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Employability of Vocational Bachelor Graduates in France: Dream or Dust in Eyes?

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Abstract

In France, the vocationalisation of the higher education at the university have resulted in increasing numbers of graduates and created new opportunities. The influx of these vocational Bachelor graduates on the labour market raises the issue of their professional prospects amid changing economic and social circumstances. Of the 737,000 young people leaving education in 2004, nearly 12,300 are vocational Bachelor graduates. The information provided by the Cereq survey highlight that higher education degrees are strongly correlated with labour market entry. This confirms that education and training are one of the most effective means of gaining employment and securing satisfactory working conditions. The employability of Bachelor graduates is undeniable in 2007 and this is a success story, except for the access to executive status. However the question is to know if the selection process at the entry into these vocational courses at the university will support the most modest young people of social origins and lead them an access to an upward social mobility, for the men as much as for the women: Is it a dream or a dust in eyes?

1. Introduction

Since the Bologna conference, improving the efficiency of education to develop a knowledge economy has become an EU priority. The *LMD* system (*Licence/Master/Doctorat* equivalent to Bachelor/Master/Doctorate, 3-5-8) was implemented to harmonize higher education diplomas throughout Europe, and has resulted in an increasing vocationalisation of French higher education in recent years. The development of vocational training is seen as a central element of policies and strategies to transform the academic world with several objectives: to upgrade the training offer, to link together University and company, to explore new opportunities for tertiary graduates, to improve their transition from higher education to labour market, to welcome new publics. The vocationalisation of tertiary education has participated to the democratization process. Although this process is not new (*cf.* reform of 1985), the development of vocational diplomas in higher education has created new opportunities, particularly for children of working-class origins.

The aim of this communication is focused on the higher education outcomes in France, especially on the employability of the Vocational Bachelor Graduates. The introduction of vocational Bachelor degrees (*licence professionnelle*) in 1999 was designed to extend the vocationalisation of French university education. They reflect the first level of the European structure of higher education diplomas defined in the Sorbonne and Bologna declarations of the three-cycles for European harmonized degrees. Before, universities only offered a purely academic, general Bachelor degree based on subject-specific teaching and training. Ever increasing numbers of vocational Bachelor graduates are entering the French labour market. The influx of these graduates on the labour market raises the issue of their professional prospects amid changing economic and social circumstances (Agulhon, 2007). So this communication will focus on the particular features of vocational courses in the specific context of education-to-work transition, especially on the

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efficiency of vocational Bachelor on the labour market and the social benefit of this diploma. In this paper, we address the following questions: does vocational higher education change labour market integration of graduates? Does vocational higher education lead to an upward social mobility?

Since the Eighties, the transition-to-work of the young graduates from University, especially general courses, were degraded in France even if a tertiary diploma remains always a relative advantage to access to employment (Giret, 2009). This degradation is characterized especially by more downgrading and more fixed-term contracts. In certain fields of study like chemistry, that is also accompanied by a rise of the unemployment which exceeds sometimes the unemployment of the secondary education graduates. From a theoretical point of view, one can question if this development of the vocationalisation in the higher education could modify the graduates' professional transition into the labour market and protect them from a degradation of their working condition.

On the one hand, the vocationalisation aims to transform the academic knowledge of the young people into knowledge-being and know-how closer to the requirements of the companies. The training in the general university courses was highly criticized in France for its distance of the needs for the labour market (Godet, 1993): the time to make the graduates university employable in the firms would be too long and thus source of inefficiency for the employers. For Thurow (1974), the companies privilege the young people who have the fastest capacity to be trained, the others being relayed to the bottom of the queue to reach employment. In the case of France, the companies often privileged the *Grandes Écoles* graduates or the graduates from short vocational tracks of tertiary education. So the young people leaving general trainings of the university are more frequently excluded from the access to the most stable segments of the labour market in France. They are more often likely to be on external markets, generally secondary segment, where their competences in connection with their training remain very limited (Arulampalamn and Booth, 1998). The French market trends with in particular the transformation and the tightening of the large intern markets traditionally open to the young graduates, reinforced their difficulties to find a stable position. The first of them, the public office, appreciably decreased the volume of these recruitments during these ten last years, which resulted in to increase the difficulties of integration for the academic graduates of level (three and four years of post-*baccalauréat* study), where the students turned mainly to the public office before.

On the other hand, the vocationalisation can bring to the young people a social capital for some persons without this asset or just a very little. Indeed, the access to the networks is a major element to find an employment in France: a third of the young people reached their first employment by their networks from relations and 10% *via* their training establishment (Joseph, Lopez, Ryck, 2008). However, these modalities of access, particularly when links are weak, in general guarantee a better professional integration (Giret, Karaa, Plassard, 1996). The massification of higher education in France allowed an access to the university to the young people of less favoured social origins, but often in general courses (Beaud, 2003), with less future opportunities on the labour market. The family networks which could support the access to the qualified labour market for the most favoured social origins play less in their case insofar as their family and friendly circle are more frequently concentrated in less qualified employment. However, the vocationalisation can in their case bring weak links for the research of the most qualified jobs (Granovetter, 1973). The vocational education implied a multiplication of placements in a company during the cursus, obligatory for all the vocational trainings. Moreover these vocational trainings also implicated much more often the involvement and participation of people coming from the professional world. One of the questions is however to know if the selection at the entry, systematic in the whole of the vocational trainings at the university contrary to the general studies, will support the most modest young people of social origins and lead them an access to professional networks necessary for their transition. A longitudinal survey was conducted by Cereq on school leavers in 2004 (*see* Box 1 below) to provide insights into these issues.

Box 1. Data and Methodology

Data drawn from Cereq's survey is used to answer this issue. In the spring of 2007, Cereq (the French Center for Research on Education, Training and Employment) surveyed by phone a sample of 65,000 young people who graduated from their initial education in 2004, from all levels, representative of 737,000 who left the educational system in France for the first time. This survey, called 'Generation 2004', aimed to analyze the first three years of active life after initial education. It includes useful information on young people's characteristics (family's socio-economic status, age, highest grade completed, highest grade attended, university area, job during their study, study time abroad, internship…) and work history from 2004 through 2007. In our sample, 2,226 respondents left higher education with a Bachelor degree: 671 are graduated from a vocational Bachelor; 1,207 are graduated from an academic Bachelor in human and social sciences; 407 are graduated from an academic Bachelor in mathematics, physics or engineering sciences. They are representative of the 50,748 Bachelor graduates who left higher education in 2004 in France. The employment situation of Bachelor graduates will be also compared with the other graduates entering the labour market in 2004 during the first years of active life, using econometric models (probit models). However, by definition, the survey does not interview Bachelor graduates who continue their studies after 2004. It also focuses on young people living in France three years after leaving the education system.

2. A vocational drift: An overview of the French Higher Education System

Efforts to bring the professional world closer to the educational system, to promote the professional transition of students and to respond to the skills required for entering the labour market are just some of the reasons used to justify the development of vocational courses in French higher education (Dupeyrat, 2002).

Until 1960, the French higher education was characterized by a dual and hierarchical opposition between the *Grandes Écoles* and the Universities. During the sixties, two technological degrees have been created in order to provide a more vocational oriented program in tertiary education (short vocational tracks): *Diplôme Universitaire de Technologie* (*DUT*), operated by autonomous university institute and the *Brevet de Technicien Supérieur* (*BTS*), higher education vocational courses operated by secondary school institutions (*lycée*). While recent studies conducted in a range of countries have emphasized the academic drift of higher education (Teichler, 2007), French higher education appears currently to be driven by an opposite trend. In the last three decades, universities have offered new vocational courses: *DESS, Miage, IUP, Magisters*, and (more recently) vocational Bachelor degrees. The purpose of these courses was to offer vocational training in universities that included work placements and interventions by professionals. This was part of an attempt to improve a university system widely criticized for being too theoretical and academic and for producing a growing number of unemployed tertiary graduates (Agulhon, 2007).

Currently, with the exception of universities, French tertiary institutions are based on distinct rules and recruitment policies and apply various selection criteria (educational record, interview, entrance exam, test, etc.). In France the *baccalauréat* is the standard - the final diploma of upper secondary education - and the gateway for accessing to higher education. The *baccalauréat* is the only requirement for enroling in a first-year undergraduate course at a university, and the number of university diplomas is not fixed. At the university, the *licence* degree is awarded after three years of studies in higher education. Students can choose a general (*licence générale*) or a vocational Bachelor degree (*licence professionnelle*).

The introduction of vocational Bachelor degrees in 1999 was designed to extend the vocationalisation of French university education. Before 1999, universities only offered a purely academic, general Bachelor degree based on subject-specific teaching and training. The award of the Bachelor degree was conditional on passing three years of university study (in humanities, science and technology, engineering, law and economics). Before, the Bachelor degree was not considered to be an appropriate standard for leaving higher education and entering the labour

market, except to enter competitive administrative and teacher recruitment exams. By establishing a close partnership with potential employers in the conception of projects, the vocational Bachelor degree was designed to provide a specific response to the local demands of high-level vocational training, particularly in the private sector. The vocational Bachelor degree is a one-year training course offered to holders of a diploma awarded after two years of university education. It is job-oriented and includes a 12 to 16 weeks work placement in a company. Nearly 77% of vocational Bachelor graduates have completed a placement lasting at least three months, as opposed to just 30% of general Bachelor graduates (Calmand *et alii,* 2009).

One of the major objectives of the vocational Bachelor degree is to promote the transition to work of young graduates who have obtained a diploma awarded after three years of post-*baccalauréat* study. The aim is to reflect the first level of the European structure of higher education diplomas defined in the Sorbonne and Bologna declarations. The *licence* is now commonly considered the equivalent to a Bachelor's degree in international terms, and represents the first stage of the three-cycles *Licence*/*Master*/*Doctorat* (3-5-8) of European harmonized degrees (associated with 180 European Credit Transfer Systems).

Table 1. Development of tertiary diplomas in France

	2000	***2004***	***2008***
BTS	95530	108839	106025
DUT	47478	47018	46714
General Bachelor (*Licence*)	135017	137307	124289
Vocational Bachelor		**17159**	**37665**
Maîtrise	93304	94146	1915
DEA	23428	26339	7
DESS	32612	47351	110
Master (Vocational)		2443	65111
Master (Research)		2247	22133
Master (others)		581	7069
Grandes Écoles	42966	51996	50865
Doctorate	9991	8931	10678

Source: Ministry of Education, *Repères et statistiques*.
Reading note: The number of vocational Bachelor graduates was 17,159 in 2004 and 37,665 four years later.

The Master degree **(**vocational or research degree) is awarded to students who have successfully completed five years of study after the *baccalauréat*. In France it was introduced for the first time in the academic year 2002/2003. This degree replaced the *Diplôme d'Études Supérieures Spécialisées* (*DESS*, vocational) and the *Diplôme d'Études Approfondies* (*DEA*, research). The implementation of the new *LMD* system also encouraged the *Grandes Écoles* to reflect the general trend. The diplomas currently awarded by *Grandes Écoles* are usually regarded as Masters-level qualifications. Some *Grandes Écoles* encourage students to obtain a university diploma as well. The creation of the *LMD* system was accompanied by an increased imbalance between vocational Masters courses and research Masters (in favour of the former). Common Masters courses (i.e. research and vocational) were created to compensate for the declining numbers of students wishing to pursue a career in research. Access to doctoral studies is increasingly open to holders of vocational Masters degrees, which may result in an increasing number of students bypassing research Masters degrees and possibly in a gradual disappearance of this type of diploma.

The shift to the *LMD* system occurred in a context of declining numbers of higher education students. In 2008-2009, the number of tertiary students in France levelled out at 2,232,000, ending two years of continued decline (Ministry of Education, *Note d'Information*, 2009). The number of students in universities (roughly 1,400,000) marginally declined, while the number of students in private training courses increased (private *BTS* and business schools). In universities, 56% of students are studying towards a Bachelor degree, while 39% are enroled in Masters courses and 5%

are undertaking a doctorate. Increasingly, only vocational courses have seen their numbers growing in universities, while the number of students in general university courses (particularly in the first years of the Bachelor degree) is declining.

3. The Vocational Graduates: Specific Marks

Unlike general education at university level, French vocational higher education is always characterised by a restricted entry. Selection is based on students' educational record and on evidence of a professional project. Another major difference with education degree at university level is the type of applicant. The process of selection and orientation at every stage of pupils' or students' educational career involves a combination of educational, social, economic and geographical factors.

3.1. Gender and social origins

In terms of the choice of tertiary education courses, students tend to be differentiated according to their social origin: *Grandes Écoles* and science degrees (particularly medical studies) for the children of managerial/professional parents; technological and two-year vocational courses for children of working-class parents, with more modest backgrounds. A number of reports and studies have strongly challenged the idea of an increasing democratization of higher education (Merle, 2000; Prost, 1986). In *La Reproduction*, Bourdieu and Passeron (1970) had already issued a warning against construing the growing numbers of students in tertiary education as a sign of increasing democratization. More recently, Albuy and Tavan (2008) show that democratisation in the French higher education mainly concerns short higher education programmes. They suggest that social inequalities have taken on a different form and now concern the nature of the course attended. A comparison between the French and the German Education system show that social inequality plays a greater role before the end of the secondary education in Germany whereas the influence of social origin is stronger in the French Higher Education system (Duru-Bellat, Kieffer, Reimer, 2010).

According to gender differentiation, women have long accounted for the majority of higher education students in France. Ten years ago, they represented 55% of students in tertiary education, and this trend has continued to this day. However, the specific distribution of students remains unchanged and a balanced mixing of sexes is still a distant prospect. In addition, for women, as Albouy and Tavan (*op. cit*.) noted it, the period of rapid growth in higher education went hand in hand with increasing social polarisation in the different subject areas.

If we focus on the bachelor level, our survey shows that the proportion of women varies between 37% in vocational Bachelor degrees to 70% among general Bachelor graduates, with some subject-specific variations. 34% of women graduates with vocational Bachelor degrees in management and 26% with a Bachelor degree in language and literature, while 44% of men graduates with a vocational Bachelor degree in science and technology.

These students have generally undertaken two short vocational courses in succession (a *BTS* or *DUT* followed by a vocational degree) before directly entering the labour market. Over 50% of graduates holding a vocational Bachelor degree also hold a *BTS*, while over a third have obtained a *DUT*; by contrast, just 12% had completed two general university studies. These new Bachelor degrees have become a way of extending training for students who have already completed a post-*baccalauréat* vocational track. While students from general courses are reluctant to pursue such training, graduates from *BTS* and *DUT* tracks generally view it as further vocational development and as a condition for securing a more highly qualified job.

Theoretically, vocational Bachelor degrees, like other Bachelor degrees, also represent a gateway to Masters-level training. Of the vocational Bachelor graduates who were awarded their diploma in 2004, just 17% continued their training at university the following year (as part of a Bachelor's or

Masters degree) and 3% enroled in an institute of teacher training (Ministry of Education, *Note d'Information*, 2007). This result is below the proportion of students pursuing postgraduate studies after a general Bachelor degree. In 2004-2005, roughly 82% of general Bachelor graduates enroled in a Masters degree (approximately two thirds), a competitive teacher recruitment exam (10%) or other training courses (5%). Two years after being awarded a general Bachelor's degree, roughly 30% of graduates obtained a Masters degree.

In 2007, 55% of vocational graduates were in services fields: finances, information and communication. The most important industrial fields were design and construction. Nearly 20% of vocational Bachelor graduates and less than 1% of general Bachelor graduates obtained their diplomas through an apprenticeship, particularly in management and business courses.

The social origin of students in vocational tracks is comparatively more modest than in general and research courses. Vocational Bachelor degrees allow a greater access of students coming from a more diverse range of social backgrounds: 26% of parents were in managerial/professional positions and 13% of them had a parent in associate professional occupation. More than 45% had a parent as an employee or a worker (working-class). As comparison children whose parents' occupations were managers/professionals were more represented in the general Bachelor degrees (32%).

3.2. Transition to work

Of the 737,000 young people leaving education in 2004, nearly 307,000 were higher education graduates. Bachelor graduates represented just 16% of the total number of these graduates leaving higher education (*See* Table 2). Overall in 2004, for the most part, tertiary graduates enjoy enviable professional prospects and have secured employment quickly and permanently. At the other end of the scale, young people with no diplomas are highly exposed to unemployment: 32% were still unemployed after three years on the labour market (Cereq, 2008).

Three quarters of vocational Bachelor graduates and two thirds of general Bachelor graduates secured a permanent job rapidly. Over 50% of Bachelor graduates have remained with their first employer. The majority of graduates have never experienced unemployment and the average period of job search was very short: 3 months for Bachelor graduates, 4 months for Master graduates (*See* Table 2). Three years after completing their studies, just 5% of vocational Bachelor graduates and 7% of general Bachelor graduates were unemployed.

In 2007, the proportion of graduates working part-time was low, including among those graduates who completed a course in the services field. Vocational Bachelor graduates also tend to be better paid than general Bachelor graduates, even if access to manager and professional occupations remains relatively uncommon. Three years after entering the labour market, just 15% of vocational Bachelor graduates had managerial/professional position as opposed to 17% of general Bachelor graduates, 64% of vocational Master graduates and 81% of *Grandes Écoles* graduates. One positive indication of integration is that nearly 60% of Bachelor graduates stated that their skills were valued in their current job, reflecting the feelings of the majority of higher education graduates. Two thirds wished to remain for as long as possible in their current job.

General Bachelor's degrees do not appear to be a similar asset to vocational Bachelor's degrees at the point of entering the labour market. Although the proportion of graduates in executive positions is 17%, general Bachelor graduates earn on average 80 Euros less than vocational Bachelor graduates. The rate of unemployment is also marginally higher, particularly after degrees in language, literature, law and economics. By contrast, the indicators of transition to work are less positive for general Bachelor graduates. The level of job stability in March 2007 was significantly lower: 67% had secured a permanent contract (as opposed to 77% of vocational Bachelor graduates, and 89% of *Grandes Écoles* graduates). Part-time work is also more common (21%). 30% of women are in part-time employment as opposed to just 13% of men. Of all higher education graduates, the lowest rates of job satisfaction are found among general Bachelor graduates, although

rates of job satisfaction are still relatively high. Nearly three quarters of general Bachelor graduates claim that they are fulfilled in their current job as opposed to 82% of vocational Bachelor graduates and higher education graduates generally.
In line with the objectives of the diploma, private sector companies constituted the vast majority of opportunities (87%) for vocational Bachelor graduates. Education sector was a significant draw among general Bachelor graduates. Many graduates chose to seek employment in the public sector more generally, particularly education. In 2007, nearly 60% of graduates in literature and the humanities were primary school teachers, supply teachers, teaching assistants or student monitors. The proportion of graduates in law and economics in these positions was lower since these graduates tended to secure managerial/professional positions or intermediate administrative or business positions in companies. In fact, general Bachelor graduates in the public sector were likely to occupy precarious positions (Dauty, Lemistre, 2006).

Table 2. Situation in the Labour Market in 2007

		General Bachelor	**Vocational Bachelor**	Vocational diploma Isced5	*Maîtrise* Master1	Research Master2 *DEA*	Vocational Master2 *DESS*	*Grandes Ecoles*	Doctorate
Part of graduates leaving tertiary education	*%*	*12*	***4***	*44*	*12*	*3*	*10*	*10*	*5*
Employed in 2007	*%*	*81*	***91***	*88*	*83*	*84*	*91*	*93*	*91*
Period from graduation to 1st employment (in months)	Mean	3,4	**2,1**	2,7	3,9	3,3	3,5	3,2	2,4
	Median	2	**0**	1	2	0	1	2	0
Duration of job search from 2004 to 2007 (in months)	Mean	3,3	**3,2**	3,4	4,3	4,1	4,7	3,7	3,6
	Median	0	**0**	0	0	0	2	1	0
Net income (month in 2007 in Euros)	Mean	1368	**1578**	1483	1618	1798	1929	2313	2383
	Median	1411	**1514**	1408	1510	1683	1842	2167	2150
Managerial/Prof. occupation	*%*	*17*	***15***	*6*	*33*	*59*	*64*	*81*	*91*
Associate occupation	*%*	*64*	***67***	*62*	*50*	*30*	*29*	*15*	*7*
Employment appropriate to level of competences	*%*	*61*	***60***	*61*	*54*	*52*	*61*	*69*	*76*
Job satisfaction in 2007	*%*	*76*	***82***	*82*	*78*	*81*	*82*	*85*	*89*
Permanent contract	*%*	*67*	***77***	*68*	*67*	*68*	*72*	*89*	*58*
Full time employment	*%*	*79*	***96***	*88*	*86*	*82*	*92*	*98*	*85*
Employment appropriate to level of education	*%*	*55*	***40***	*70*	*59*	*44*	*55*	*72*	*87*

Source: Cereq's 'Generation 2004' survey.
Reading note: The vocational Bachelor graduates represented 4% of the leavers from tertiary education in 2004. Three years later, 91% were employed and 77% had a permanent contract.

Overall, vocational Bachelor graduates experienced fewer difficulties in seeking to enter the labour market in difficult economic circumstances. Compared with graduates from shorter higher education courses, job opportunities for vocational Bachelor graduates tend to be more stable and better paid. The positions secured by vocational Bachelor graduates are also more highly qualified. However, very few vocational Bachelor graduates had executive positions just 15% of them in 2007 (*See* Table 3), predominantly in the industrial sector. Levels of remuneration were also higher among vocational Bachelor graduates despite the fact that they have completed the same number of years of study in higher education: vocational Bachelor graduates earned on average 100 Euros more per month than general Bachelor graduates. In 2007, a vocational Bachelor graduate earned a monthly median salary of 1,514 Euros, as opposed to 1,411 Euros for a general Bachelor graduate. Women tend to begin their professional career with lower salaries than men, and the gap (100 Euros) remained throughout the three years.

Similar conclusions in two surveys
The same trends were highlighted in the previous survey conducted by Cereq in France among the 2001 generation (Giret *et alii*, 2006). Holders of a vocational Bachelor degree still tend to secure a

steady job more rapidly and to be paid marginally more than general Bachelor graduates (*see* Table 3). Three years after leaving higher education, three quarters of students from the 2001 and 2004 cohorts had secured a permanent contract, while the level of unemployment declined (9% of graduates in 2001 and 5% in 2004). Overall, Bachelor graduates experienced less difficulty in the labour market in hard economic circumstances. However, the most common job opportunities are technical and intermediate positions fewer vocational graduates obtained manager occupations than among general Bachelor graduates. The proportion of young people securing an executive position has remained unchanged at nearly 15%. This result may suggest a lower transferability of technical and managerial skills for vocational Bachelor graduates.

Table 3. Transition to work among graduates three years after leaving higher education

	Unemployment rate	Professionals & managers	Stable employment	Median net mensual wage (euros)
Graduates 2004				
Vocational Bachelor	5%	15%	80%	1514
General Bachelor	7%	17%	70%	1411
Graduates 2001				
Vocational Bachelor	9%	17%	78%	1380
General Bachelor	12%	22%	67%	1300

Source: Cereq's 'Generation 2004' and 'Generation 2001' surveys.
Reading note: the rate of unemployment for the vocational Bachelor graduates in 2001 was 9% and 5% for the vocational Bachelor graduates in 2004, three years later.

In view of the growing numbers of students in higher education, many experts and scholars warned that an increasing gap would develop between the level of qualification and the jobs effectively secured at the end of their studies (Duru-Bellat, 2006). Yet higher education graduates tend not to perceive this gap. Nearly 70% of graduates claimed that their level of qualification is necessary to carry out their job to a satisfactory level. One slight damper is noted among vocational Bachelor graduates: 45% of students stated that a lower qualification would be sufficient. This can be explained by their difficulties to access executive positions and to demarcate themselves from tertiary technicians recruited after two years of post-*baccalauréat* study (*BTS* or *DUT*). However, these results need to be put into perspective since 82% of vocational Bachelor graduates wished to remain in their current job and 82% also stated that they are fulfilled in their current job. 27% of vocational Bachelor graduates consider that they are well or very well paid as opposed to just 20% of tertiary graduates generally. Gender-related differences remain significant among higher education graduates and continue to account for a significant proportion of income disparities; they earned 15% less than their male counterparts, 30% of women were in part-time employment as opposed to just 13% of men.

4. Labour market situations, three years after graduation

This section will introduce what the Bachelor graduates chances are of securing positions that make full use of their skills and potential, compared with the other tertiary graduates. The analysis of the education-to-work-transition of vocational Bachelor or Master graduates highlights a real effectiveness of these diplomas on the labour market. In order to have the actual outcomes of diplomas, we selected to analyze it 'all other things being equal'. First, we focused on three dependent variables: the probability of being employed three years after graduation in 2007, the probability to secure a permanent position, the probability of being employed in a managerial/professional position. Probit models were first estimated because dependent variables are dichotomous (*See* Table 4.A.). Hovewer, bivariate probit models were also used because the choice of the vocational track could be endogenous with education-to-work transition (Table 4.B). As independent variables, we chose to include the gender, social and national origins, field of study

and diploma. Four vocational diplomas are included as independent variables: vocational bachelor, other vocational degree, vocational master and *Grandes Écoles*. For social origins, we integrated the professional occupation of the two parents and also the country origin for the father.

Table 4.A. Professional situation in the labour market (probit Models)

Probit Model **Probability to be:**	Model 1 **Employed**	Model 2 **Stable position**	Model 3 **Manager occupation**
Man (ref. woman)	-0.0163	0.0103	0.360***
	(-0.56)	(0.45)	(12.96)
Father from foreign country	-0.276***	-0.173***	-0.0405
	(-5.05)	(-3.75)	(-0.68)
Father and Mother Managers/Prof	-0.0377	-0.0167	0.259***
	(-0.92)	(-0.52)	(6.89)
Diploma (ref. *Maîtrise*/Master1)			
Vocational Bachelor	**0.365*** **	**0.380*** **	**-0.544*** **
	(4.61)	**(6.22)**	**(-7.13)**
General Bachelor	-0.114*	-0.0859	-0.520***
	(-2.16)	(-1.90)	(-9.54)
Other Bachelor (Isced 5b)	0.335***	0.159***	-1.170***
	(7.69)	(4.47)	(-25.73)
General Master + *DEA*	-0.0551	-0.0452	0.788***
	(2.98)	(-0.64)	(16.80)
Vocational Master + *DESS*	0.370***	0.234***	0.524***
	(6.37)	(5.17)	(7.24)
Grandes Ecoles	0.571***	0.784***	1.186***
	(7.88)	(13.98)	(20.92)
Phd	0.193***	-0.0331	1.284***
	(4.67)	(-0.71)	(24.63=
Field of study: industrial	0.0389	-0.0023	0.156***
	(1.25)	(-0.09)	(4.85)
_cons	1.000***	0.193***	-0.838***
	(25.14)	(5.81)	(-22.55)
N	15635	15635	15635

Source: Cereq's 'Generation 2004' survey. * p<0.05, **p<0.01, *** p<0.001

Reading note: All things being equal, a Bachelor graduate has a higher probability of being employed in a stable position (positive and significant coefficient), and a lower probability of being a manager (negative and significant coefficient) compared to a *Maîtrise*/Master1 graduate.

Given similar social origins and individual characteristics, results of the probit estimates (Table 4.A.) show a strong effect of the vocationalisation in all the models. Vocational Bachelor graduates were likely employed than general Bachelor all other things being equals. The model 2 indicates that graduates from vocational Bachelor were more (with *Grandes Écoles* graduates) in a stable employment such as civil servant or permanent contract. However vocational Bachelor graduates had the lowest probability to get a managerial/professional occupation three years after graduation (model 3). A high effect of the level of education appears (in the model 3). The manager and executive profession seems to be reserved for the *Grandes Écoles* graduates and Doctorate or Master graduates. Other result: no significant gender effect comes to light on the probability to be employed or to get a permanent contract, but there is a negative impact for the access to executive profession. Most managers' positions are still held by men (Guégnard *et alii*, 2008). Social origin plays an expected role: the likelihood of obtaining a manager/professional occupation is higher among people with a high level of social capital. On the contrary, the negative impact of national origin remains significant in all the models.

Table 4.B. Professional situation in the labour market (bi-probit Models)

Bi-probit Model - Probability to be graduated in a vocational track	**Model 1**	**Model 2**	**Model 3**
Man (ref. woman)	-0.0553*	-0.0541*	-0.0559*
	(-2.54)	(-2.48)	(-2.56)
Mother in managerial/professional position	-0.0505	-0.0461	-0.0549
	(-1.23)	(-1.12)	(-1.33)
Father in managerial/professional position	-0.0609*	-0.0625*	-0.0608*
	(-2.26)	(-2.33)	(-2.25)
Attitudes toward education			
Refusal of a training (not selected for an additional year in HE)	-0.174***	-0.169***	-0.195***
	(-3.68)	(-3.58)	(-4.10)
Financial reasons	-0.0439	-0.0358	-0.0485
	(-1.62)	(-1.32)	(-1.78)
Wish to work	0.461***	0.453***	0.479***
	(18.94)	(18.65)	(19.88)
***Baccalauréat* (ref. Technological)**			
General *Baccalauréat*	-0.639***	-0.632***	-0.647***
	(-24.99)	(-24.66)	(-25.29)
Vocational *Baccalauréat*	0.640***	0.640***	0.643***
	(7.31)	(7.32)	(7.31)
Other Diploma	0.335*	0.341**	0.334*
	(2.54)	(2.58)	(2.54)
Baccalauréat Mention	-0.218***	-0.227***	-0.213***
	(-9.93)	(-10.35)	(-9.62)
_cons	0.691***	0.693***	0.685***
	(21.44)	(21.53)	(21.19)
Second Model - Probability to be:	**Employed**	**Stable position**	**Manager occupation**
Man (ref. woman)	-0.0150	0.0122	0.360***
	(-0.52)	(0.54)	(12.96)
Father from foreign country	-0.264***	-0.161***	-0.0408
	(-4.87)	(-3.52)	(-0.69)
Father and Mother Managers/Prof	-0.0392	-0.0180	0.259***
	(-0.97)	(-0.57)	(6.89)
Diploma (ref. *Maîtrise*/Master1)			
Vocational Bachelor	**0.212***	**0.216*****	**-0.538*****
	(2.53)	**(3.32)**	**(-7.13)**
General Bachelor	-0.0290	0.0119	-0.524***
	(-0.53)	(0.25)	(-9.10)
Other Bachelor (Isced 5b)	0.213***	0.0257	-1.165***
	(4.34)	(0.64)	(-23.02)
General Master + *DEA*	0.198**	0.0513	0.795***
	(2.98)	(0.98)	(14.03)
Vocational Master + *DESS*	0.0189	0.0398	0.520***
	(0.23)	(0.56)	(7.01)
Grandes Ecoles	0.388***	0.586***	1.193***
	(4.84)	(9.33)	(18.15)
Phd	0.279***	0.0653	1.280***
	(4.67)	(1.35)	(23.02)
Field of study: industrial	0.0434	0.00367	0.155***
	(1.25)	(0.14)	(4.84)
_cons	1.064***	0.265***	-0.838***
	(25.89)	(7.65)	(-21.43)
athrho			
	0.161***	0.175***	-0.00687
	(5.32)	(6.92)	(-0.22)
N	15635	15635	15635

Source: Cereq's 'Generation 2004' survey. * p<0.05, **p<0.01, *** p<0.001

Reading note: All things being equal, a Bachelor graduate has a higher probability of being employed in a stable position (positive and significant coefficient), and a lower probability of being a manager (negative and significant coefficient) compared to a *Maîtrise*/Master1 graduate.

As expected, results presented in table 4 show that being graduated from a vocational higher education degree is not random (model 1, *see* Table 4.B.). The access of a student to vocational track is linked to previous accomplishment at the secondary level, its type of the *baccalauréat* and the mention (low success). Compared with holders of a technological *baccalauréat*, general *baccalauréat* graduates have fewer probabilities to be enroled into a vocational unlike holders of a vocational *baccalauréat*. Men are more likely graduated in a vocational diploma than women, all other things being equal. In addition, a small but significant effect of father social position appears: children of modest social origins have a higher probability to be graduated from vocational higher education. Moreover, as expected, people who were bored by their studies have also better chances to choose a vocational degree.

Results of the bivariate probit models are quite similar. In the three models, firstly we estimated the probability of being graduated in a vocational tertiary track and secondly, we calculated the probability of being in a specific state. The estimation of holding a vocational diploma in higher education is explained by the gender, social origins, type of *baccalauréat* obtained in secondary education and its mention as an indicator of the high secondary school performance (model 1, *see* Table 4.B.). In order to solve the identification problem, an additional variable is needed that is correlated with the endogenous variable and unrelated to the error term in the estimates of labour market situations equations. We used three reasons of leaving higher education (not selected to an additional year of study, financials reasons or the desire to join the workplace which may be also interpreted as students' weariness) which may be viewed as general motivations toward education. Although they concern the decision of leaving higher education, these variables can also explain the motivation to choose a vocational track in higher education. Concerning the second equations, the effects of vocational graduates are more modest for the models 1 and 2. For example, the effect of vocational master is now not significant. In addition, we found that the correlation coefficients between the two equations are significantly different from zero and positive for three bivariate probit models. Thus, there is a positive correlation between the unobserved terms that affect the decision to choose a vocational track and the labour market situations[2].

Social mobility

The access to vocational higher education is often considered as an opportunity to provide a tertiary training to students from modest origins. Our previous results show that students from lower social background seem to have a higher probability to be graduated from vocational higher education and vocational higher education gives good career prospect during the first year of active lives. However does vocational higher education lead to an upward social mobility? In order to answer this question we created a social mobility variable using social variables contained in our database. The general principle of our analysis was to assign mobility to each individual by comparing the position of parents and the actual position of respondents three years after leaving higher education. Exactly, we took into account only the father position and in the case of there was no information we got the mother position. For example, a young graduate was employed as a manager or professional and his father was an employee, we considered that as an upward mobility. Inversely if one respondent was a worker and his father was a professional, we considered that as a downward mobility. Finally we created a variable of social mobility with three modalities or items (*See* Table 5).

The second step of our analysis was to create a model in order to estimate the probability to have an upward mobility. As the variable mobility had three items, we used an ordered probit. Results presented in Table 6 show that social mobility strongly depends of the level of the diploma. Only Master graduates (and the most qualified) were likely to have an upward mobility, combined with a vocationalisation impact: only vocational Masters, *Grandes Écoles* and Doctorate graduates had an

[2] However, we must be prudent concerning the validity of our instruments in the first equation, from theoretical and empirical points of view.

ascendant mobility. Holders of a general or a vocational Bachelor diploma did not get an upward mobility, compare with *Maîtrise* graduates. *Grandes Écoles* degrees had a great impact on upward mobility. In fact, the population enroled in these higher schools is generally from upper backgrounds, with professional/manager parents and social networks. Ethnic origin plays a role: the likelihood of obtaining an upward social mobility is higher among young people from immigrant families.

Table 5. Diploma and Social Mobility

Type of diploma	**Type of social mobility**		
	Downward mobility	**No mobility**	**Upward Mobility**
General Bachelor	20%	41%	39%
Vocational Bachelor	**19%**	**42%**	**39%**
Other Vocational diploma (Isced 5b)	16%	51%	33%
Maîtrise (Master1)	17%	44%	39%
General Master 2 + *DEA*	16%	50%	34%
Vocational Master 2 + *DESS*	11%	41%	48%
Grandes Ecoles	7%	51%	42%
Doctorate	4%	56%	41%
Total	15%	48%	38%

Source: Cereq's 'Generation 2004' survey.
Reading note: 42% of vocational Bachelor graduates had no social mobility, 39% had an upward mobility and 19% a downward mobility.

Table 6. To the Upward Mobility (ordered probit)

	Mobility
Man (ref. woman)	-0.0343
	(-1.61)
Diploma (ref. *Maîtrise*/Master1)	
Vocational Bachelor	-0.0387
	(-0.69)
Other Bachelor (Isced 5b)	-0.00290
	(-0.08)
General Bachelor	-0.0383
	(-0.85)
Vocational Master + *DESS*	0.246***
	(5.68)
General Master + *DEA*	-0.0384
	(-0.53)
Grandes Ecoles	0.219***
	(4.49)
Phd	0.290***
	(6.38)
Father from foreign country	0.511***
	(10.46)
Field of study: industrial	0.0696**
	(2.38)
cut 1	-0.947***
	(-28.25)
cut2	0.350***
	(10.64)
N	13688

(Source: Cereq's Generation 2004' survey)
* p<0.05, **p<0.01, *** p<0.001
Reading note: All things being equal, a vocational Master or DESS graduate has a higher probability of having an upward mobility compared to a *Maîtrise*/Master1 graduate.

These results, a little disappointing, of low social mobility are found in other studies in France which underlines the "*breakdown of the social elevator*" (Thélot, 1982; Vallet 1992; Eckert 2002). Dupays (2006) noticed that between 1977 and 2003 the social mobility evolved little, even decreased while the inequality of access to the higher status increased. The survey carried out by Cereq in 2005 towards leavers in 1998, attests social processes which slow down mobility inter generation (Cereq, 2007). Thus, the share of young graduates (three years after *baccalauréat*) which reached managers' position varies from 31% to 71% according to the social individual origin (Eckert, 2008). *"Like father, like son"* would be interesting to analyze taking into consideration these new vocational training, in particular to combine "*like mother, like daughter*"…

Dream or Dust in Eyes?

Dream or dust, can one answer this question? Taking into account the employability of the vocational Bachelor graduates on the labour market, the dust can be removed and replaced by dream and reality. One side of the dream became reality: these vocational Bachelor degrees enroled a mix social public. It is possible for many vocational graduates in short tertiary tracks (Isced 5b) to continue their studies and thus to reach a level of higher qualification, even for a few of them a manager position, in a French society which hardly ensures of social mobility. Overall in 2004, vocational higher education graduates entered the labour market in better conditions than their predecessors. After three years, a greater number of graduates had secured a permanent job. Despite unfavourable economic circumstances and significant changes in the provision of training, the hierarchy of diplomas remains unchanged. Higher education graduates also tend to be less exposed to the effects of changing economic circumstances, despite continuing disparities between *Grandes Écoles* graduates and university graduates. These observations highlight the continuing influence of forms of higher education inherited from the past (Brennan, Tang, 2008). It will be more than interesting to see whether in current economic period of crisis, the vocational graduates will be able to obtain satisfactory work conditions, and to know if a vocational tertiary diploma will constitute always a protection against unemployment.

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