

Unemployment Among Young People of Foreign Origin in France: Ways of Measuring Discrimination

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Abstract: This study is based on an analysis of different methods that can be used to establish a possible discrimination against some young people (< 33 years old) of foreign origin who are living in France. Because of its size, the French Permanent Demographic Sample (EDP, an INSEE longitudinal data base which is the French equivalent to the English LS) enables the study for both migrants' children populations: young foreign-born people who grew up in France and young people of foreign origin who are born in France. The only comparison of cross section unemployment rates among the different national origin's groups and the sons and daughters of the French by birth is not sufficient in order to measure discriminations and the analysis must focus on the long term unemployment's situations. Logit models are very useful to understand the effects' complexity. The main individual characteristics are taken into account: national origin, current citizenship, place of birth, eventual date of the migration toward France, social background of the family they're originating from, individual qualification of the youngs and of their parents (professional occupation, diploma). Using separate models for the male and female populations from each main different origin's group is, of course, firstly necessary because we need to understand the peculiar logics occurring on the labour market. However, as we can consider that national origin seems to be the most explanatory reason of unemployment rates' differences among the groups, it is necessary to use longitudinal data and to introduce in the models variables that can have an influence on employers' choices. It appears that the introduction of national origin variables in logistic regressions concerning long term unemployment of all migrants' sons or daughters highlights the reality of discrimination against some of the young people of foreign origin (specially african migrants' sons).

It is not easy for young people of foreign origin in France to enter the labour market. The problems they experience in this area need to be analysed in the light of the important role played by qualifications obtained in the education system as a mediator between the weight of family origins and professional destiny. From 1945 to 1975, the growing labour market played the leading role (1) in the integration of immigrants. Today, school has taken over this role for the children of immigrants. However, school undoubtedly plays a lesser role due to the potential distortion between the upward social mobility prospects implicit in schooling and the reality of final professional destinations (2). However, consideration of the level of education does not imply disregarding the possible effects of family origins. Moreover, job-seeking by young people of foreign origin should be viewed in particular from the standpoint of changing opinions about the immigrant population in general and especially their descendants (3). Once it is deemed possible that some employers discriminate, it is important when measuring the likely magnitude of this phenomenon to make a distinction between the consequences of discrimination in a balanced labour market and the consequences in a labour market with a labour supply surplus. In the first case, discrimination is found by studying the “training/job occupied” or social mobility relation, since the level of unemployment is too low to identify discriminatory practices by comparing unemployment rates. The study of wage differences between individuals with the same level of qualifications is therefore a typical stage in the analysis, such as it has been developed in the United States where the unemployment rate is considerably lower than in France. During the employment crisis that has been developing since 1975, corporate demand for labour was too low to ensure equilibrium on the labour market. The young working population was particularly hard hit by this situation, since firms with openings tended to prefer hiring manpower with previous professional experience. The EDP (Echantillon Démographique Permanent, an INSEE longitudinal data base) is the unique source which enables to identify the children of immigrants who are living in France (Appendix 1) (4). Both young people of foreign origin and young people born of long-standing French families were subject to the economic fluctuations and structural youth underemployment (FIGURES 1 to 4).

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FIGURE 1. MALE UNEMPLOYMENT IN 1990 (/TOTAL POP. BY ORIGIN)

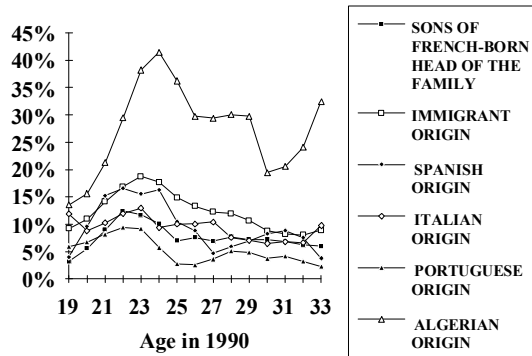
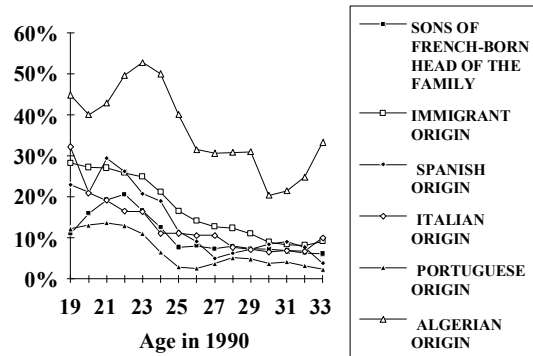


FIGURE 2. MALE UNEMPLOYMENT RATE IN 1990



source: for all figures and tables: EDP INSEE France 1975-1982-1990

FIGURE 3. FEMALE UNEMPLOYMENT IN 1990 (/TOTAL POP. BY ORIGIN)

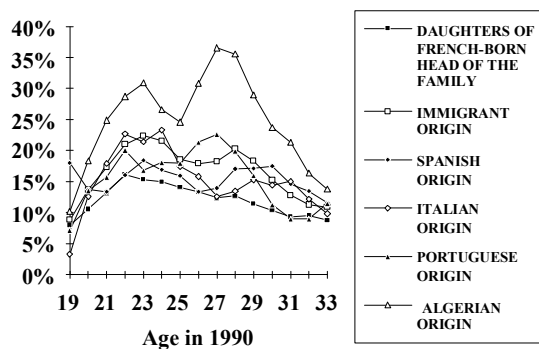
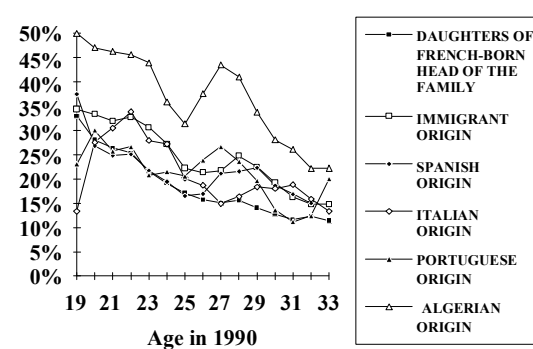


FIGURE 4. FEMALE UNEMPLOYMENT RATE IN 1990

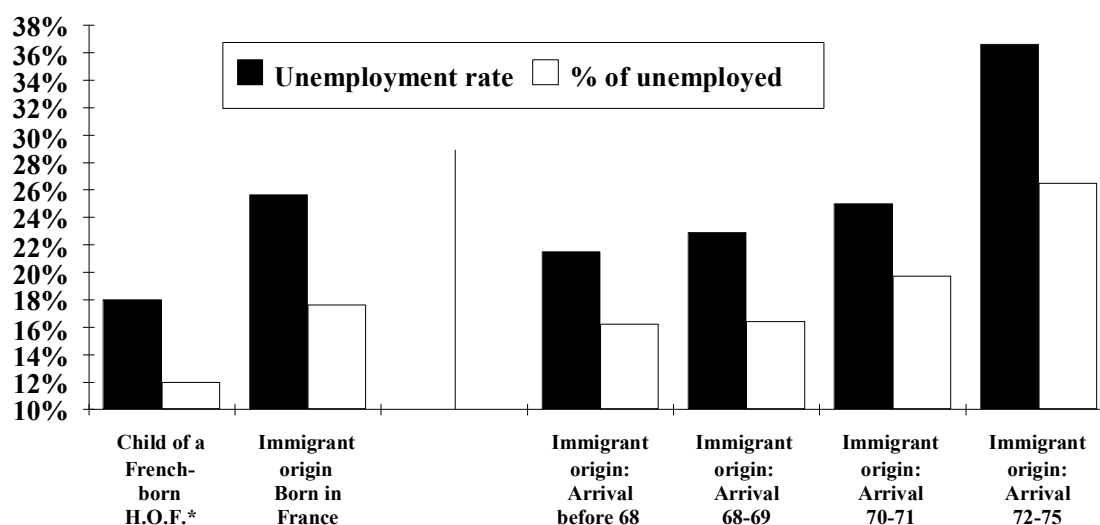


A. THE FREQUENCY OF UNEMPLOYMENT AND A DESCRIPTIVE ANALYSIS

Up until 1975, many new arrivals in France were in response to a demand for labour from French businesses. In this situation, the length of residence in France was not correlated with the probability of being employed. More recently, a number of authors have stressed the importance of the length of residence in France to explain the level of immigrant integration into the labour market. Illegal immigration into France at a time when unemployment was already high might provide a better explanation for the possible accuracy of the above statement. This analysis is more pertinent for those who entered France following their parents taking up residence in the country. The arrival of these individuals on the labour market is not a direct response to a demand. Moreover, their partial or total schooling abroad forms an additional obstacle. It is therefore rational to change the

classification of individuals by age to a classification based on the date of their arrival on French territory or their age on arrival in France. We have already checked that no structural effects can diminish the explanatory nature of the variable representing the date of arrival of young immigrants in France. For example, in 1990, the 19-25 year olds most recently arrived on French territory were not particularly younger than those born in France or those who had been living in France longer. The age structures of the different population groups formed (born in France, arrived before 1968, arrived in 1968 and 1969, etc.) are even remarkably similar. Only the numbers, which are a function of the intensity of arrivals and the lengths of periods of time considered, vary. For sample size reasons, we have had to group the individuals arriving in France after 1967 by multiannual categories of settlement in France.

FIGURE 5. PERCENTAGE OF UNEMPLOYED AND UNEMPLOYMENT RATE FOR 19-25 YEAR OLDS IN 1982 BY LENGTH OF PRESENCE IN FRANCE OF YOUNG PEOPLE OF FOREIGN ORIGIN (INDIVIDUALS ALREADY PRESENT IN FRANCE IN 1975)



*for comparison. H.O.F.: head of the family

Hence the percentages given in many of our tables and graphs sometimes correspond to a proportion of unemployed individuals within the various sub-populations, whether of different national origin or not, rather than to the unemployment rate in the economic sense of the term (5). The overall group of individuals out of the labour force is therefore integrated into the total numbers used as the fraction denominator. This is consequently

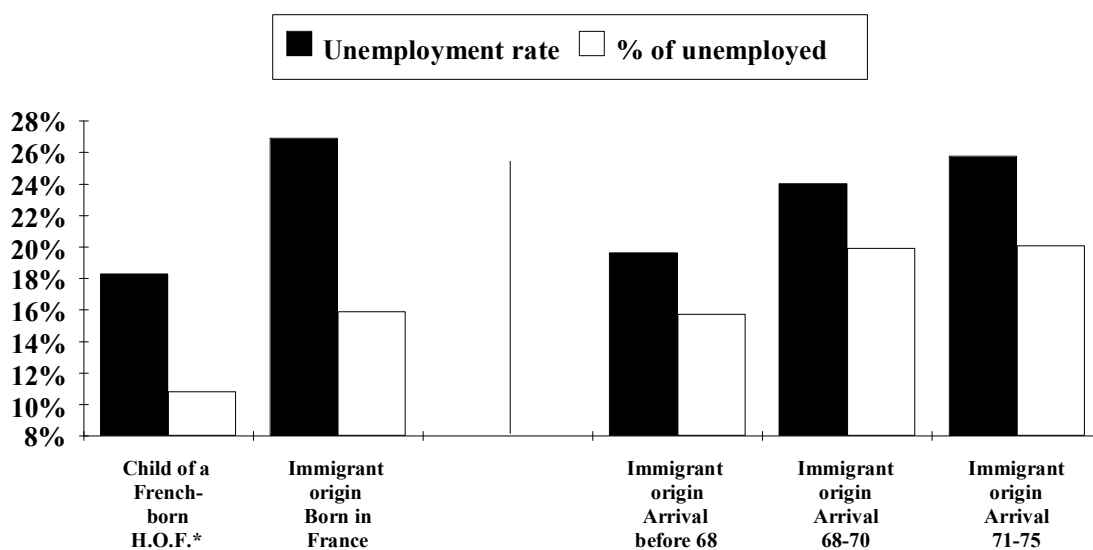
a revealing proportion of the real magnitude of youth unemployment. Nevertheless, we cannot exclude that the existence of high unemployment could have a repercussion in terms of a semblance of protracted education and could consequently contribute to reducing the real number of job seekers. A real student status (excluding post-graduates) is actually incompatible with the status of job seeker, despite the fact that many students and pupils leave the education system at all levels to enter the labour market when they sign what they feel to be an opportune employment contract.

It is therefore both pertinent and useful to sometimes reason in terms of the probability of the individuals in a given population group A being unemployed (we thus refer to the percentage of unemployed individuals in the total population), rather than in terms of the unemployment rate among the working population made up of population group A . FIGURES 5, 6 and 7 illustrate this. For sample size reasons, we have decided not to divide the population up into smaller age brackets. However, among the younger ages, the frequency of protracted education (sometimes purely to postpone entry onto a saturated labour market) results in an extremely high selectivity of working individuals at these ages and, where appropriate, unemployed individuals. It is therefore important not to forget that high unemployment rates do not imply a higher frequency of unemployed individuals among these young generations than the frequencies observed among older individuals. For a decade now, the increase in the unemployment rate of the under-25s in France has been more than proportional to the increase, when all is said and done, in the number of job seekers in this young population. In both 1982 and 1990, the probability of immigrants being unemployed was a growing function of recent residency in the country, even after over fifteen years spent in France. The differences are significant. This shows that there are phenomena that make the study of the entire population of foreign origin a worthwhile exercise.

However, at first glance, the unemployment rate is not an obviously pertinent concept in an explanation of different integration methods depending on birth or length of presence in France. The largest percentage deviation between two groups represented adjacently in our graphs is observed between the children of French-born head of the family and the children born in France of one immigrant *head of the family*. However, it should be noted that the compositions by national origin of the born in France and young immigrants groups are extremely different. In 1990, the proportion of young people of North African origin was higher in the born in France group than in the sample's immigrant population. The same holds true for the young people of Portuguese origin in the young immigrants

group, especially in the youngest generations. As we will see later on in this chapter, it is therefore important to consider rather the level of the unemployment rate solely for young immigrants in 1982 and especially in 1990 (due to age effects associated with the different national origins).

FIGURE 6. PERCENTAGE OF UNEMPLOYED AND UNEMPLOYMENT RATE FOR 19-25 YEAR OLDS IN 1990 BY LENGTH OF PRESENCE IN FRANCE OF YOUNG PEOPLE OF FOREIGN ORIGIN (INDIVIDUALS ALREADY PRESENT IN FRANCE IN 1975)



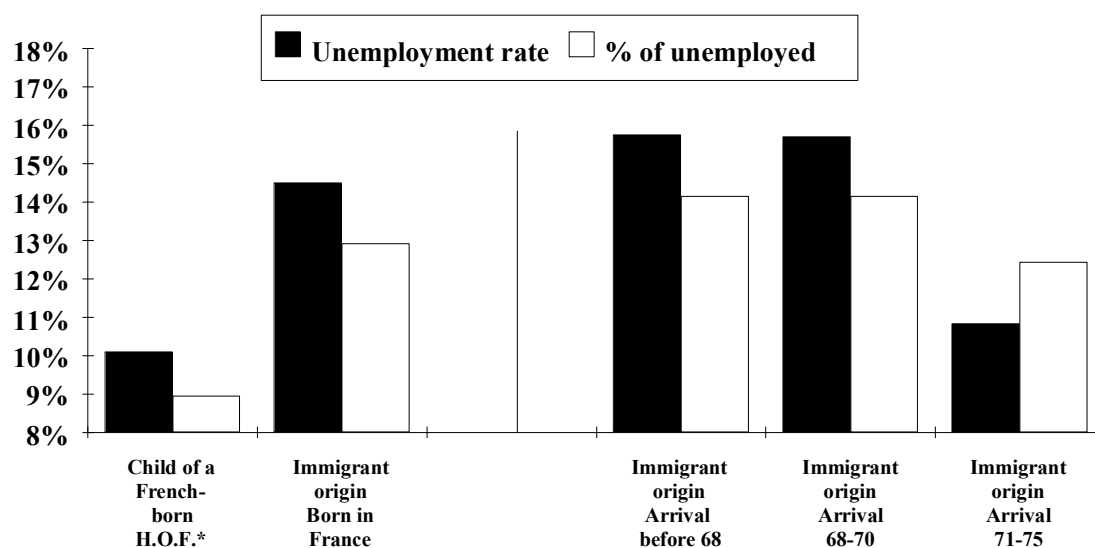
* for comparison

The numbers are too small to enable highly detailed analyses by national origin. Nevertheless, it is clear that the young people of North African origin, along with young people from other European member states, were subject to the same increased occurrence of unemployment when they had recently settled in France. Young immigrants, often less qualified than the young people born in France, have a hard time finding a job.

Another reason could explain the particular look of the histograms representing the unemployment rates. Young people born in France or resident in France for a long time have generally spent more time studying than the more recent young arrivals, especially since the latter are more often of Portuguese origin (where schooling is typically short) and North African origin (with particular problems on the labour market, as we will see in the next chapter). Structures by national origin (themselves linked to the dates of waves of immigration) and the general trends on the labour market and in the demand for education explain the high 1990 unemployment rate

among young workers born in France or arriving in France before 1968. An analysis in terms of the probability of being unemployed shows that young people born in France or arriving in France before 1968 did not have a higher level of unemployment in 1990 than the more recent immigrants.

FIGURE 7. PERCENTAGE OF UNEMPLOYED AND UNEMPLOYMENT RATE FOR 26-33 YEAR OLDS IN 1990 BY LENGTH OF PRESENCE IN FRANCE OF YOUNG PEOPLE OF FOREIGN ORIGIN (INDIVIDUALS ALREADY PRESENT IN FRANCE IN 1975)



*for comparison

The age-on-arrival-in-France factor appears to have a different effect to that anticipated. Here again, we need to understand the phenomena at work (TABLES 1, 2 & 3). The individuals who arrived in France at the end of their childhood and were still present in the EDP in 1990, as opposed to a large minority of young people with the same particularity who have since left France, probably had the fewest educational problems (the least qualified were those who had been the most subject to departures from France from 1982 to 1990). These immigrants present in 1990 are also those for whom the parents' plans to set up home in France were the most definite. These two factors are favourable to their better integration. The same phenomena are observed in other countries and among immigrants in France (6). Moreover, the individuals who arrived in France at a later age were necessarily among the oldest in 1975. Their social situation is therefore more stable and better than the youngest, who find it hard to enter the world of work.

TABLE 1. PERCENTAGE OF UNEMPLOYED AND UNEMPLOYMENT RATE FOR YOUNG IMMIGRANTS AGED 19-25 YEARS OLD IN 1982 BY AGE ON ARRIVAL IN FRANCE (ARRIVAL FROM 1968 TO 1975)

| Age on Arrival in France | Unemployment Frequency | Unemployment Rate |
|--------------------------|------------------------|-------------------|
| 8 years and - | 21% | 31% |
| 9 to 12 years | 20% | 25% |
| 13 years and + | 21% | 25% |

TABLE 2. PERCENTAGE OF UNEMPLOYED AND UNEMPLOYMENT RATE FOR 19-25 YEAR OLDS IN 1990 BY AGE ON ARRIVAL IN FRANCE (ARRIVAL FROM 1968 TO 1975)

| Age on Arrival in France | Unemployment Frequency | Unemployment Rate |
|--------------------------|------------------------|-------------------|
| 4 years and - | 19% | 23% |
| 5 to 9 years | 21% | 26% |

TABLE 3. PERCENTAGE OF UNEMPLOYED AND UNEMPLOYMENT RATE FOR 26-33 YEAR OLDS IN 1990 BY AGE ON ARRIVAL IN FRANCE (ARRIVAL FROM 1968 TO 1975)

| Age on Arrival in France | Unemployment Frequency | Unemployment Rate |
|--------------------------|------------------------|-------------------|
| 8 years and - | 16% | 18% |
| 9 to 12 years | 11% | 12% |
| 13 to 18 years | 11% | 12% |

B. ANALYSIS OF UNEMPLOYMENT USING LOGISTIC REGRESSIONS

There is a risk of incompleteness in analysis of behaviour limited to the observation of bivariate frequency tables breaking out a state according to one or more criteria. Various structural effects may lead to erroneous interpretations of the observed phenomena. The importance of the specific effect of one variable may be incorrectly understood. A more detailed study should endeavour to isolate the specific effect of one factor using other things being equal reasoning. The variables contained in the EDP are essentially discrete, qualitative, polytomous variables whether ordered or not. In this context, it is not possible to use the correlation analysis method. The logistic regression is therefore suitable for showing the effect of each of the variables liable to be involved in the occurrence of a situation.

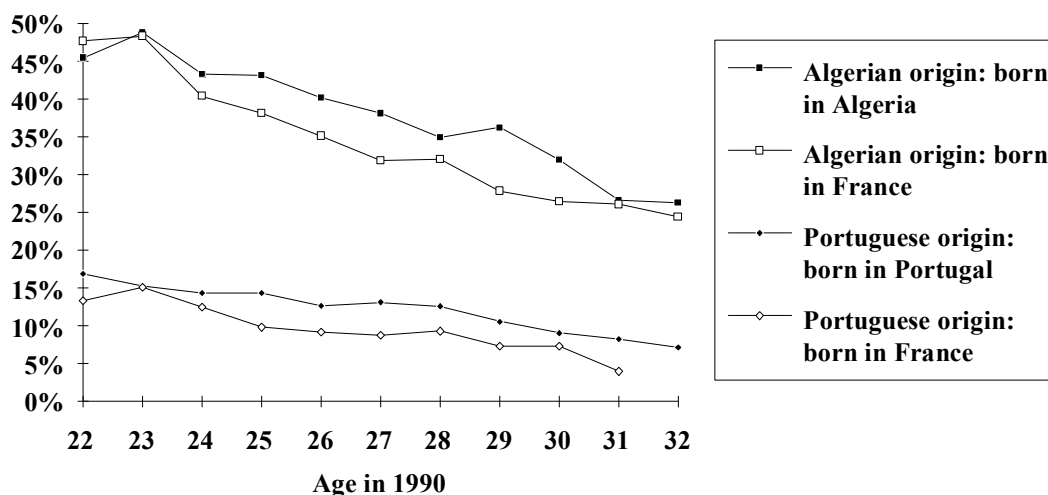
This technique requires the dichotomisation of all the explanatory variables and the dependent variable. This modeling requires the selection of a reference state for each group of alternative variables (7), following which an approach can be taken in terms of probabilities. The use of logistic models presupposes the acceptance of certain assumptions, which are presented in the following box. The most important assumption is the idea that the aim of measuring the “isolated effect” of a variable on the probability of an event’s occurrence implies an a priori conviction of the permanent implication of this effect on all the sub-populations in the sample studied. If this is not the case, the modeling can lead to the generalisation of the implication and magnitude of an effect on an entire population, even though the effect is insignificant or has an implication on a sub-segment of the total population.

The measurement of actual discrimination has to make allowance for the individual characteristics of workers if it is to check for any employer discrimination. There are numerous ways of defining behaviour and situations explicable by discrimination. In France, a number of researchers consider that the existence of discrimination can only be defined if there is data on or proof of facts confirming discriminatory behaviour. Recent work by American economists is also in this vein (8). The authors of most of the Anglo-Saxon sociological studies consider, however, that the statistical data from surveys solely on potential victims of discrimination prove the existence of discrimination. This judgement was behind the “affirmative action” programmes (9).

We have used logistic regressions to measure the existence of any such practices. The first step taken in this procedure is to try and measure the effect of factors liable to influence the occurrence of being unemployed,

depending on the individual's origin. For reasons explained later, we present modelings in which the reference populations are sometimes the entire population of the same origin and sex and sometimes solely the working population of the same sex and regional origin (here the populations of African and southern European origin). In most of the models, being born in France, no more than being French, has no significant influence on the occurrence of unemployment for individuals of different regional origins (two out of ten possible significant effects). The slight difference in employment rates between populations born in France and immigrants of the same origin (FIGURE 8) can be explained by the effects of other variables such as the socio-economic group of the fathers in 1975. These results are non-negligible. Being a foreigner, especially a foreigner from a country other than what was the European Economic Community at the time, was a barrier to entry to protected permanent civil service posts in the 1975-1990 period and has always been such in the history of France. A large number of jobs are closed to foreign nationals (10) (Until 1993, almost all immigrants' children born in France became automatically French when they reached the age of majority. They now have to ask for getting the French citizenship, excepted Algerians' children born in France who are still French-born).

FIGURE 8. UNEMPLOYMENT RATES FOR 22-33 YEAR OLDS IN 1990 BY PLACE OF BIRTH (INDIVIDUALS OF BOTH SEXES)



The higher unemployment rate for individuals from large families reflects the fact that a certain number of young people from these families have to seek work to supplement their households' incomes even though they often lack the level of education that will secure them a job.

TABLE 4. LOGIT MODELS. DEPENDENT VARIABLE: UNEMPLOYMENT IN 1990
ACTIVE MALE POPULATION. 22-33 YEARS OLD

| | SONS OF A FRENCH BY BIRTH H.O.F. | | | | MEN OF AFRICAN ORIGIN (NORTH-AFR: 98 %) | | | | MEN OF SOUTH-EUROPEAN ORIGIN | | | | | | | | |
|------------------------------------------|----------------------------------|-----------|-------|------|-----------------------------------------|--------------|-----------|-------|------------------------------|------|--------------|-----------|-------|-------|------|--------------|--|
| | β_0 | β_1 | is | P | P-Po | Δ (%) | β_1 | is | P | P-Po | Δ (%) | β_1 | is | P | P-Po | Δ (%) | |
| 30-33 YEARS OLD | -3.597** | 0.206 | 17.49 | 3% | n.s. | n.s. | -1.504** | 0.275 | 5.46 | 18% | n.s. | -3.133** | 0.244 | 12.87 | 4% | n.s. | |
| 26-29 YEARS OLD | 0.256* | 0.152 | 1.68 | 3% | 1% | 28% | -0.452** | 0.230 | 1.97 | 12% | -6% | 0.243 | 0.204 | 1.19 | n.s. | n.s. | |
| 22-25 YEARS OLD | 0.336** | 0.138 | 2.44 | 4% | 1% | 38% | 0.722** | 0.189 | 3.82 | 31% | 13% | 0.372** | 0.186 | 2.00 | 6% | 2% | |
| BORN IN FRANCE | | | | | | | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | |
| FOREIGN-BORN | | | | | | | -0.072 | 0.214 | 0.34 | n.s. | n.s. | -0.156 | 0.233 | 0.67 | n.s. | n.s. | |
| MONOPARENTAL FAMILY 1975 | -0.020 | 0.212 | 0.09 | n.s. | n.s. | n.s. | 0.145 | 0.320 | 0.45 | n.s. | n.s. | 0.005 | 0.329 | 0.02 | n.s. | n.s. | |
| 1-2 CHILDREN FAMILY 1975 | -0.241* | 0.129 | 1.87 | 2% | -1% | -21% | -0.669** | 0.313 | 2.14 | 10% | -8% | -0.381 | 0.183 | 2.08 | 3% | -1% | |
| 3-4 CHILDREN FAMILY 1975 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | |
| 5-6 CHILDREN FAMILY 1975 | 0.315* | 0.172 | 1.83 | 4% | 1% | 36% | -0.233 | 0.211 | 1.10 | n.s. | n.s. | -0.153 | 0.196 | 0.78 | n.s. | n.s. | |
| 7-8 CHILDREN FAMILY 1975 | 0.659** | 0.243 | 2.71 | 5% | 2% | 89% | -0.254 | 0.221 | 1.15 | n.s. | n.s. | -0.404 | 0.346 | 1.17 | n.s. | n.s. | |
| >9 CHILDREN FAMILY 1975 | -0.022 | 0.427 | 0.05 | n.s. | n.s. | -62% | -0.681** | 0.277 | 2.46 | 10% | -8% | -1.580 | 1.039 | 1.52 | n.s. | n.s. | |
| FARMER / FARM WORKER FATHER 1975*** | -0.992** | 0.248 | 4.00 | 1% | -2% | | -0.026 | 0.870 | 0.03 | n.s. | n.s. | -0.279 | 0.303 | 0.92 | n.s. | n.s. | |
| SHOPKEEPER-CRAFTSMAN FATHER 1975*** | -0.083 | 0.223 | 0.37 | n.s. | n.s. | n.s. | 0.062 | 0.376 | 0.17 | n.s. | n.s. | -0.492 | 0.385 | 1.28 | n.s. | n.s. | |
| MANAGER / TEACHER / SEARCHER FATHER 1975 | 0.343 | 0.249 | 1.38 | n.s. | n.s. | n.s. | -0.994 | 1.070 | 0.93 | n.s. | n.s. | 0.773 | 0.845 | 0.91 | n.s. | n.s. | |
| MIDDLE EXECUTIVE FATHER 1975*** | 0.158 | 0.204 | 0.77 | n.s. | n.s. | n.s. | 0.057 | 0.651 | 0.09 | n.s. | n.s. | 0.072 | 0.551 | 0.13 | n.s. | n.s. | |
| WORKER FATHER 1975*** | 0.373* | 0.191 | 1.95 | 4% | 1% | 43% | 0.095 | 0.353 | 0.27 | n.s. | n.s. | -0.330 | 0.489 | 0.67 | n.s. | n.s. | |
| WORKER FATHER 1975*** | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | |
| MAID / DOMESTIC FATHER 1975*** | -0.230 | 0.442 | 0.52 | n.s. | n.s. | n.s. | -0.834 | 0.684 | 1.22 | n.s. | n.s. | 0.269 | 0.557 | 0.48 | n.s. | n.s. | |
| OTHER JOB FATHER 1975*** | 0.349* | 0.204 | 1.71 | 4% | 1% | 40% | 0.289 | 0.242 | 1.19 | n.s. | n.s. | 0.173 | 0.292 | 0.59 | n.s. | n.s. | |
| FOREIGN CITIZENSHIP 1990 | | | | | | | 0.843** | 0.211 | 3.99 | 34% | 16% | -0.394 | 0.255 | 1.55 | n.s. | n.s. | |
| FRENCH CITIZENSHIP 1990 | | | | | | | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | |
| LIVING WITH PARENT(S) 1990 | 1.656** | 0.169 | 9.67 | 12% | 10% | 362% | 0.879** | 0.229 | 3.84 | 55% | 17% | 1.382** | 0.210 | 6.58 | 15% | 11% | |
| LIVING ALONE 1990 | 1.158** | 0.188 | 6.15 | 8% | 5% | 201% | 0.340 | 0.279 | 1.22 | n.s. | n.s. | 0.963** | 0.261 | 3.70 | 10% | 6% | |
| COHABITATION 1990 | 0.866** | 0.192 | 4.51 | 6% | 3% | 129% | -0.341 | 0.322 | 1.06 | n.s. | n.s. | 0.672** | 0.252 | 2.66 | 8% | 4% | |
| MARRIED 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | 0.595** | 0.185 | 3.22 | 29% | 11% | 0.745** | 0.175 | 4.27 | 8% | 4% | |
| NO DIPLOMA/PRIMARY LEAVING CERTIFICATE | 0.831** | 0.141 | 5.88 | 6% | 3% | 122% | 0.394 | 0.359 | 1.10 | n.s. | n.s. | 0.456 | 0.291 | 1.57 | n.s. | n.s. | |
| SECONDARY SCHOOL LEVEL (= '0' LEVEL) | -0.104 | 0.255 | 0.41 | n.s. | n.s. | n.s. | Ref. | Ref. | Ref. | Ref. | Ref. | 0.456 | 0.291 | 1.57 | n.s. | n.s. | |
| 1ST CERTIFICATE OF APPRENTICESHIP | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | -0.120 | 0.272 | 0.44 | n.s. | n.s. | -0.726** | 0.318 | 2.28 | 2% | -2% | |
| 2ND CERTIFICATE OF APPRENTICESHIP | -0.276 | 0.213 | 0.441 | n.s. | n.s. | n.s. | -0.835** | 0.328 | 2.55 | 9% | -9% | -0.192 | 0.291 | 0.66 | n.s. | n.s. | |
| BACCALAUREAT (= 'A' LEVEL) | -0.055 | 0.253 | 0.27 | n.s. | n.s. | n.s. | -0.711* | 0.389 | 1.82 | 10% | -8% | -1.566** | 0.530 | 2.95 | n.s. | n.s. | |
| UNIVERSITY EDUCATION | -0.555** | 0.271 | 2.43 | 2% | -1% | -42% | 73% | | | | | 73% | | | | | |
| concordant: | 74% | | | | | | | | | | | | | | | | |

β_0 = reference situation's coefficient
 β_1 = regression's coefficient
 is : Student-Fisher's t
 n.s. = not significant
 Ref. = reference's situation
 ** = significant .1
 *** Mother's job in case of monoparental family

Po = reference situation's probability of occurrence
 P = probability of occurrence
 P-Po = difference between P and Po (in points)
 Δ P = % P's variation (=|P-Po|/Po)

N = 4252
 N = 937
 N = 2494

TABLE 5. LOGIT MODELS. DEPENDENT VARIABLE: UNEMPLOYMENT IN 1990
TOTAL FEMALE POPULATION. 22-33 YEARS OLD

| | DAUGHTERS OF A FRENCH-BORN H.O.F. | | | | WOMEN OF AFRICAN ORIGIN (NORTH-AFRI: 98 %) | | | | WOMEN OF SOUTH-EUROPEAN ORIGIN | | | | | | | | | | |
|-------------------------------------------|-----------------------------------|---------------|-------|---------|--------------------------------------------|--------------|---------|---------------|--------------------------------|-------|--------|--------------|---------|---------------|---|---|--------|--------------|--|
| | β | $\sigma\beta$ | s | P | P - Po | Δ (%) | β | $\sigma\beta$ | s | P | P - Po | Δ (%) | β | $\sigma\beta$ | s | P | P - Po | Δ (%) | |
| $\beta_0 =$ | -1,898** | 0,156 | 17,45 | 13% | -0,503* | 0,294 | 1,71 | 38% | -1,285** | 0,179 | 7,19 | 22% | | | | | | | |
| 30-33 YEARS OLD | -0,380** | 0,122 | 4,13 | 9% | -0,767** | 0,240 | 3,20 | 22% | -0,232 | 0,152 | 1,53 | n.s. | | | | | | | |
| 26-29 YEARS OLD | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | | | | | | | |
| 23-25 YEARS OLD | 0,285** | 0,115 | 2,48 | 17% | -0,173 | 0,176 | 0,98 | n.s. | 0,434** | 0,143 | 3,04 | 30% | | | | | | | |
| BORN IN FRANCE | Not tested | | | | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | | | | | | | |
| FOREIGN-BORN | Not tested | | | | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | | | | | | | |
| LONE-PARENT FAMILY 1975 | 0,038 | 0,170 | 0,22 | n.s. | 0,135 | 0,350 | 0,39 | n.s. | 0,034 | 0,259 | 0,13 | n.s. | | | | | | | |
| 1-2 CHILDREN FAMILY 1975 | 0,154 | 0,105 | 1,47 | n.s. | 0,065 | 0,316 | 0,20 | n.s. | -0,180 | 0,140 | 1,29 | n.s. | | | | | | | |
| 3-4 CHILDREN FAMILY 1975 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | | | | | | | |
| 5-6 CHILDREN FAMILY 1975 | 0,137 | 0,143 | 0,958 | Ref. | 0,254 | 0,218 | 1,17 | n.s. | 0,158 | 0,151 | 1,05 | n.s. | | | | | | | |
| 7-8 CHILDREN FAMILY 1975 | 0,112 | 0,216 | 0,52 | n.s. | 0,548** | 0,230 | 2,39 | 51% | -0,224 | 0,250 | 0,90 | n.s. | | | | | | | |
| >9 CHILDREN FAMILY 1975 | 0,109 | 0,332 | 0,33 | n.s. | 0,659** | 0,255 | 2,58 | 54% | -0,136 | 0,370 | 0,37 | n.s. | | | | | | | |
| FARMER / FARM WORKER FATHER 1975*** | -0,092 | 0,160 | 0,58 | n.s. | 0,544 | 0,521 | 1,04 | n.s. | 0,495** | 0,220 | 2,25 | 31% | | | | | | | |
| SHOPKEEPER-CRAFTSMAN FATHER 1975*** | 0,077 | 0,164 | 0,47 | n.s. | 0,061 | 0,441 | 0,14 | n.s. | 0,237 | 0,222 | 1,16 | n.s. | | | | | | | |
| MANAGER / TEACH.-RESEARCH. FATHER 1975*** | -0,156 | 0,211 | 0,74 | n.s. | 0,379 | 0,672 | 0,56 | n.s. | -1,210* | 0,733 | 1,65 | 8% | | | | | | | |
| MIDDLE-MANAGEMENT FATHER 1975*** | -0,277 | 0,199 | 1,39 | n.s. | -0,787 | 0,770 | 1,02 | n.s. | 0,142 | 0,377 | 0,38 | n.s. | | | | | | | |
| EMPLOYEE/CLERK FATHER 1975*** | -0,144 | 0,178 | 0,81 | n.s. | -0,597 | 0,511 | 1,17 | n.s. | -0,370 | 0,368 | 1,00 | n.s. | | | | | | | |
| MANUAL WORKER FATHER 1975*** | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | | | | | | | |
| HOUSEHOLD EMP. FATHER 1975*** | 0,000 | 0,334 | 0,00 | n.s. | -0,187 | 0,538 | 0,35 | n.s. | -0,343 | 0,400 | 0,86 | n.s. | | | | | | | |
| OTHER JOB FATHER 1975*** | 0,259* | 0,157 | 1,66 | 16% | 0,056 | 0,228 | 0,25 | n.s. | 0,317 | 0,236 | 1,34 | n.s. | | | | | | | |
| FOREIGN CITIZENSHIP 1990 | Not tested | | | | 0,123 | 0,209 | 0,59 | n.s. | 0,159 | 0,200 | 0,80 | n.s. | | | | | | | |
| FRENCH CITIZENSHIP 1990 | Not tested | | | | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | | | | | | | |
| LIVING WITH PARENT(S) 1990 | 0,454** | 0,173 | 2,62 | 19% | 0,123 | 0,243 | 0,50 | n.s. | 0,068 | 0,193 | 0,35 | n.s. | | | | | | | |
| LIVING ALONE 1990 | -0,194 | 0,198 | 0,98 | n.s. | -0,904** | 0,327 | 2,77 | 20% | -0,251 | 0,242 | 1,03 | n.s. | | | | | | | |
| COHABITATION 1990 | 0,693** | 0,123 | 5,64 | 23% | 0,138 | 0,231 | 0,60 | n.s. | 0,175 | 0,169 | 1,04 | n.s. | | | | | | | |
| MARRIED 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | | | | | | | |
| NO CHILDREN IN 1990 | -0,453** | 0,139 | 3,26 | 9% | -0,247 | 0,252 | 0,98 | n.s. | -0,343** | 0,172 | 1,99 | 16% | | | | | | | |
| 1 CHILD'S MOTHER 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | | | | | | | |
| 2 CHILDREN'S MOTHER 1990 | 0,073 | 0,137 | 0,53 | n.s. | -0,028 | 0,289 | 0,09 | n.s. | 0,061 | 0,166 | 0,37 | n.s. | | | | | | | |
| 3 CHILDREN'S MOTHER 1990 | -0,470** | 0,229 | 2,05 | 9% | -1,284** | 0,523 | 2,46 | 14% | -0,664** | 0,303 | 2,19 | 12% | | | | | | | |
| 4 CHILDREN'S MOTHER 1990 | -1,052** | 0,535 | 1,97 | 5% | -1,651** | 0,778 | 2,12 | 10% | -1,833** | 1,033 | 1,77 | 4% | | | | | | | |
| NO QUALIF./PRIMARY LEAVING CERT. | 0,543** | 0,136 | 4,00 | 21% | -0,162 | 0,196 | 0,83 | n.s. | 0,077 | 0,150 | 0,51 | n.s. | | | | | | | |
| SECONDARY SCHOOL LEVEL (= 'O' L) | 0,003 | 0,179 | 0,02 | n.s. | -0,172 | 0,316 | 0,54 | n.s. | 0,249 | 0,194 | 1,29 | n.s. | | | | | | | |
| 1ST CERTIFICATE OF APPRENTICESHIP | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | | | | | | | |
| 2ND CERTIFICATE OF APPRENTICESHIP | -0,236 | 0,166 | 1,42 | n.s. | -0,443* | 0,242 | 1,827 | 28% | -0,61** | 0,195 | 3,085 | 13% | | | | | | | |
| BACCALAUREAT (= 'A' LEVELS) | -0,340** | 0,155 | 2,19 | 10% | -0,807** | 0,275 | 4,53 | 15% | -0,967** | 0,212 | 4,57 | 10% | | | | | | | |
| UNIVERSITY EDUCATION | -0,966** | 0,186 | 5,19 | 5% | -1,688** | 0,427 | 4,98 | 7% | -1,077** | 0,236 | 4,57 | 9% | | | | | | | |
| concordant: | 68% | | | | 72% | | | | 67% | | | | | | | | | | |
| | | | | N= 4735 | | | | N= 1073 | | | | N= 2569 | | | | | | | |

source: EDP INSEE France

TABLE 6. LOGIT MODELS. DEPENDENT VARIABLE: UNEMPLOYMENT IN 1990
WORKING FEMALE POPULATION, 22-33 YEARS OLD

| | DAUGHTERS OF FRENCH-BORN PARENTS | | | | | WOMEN OF AFRICAN ORIGIN (NORTH-AFRICAN):98% | | | | | WOMEN OF SOUTH-EUROPEAN ORIGIN | | | | |
|---------------------------------------------|----------------------------------|-----------------|-------|------|---------------------|---------------------------------------------|-----------------|-------|------|---------------------|--------------------------------|-----------------|-------|------|---------------------|
| | β_i | $\sigma\beta_i$ | ts | P | P - Po Δ (%) | β_i | $\sigma\beta_i$ | ts | P | P - Po Δ (%) | β_i | $\sigma\beta_i$ | ts | P | P - Po Δ (%) |
| $\beta_0 =$ | -1,748** | 0,162 | 10,81 | 15% | | -0,545* | 0,315 | 1,73 | 37% | | -1,038** | 0,218 | 5,58 | 26% | |
| 30 - 33 YEARS OLD | -0,550** | 0,129 | 4,27 | 9% | -38% | -0,933** | 0,258 | 3,62 | 19% | -18% | -0,328** | 0,159 | 2,06 | 20% | -6% |
| 26 - 29 YEARS OLD | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 22 - 25 YEARS OLD | 0,464** | 0,120 | 3,87 | 22% | 7% | 0,138 | 0,189 | 0,73 | n.s. | n.s. | 0,537** | 0,148 | 3,63 | 38% | 12% |
| BORN IN FRANCE | Not tested | | | | | Ref. | | | | | Ref. | | | | |
| FOREIGN-BORN | Not tested | | | | | -0,090 | | | | | -0,390** | | | | |
| LONE-PARENT FAMILY 1975 | 0,018 | 0,178 | 0,10 | n.s. | n.s. | 0,181 | 0,385 | 0,47 | n.s. | n.s. | -0,154 | 0,269 | 0,57 | n.s. | n.s. |
| 1-2 CHILDREN FAMILY 1975 | 0,133 | 0,108 | 1,22 | n.s. | n.s. | 0,079 | 0,332 | 0,24 | n.s. | n.s. | -0,219 | 0,145 | 1,51 | n.s. | n.s. |
| 3-4 CHILDREN FAMILY 1975 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 5-6 CHILDREN FAMILY 1975 | 0,161 | 0,149 | 1,077 | n.s. | n.s. | 0,254 | 0,233 | 1,09 | n.s. | n.s. | 0,089 | 0,158 | 0,57 | n.s. | n.s. |
| 7-8 CHILDREN FAMILY 1975 | 0,124 | 0,230 | 0,54 | n.s. | n.s. | 0,628** | 0,252 | 2,49 | 52% | 15% | -0,227 | 0,261 | 0,87 | n.s. | n.s. |
| > 9 CHILDREN FAMILY 1975 | 0,212 | 0,360 | 0,59 | n.s. | n.s. | 0,832** | 0,279 | 2,97 | 57% | 20% | 0,038 | 0,392 | 0,09 | n.s. | n.s. |
| FARMER / FARM WORKER FATHER 1975 | -0,206 | 0,165 | 1,25 | n.s. | n.s. | 0,365 | 0,571 | 0,64 | n.s. | n.s. | 0,580** | 0,232 | 2,49 | 39% | 13% |
| SHOPKEEPER-CRAFTSMAN FATHER 1975 | 0,204 | 0,171 | 1,19 | n.s. | n.s. | -0,215 | 0,452 | 0,48 | n.s. | n.s. | 0,351 | 0,233 | 1,51 | n.s. | n.s. |
| MANAGER / TEACH-RESEARCH FATHER 1975 | 0,084 | 0,218 | 0,39 | n.s. | n.s. | 0,616 | 0,743 | 0,83 | n.s. | n.s. | -1,358* | 0,739 | 1,84 | 8% | -18% |
| MIDDLE MANAGEMENT FATHER 1975 | -0,233 | 0,203 | 1,15 | n.s. | n.s. | -0,631 | 0,801 | 0,79 | n.s. | n.s. | 0,236 | 0,394 | 0,60 | n.s. | n.s. |
| EMPLOYEE/CLERK FATHER 1975*** | -0,083 | 0,185 | 0,45 | n.s. | n.s. | -0,648 | 0,536 | 1,21 | n.s. | n.s. | -0,211 | 0,379 | 0,56 | n.s. | n.s. |
| MANUAL WORKER FATHER 1975*** | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| HOUSEHOLD EMP. FATHER 1975*** | -0,028 | 0,344 | 0,08 | n.s. | n.s. | -0,540 | 0,552 | 0,98 | n.s. | n.s. | -0,191 | 0,415 | 0,46 | n.s. | n.s. |
| OTHER JOB FATHER 1975*** | 0,404** | 0,165 | 2,45 | 21% | 6% | 0,168 | 0,253 | 0,67 | n.s. | n.s. | 0,435* | 0,251 | 1,73 | 35% | 9% |
| FOREIGN CITIZENSHIP 1990 | Not tested | | | | | Ref. | | | | | Ref. | | | | |
| FRENCH CITIZENSHIP 1990 | Not tested | | | | | 0,235 | | | | | 0,157 | | | | |
| LIVING WITH PARENT(S) 1990 | 0,641** | 0,179 | 3,59 | 25% | 10% | 0,347 | 0,257 | 1,35 | n.s. | n.s. | 0,136 | 0,200 | 0,68 | n.s. | n.s. |
| LIVING ALONE 1990 | -0,050 | 0,204 | 0,25 | n.s. | n.s. | -1,051** | 0,340 | 3,10 | 17% | -20% | -0,173 | 0,253 | 0,68 | n.s. | n.s. |
| COHABITATION 1990 | 0,674** | 0,129 | 5,23 | 25% | 11% | -0,015 | 0,245 | 0,06 | n.s. | n.s. | 0,140 | 0,178 | 0,75 | n.s. | n.s. |
| MARRIED 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| NO CHILDREN IN 1990 | -0,648** | 0,143 | 4,52 | 8% | -6% | -0,329 | 0,263 | 1,25 | n.s. | n.s. | -0,520** | 0,180 | 2,88 | 17% | -9% |
| 1 CHILD'S MOTHER 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 2 CHILDREN'S MOTHER 1990 | 0,332** | 0,144 | 2,31 | 20% | 5% | 0,342 | 0,312 | 1,09 | n.s. | n.s. | 0,440** | 0,177 | 2,49 | 35% | 9% |
| 3 CHILDREN'S MOTHER 1990 | 0,650** | 0,257 | 2,53 | 25% | 10% | -0,088 | 0,602 | 0,15 | n.s. | n.s. | 0,312 | 0,338 | 0,92 | n.s. | n.s. |
| 4 CHILDREN'S MOTHER 1990 | 0,776** | 0,613 | 1,26 | 27% | 13% | 0,727 | 0,996 | 0,73 | n.s. | n.s. | -0,365 | 1,120 | 0,33 | n.s. | n.s. |
| NO QUALIF./PRIMARY LEAVING CERTIFICATE 1990 | 0,768** | 0,161 | 5,42 | 27% | 12% | 0,207 | 0,215 | 0,96 | n.s. | n.s. | 0,223 | 0,158 | 1,41 | n.s. | n.s. |
| SECONDARY SCHOOL LEVEL (= 'O' LEVEL) 1990 | 0,019 | 0,184 | 0,10 | n.s. | n.s. | -0,093 | 0,333 | 0,28 | n.s. | n.s. | 0,403** | 0,205 | 1,97 | 35% | 8% |
| 1ST CERTIFICATE OF APPRENTICESHIP 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 2ND CERTIFICATE OF APPRENTICESHIP 1990 | -0,316* | Ref. | 1,87 | 11% | -4% | -0,431* | 0,254 | 1,698 | 27% | -9% | -0,697** | 0,199 | 3,500 | 15% | -11% |
| BACCALAUREAT (= 'A' LEVELS) 1990 | -0,241 | 0,159 | 1,52 | n.s. | n.s. | -0,879** | 0,291 | 3,02 | 19% | -17% | -0,893** | 0,216 | 4,14 | 13% | -13% |
| UNIVERSITY EDUCATION 1990 | -0,946** | 0,188 | 5,02 | 6% | -8% | -1,849** | 0,440 | 4,21 | 8% | -28% | -1,001** | 0,239 | 4,19 | 12% | -56% |
| concordant: | 71% | | | | | 72% | | | | | 69% | | | | |
| | | | | | N= 3688 | | | | | N= 814 | | | | | N= 2037 |

source: EDP INSEE France

The logistic regressions on the previous pages showed the similarities between the weights of the effects or the absences of effect for most of the variables, independently of the (regional) origin of individuals (TABLES 4, 5 & 6). There are thus particularly good grounds for modeling a population consisting of individuals of all origins, including the children of French-born head of the family (TABLES 7, 8 & 9). The statistical modeling used to identify certain discriminatory behaviour should only include those variables whereby it is assumed that knowledge of them is liable to influence a potential employer's judgement of the suitability of the applicant for a professional activity (11). The logit models include the binary "nationality of origin" variables, the effects of which are the mediators for the appearance of any discrimination based on name or skin colour. Coefficients specific to these variables thus alone count in any acceptance (or rejection) of the assumption of the existence of discrimination against young men and/or women of a given origin.

Two important points should be clarified at this stage. The first concerns the choice of a modeling of a population made up of individuals of all origins. The second regards the significance of the results compared with different economic theories.

Depending on what we want to show or represent, the use of a model of the entire population may be more pertinent than the use of a number of regressions associated respectively with a particular sub-population. If we want to show the specific nature of the effects of certain variables on sub-populations, distinct modelings are necessary. In this case, we endeavour to compare the respective coefficients associated with the same variables in regressions that are as similar as possible (same reference state), for regressions calculated on different populations (12). If we want to show the existence of differences associated with national origin (13), it is possible to consider the respective probabilities associated with the reference states of each of the modelings made. It is also possible, with small differences in the effects of the socio-demographic variables in the different modelings, to calculate just one regression in which, in addition to the socio-demographic explanatory variables previously chosen, identification variables for the different sub-populations are included. The existence of effects associated with these latter extraction variables can lead to different conclusions:

- If it is considered that the potentially explanatory variables have not have been (or have not been able to be) integrated into the model, it has to be supposed that the national origin of the individuals does not explain a more or less large occurrence of a situation or state in the population. The specification error explains at least part of the value of the coefficients relative to the national origins.

- The national origin, as an individual characteristic, is the real cause of the variation in the frequency of the phenomenon that we are endeavouring to explain,
- The real cause of this variation is not the national origin as an individual characteristic, but the effect of this origin in all or part on the behaviour of other individuals, which would explain the “national origin” effect (14).

It is obviously dangerous to view the population of immigrant origin as homogenous. This shows what we feel to be the error of modeling based on holding the baccalauréat for two distinct populations (of French origin, both long-standing and recent) made up of individuals of both sexes, such as has been done by other French researchers to study educational success (15). If no distinction is made between the young people of foreign origin based on one of their parents’ nationality at birth, the heterogeneity of the different sexual sub-populations that it is pertinent to study is artificially erased from the models used. Moreover, it is regrettable that the detailed results of the modelings made by INED based on the MGIS survey have never been published or presented by their authors. These results have often formed the basis for criticisms of other studies (16), which have concerned in particular the unemployment of young people of immigrant origin (Logit models) and which, in this regard, incorporated into one modeling a status resulting from both the individual or family human capital and the labour supply and demand behaviour (17). We feel it extravagant and sometimes even unsuited to the study of certain phenomena (18) to insist on the systematic need for a separate modeling by national origin. Nevertheless, we do feel it important to mention the consequences of implicit assumptions when this type of econometric study of behaviour is made.

The existence of a specific effect of some of the “national origin” variables in our logistic regressions means that we cannot deduce the existence of discrimination liable to explain the entire effect associated with such a variable. A number of reasons should be raised here. First of all, the model only incorporates those variables at our disposal that we feel worth including. We could therefore have omitted to integrate explanatory variables that may have an effect. Secondly, our proposed models are not able to show whether we are effectively measuring conscious discrimination by employers or whether we are observing ex-post “unconscious discrimination”, a de facto state resulting from a combination of uncoordinated individual behaviour (19). There are a number of other possible reasons for the effects of the “national origin” variables. For example, the relative strength of community networks and the resulting solidarity has an influence on the possibility of being employed by individuals from the same community. This point should be associated with how long ago the

immigrant wave to which the individuals belong or of which they are born arrived in France (20).

Our models contain no place of residence variables. Although unemployment obviously restricts the geographic mobility of the young unemployed, we consider that young people are relatively mobile or at least have the possibility of finding jobs in a wide range of locations. The geographic concentration of young job-seekers is also partly a remnant of market forces, unless some places of residence are considered to be stigmatised. We have not envisaged taking into account residence in a particular type of settlement. Recent work by G. Borjas based on American data from the National Longitudinal Survey of Youth (NLSY) suggests carrying out such research. However, even the authors admit that such analyses are not without limits. For example, the author states that residential segregation and the external effect of the national origin are linked mainly because the level of cultural adaptation by the education system intermediary is a product of the socio-economic context of the places where the immigrant populations have lived for a more or less long time (21). We would therefore have had to resolve some complex problems. Should we have had to take into account the localities, départements and regions of residence, the relative rural or urban nature of these areas, or even the existence of past internal migrations? The longitudinal nature of the study results in a relativisation of inordinately geographical approaches, as such approaches often suppose that the individual's current place of residence is where he grew up when it is often the product of a positive choice by employed workers. French studies have shown that a foreigner's residence in a particular type of urban or rural area generally has no significant effect on whether he is unemployed (22). Moreover, foreigners and individuals who have taken French nationality are relatively mobile in France, even though retrospective measurements suggest that they are slightly less mobile than those who are born French (23).

High unemployment rates among certain populations of foreign origin should be analysed in two ways: using a cross-sectional measurement (which we have done in the previous modelings even though the data on individuals are longitudinal) and a backward-looking analysis to gain a better understanding of the distortions between human capital and professional situations (24).

TABLE 7. LOGISTIC REGRESSION: UNEMPLOYMENT OF MEN AGED 25 TO 33 COMPARED WITH THE MALE WORKING POPULATION

| | β_i | $\sigma\beta_i$ | ts | P | $P - P_o$ | Δ (%) |
|--------------------------------------------------|-------------------------|-----------------|-------|----------------|-----------|--------------|
| | $\beta_o = -3,072^{**}$ | 0,259 | 11,86 | 4% | | |
| 25 YEARS OLD | -0,111 | 0,185 | 0,60 | n.s. | n.s. | n.s. |
| 26 YEARS OLD | -0,541** | 0,201 | 2,69 | 3% | -2% | -41% |
| 27 YEARS OLD | 0,055 | 0,185 | 0,30 | n.s. | n.s. | n.s. |
| 28 YEARS OLD | -0,157 | 0,196 | 0,80 | n.s. | n.s. | n.s. |
| 29 YEARS OLD | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 30 YEARS OLD | 0,005 | 0,194 | 0,00 | n.s. | n.s. | n.s. |
| 31 YEARS OLD | -0,319 | 0,209 | 1,53 | n.s. | n.s. | n.s. |
| 32 YEARS OLD | 0,068 | 0,209 | 0,32 | n.s. | n.s. | n.s. |
| 33 YEARS OLD | -0,009 | 0,211 | 0,00 | n.s. | n.s. | n.s. |
| FOREIGN-BORN*** | -0,018 | 0,176 | 0,10 | n.s. | n.s. | n.s. |
| SON OF A FRENCH-BORN HEAD OF THE FAMILY | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| SPANISH ORIGIN | -0,043 | 0,176 | 0,24 | n.s. | n.s. | n.s. |
| ITALIAN ORIGIN | 0,009 | 0,148 | 0,00 | n.s. | n.s. | n.s. |
| POLISH ORIGIN | -0,237 | 0,312 | 0,24 | n.s. | n.s. | n.s. |
| PORTUGUESE ORIGIN | -1,237** | 0,321 | 3,85 | 1% | -3% | -70% |
| ALGERIAN ORIGIN | 1,136** | 0,154 | 7,37 | 13% | 8% | 185% |
| MOROCCAN ORIGIN | 1,383** | 0,288 | 4,80 | 16% | 11% | 252% |
| TUNISIAN ORIGIN | 0,389 | 0,366 | 1,06 | n.s. | n.s. | n.s. |
| OTHER IMMIGRANT ORIGIN | -0,478* | 0,274 | 1,74 | 3% | -2% | -37% |
| LONE-PARENT FAMILY 1975 | 0,123 | 0,166 | 0,74 | n.s. | n.s. | n.s. |
| 1-2 CHILDREN FAMILY 1975 | -0,291** | 0,115 | 2,53 | 3% | -1% | -24% |
| 3-4 CHILDREN FAMILY 1975 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 5-6 CHILDREN FAMILY 1975 | -0,145 | 0,137 | 1,06 | n.s. | d.n.s. | d.n.s. |
| 7-8 CHILDREN FAMILY 1975 | 0,127 | 0,166 | 0,77 | n.s. | d.n.s. | d.n.s. |
| > 9 CHILDREN FAMILY 1975 | -0,712** | 0,268 | 2,66 | 2% | -2% | -50% |
| FARMER / FARM WORKER FATHER 1975**** | -1,171** | 0,275 | 4,26 | 1% | -3% | -68% |
| SHOPKEEPER-CRAFTSMAN FATHER 1975**** | -0,253 | 0,206 | 1,22 | n.s. | n.s. | n.s. |
| MANAGER/TEACH/RESEARCH FATHER 1975**** | 0,256 | 0,243 | 1,05 | n.s. | n.s. | n.s. |
| MIDDLE MANAGEMENT FATHER 1975**** | 0,091 | 0,219 | 0,41 | n.s. | n.s. | n.s. |
| EMPLOYEE/CLERK FATHER 1975**** | 0,237 | 0,187 | 1,27 | n.s. | n.s. | n.s. |
| MANUAL WORKER FATHER 1975**** | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| HOUSEHOLD EMP. FATHER 1975**** | -0,202 | 0,339 | 0,59 | n.s. | d.n.s. | d.n.s. |
| OTHER JOB FATHER 1975**** | 0,325** | 0,148 | 2,20 | 6% | 2% | 36% |
| FOREIGN CITIZENSHIP 1990 | 0,378** | 0,170 | 2,22 | 6% | 2% | 43% |
| LIVING WITH PARENT(S) 1990 | 1,407** | 0,123 | 11,49 | 16% | 11% | 259% |
| LIVING ALONE 1990 | 0,966** | 0,142 | 6,80 | 11% | 6% | 145% |
| COHABITATION 1990 | 0,563** | 0,146 | 3,84 | 8% | 3% | 70% |
| MARRIED 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| NO QUAL./PRIMARY LEAVING CERTIFICATE***** | 0,771** | 0,209 | 3,69 | 9% | 5% | 106% |
| SECONDARY SCHOOL LEVEL (= 'O' LEVEL) | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 1ST CERTIFICATE OF APPRENTICESHIP | 0,154 | 0,212 | 0,73 | n.s. | n.s. | n.s. |
| 2ND CERTIFICATE OF APPRENTICESHIP | -0,090 | 0,247 | 0,36 | n.s. | n.s. | n.s. |
| BACCALAUREAT (= 'A' LEVELS)***** | -0,202 | 0,248 | 0,81 | n.s. | n.s. | n.s. |
| UNIVERSITY EDUCATION | -0,595** | 0,255 | 2,33 | 2% | -2% | -44% |
| concordant: 76% | | | | N= 6542 | | |

β_o = intercept β_i = variable's regression coefficient $\sigma\beta_i$ = β_i 's standard error
 P_o = probability associated with β_o ΔP = marginal effect (= $[P - P_o]/P_o$)
 Ref. = Reference situation P = probability associated with β_i ts = Student-Fisher's t
 n.s. = not significant * = significant 0.1 ** = significant 0.05
 *** only for people of immigrant origin **** Or mother's job if lone-mother family
 ***** No qualifications or Primary Leaving Certificate ***** Baccalauréat or equivalent

TABLE 8. LOGISTIC REGRESSION: UNEMPLOYMENT OF WOMEN AGED 25 TO 33 COMPARED WITH THE FEMALE POPULATION

| | β_i | $\sigma\beta_i$ | ts | P | $P - P_0$ | Δ (%) |
|----------------------------------------------------------------------------|-------------------------|-----------------|------|------|-----------|----------------|
| | $\beta_0 = -1,555^{**}$ | 0,174 | 8,94 | 17% | | |
| 25 YEARS OLD | -0,041 | 0,147 | 0,28 | n.s. | n.s. | n.s. |
| 26 YEARS OLD | -0,217 | 0,148 | 1,46 | n.s. | n.s. | n.s. |
| 27 YEARS OLD | -0,063 | 0,115 | 0,44 | n.s. | n.s. | n.s. |
| 28 YEARS OLD | -0,227 | 0,146 | 1,56 | n.s. | n.s. | n.s. |
| 29 YEARS OLD | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 30 YEARS OLD | -0,474** | 0,156 | 3,05 | 12% | -6% | -33% |
| 31 YEARS OLD | -0,532** | 0,159 | 3,36 | 11% | -6% | -37% |
| 32 YEARS OLD | -0,438** | 0,156 | 2,82 | 12% | -5% | -31% |
| 33 YEARS OLD | -0,662** | 0,169 | 3,92 | 10% | -8% | -44% |
| FOREIGN-BORN | -0,088 | 0,139 | 0,63 | n.s. | n.s. | n.s. |
| DAUGHTER OF A FRENCH-BORN HEAD OF THE FAMILY | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| SPANISH ORIGIN | 0,190 | 0,138 | 1,38 | n.s. | n.s. | n.s. |
| ITALIAN ORIGIN | 0,166 | 0,115 | 1,44 | n.s. | n.s. | n.s. |
| POLISH ORIGIN | 0,082 | 0,226 | 0,36 | n.s. | n.s. | n.s. |
| PORTUGUESE ORIGIN | -0,220 | 0,192 | 1,14 | n.s. | n.s. | n.s. |
| ALGERIAN ORIGIN | 0,601** | 0,140 | 4,28 | 28% | 10% | 59% |
| MOROCCAN ORIGIN | 0,266 | 0,279 | 0,95 | n.s. | n.s. | n.s. |
| TUNISIAN ORIGIN | -0,442 | 0,368 | 1,20 | n.s. | n.s. | n.s. |
| OTHER IMMIGRANT ORIGIN | 0,240 | 0,157 | 1,54 | n.s. | n.s. | n.s. |
| LONE-PARENT FAMILY 1975 | 0,081 | 0,123 | 0,57 | n.s. | n.s. | n.s. |
| 1-2 CHILDREN FAMILY 1975 | 0,102 | 0,091 | 1,12 | n.s. | n.s. | n.s. |
| 3-4 CHILDREN FAMILY 1975 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 5-6 CHILDREN FAMILY 1975 | 0,260** | 0,105 | 2,36 | 22% | 4% | 23% |
| 7-8 CHILDREN FAMILY 1975 | 0,338** | 0,143 | 2,92 | 23% | 5% | 31% |
| > 9 CHILDREN FAMILY 1975 | 0,544** | 0,186 | 3,15 | 27% | 9% | 35% |
| FARMER / FARM WORKER FATHER 1975 | 0,211 | 0,140 | 1,51 | n.s. | n.s. | n.s. |
| SHOPKEEPER-CRAFTSMAN FATHER 1975 | 0,298** | 0,141 | 2,11 | 22% | 5% | 27% |
| MANAGER/TEACH./RESEARCH. FATHER 1975 | 0,067 | 0,201 | 0,33 | n.s. | n.s. | n.s. |
| MIDDLE MANAGEMENT FATHER 1975 | 0,168 | 0,182 | 0,93 | n.s. | n.s. | n.s. |
| EMPLOYEE/CLERK FATHER 1975 | -0,175 | 0,172 | 1,02 | n.s. | n.s. | n.s. |
| MANUAL WORKER FATHER 1975 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| HOUSEHOLD EMP. FATHER 1975 | -0,047 | 0,255 | 0,18 | n.s. | n.s. | n.s. |
| OTHER JOB FATHER 1975 | 0,213* | 0,126 | 1,69 | 21% | 3% | 19% |
| FOREIGN CITIZENSHIP 1990 | 0,498** | 0,156 | 3,19 | 26% | 8% | 48% |
| LIVING WITH PARENT(S) 1990 | 0,495** | 0,145 | 3,40 | 26% | 8% | 48% |
| LIVING ALONE 1990 | -1,706** | 0,179 | 9,52 | 4% | -14% | -79% |
| COHABITATION 1990 | 0,419** | 0,102 | 4,12 | 24% | 7% | 39% |
| MARRIED 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| NO QUALI./PRIMARY LEAVING CERTIFICATE SECONDARY SCHOOL LEVEL (= 'O' LEVEL) | 0,088 | 0,132 | 0,67 | n.s. | n.s. | n.s. |
| 1ST CERTIFICATE OF APPRENTICESHIP | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 2ND CERTIFICATE OF APPRENTICESHIP | 0,001 | 0,136 | 0,06 | n.s. | n.s. | n.s. |
| BACCALAUREAT (= 'A' LEVELS) | -0,376** | 0,156 | 2,41 | 13% | -5% | -27% |
| UNIVERSITY EDUCATION | -0,449** | 0,150 | 3,00 | 12% | -6% | -32% |
| NO CHILDREN IN 1990 | -1,222** | 0,177 | 6,92 | 6% | -12% | -66% |
| 1 CHILD'S MOTHER 1990 | -0,420** | 0,116 | 3,63 | 12% | -5% | -30% |
| 2 CHILDREN'S MOTHER 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 3 CHILDREN'S MOTHER 1990 | 0,062 | 0,100 | 0,62 | n.s. | n.s. | n.s. |
| 4 CHILDREN'S MOTHER 1990 | -0,535** | 0,169 | 3,17 | 11% | -6% | -37% |
| | -1,341** | 0,404 | 3,32 | 5% | -12% | -70% |
| concordant: | 73% | | | | | N= 8144 |

TABLE 9. LOGISTIC REGRESSION: UNEMPLOYMENT OF WOMEN AGED 25 TO 33 COMPARED WITH THE FEMALE WORKING POPULATION

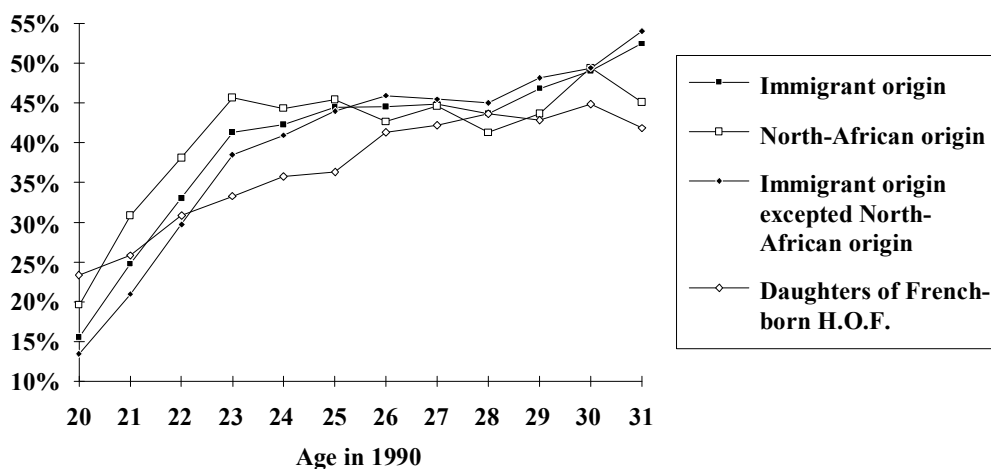
| | β | $\sigma\beta$ | <i>ts</i> | <i>P</i> | <i>P - Po</i> | Δ (%) |
|----------------------------------------------|-------------------------|---------------|-----------|----------|---------------|--------------|
| | $\beta_0 = -1,346^{**}$ | 0,180 | 7,49 | 21% | | |
| 25 YEARS OLD | 0,001 | 0,154 | 0,00 | n.s. | n.s. | n.s. |
| 26 YEARS OLD | -0,212 | 0,155 | 1,36 | n.s. | n.s. | n.s. |
| 27 YEARS OLD | -0,050 | 0,153 | 0,33 | n.s. | n.s. | n.s. |
| 28 YEARS OLD | 0,204 | 0,154 | 1,33 | n.s. | n.s. | n.s. |
| 29 YEARS OLD | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 30 YEARS OLD | -0,619** | 0,163 | 3,80 | 12% | -8% | -40% |
| 31 YEARS OLD | -0,629** | 0,166 | 3,78 | 12% | -8% | -41% |
| 32 YEARS OLD | -0,593** | 0,163 | 3,63 | 13% | -8% | -39% |
| 33 YEARS OLD | -0,775** | 0,178 | 4,36 | 11% | -10% | -48% |
| FORREIGN-BORN | 0,114 | 0,149 | 0,76 | n.s. | n.s. | n.s. |
| DAUGHTER OF A FRENCH-BORN HEAD OF THE FAMILY | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| SPANISH ORIGIN | 0,244* | 0,145 | 1,69 | 25% | 4% | 21% |
| ITALIAN ORIGIN | 0,25** | 0,120 | 2,08 | 25% | 4% | 21% |
| POLISH ORIGIN | 0,205 | 0,233 | 0,88 | n.s. | n.s. | n.s. |
| PORTUGUESE ORIGIN | -0,325 | 0,204 | 1,59 | n.s. | n.s. | n.s. |
| ALGERIAN ORIGIN | 0,665** | 0,148 | 4,48 | 34% | 13% | 39% |
| MOROCCAN ORIGIN | 0,459 | 0,303 | 1,52 | n.s. | n.s. | n.s. |
| TUNISIAN ORIGIN | -0,396 | 0,381 | 1,04 | n.s. | n.s. | n.s. |
| OTHER IMMIGRANT ORIGIN | 0,29* | 0,163 | 1,77 | 26% | 5% | 25% |
| LONE-PARENT FAMILY 1975 | 0,035 | 0,150 | 0,22 | n.s. | n.s. | n.s. |
| 1-2 CHILDREN FAMILY 1975 | 0,068 | 0,094 | 0,73 | n.s. | n.s. | n.s. |
| 3-4 CHILDREN FAMILY 1975 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 5-6 CHILDREN FAMILY 1975 | 0,200* | 0,110 | 1,82 | 24% | 3% | 17% |
| 7-8 CHILDREN FAMILY 1975 | 0,301** | 0,153 | 1,97 | 26% | 5% | 26% |
| > 9 CHILDREN FAMILY 1975 | 0,639** | 0,203 | 3,15 | 33% | 12% | 60% |
| FARMER / FARM WORKER FATHER 1975 | 0,123 | 0,145 | 0,85 | n.s. | n.s. | n.s. |
| SHOPKEEPER-CRAFTSMAN FATHER 1975 | 0,370** | 0,147 | 2,51 | 27% | 7% | 33% |
| MANAGER/TEACH./RESEARCH. FATHER 1975 | 0,166 | 0,206 | 0,80 | n.s. | n.s. | n.s. |
| MIDDLE MANAGEMENT FATHER 1975 | 0,154 | 0,187 | 0,83 | n.s. | n.s. | n.s. |
| EMPLOYEE/CLERK FATHER 1975 | -0,146 | 0,177 | 0,83 | n.s. | n.s. | n.s. |
| MANUAL WORKER FATHER 1975 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| HOUSEHOLD EMP. FATHER 1975 | 0,097 | 0,263 | 0,37 | n.s. | n.s. | n.s. |
| OTHER JOB FATHER 1975 | 0,310** | 0,134 | 2,32 | 26% | 6% | 27% |
| FOREIGN CITIZENSHIP 1990 | 0,216 | 0,166 | 1,30 | n.s. | n.s. | n.s. |
| LIVING WITH PARENT(S) 1990 | 0,467** | 0,147 | 3,17 | 29% | 9% | 42% |
| LIVING ALONE 1990 | -0,464** | 0,175 | 2,66 | 14% | -7% | -32% |
| COHABITATION 1990 | 0,334** | 0,106 | 3,16 | 27% | 6% | 29% |
| MARRIED 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| NO QUALI./PRIMARY LEAVING CERTIFICATE | 0,389** | 0,136 | 2,86 | 28% | 7% | 34% |
| SECONDARY SCHOOL LEVEL (= 'O' LEVEL) | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 1ST CERTIFICATE OF APPRENTICESHIP | -0,066 | 0,140 | 0,47 | n.s. | n.s. | n.s. |
| 2ND CERTIFICATE OF APPRENTICESHIP | -0,545** | 0,159 | 3,43 | 13% | -8% | -36% |
| BACCALAUREAT (= 'A' LEVELS) | -0,597** | 0,153 | 3,91 | 13% | -8% | -39% |
| UNIVERSITY EDUCATION | -1,421** | 0,179 | 7,94 | 6% | -15% | -71% |
| NO CHILDREN IN 1990 | -0,435** | 0,117 | 3,72 | 14% | -6% | -30% |
| 1 CHILD'S MOTHER 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 2 CHILDREN'S MOTHER 1990 | 0,342** | 0,105 | 3,26 | 27% | 6% | 30% |
| 3 CHILDREN'S MOTHER 1990 | 0,462** | 0,188 | 2,46 | 29% | 9% | 42% |
| 4 CHILDREN'S MOTHER 1990 | 0,305 | 0,350 | 0,85 | n.s. | n.s. | n.s. |
| concordant: | 72% | | | | | N= 5468 |

The figures representing the frequency of long-term unemployment among the unemployed provide some preliminary indications (FIGURES 9 & 10). Age has a greater effect on establishing long-term unemployment among the male populations of foreign origin than among the sons of French-born head of the family. Yet the curves for women are comparable. This could be because women of immigrant origin are more likely to withdraw from the labour market when they find themselves without a job for a long period of time.

FIGURE 9. FREQUENCY OF LONG-TERM UNEMPLOYMENT IN MALE UNEMPLOYED POPULATION IN 1990



FIGURE 10. FREQUENCY OF LONG-TERM UNEMPLOYMENT IN FEMALE UNEMPLOYED POPULATION IN 1990



Solely the longitudinal data can be used to establish whether the market barriers are temporary (which corresponds to the neo-classical assumption) or whether the market is sustainably segmented, independently of the short-term economy and the age of the workers studied (25). In the present case, it is therefore important to measure the effects on the probabilities of ending up in long-term unemployment. Our calculated regressions, like those that modeled the occurrence of unemployment, have enabled us to calculate a regression comprising populations of all origins for both sexes (TABLES 10 & 11) without masking the possible effects of certain variables on certain populations (26).

In 1990, men of Algerian and Moroccan origin and women of Algerian origin were, other things being equal, more often long-term unemployed than the other populations. Our findings appear to confirm Aigner and Cain's conclusions (difference in unemployment rates and average wage rates, based on the social legislation in force, over the long run). These authors also showed that discriminatory behaviour due to culturally biased employment tests could prove to be counter-productive (27). This is important, since many neo-classical economists have disputed the possibility of the persistence of the consequences of discriminatory behaviour on the same individuals, even though they have often chosen to make an analysis of labour market wage levels in a full-employment economy (28) rather than an analysis of unemployment rates in an economy with scant job offers. Similarly, P. A. Samuelson refused a proposed modeling of the economic rationality of discrimination any scientific basis whatsoever (29).

In the hypothesis of a permanently overabundant labour supply, the comparison of unemployment rates, despite the short-term nature of the situation at an individual level compared with the entire life span, shows employers' behaviour in terms of the selection or non-selection of certain populations. The pertinence of this comparison is substantiated in this regard by certain features specific to the French labour market, especially the imbalances observed between youth labour demand and supply. The weight of the demographic factor has therefore often been neglected. Although the arrival of young people on the labour market was largely responsible for the 0.9% annual increase in the potential working manpower in France in the second half of the 1980s, the effect of this same phenomenon was much more modest in Germany at + 0.4% (30). In this situation of a surplus of young people, employers might have chosen to give preference to employing French citizens. It is therefore precarious to consider that the empirical observations illustrate a theory of discrimination whose formulations would alter the neo-classical concept of how the labour market operates.

TABLE 10. LOGISTIC REGRESSION: LONG-TERM UNEMPLOYMENT OF WORKING MEN AGED 25 TO 33

| | β_i | $\sigma\beta_i$ | <i>ts</i> | <i>P</i> | <i>P - Po</i> | Δ (%) |
|------------------------------------------------|-------------------------|-----------------|-------------|-------------|---------------|----------------|
| | $\beta_0 = -4,631^{**}$ | 0,461 | 10,05 | 1,0% | | |
| 25 YEARS OLD | -0,385 | 0,329 | 1,17 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| 26 YEARS OLD | -0,326 | 0,332 | 0,98 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| 27 YEARS OLD | 0,062 | 0,321 | 0,19 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| 28 YEARS OLD | 0,329 | 0,311 | 1,06 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| 29 YEARS OLD | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> |
| 30 YEARS OLD | 0,260 | 0,325 | 0,80 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| 31 YEARS OLD | -0,145 | 0,356 | 0,41 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| 32 YEARS OLD | -0,016 | 0,362 | 0,04 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| 33 YEARS OLD | 0,232 | 0,355 | 0,65 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| FOREIGN-BORN | 0,074 | 0,266 | 0,28 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| SON OF A FRENCH-BORN HEAD OF THE FAMILY | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> |
| SPANISH ORIGIN | 0,096 | 0,293 | 0,33 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| ITALIAN ORIGIN | -0,132 | 0,267 | 0,50 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| POLISH ORIGIN | 0,373 | 0,444 | 0,84 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| PORTUGUESE ORIGIN | -1,027** | 0,522 | 1,97 | 0,3% | -0,6% | -64% |
| ALGERIAN ORIGIN | 1,203** | 0,236 | 5,09 | 3,1% | 2,2% | 226% |
| MOROCCAN ORIGIN | 0,852* | 0,497 | 1,71 | 2,2% | 1,3% | 131% |
| TUNISIAN ORIGIN | 0,725 | 0,560 | 1,29 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| OTHER IMMIGRANT ORIGIN | -0,358 | 0,477 | 0,75 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| LONE-PARENT FAMILY 1975 | 0,416 | 0,255 | 1,63 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| 1-2 CHILDREN FAMILY 1975 | -0,166 | 0,204 | 0,81 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| 3-4 CHILDREN FAMILY 1975 | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> |
| 5-6 CHILDREN FAMILY 1975 | 0,117 | 0,217 | 0,54 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| 7-8 CHILDREN FAMILY 1975 | 0,120 | 0,261 | 0,46 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| > 9 CHILDREN FAMILY 1975 | -0,108 | 0,357 | 0,30 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| FARMER / FARM WORKER FATHER 1975 | -1,146** | 0,470 | 2,44 | 0,3% | -0,7% | -68% |
| SHOPKEEPER-CRAFTSMAN FATHER 1975 | -0,242 | 0,347 | 0,70 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| MANAGER/TEACH./RESEARCH. FATHER 1975 | -0,142 | 0,493 | 0,29 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| MIDDLE MANAGEMENT FATHER 1975 | -0,099 | 0,413 | 0,24 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| EMPLOYEE/CLERK FATHER 1975 | -0,213 | 0,354 | 0,60 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| MANUAL WORKER FATHER 1975 | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> |
| HOUSEHOLD EMP. FATHER 1975 | -0,546 | 0,616 | 0,89 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| OTHER JOB FATHER 1975 | 0,136 | 0,236 | 0,57 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| FOREIGN CITIZENSHIP 1990 | 0,238 | 0,884 | 0,94 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| LIVING WITH PARENT(S) 1990 | 1,574** | 0,205 | 7,68 | 4,5% | 3,5% | 365% |
| LIVING ALONE 1990 | 1,246** | 0,235 | 5,30 | 3,3% | 2,3% | 71% |
| COHABITATION 1990 | 0,136 | 0,296 | 0,46 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| MARRIED 1990 | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> |
| NO QUALI/PRIMARY LEAVING CERTIFICATE | 0,936** | 0,362 | 2,59 | 2,4% | 1,5% | 151% |
| SECONDARY SCHOOL LEVEL (= 'O' LEVEL) | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> | <i>Ref.</i> |
| 1ST CERTIFICATE OF APPRENTICESHIP | 0,053 | 0,375 | 0,14 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| 2ND CERTIFICATE OF APPRENTICESHIP | -0,561 | 0,474 | 1,18 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| BACCALAUREAT (= 'A' LEVELS) | -0,178 | 0,436 | 0,41 | <i>n.s.</i> | <i>n.s.</i> | <i>n.s.</i> |
| UNIVERSITY EDUCATION | -0,820* | 0,487 | 1,69 | 0,4% | -0,5% | -56% |
| concordant: | 81% | | | | | N= 6542 |

TABLE 11. LOGISTIC REGRESSION: LONG-TERM UNEMPLOYMENT OF WORKING WOMEN AGED 25 TO 33

| | β_1 | $\sigma\beta_1$ | t_s | P | $P - P_0$ | Δ (%) |
|-----------------------------------------------------|-------------------------|-----------------|-------|-------|----------------|--------------|
| | $\beta_0 = -2,497^{**}$ | 0,260 | 9,60 | 7,6% | | |
| 25 YEARS OLD | 0,048 | 0,214 | 0,22 | n.s. | n.s. | n.s. |
| 26 YEARS OLD | -0,309 | 0,225 | 1,38 | n.s. | n.s. | n.s. |
| 27 YEARS OLD | -0,215 | 0,219 | 0,98 | n.s. | n.s. | n.s. |
| 28 YEARS OLD | -0,110 | 0,212 | 0,52 | n.s. | n.s. | n.s. |
| 29 YEARS OLD | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 30 YEARS OLD | -0,512** | 0,227 | 2,26 | 4,7% | -2,9% | -38% |
| 31 YEARS OLD | -0,527** | 0,233 | 2,26 | 4,6% | -3,0% | -39% |
| 32 YEARS OLD | -0,434* | 0,224 | 1,94 | 5,1% | -2,5% | -33% |
| 33 YEARS OLD | -0,556** | 0,245 | 2,27 | 4,5% | -3,1% | -41% |
| FOREIGN-BORN | 0,123 | 0,198 | 0,62 | n.s. | n.s. | n.s. |
| DAUGHTER OF A FRENCH-BORN HEAD OF THE FAMILY | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| SPANISH ORIGIN | 0,310 | 0,200 | 1,55 | n.s. | n.s. | n.s. |
| ITALIAN ORIGIN | 0,275 | 0,168 | 1,64 | n.s. | n.s. | n.s. |
| POLISH ORIGIN | 0,068 | 0,361 | 0,19 | n.s. | n.s. | n.s. |
| PORTUGUESE ORIGIN | -0,423 | 0,282 | 1,50 | n.s. | n.s. | n.s. |
| ALGERIAN ORIGIN | 0,401** | 0,203 | 1,97 | 10,9% | 3,3% | 44% |
| MOROCCAN ORIGIN | 0,374 | 0,420 | 0,89 | n.s. | n.s. | n.s. |
| TUNISIAN ORIGIN | -0,319 | 0,545 | 0,58 | n.s. | n.s. | n.s. |
| OTHER IMMIGRANT ORIGIN | 0,653** | 0,208 | 3,14 | 13,7% | 6,1% | 80% |
| LONE-PARENT FAMILY 1975 | 0,168 | 0,204 | 0,82 | n.s. | n.s. | n.s. |
| 1-2 CHILDREN FAMILY 1975 | 0,150 | 0,137 | 1,09 | n.s. | n.s. | n.s. |
| 3-4 CHILDREN FAMILY 1975 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 5-6 CHILDREN FAMILY 1975 | 0,345** | 0,150 | 2,30 | 10,4% | 2,8% | 37% |
| 7-8 CHILDREN FAMILY 1975 | 0,219 | 0,212 | 1,03 | n.s. | n.s. | n.s. |
| > 9 CHILDREN FAMILY 1975 | 0,877** | 0,251 | 3,49 | 16,5% | 8,9% | 117% |
| FARMER / FARM WORKER FATHER 1975 | -0,010 | 0,203 | 0,05 | n.s. | n.s. | n.s. |
| SHOPKEEPER-CRAFTSMAN FATHER 1975 | 0,166 | 0,214 | 0,78 | 8,9% | 1,3% | 16% |
| MANAGER/TEACH./RESEARCH. FATHER 1975 | -0,064 | 0,333 | 0,19 | n.s. | n.s. | n.s. |
| MIDDLE MANAGEMENT FATHER 1975 | -0,884** | 0,398 | 2,22 | n.s. | n.s. | n.s. |
| EMPLOYEE/CLERK FATHER 1975 | -0,101 | 0,247 | 0,41 | n.s. | n.s. | n.s. |
| MANUAL WORKER FATHER 1975 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| HOUSEHOLD EMP. FATHER 1975 | -0,523 | 0,410 | 1,28 | n.s. | n.s. | n.s. |
| OTHER JOB FATHER 1975 | 0,043 | 0,190 | 0,23 | n.s. | n.s. | n.s. |
| FOREIGN CITIZENSHIP 1990 | 0,179 | 0,221 | 0,81 | n.s. | n.s. | n.s. |
| LIVING WITH PARENT(S) 1990 | 0,153 | 0,208 | 0,73 | n.s. | n.s. | n.s. |
| LIVING ALONE 1990 | -0,891** | 0,279 | 3,19 | 3,3% | -4,3% | -57% |
| COHABITATION 1990 | 0,048 | 0,152 | 0,31 | n.s. | n.s. | n.s. |
| MARRIED 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| NO QUALI/PRIMARY LEAVING CERTIFICATE | 0,669** | 0,192 | 3,48 | 13,8% | 6,2% | 82% |
| SECONDARY SCHOOL LEVEL (= 'O' LEVEL) | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 1ST CERTIFICATE OF APPRENTICESHIP | 0,105 | 0,202 | 0,52 | n.s. | n.s. | n.s. |
| 2ND CERTIFICATE OF APPRENTICESHIP | -0,318 | 0,230 | 1,38 | n.s. | n.s. | n.s. |
| BACCALAUREAT (= 'A' LEVELS) | -0,794** | 0,244 | 3,25 | 3,6% | -4,0% | -53% |
| UNIVERSITY EDUCATION | -1,380** | 0,288 | 4,79 | 2,0% | -5,6% | -73% |
| NO CHILDREN IN 1990 | -0,145 | 0,166 | 0,87 | n.s. | n.s. | n.s. |
| 1 CHILD'S MOTHER 1990 | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 2 CHILDREN'S MOTHER 1990 | 0,43** | 0,144 | 3,00 | 11,2% | 3,6% | 48% |
| 3 CHILDREN'S MOTHER 1990 | 0,349 | 0,255 | 1,37 | n.s. | n.s. | n.s. |
| 4 CHILDREN'S MOTHER 1990 | -0,301 | 0,760 | 0,40 | n.s. | n.s. | n.s. |
| concordant: | | | | 73% | N= 5468 | |

We opt more for two types of theoretical representations of discrimination substantiated by unemployment rate differences in an economy in which legal minimum wages and labour agreements still exist (31).

An employer preference for discrimination in an economy with fixed or regulated wages (wage rigidity) results in a general absence of wage differences between immigrants and natives in equivalent jobs. It is the unemployment rates that are different (32). The “theory of statistical discrimination” leads to the same conclusions based on a different initial assumption. This is the idea that employers are in a situation of imperfect information and that they cannot make an accurate ex-ante measurement of the real productivity of workers in certain minorities. Given these circumstances, hiring discrimination based on risk aversion exists. This “theory of statistical discrimination” was formulated in part by K.J. Arrow (33) and, if we consider a possible effect on the unemployment rates of the population groups, by E.S. Phelps (34) and G.J. Borjas & M.S. Goldberg (35). Wage differences or inequalities are nevertheless long-term. George Akerlof underscores both the limits and risks (36) of accepting the acclaimed nature of real discrimination.

National origin, a particularly strong notion for individuals, has a real importance. It is obvious that some firms have policies that discriminate against young people of foreign origin, especially North African Muslims (37). As far back as 1982, young people of North African immigrant origin alone already suffered en masse at the hands of such practices in violation of basic rights (38). Formal equality does not necessarily bring about “actual equality” and there are no “sectional pseudo-markets” on the “fragmented labour market” to enable unsubstitutable candidate workers to enter independent markets (39).

The economic reasons that could lead a rational employer to practise such discrimination may be associated with the anticipated negative consequences of hiring a certain category of manpower (40). Some company heads, especially in the service sector, may therefore consider for reasons of prestige or image or out of fear of losing market share that it is economically more profitable to employ certain individuals rather than others, independently of the comparative qualities and productivity levels of the respective manpower.

C. ADDITIONAL ANALYSES

We have shown that national origin alone appears to explain the differences observed between the unemployment rates of populations of European origin (including the children of a French-born head of the family) and those of North African origin. Another way of analysing discrimination could be to break down a population group with a given level of education into socio-economic categories (possible existence of a distortion between the position occupied and qualifications). The relatively young age of the individuals and the longitudinal nature of the EDP mean that comparisons can be made free of the major biases that generally affect such comparisons of situations (41) (TABLES 12 & 13).

Although some sociological studies have found situations that tend to demonstrate the extent of downgrading phenomena, other authors have recently put a finer point on the existence of possible discrimination against young people of Algerian origin by explaining that the study solely of the breakdown of employed workers by socio-economic category at a given level of education may reflect a greater demand for prestige from the positions they are offered (42). Our study focuses on much higher numbers of people than those in the MGIS survey used for this interpretation. Our results appear to invalidate this finding based on a dual methodological error. It is easy to take two population groups and show that a higher relative frequency of one situation among employed workers in one population group can represent a lower absolute frequency of this situation in the total population of this population group compared with the percentage observed in the other population. We do not agree with the authors who believe that they have detected a specific labour supply pattern among young people of Algerian origin. Such a pattern is said to be reflected in the socio-economic breakdown of employed workers with a given level of education. Not only is this inaccurate, since it disregards the fact that employment results from the comparison of labour supply and demand, but the breakdown of young people of Algerian origin into different socio-economic categories, whether compared with the entire employed labour force or not (the only pertinent reference population) shows that the percentage of young people of Algerian origin with a status in line with their training (or a prestigious status compared with their training) is never higher than the percentage observed for the children of a French-born head of the family. On the other hand, downgrading is common: 19% of all men of Algerian origin with higher education qualifications are employed, as opposed to only 5% of the sons of a French-born head of the family.

TABLE 12. UNEMPLOYMENT AND JOBS HELD AMONG WORKING MEN AGED 25 TO 33 BY STATED QUALIFICATIONS IN 1990

| NO DIPLOMA | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma- nagement | Employee Clerk | Household Emp. | Manual Worker |
|-----------------------------------------|------------|-------------------|-----------------------|--------------------|------------------------|-------------------|-------------------|------------------|
| Sons of a French-born H.O.F. | 13% | 4% | 3% | 2% | 5% | 7% | 2% | 64% |
| Spanish origin | 16% | 6% | 4% | 1% | 3% | 8% | 1% | 61% |
| Italian origin | 13% | 1% | 8% | 1% | 3% | 10% | 1% | 64% |
| Portuguese origin | 5% | 0% | 3% | 1% | 2% | 1% | 1% | 87% |
| North-African origin | 35% | 0% | 3% | 0% | 5% | 3% | 4% | 51% |
| Algerian origin only | 35% | 0% | 2% | 0% | 5% | 2% | 4% | 52% |
| PRIMARY LEAVING CERTIFICATE | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma- nagement | Employee Clerk | Household Emp. | Manual Worker |
| Sons of a French-born H.O.F. | 15% | 4% | 1% | 1% | 13% | 8% | 0% | 59% |
| Spanish origin | 15% | 0% | 3% | 0% | 10% | 3% | 13% | 57% |
| Italian origin | 18% | 0% | 4% | 0% | 18% | 0% | 4% | 58% |
| Portuguese origin | 12% | 2% | 0% | 0% | 6% | 0% | 2% | 78% |
| North-African origin | 52% | 0% | 8% | 0% | 0% | 10% | 0% | 28% |
| Algerian origin only | 59% | 0% | 10% | 0% | 0% | 8% | 0% | 24% |
| SECONDARY SCHOOL LEVEL (= 'O' LEVEL) | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma- nagement | Employee Clerk | Household Emp. | Manual Worker |
| Sons of a French-born H.O.F. | 6% | 2% | 5% | 2% | 15% | 27% | 2% | 41% |
| Spanish origin | 6% | 0% | 6% | 6% | 22% | 35% | 0% | 25% |
| Italian origin | 10% | 4% | 7% | 1% | 23% | 16% | 1% | 37% |
| Portuguese origin | 5% | 0% | 10% | 0% | 15% | 10% | 0% | 60% |
| North-African origin | 34% | 0% | 13% | 3% | 16% | 13% | 0% | 21% |
| Algerian origin only | 33% | 0% | 17% | 3% | 10% | 13% | 0% | 23% |
| 1ST CERTIFICATE OF APPRENTICESHIP | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma- nagement | Employee Clerk | Household Emp. | Manual Worker |
| Sons of a French-born H.O.F. | 7% | 2% | 6% | 0% | 8% | 10% | 2% | 65% |
| Spanish origin | 8% | 1% | 6% | 1% | 9% | 5% | 1% | 67% |
| Italian origin | 9% | 1% | 11% | 2% | 7% | 7% | 1% | 64% |
| Portuguese origin | 2% | 1% | 9% | 0% | 11% | 3% | 1% | 74% |
| North-African origin | 25% | 0% | 5% | 1% | 7% | 6% | 1% | 54% |
| Algerian origin only | 27% | 0% | 5% | 1% | 8% | 6% | 2% | 52% |
| 2ND CERTIFICATE OF APPRENTICESHIP | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma- nagement | Employee Clerk | Household Emp. | Manual Worker |
| Sons of a French-born H.O.F. | 6% | 9% | 4% | 1% | 15% | 16% | 1% | 48% |
| Spanish origin | 2% | 0% | 13% | 1% | 12% | 11% | 0% | 61% |
| Italian origin | 5% | 3% | 2% | 1% | 15% | 13% | 7% | 55% |
| Portuguese origin | 2% | 0% | 2% | 0% | 17% | 4% | 0% | 74% |
| North-African origin | 35% | 0% | 0% | 0% | 17% | 13% | 0% | 36% |
| Algerian origin only | 31% | 0% | 0% | 0% | 15% | 15% | 0% | 39% |
| BACCALAUREAT (= 'A' LEVELS) | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma- nagement | Employee Clerk | Household Emp. | Manual Worker |
| Sons of a French-born H.O.F. | 6% | 6% | 5% | 7% | 39% | 19% | 1% | 17% |
| Spanish origin | 2% | 1% | 7% | 13% | 35% | 27% | 0% | 14% |
| Italian origin | 5% | 3% | 4% | 3% | 54% | 11% | 2% | 17% |
| Portuguese origin | 3% | 0% | 0% | 3% | 61% | 6% | 0% | 26% |
| North-African origin | 17% | 0% | 14% | 12% | 24% | 16% | 1% | 16% |
| Algerian origin only | 32% | 0% | 3% | 0% | 22% | 22% | 0% | 22% |
| UNIVERSITY EDUCATION | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma- nagement | Employee Clerk | Household Emp. | Manual Worker |
| Sons of a French-born H.O.F. | 4% | 1% | 2% | 46% | 40% | 5% | 0% | 2% |
| Spanish origin | 0% | 3% | 2% | 33% | 58% | 5% | 0% | 0% |
| Italian origin | 3% | 3% | 3% | 34% | 46% | 6% | 0% | 5% |
| Portuguese origin | 0% | 0% | 8% | 25% | 58% | 8% | 0% | 0% |
| North-African origin | 18% | 0% | 5% | 25% | 32% | 14% | 2% | 4% |
| Algerian origin only | 19% | 0% | 5% | 11% | 38% | 19% | 3% | 5% |

TABLE 13. UNEMPLOYMENT AND JOBS HELD AMONG WORKING WOMEN AGED 25 TO 33 BY STATED QUALIFICATIONS IN 1990

| NO QUALIFICATIONS | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma-nagement | Employee Clerk | Household Emp. | Manual Worker |
|--------------------------------------|---------|----------------|--------------------|-----------------|--------------------|----------------|----------------|---------------|
| Daughters of a French-born H.O.F. | 32% | 2% | 3% | 1% | 3% | 29% | 6% | 25% |
| Spanish origin | 32% | 0% | 1% | 0% | 3% | 26% | 14% | 24% |
| Italian origin | 31% | 0% | 7% | 1% | 2% | 25% | 10% | 22% |
| Portuguese origin | 21% | 0% | 0% | 0% | 2% | 15% | 14% | 47% |
| North-African origin | 41% | 0% | 0% | 2% | 5% | 20% | 8% | 22% |
| Algerian origin only | 46% | 0% | 0% | 3% | 5% | 13% | 7% | 25% |
| PRIMARY LEAVING CERTIFICATE | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma-nagement | Employee Clerk | Household Emp. | Manual Worker |
| Daughters of a French-born H.O.F. | 27% | 1% | 4% | 0% | 4% | 23% | 9% | 31% |
| Spanish origin | 27% | 0% | 0% | 4% | 4% | 27% | 4% | 35% |
| Italian origin | 21% | 0% | 3% | 0% | 6% | 42% | 9% | 18% |
| Portuguese origin | 27% | 0% | 7% | 0% | 2% | 7% | 18% | 40% |
| North-African origin | 45% | 2% | 0% | 0% | 2% | 19% | 2% | 30% |
| Algerian origin only | 43% | 3% | 0% | 0% | 3% | 18% | 3% | 30% |
| SECONDARY SCHOOL LEVEL (= 'O' LEVEL) | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma-nagement | Employee Clerk | Household Emp. | Manual Worker |
| Daughters of a French-born H.O.F. | 15% | 1% | 3% | 1% | 10% | 46% | 8% | 16% |
| Spanish origin | 20% | 2% | 4% | 0% | 4% | 54% | 6% | 10% |
| Italian origin | 36% | 0% | 0% | 2% | 14% | 32% | 5% | 11% |
| Portuguese origin | | | | | | | | |
| North-African origin | 29% | 0% | 2% | 0% | 16% | 41% | 6% | 6% |
| Algerian origin only | 34% | 0% | 0% | 0% | 23% | 29% | 6% | 9% |
| 1ST CERTIFICATE OF APPRENTICESHIP | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma-nagement | Employee Clerk | Household Emp. | Manual Worker |
| Daughters of a French-born H.O.F. | 16% | 1% | 4% | 0% | 6% | 48% | 9% | 16% |
| Spanish origin | 30% | 0% | 8% | 0% | 3% | 33% | 10% | 16% |
| Italian origin | 23% | 0% | 1% | 0% | 2% | 45% | 10% | 19% |
| Portuguese origin | 20% | 0% | 2% | 0% | 1% | 33% | 18% | 25% |
| North-African origin | 40% | 0% | 1% | 1% | 4% | 34% | 9% | 11% |
| Algerian origin only | 39% | 0% | 2% | 1% | 4% | 35% | 6% | 14% |
| 2ND CERTIFICATE OF APPRENTICESHIP | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma-nagement | Employee Clerk | Household Emp. | Manual Worker |
| Daughters of a French-born H.O.F. | 12% | 2% | 2% | 0% | 7% | 64% | 4% | 8% |
| Spanish origin | 13% | 0% | 2% | 0% | 7% | 65% | 5% | 7% |
| Italian origin | 15% | 1% | 3% | 1% | 7% | 64% | 1% | 9% |
| Portuguese origin | 10% | 0% | 3% | 3% | 10% | 56% | 8% | 10% |
| North-African origin | 25% | 0% | 2% | 0% | 3% | 54% | 3% | 13% |
| Algerian origin only | 23% | 0% | 3% | 0% | 4% | 59% | 3% | 9% |
| BACCALAUREAT (= 'A' LEVELS) | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma-nagement | Employee Clerk | Household Emp. | Manual Worker |
| Daughters of a French-born H.O.F. | 12% | 1% | 5% | 3% | 23% | 51% | 2% | 3% |
| Spanish origin | 14% | 1% | 9% | 3% | 17% | 52% | 3% | 1% |
| Italian origin | 10% | 0% | 5% | 1% | 21% | 60% | 1% | 1% |
| Portuguese origin | | | | not | significant | | | |
| Maghrebi origin | 17% | 0% | 3% | 3% | 21% | 53% | 3% | 0% |
| Algerian origin only | 25% | 0% | 5% | 2% | 22% | 42% | 5% | 0% |
| UNIVERSITY EDUCATION | Jobless | Agricul Sector | Shopkeep Craftswo. | Manager Teacher | Middle Ma-nagement | Employee Clerk | Household Emp. | Manual Worker |
| Daughters of a French-born H.O.F. | 5% | 0% | 2% | 25% | 51% | 16% | 0% | 1% |
| Spanish origin | 5% | 0% | 1% | 18% | 45% | 31% | 0% | 0% |
| Italian origin | 6% | 0% | 1% | 18% | 50% | 24% | 0% | 1% |
| Portuguese origin | | | | not | significant | | | |
| North-African origin | 9% | 0% | 1% | 28% | 42% | 19% | 0% | 0% |
| Algerian origin only | 14% | 0% | 0% | 21% | 51% | 14% | 0% | 0% |

Maintaining the conclusion that we invalidate would in fact imply the acceptance of the existence of a much higher level of job refusal among the majority of the young people of Algerian origin at all levels of education than that observed among the children of a French-born head of the family. Yet even if we consider that a same level of aspiration as that for the children of a French-born head of the family already constitutes a break from the parents' behaviour, there is nothing to support the existence of a "will to upgrade". Tables based on more detailed classifications would prove this. In a recent study, R. Silberman found that young people of North African immigrant origin refused a job offered to them less often than the children of French-born head of the family (43).

More generally, young people of Muslim origin rarely appear to hold jobs considered to be a step up. The reasons contributing to this situation have already been mentioned. However, bear in mind that these problems are still partially associated with the non-interchangeability of national and foreign manpower due to these populations finding it hard to get a good return on their "human capital". This is more than underqualification. These young people are victims of a presupposed absence of qualifications and possibilities (44).

Moreover, social psychologists have shown that young people of immigrant origin often put themselves down (45). These perceptions also concern the sphere of professional aptitude. Giving up on trying to find a job above or in line with qualifications can exist, at a different level to the possible disincentive to training or find a job. Lastly, in line with M. Tribalat's comments on the same results whose different interpretation by other researchers we have already criticised, we consider that the young people of Algerian origin are also victims of weak community networks, which could help their social integration (46). Economic anthropological studies have, however, shown the advantages to young people from these communities when such solidarity exists (47).

Another aspect of the existence of discrimination, partly resulting from the first barrier to employment apparently formed by the weight of national origin, is the low occurrence of access to positions at the top of the professional scale normally attainable with a certain level of education. The example of men of Algerian origin illustrates this factor. Only 11% of men of Algerian origin with higher education qualifications are senior executives, as opposed to 46% for the children of a French-born head of the family. Similarly, the percentages of middle managers among men of Algerian origin with the BEPC ("O" level equivalent) and baccalauréat ("A" level equivalent) are much lower than those observed for other populations. The

women of North African origin do not appear to suffer this same hindrance to obtaining the best return on their qualifications on the labour market. Yet this may be since, as we have shown, these women often associate being unemployed with being a mother in both the short and medium run. This limits the scope of considerations on the existence of long-run discrimination against qualified women. Yet it has been established that the border between “job-seeker” and “housewife” is particularly vague among women of all origins, both in France and in the country where their parents come from (48).

Logistic regressions modeling the effects of socio-demographic variables on the probability of holding a job also provide coherent results if we consider that unemployed women and declared non-working women are partially related in terms of their reasons (49). A new corporate labour supply reveals and sets a new latent labour demand, which may subsequently disappear because it is unable to be satisfied (50). The positive effect of the number of siblings in 1975 associated with the probability of young women of African origin not having a job (98% North African origin in this sample) shows that the role of sisters is also sometimes to help or replace mothers in their housework and care of their children. The larger the family, the more faithful it remains to traditions. It is consequently difficult for the girls to talk the family into the idea of their taking a job (51). This is acknowledged by both young men and women of North African immigrant origin (52).

* *
*

National origin, a particularly strong notion for individuals, has a real importance. It is obvious that some firms have policies that discriminate against young people of foreign origin, especially North African Muslims. The latter are in fact the only group to have sometimes been victims of such practices in violation of basic rights: formal equality does not necessarily bring about “real equality” and there are no “sectional pseudo-markets” on the “fragmented labour market” to enable unsubstitutable candidate workers to enter independent markets (53). The children of one or two immigrant parents accrue the status both of being young and of foreign origin, sometimes even born outside of France and therefore foreign. These two statuses are equally obstructive to employment. These young people are therefore in a doubly precarious situation. The fact that some of them are not fluent in French probably adds to the problems encountered when looking

for work. The variable representing the social origin of young people does not explain the problems encountered by young people on the labour market. Finding a job befitting qualifications does not appear, at equivalent levels of education, to be influenced by social background. However, the level of education is strongly conditioned by family background in all communities: the qualifications and socio-economic category of each of the parents play a similar and cumulative role. The qualifications obtained by the child are therefore the mediator by which the de facto reproduction of social classes and negation of the weight of origins simultaneously operate. The professional downgrading of young people from French and foreign working class families results for two reasons from the absence of human capital (54). However, the methods for the professional integration of young generations of immigrant origin are also the product of prior decisions concerning the final country of settlement. We have shown in a part of our thesis on which this paper is based the importance of departures to the country of origin (about 20 % between 1975 and 1990), specially among foreign-born youth (55).

NOTES

1 TAPINOS G., *L'immigration étrangère en France. 1946-1973*, Paris, INED/Presses Universitaires de France, 1975; Tapinos G., "European Migration Patterns: Economic Linkages and Policy Experiences", p. 53-70 in Kritiz M.M. (ed.), *U.S. Immigration and Refugee Policy*, Lexington, Lexington Books, 1983.

2 WEIL P. & CROWLEY J., "Integration in Theory and Practice: a Comparison of France and Britain", *West European Politics*, XVII, n° 2, 1994, pp. 110-126.

3 TAPINOS G., *L'économie des migrations internationales*, Paris, FNSP/A. Colin, 1974, p. 132.

4 SILBERMAN R., *L'approche longitudinale pour les populations issues de l'immigration: apports et difficultés méthodologiques*, presentation to the *XVe Journées de l'Association d'Economie Sociale: L'analyse longitudinale en économie sociale*, Nancy, 14 and 15 September 1995, appendix to Volume I of the Proceedings, ADEPS/Commissariat général au Plan, 1995, Nancy. The EDP is the French equivalent of the English LS and the American NLSY.

5 In this article, the unemployment rate is the ratio of the number of unemployed to the number of workers in work or unemployed. National service conscripts are excluded from the number of workers to make for a more pertinent and significant comparison of the frequency of unemployment among young immigrants (few young immigrants do national service in France as they are often foreigners) and young people of immigrant origin born in France more likely to do national service since the vast majority of them are French.

6 LEMEL Y., SILBERMAN R. & VALLET L.-A., "Explaining the Socio-Economic Success of Immigrants in French Society", *Paper at the Siena Group Meeting - Neuchâtel*, 1997.

7 Insofar as the change in the reference state relative to a single group of alternative variables does not bring about a change in the values of the coefficients relative to the

variables external to this group, but solely that of the value of the estimated constant, the explanatory nature of the model is not based on a single reference state, dependent on the values of all the variables. However, it is possible to simplify matters by considering that the choice of a set of reference states contributes to forming an overall reference situation from which it is interesting to calculate absolute variations in probability; LERIDON H. & TOULEMON L., *Démographie. Dynamique et analyse statistique des populations*, Paris, Economica, 1997.

8 AYRES I. & SIEGELMAN P., "Race and Gender Discrimination in Bargaining for a New Car", *American Economic Review*, LXXXV, n° 3, 1995, p. 304-321.

9 On this subject, see Glazer N., *Affirmative Discrimination: Ethnic Inequality and Public Policy*, New York, Basic Books, 1975.

10 LOCHAK D., *Etrangers de quel droit ?*, Paris, Presses Universitaires de France, 1985.

11 HOUZEL Y., "L'analyse des trajectoires d'insertion", p. 23-24, in VERNIERES M. (dir.), *L'insertion professionnelle. Analyse et débats*, Paris, Economica, 1997.

12 Which was not done in the analysis of immigrant "aspirations to return" in the publication *De l'immigration à l'assimilation* by M. Tribalat; TRIBALAT M., *De l'immigration à l'assimilation*, Paris, La découverte, 1996, p. 135. This makes it impossible to compare probabilities and effects by national origin, which would have been of paramount interest.

13 We simplify our argument here, as follows in the rest of the paragraph.

14 A concrete illustration of this latter hypothesis is given later.

15 TRIBALAT M., "La réussite au bac des jeunes d'origine étrangère", *Hommes & migrations*, n° 1201, September 1996, pp. 35-42.

16 Critique in TRIBALAT M., "L'enquête mobilité géographique et insertion sociale : remise en cause des habitudes statistiques françaises", *Espace Populations Sociétés*, n° 2-3, 1996, pp. 215-225. This critique overlooks the fact that the acquisition of educational qualifications precedes access to the labour market.

17 SILBERMAN R. & FOURNIER I., *La position sur le marché du travail des enfants des immigrés. Une analyse des données de l'enquête FQP 1985 de l'INSEE. Contribution à une discussion sur la construction des populations issues de l'immigration : le rôle de la variable origine nationale*, presentation to the *European symposium on school and university success, the equality of opportunities and discrimination in the hiring of young people of immigrant origin*, 6-7 March 1996, University of Paris VII - Denis Diderot.

18 Such is the case with the study of possible discriminatory effects in hiring procedures affecting more individuals from certain communities, due to their origin, as is seen later on in this document.

19 ALBA R. HANDL J. & MULLER W., "Ethnische Ungleichheit im Deutschen Bildungssystem", *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, XLVI, n° 2, pp. 209-237.

20 BONVENKERK F., *Testing Discrimination in Natural Experiments: A Manual for International Comparative Research on Discrimination on the Grounds of "Race" and Ethnic Origin*, Geneva, ILO, 1992.

21 BORJAS G.J., "Ethnicity, Neighborhoods and Human-Capital Externalities", *American Economic Review*, LXXXV, n° 3, 1995, p. 365.

22 MAURIN E., "Les étrangers, une main d'oeuvre à part ?", *Economie et statistique*, n° 242, 1991, p. 43.

23 AUBRY B., "Les migrations résidentielles des étrangers et des immigrés", *Espace Populations Sociétés*, n° 2-3, 1996, pp. 299-303. The rates are calculated on the

populations present in France in $t+1$, which amounts to underestimating the frequency of internal migrations between t and $t+1$ for the immigrant populations already living in France in t .

24 Jacob Mincer considers that the human-capital model does not apply directly to cross-sectional data, since the theory deals with behaviour over individuals' life spans and not with the differences between individuals of different ages; MINCER J., *Studies in Human Capital. Collected Essays*, Paris, Edward Elgar Publishing, 1993, p. 63.

25 SORENSEN A., "Sociological Research on the Labor Market", *Work and Occupations*, X, n° 3, 1983, pp. 261-287.

26 At the cost of the loss of the significant nature of the effect of the variable that could play a non-null role in the occurrence of a phenomenon in one of the sub-populations.

27 AIGNER D. & CAIN G., "Statistical Theories of Discrimination in Labor Markets", *Industrial and Labor Relations Review*, XXX, n° 1, 1977, pp. 175-187.

28 Such as BECKER G.S., *Economics of Discrimination*, Chicago, University of Chicago Press, 1957.

29 SAMUELSON P.A., *Economics*, Tokyo, Mac Graw-Hill - Kogakusha, 1974, pp. 787-800. Mac Call, for his part, considers that the differences in unemployment rates (and therefore the occurrence of unemployment for the same individuals) can only be temporary. The employers practising this discrimination, although less informed to begin with, become so and are led to deal with competing firms employing members of the groups discriminated against; MAC CALL J.J., "The Simple Mathematics of Information, Job Search, and Prejudice", pp. 205-224 in PASCAL A.H. (ed.), *Racial Discrimination in Economic Life*, 1972; Mac Call J.J., *Income Mobility, Racial Discrimination and Economic Growth*, Lexington, DC Heath, 1973.

30 FITOUSSI J.P. et al., "Le modèle allemand", *Observations et diagnostics économiques. Lettre de l'OFCE*, 28 January 1987, p. 1-4.

31 GILMAN H.J., "Economic Discrimination and Unemployment", *American Economic Review*, LV, n° 5, 1965, pp. 1077-1096; DEMSETZ H., "Minorities in the Market Place", *North Carolina Law Review, Papers and Proceedings of the Eighty Fifth Annual Meeting of the American Economic Association*, Toronto, Ontario, 28-30 December 1972, LXIII, n° 2, pp. 271-297; THUROW L.C., *Poverty and Discrimination*, Washington, The Brookings Institution, 1969.

32 French data about immigrants' wages are very few but it seems there are no wages' differences between French and strangers who got the same professional qualifications; INSEE, *Les étrangers en France*, Paris, INSEE, 1994.

33 ARROW K.J., "Models of Job Discrimination", pp. 83-102, in PASCAL A.H. (ed.), *Racial Discrimination in Economic Life*, 1972, preceded by a memorandum entitled: ARROW K. J., *Some Models of Racial Discrimination in the Labor Market*, 1971. STIGLITZ J.E., "Approaches to the Economics of Discrimination", *American Economic Review, Papers and Proceedings of the Eighty Fifth Annual Meeting of the American Economic Association*, Toronto, Ontario, 28-30 December 1972, LXIII, n° 2, 1973, pp. 287-295.

34 PHELPS E.S., "The Statistical Theory of Racism and Sexism", *American Economic Review*, LXII, n° 4, 1972, pp. 659-661.

35 BORJAS G.S. & GOLDBERG M.S., "Biased Screening and Discrimination in the Labor Market", *American Economic Review*, LXVIII, n° 5, 1978, pp. 918-922.

36 AKERLOF G.A., "The Economics of Caste and of the Rat Race and Other Woeful Tales", *Quarterly Journal of Economics*, XC, n° 6, 1976, pp. 599-617.

- 37 P. Weil says of immigrant children: "The young second-generation immigrants have the dual handicap of youth and dark skin when trying to access the labour market. If they are of foreign nationality, they are never offered jobs in public service"; WEIL P., *La France et ses étrangers. L'aventure d'une politique de l'immigration*, 1995, p. 436.
- 38 RICHARD J.-L., *Etude sur l'entrée dans la vie adulte des jeunes d'origine immigrée. Un exemple d'utilisation de l'échantillon démographique permanent de l'INSEE*, DEA dissertation, IEP Paris, 1993.
- 39 GAMBIER D. & VERNIERES M., *Le marché du travail*, Paris, Economica, 1985, pp. 75-93.
- 40 AKERLOF G.A., "A Theory of Social Custom, of which Unemployment May Be One Consequence", *Quarterly Journal of Economics*, XCIV, n° 4, 1980, pp. 749-775.
- 41 Differences between the educational levels of people already in jobs or just starting jobs, for example; see BERGMANN I., "The Effect on White Incomes of Discrimination in Employment", *Journal of Political Economy*, ILXXX, n° 2, 1971, pp. 294-313.
- 42 GAYMU J. & PARANT A., "Les débuts dans la vie active", Summary of the presentation to the *European symposium on school and university success, the equality of opportunities and discrimination in the hiring of young people of immigrant origin*, 6 & 7 March 1996, University of Paris VII, Denis Diderot, 1996, p. 3; PARANT A. & GAYMU J., "Les débuts dans la vie active des jeunes immigrés ou d'origine étrangère", *Espace Populations Sociétés*, n° 2-3, 1996, pp. 439-455. The complex nature of the elements to be taken into account should prohibit relatively unsupported pronouncements such as the publication of inaccurate statistics and comments on insignificant effects.
- 43 SILBERMAN R., *Enfants d'immigrés : trajectoires d'insertions et recours aux mesures d'aide à l'emploi*, presentation to the *Journées d'études, Les données longitudinales dans l'analyse du marché du travail - Les politiques de l'emploi - CEREQ - IDL LASMAS - LEST University of Paris I - Paris, 22-23 May 1997* (to be published in the Symposium Proceedings).
- 44 SCHWARTZ B., *L'insertion professionnelle et sociale des jeunes*, Paris, La documentation française, 1981.
- 45 VINSONNEAU G. "Etude comparative des modalités d'intériorisation de quelques représentations négatives dans des populations de préadolescents, d'adolescents et d'adultes immigrés en France", pp. 91-106, in *Actes des Cinquièmes Journées internationales de Vaucresson - Mai 1985, Immigrations, multiethnicité et socialisation des jeunes. Problèmes de la jeunesse, marginalité et délinquance juvéniles, intervention sociales au milieu des années 1980*, Vol. 3, 1986.
- 46 TRIBALAT M., "Jeunes d'origine étrangère en France", *Futuribles*, n° 215, 1996, pp. 55-80.
- 47 TARRIUS A., *Arabes de France*, La Tour d'Aigues, éditions de l'aube, 1995.
- 48 For more details, see our thesis, RICHARD J.-L., *Dynamiques démographiques et socio-économiques de l'intégration des jeunes générations d'origine immigrée en France*, IEP Paris, 1997 (to be attended).
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- 50 THELOT C., "Le fonctionnement du marché du travail : l'exemple des Pays de la Loire", *Economie et statistique*, n° 69, July-August 1975.
- 51 RICHARD J.-L., "L'insertion des jeunes femmes d'origine immigrée sur le marché du travail: Imbrication avec les dimensions socio-démographiques du processus d'intégration", presentation to the INED Symposium *Questions de population*, Paris,

May 1997 (published in INED, *Actes du Colloque Questions de Population, Dossiers et recherches*, n° 58, April 1997).

52 53% of young people from 18 to 30 years old, born in France and of North African immigrant origin considered, in November 1993, that a young woman of North African origin was less likely than other young women to have a professional activity; source: SOFRES survey, November 1993 (results published in the *Nouvel Observateur*, 2-8 December 1993).

53 GAMBIER D. & VERNIERES M., Paris, Economica, *Le marché du travail*, 1985, pp. 75-93.

54 ZEROULOU Z., "L'insertion professionnelle des jeunes issus de l'immigration algérienne et diplômés de l'enseignement supérieur", p. 299, in ABOU-SADA G., COURAULT B. & ZEROULOU Z. (ED.), *L'immigration au tournant*, Paris, L'Harmattan, 1990.

55 RICHARD J.-L., "Rester en France, devenir Français, voter : trois étapes dans l'intégration des enfants d'immigrés", *Economie et statistique*, 1997 (submitted).

APPENDIX 1: DATA

This study is based on the longitudinal 1975-1990 analysis of an EDP population of 15,345 children aged 3 to 18 years in 1975 and raised in a family whose head had taken French nationality or was foreign on this date*. These young people represented approximately 11% of the young people living in France at the time. Virtually all of these children were the sons and daughters of an immigrant family, i.e. himself born a foreigner abroad. In this article, the family head's 1975 declaration of being or having previously been of foreign nationality is the criterion by which a national origin is attributed to the family's children**. Some 32% of the children were born outside of metropolitan France. The EDP breakdown of the children by national origin was as follows in 1975: 3,277 children of Italian origin, 2,983 of Portuguese origin, 2,955 of Algerian origin, 2,637 of Spanish origin, 679 of Polish origin, 637 of Moroccan origin, and 476 of Tunisian origin (1,701 children were of another foreign origin). In 1990, all the young people in the sample had reached adulthood, excepting approximately 2% who had died in the interim. A further 24% were no longer in the sample, but nearly three-quarters or 74% were again in the EDP. This proportion is obviously lower than that observed for the children of families whose head was French by birth in 1975 (92% of the individuals were again in the EDP in 1990). Bear in mind that the longitudinal study of the demographic, socio-economic and socio-political dynamics of this population over a period of fifteen years implies disregarding the paths of individuals who arrived in France to join their families after 1975. Similarly, it was not possible to study the dynamics of the integration of young people from families of Sub-Saharan African and Turkish origin. The waves of immigration from these countries had barely started in 1975.

* For a presentation of the history of the EDP, see ROUAULT D., "Gestion informatisée et nouvelle base d'étude. L'échantillon démographique permanent a pris un coup de jeune", *Courrier des statistiques*, n° 73, March 1995, pp. 35-41.

** The ages are the ages reached by the individuals (i.e. the exact ages on 31 December).
NB: The notions of “head of household” and “head of family” were used up to 1982, when they were replaced with classifications that now take account of the characteristics of the households (notion of the household’s reference person) and of the two possible parents of the families (family type). The immigrant population is identified by associating the nationality at birth criterion with the place of birth criterion. Any person living in France who was born a foreigner abroad is considered to be an immigrant. Their children born in France are therefore not immigrants. This definition is demographic and is only used for research purposes.

APPENDIX 2: LOGIT MODELS

The percentage given at the bottom of the table also indicates the quality of the regression (percentage agreement between the estimated situations and the observed situations). The quality of a logistic regression can be judged using other criteria and coefficients calculated by statistical programs. For example, if a model contains explanatory variables, we have to observe a decline in the Akaike and Schwartz criteria if we shift from the model excluding explanatory variables to the complete model. A third test is possible using the comparison of an χ^2 to n degrees of freedom and the -2 LOG L statistic (where n is equal to the number of dichotomous explanatory variables). These tests should lead to the rejection of the H_0 null hypothesis defined such that the model contains no significant explanatory variable. The formulae used to calculate the probabilities that measure the penetration rate of a state in the population are:

$P(0) = 1 / (1 + \exp(-\beta_0))$ where β_0 is the constant estimated by the model.

The probability of an individual “x” deviating from the situation made up of all the reference states by variables x_i , x_j and x_k is:

$P(x) = 1 / (1 + \exp(-(\beta_0 + \beta_i + \beta_j + \beta_k)))$.

There is therefore no additivity of deviation effects for the probabilities, but solely for the β_i coefficients. It is then possible to calculate the variations in probabilities provoked by state changes/differences. The significance of parameters β_i is established by the application of *Student’s t-test* (t_s). Each t_{si} is compared with the t_s values associated with the different probabilities P of uncertainty over the H_0 hypothesis of β_i being null. If t_{si} is higher than t_s , the H_0 hypothesis is rejected.

Impressum

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