CENTRE D'ETUDES ET DE RECHERCHES SUR LES QUALIFICATIONS
A FRENCH NEWSLETTER FROM CEREQ AND ITS ASSOCIATED CENTRES

# Higher Education Graduates: Despite Increasing Numbers, Employment Prospects Remain Good

In recent years, the supply of post-secondary training has developed considerably. Nonetheless, conditions for labour-market entry remain favourable for young graduates, especially those with industrial or scientific training. Although access to employment essentially depends on the training speciality, wages are mainly tied to the degree level. Women still receive lower wages than their male Counterparts, but the differences diminish as the degree level rises. Labour-market entry following higher education has been favoured by rising employment in the occupations that provide its traditional outlets. There is increasing employment for managers, particularly in the under-35 age group. There have been many recruitments of young engineers, administrative and commercial managers, and teachers. At the same time, the unemployment level has remained very low in these occupations.

## SHARP RISE IN EXITS FROM HIGHER EDUCATION

The overall number of those exiting the educational system has declined slightly since 1980. This trend is the result of a sharp decline in exits at the end of secondary education (-31%), largely compensated by the rise on **post-baccalauréat** levels (+78%). The majority (58%) of students who have entered working life now have a **baccalauréat** degree.

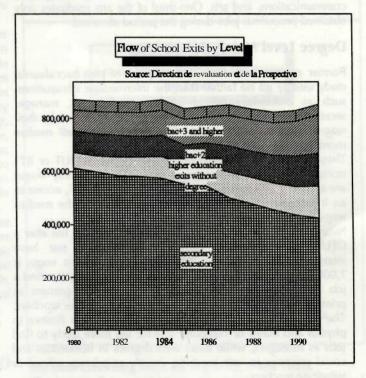
Half of those leaving the educational system now come from higher education, as opposed to only 26 percent in 1980. Among the higher education graduates, the increase is greatest among students with long years of study behind them. But nearly one-third of those leaving school are fcacca/aureat-holders who undertook further studies without obtaining a degree.

The exit level increases within higher education. The proportion of graduates with a DUT (bac+2) who continue their studies has thus gone from 25 percent in 1980 to 51 percent in 1988. The rise is also considerable among those holding the BTS, whose rate of continued study has gone from 16 to 30 percent over the same period. This trend applies equally to industrial and service tracks. (The structure of higher education in France is explained on page 5.)

By contrast, the rates of continued study are stable for those completing business and engineering schools (bac+4 or bac+5), although these still remain fairly high, at 19 and 22 percent, respectively.

# ENTRY CONDITIONS STILL FAVOURABLE Little Unemployment for Science Graduates

Labour-market entry has improved slightly since the last survey carried out in 1987. The unemployment rate of those holding a



DUT or BTS has declined and is now close to that of former business school students (around 4 %). The proportion of unemployed university graduates varies between 4 and 6 percent depending on whether the degree is a doctorate or a *licence* (bac+3). Young engineers (2%) and young medical doctors (1%) have the lowest unemployment rates.

Graduates of industrial or scientific tracks generally enter the labour market more successfully and quicker than those in service fields. The unemployment rate for those holding

industrial DUTs or BTSs is less than 3 percent, while STS graduates in "tourism/communications/advertising" have a rate of 11 percent, and those with DUTs in "information careers" and "marketing techniques", 7 percent. The waiting period for access to employment is shorter for those with industrial background: 81 percent of those holding industrial DUTs found a job in less than six months, as opposed to only 71 percent of those holding a service DUT. A similar split can be observed after university training. Less than 3 percent of physical science graduates experience more than six months' unemployment before entering their first job, while these rates reach or exceed 9 percent among former students in law, economics, economic and social administration, communications and arts.

After industrial or scientific training, entry is still less easy for graduates in biology, ecology and agriculture. This trend can be observed at all levels, even among young engineers.

Following training in economics, unemployment is less frequent for those specialising in management/accounting/finance. Less than 3 percent of STS and IUT graduates in finance/accounting were still unemployed at the time of the survey. Those holding masters degrees in management overwhelmingly find a first job with an indefinite-term contract, and only 8 percent of them will experience more than six months of unemployment during their first thirty-three months of working life.

In letters and social sciences, disciplines that lead to teaching jobs offer better employment prospects. Graduates in literature, philosophy and education enjoy good conditions of entry into working life. Conversely, unemployment is more frequent following training in sociology, applied foreign languages, communications, and arts. One-third of the arts graduates only obtained precarious jobs during the period observed.

#### Degree Level Mainly Affects Wages

Former students with two or three years of post-baccalauréat study usually go no farther than the intermediate occupations, such as elementary school teachers, technicians, manager secretaries or commercial representatives. As a result, their wages remain under eight thousand francs (net median monthly salary with all bonuses included).

Those holding an industrial or computer science DUT or BTS occupy technician or supervisor posts. Their monthly wages are around 7,000 francs. With a tertiary DUT or BTS, access to an intermediate occupation is not systematic and the median wage rarely exceeds 7,500 francs.

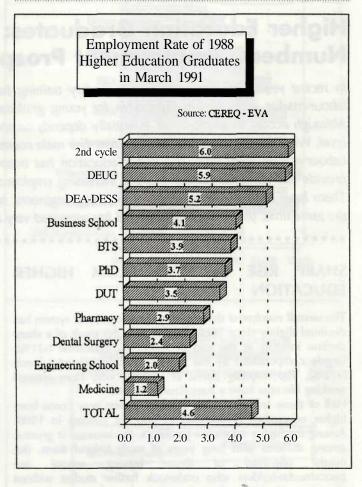
Nearly half of the 1988 graduates entering working life after a DEUG became primary school teachers. The rest have intermediate or clerical occupations. Their median wage is 7,000 francs. After the *licence*, a quarter of the graduates find a job as manager or qualified school teacher, 25 percent as primary school teacher and 14 percent as substitute teachers. The median wage is 7,900 francs. Those holding a *licence* in physics and maths or computer science are more likely to find jobs as managers, while those with degrees in humanities and social sciences go into teaching, mainly as primary school or substitute teachers.

When the degree obtained corresponds to more than three years of post-baccalauréat study, access to managerial jobs is more frequent. After the masters, nearly half of the former students find such jobs. As a result, their median wage is 8,750 francs, which is clearly higher than that of licence-holders. There is a significant proportion of managers among physical science and data processing graduates, which explains the higher level of their wages. It is lower among those with masters degrees in letters and social science, who mainly look

#### CEREQ's 1991 Survey

In the context of the Observatory on Entry into Working Life (EVA), CEREQ conducted a new study in 1991 on the first years of professional life among higher education graduates. Nearly all the tracks of higher education were covered, with tiig-lexeegtJ!pn;Qf training programmes offered by the Ministry of Defense and nursing schools.

The survey was conducted by mall fone mailing followed by two reminders). It was complemented by interviews carried out among a sampling of university graduates who did not reply to frw postal survey. The net reply rate was 58 percent, and 43,000 valid questionaires were obtained.



toward teaching, and among graduates in biology, chemistry and economic and social administration. After a DEA or a DESS, most graduates obtain a managerial job. Those with a DESS work almost exclusively in the private sector, while a third of those with a DEA obtain teaching positions. The median wage is 11,000 francs with a DESS and 10,400 francs with a DEA.

Those with doctorates become either teachers in higher education or researchers (44%), or managers in the private sector (32%). Their median wage is 12,000 francs. Among medical school graduates, young pharmacists, who are often employed by others, have wages of around 11,000 francs, while the young doctors and dental surgeons, who are frequently in private practice, have incomes of around 15,000francs.

Graduated Engineers usually become product or system designers in large manufacturing plants. Their earnings vary according to their specialisation and the prestige of their training, but the median is 12,600 francs. Former business

school students, meanwhile, have jobs as administrative and commercial executives in large firms. At the time of the survey, their median wage was 12,300 francs.

### MALE-FEMALE GAP DECLINES AS DEGREE LEVEL RISES

Nearly one out of every two higher education graduates is a woman. The **feminisation** of the different tracks is uneven, however. Although the majority of university graduates are women up to the masters **level**, the proportion drops to about one-half for DEA- or DESS-holders and only a little over a third at the doctorate level (excluding health). The large majority of DUT-holders, veterinary school graduates and above all engineering school graduates are men.

The differences between men and women are the smallest, in terms of both access to jobs and wages, among business school graduates. Following engineering school, the entry of young women is less rapid than that of their male counterparts, who greatly outnumber them. These differences can be partly explained by the disproportionate number of women in certain fields where professional entry is less favorable (natural and life sciences, chemistry). Even in cases of equivalent fields, however, there is a wage differential according to gender.

Young men and women with DUTs have comparable access to jobs. The women's wages are slightly lower, especially for DUTs in applied biology, private- and public-sector management, information, and marketing techniques. Two out of three young women with a BTS are trained in secretarial work, accounting, and tourism, where the wages are considerably lower than in other fields.

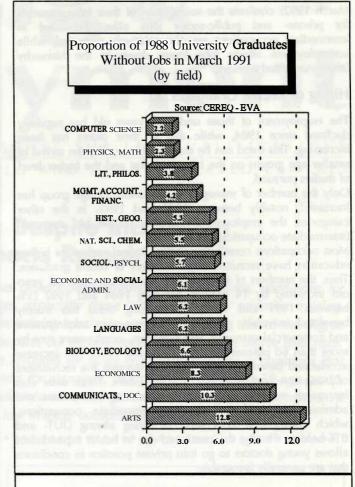
The relative position of young women is less favourable after university studies: only 50 percent initially obtain a job with an indefinite-term contract, as opposed to 60 percent of male university students. They are more affected by unemployment and receive lower wages. This differential can be explained in part by the large numbers of women in fields where job entry is relatively more difficult: natural sciences, biology, chemistry, social sciences. For a given degree level and discipline, women are not more vulnerable to unemployment than men; however, their wages are generally lower. This gap is related to the nature of the jobs held: female students more often become non-tenured primary and secondary school teachers while male students become company managers.

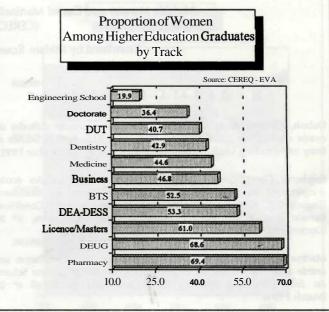
Disparities in labour-market entry decrease at higher degree levels, however. The wage differential among men and women with doctorates (excluding health) is less pronounced than among those with masters degrees. It can also be observed that in the disciplines where job entry is the easiest (physics, math, computers), the entry of young women is equivalent to that of their male counterparts.

## ENTRY CONDITIONS RISE IN SKILLED EMPLOYMENT PADS

#### **Management Posts Increasing**

Higher education degrees lead to manager jobs, to intermediate occupations, and more rarely, to clerical positions. There has been a rapid rise in the number of supervisory personnel since the early 1980s because of the recruitment of many administrative and commercial executives, engineers, secondary school teachers and professors. This trend





has been continuing since the beginning of the 1990s.

The intermediate occupations, meanwhile, have only enjoyed a slight increase in their ranks. The number of primary-school teachers, foremen, and supervisors has decreased. On the other hand, employment has increased among technicians and administrative and commercial intermediate occupations in the firms, such as manager secretaries, representatives, and banking and insurance officers. In the categories that do not constitute the main outlet for higher education, employment has stagnated or declined.

The moderate unemployment rate for managers (3.4% in

March 1992) confirms the sound state of their labour market for private- and public-sector jobs alike. Personnel in intermediate occupations are also relatively protected, while unemployment affects jobs lower down in the hierarchy (clerks, unskilled workers).

#### Hiring of Recent Graduates

The employment of those under 35 years old has regularly declined since 1984, while that of their elders has been increasing. This trend can be explained in part by the arrival of smaller age groups on the labour market and the higher level of studies pursued.

Only the number of managers in the under-35 age group has increased, notably between 1991 and 1992. In the other categories, the employment of young people has stagnated (intermediate occupations) or declined.

Most occupations constituting the traditional outlets for higher education have recruited large numbers of recent graduates. Thus, the numbers of teachers and researchers under 35 years old increased by 14 percent between 1984 and 1992 (3% between 1991 and 1992). This hiring trend has mainly benefitted university graduates. Among young administrative and commercial managers and engineers, employment rose by more than 60 percent between 1984 and 1992. This increase accelerated between 1991 and 1992 through the recruitment of business-school graduates and engineers. There were also increasing numbers of recruitments among technicians and administrative and commercial intermediate occupations, which corresponds to a wave of hiring among DUT- and BTS-holders. Finally, the continued rise in health expenditures allows young doctors to go into private practice in conditions that are generally favourable.

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> > Translated by Miriam Rosen

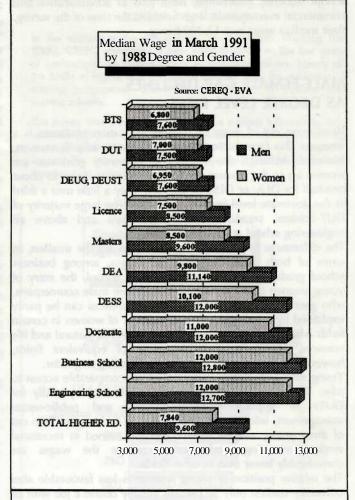
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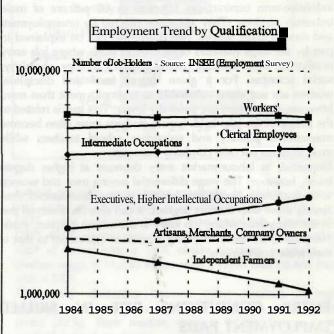
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