arrighi, O. Joseph, *Bref* n°223, 2005.