# Econometric study of the integration of young Moroccan immigrants in France 

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#### Abstract

Insertion is the essential aspect of the immigrant question, neglected for too long. The reform of the nationality code can only be a means at the service of a policy and not a policy in itself. Inclusion also presupposes the success of school, housing and vocational training policies. Economic, social and cultural integration, the sharing of common values and the transmission of knowledge are at the heart of the challenges of both school and immigration. Being more than a million foreign children to attend, it is today on the school that we count to strengthen the integration of young immigrants.


Keywords-Econometric, Insertion, Integration, Logit Model, Moroccan immigrant.

## I. INTRODUCTION

The word insertion most often refers to the fate of immigrants and their children, the place they occupy in society and the place where their cultures of origin must be taken, the legal provisions concerning their rights and obligations and, more generally, public policies concerning them.

To be inserted is to have a place in society, a place that relies on work and housing and which leads to the recognition of others.

The French tradition of integration has been to open widely to foreigners access to nationality in order to quickly make French. It does not seem that historically France has been able to live sustainably with too many foreign nationals on its soil.

France has already been confronted with a massive presence of foreigners, but the question today has a new aspect: the populations concerned, mainly Maghreb, are different in their culture and their religion.

We can not hope to achieve the integration of these populations without acting to facilitate coexistence with the French population. Exclusion factors are numerous: school, housing, training,...

Faced with the three problems of housing, school and professional integration, we are inevitably torn between two needs: the desire to trivialize solutions to problems that are also those of French origin, from the most disadvantaged, and the need to specifically treat those who hold the immigrant status.

## II. METHODOLOGICAL APPROACH

## 1. Objectives of the study

The purpose of this study is to detect the determinants of social integration and verify the accuracy of several
hypotheses concerning the insertion of young Moroccan immigrants in France who are still studying and in parallel with those who abandoned them, and from there knowing their relationship with their families, their friends, their comrades, their teachers and in a global context all the entourage of their place of social life in the French society.

Hence the interest of making a survey of these children in order to verify if the family environment, the school environment, the student's environment, the profile as well as the behavior have an influence on the social integration of the Moroccan immigrant child in France.

From this problematic, follows a questionnaire for which we asked ourselves several questions: What are the factors that determine the social integration of the children of Moroccan immigrants in France? What are the explanatory variables of the social integration of young Moroccan immigrants in French society?

## 2. Elaboration of the questionnaire

After consulting a certain number of statistical documents (questionnaires, grids, interviews, focus-group, etc.), we were able to select several themes that relate to our research. This enabled us to write the contents of the questionnaire project and to collect a set of qualitative and quantitative variables that are sufficiently relevant. The latter was tested on some children of Moroccan immigrants who came to spend their holidays in Morocco. This pilot survey was used to restructure and take stock of the choice of the final variables of the questionnaire. This one is composed of several types of variables such as:

- Individual variables;
- Environment variables;
- Behavior variables;
- School variables;
- Performance variables.

This decomposition as a whole is not fixed, it does not reflect all the complexity of reality and is not unique. Moreover, any other logical decomposition could be considered. The goal is to simplify the presentation to better understand the reality.

## 3. Choice of respondents

This survey concerned children of Moroccan immigrants whose age varies from 13 to 22 years. It was conducted with:

- Families with children in school or who have dropped out;
- Students pursuing their studies;
- Students who have left school.

It should be noted that some families did not respond favorably to our expectations, as some institutions did not even want to read the content of the questionnaire.

## 4. Location of the survey

The department of Yvelines as well as Trocadero and the suburbs of Paris were selected for reasons of convenience and means.

Indeed, the Moroccan school population is more represented in these regions of high immigration, because of the existence of a very large number of companies that employ abundant foreign labor in addition to the headquarters of our embassy in France.

We wish to point out the support of the members of our family living in Yvelines which has been of great help to us since no subsidy was granted to us for transport or stay during our multiple trips to France.

## 5. Survey field

We have had problems with some high school principals for direct contact with students in class and for a consultation of their school textbooks. This reluctance is due to bad circumstances:

- Beginning of schooling.
- Period of bombings.

These obstacles did not prevent us from continuing and persevering to determine the scope of our investigation. We visited the following places:

- High schools;
- Colleges;
- Youth associations;
- Socio-cultural centers;
- Households of Moroccan immigrant families (home visits).

On this occasion, let us point out the reluctance of some administrators responsible for manifest racism that did not allow us to access classes in high schools and colleges for direct contact with students and consultation of school textbooks. This resulted in the narrowing of the
scope of our investigation. With regard to the selected high schools:
-Lycée Saint Exupéry in Mantes la Jolie;
-Lycée Jean Rostand in Mantes la Jolie;
-Vaucanson Professional High School in Les Mureaux.
Indeed, these are characterized by the presence of a large number of Moroccans, as well as the existence of the Renault and Peugeot houses employing abundant Moroccan labor.

## 6. Sample size

600 copies of the questionnaire were distributed. Our desire was to get as many people as possible to have a comprehensive and representative sample and to be able to collate the results of the survey.

Unfortunately, only $56 \%$ were returned, of which 24 questionnaires were rejected and only $52 \%$ were retained thus narrowing the size of our sample without diminishing the richness of its information.

We give below the number of questionnaires delivered and returned in each city.

| City | Number of questionnaires |  |
| :--- | :---: | :---: |
|  | Distributed | Returned |
| Poissy | 148 | 114 |
| Les Mureaux | 60 | 10 |
| Mantes la Jolie | 200 | 105 |
| Achères | 46 | 37 |
| Chanteloup | 10 | 9 |
| S.G. en Laye | 10 | 3 |
| Trocadéro | 70 | 44 |
| Limay | 20 | 0 |
| Others | 36 | 13 |
| Total | $\mathbf{6 0 0}$ | $\mathbf{3 3 5}$ |

## 7. Receipt of questionnaires

Of the 600 copies distributed, only 335 questionnaires were retrieved. As noted earlier, some students and directors of establishments have had uncivilized behavior sometimes even throwing us the questionnaire.

We are very pleased to report the positive support of our embassy in Paris and our consulate in Pontoise for their intervention with the Prefect of Yvelines in Versailles for an extension of the residence visa and the incentive to answer the questionnaires.

During the collection and taking advantage of the grouping of children at the exit of schools, or in front of the doors of their homes and in the socio-cultural centers, some questionnaires were completed thus making it possible to enrich the research.

## 8. Data gathering

With regard to data collection, the survey took place during the period from 24/08/1995 to 11/11/1995. On the whole, all the objectives set were achieved despite the many difficulties encountered.

## 9. Data processing

The data processing took place in two steps:

### 9.1 Computer processing

It has been realized in several phases:

- Coding of variables;
- Coherence test between variables;
- Making entry masks;
- Data entry;
- Clearance of files (coherence tests and code validity program);
- Tabulation program.

Data exploitation was performed on the statistical processing software EXCEL, SPSS, STATA and LIMDEP.

### 9.2 Results and statistical tests

The results of the exploitation allowed us to reach the following series:

- The marginalized;
- Two-dimensional cross-tabulations;
- The ratios;
- Statistical tests: Fisher, Student et Khi²;
- Correlation tests;
- Logit models.

All these results have been analyzed and interpreted. In terms of content analysis for qualitative questions, we elaborate summary sheets to identify key ideas for each theme.

## III. PRESENTATION OF THE RETAINED ANALYSIS

In this section, we present the rankings operated on the variables and data processing methods implemented in the following sections.

## 1. The ranking of variables

The data extracted from the questionnaires have been grouped into five homogeneous sets which are as follows:

- Individual variables,
- Family variables,
- Environment variables,
- Behavior variables,
- School variables.

This decomposition as a whole is not fixed, it does not reflect all the complexity of reality and is not unique. Moreover any other logical decomposition could be considered. The goal is to simplify the presentation to better understand the reality.

## 2. The methods used in statistical processing

The approach consists of using the data collected on young immigrants to identify the most significant econometric models (from the statistical, economic, social and other points of view). The search for the most relevant models requires the elimination of colinear variables. Thus, among two collinear variables, the one that is the least correlated with the variable to explain, namely the social integration of the children of Moroccan immigrants in France, is discarded.

On the other hand, analyzes are occasionally supplemented and explained by the crossing of the rival variables within double-entry tables.

Finally, note that the interpretation of the results found is done by reference:

- To the results of the various statistical treatments performed on the data of our sample,
- To the theoretical contributions cited in the bibliography that preceded the development of this work,
- To the results of empirical work realized by some researchers and organizations specialized in the subject.


## III. DETERMINANTS OF THE SOCIAL INSERTION OF MOROCCAN IMMIGRANTS IN FRANCE

The main aim of any education system is to improve its own efficiency and to improve the social integration of young people that society is responsible for training.

One of the essential conditions for social integration is socio-professional integration, but if we consider that school success is probably the generally necessary condition of social success, it is certainly not the sufficient condition; in other words, somewhat paradoxical situations, or even perverse effects, can lead to academic success becoming a factor of social and socio-professional inequalities aggravation.

Insertion is the essential aspect of the immigrant question, neglected for too long. Insertion requires successful school, housing and vocational training policies.

1. Definition of the insertion variable and presentation of the explanatory variables

Using theoretical analysis and survey data we were able to define the insertion variable. Indeed, a student is inserted if:

- he succeeds scholastically, that is, his average is greater than or equal to 10 ;
- the number of rooms in his accommodation is greater than or equal to three;
- he has a professional ambition.

Among the different cohorts we selected the bac, because the students belonging to the other cohorts $\left(\mathrm{CM}_{2}\right.$,

6th, second) are not sure of their future ambitions. Indeed, a pupil in $\mathrm{CM}_{2}$, for instance, biases the information concerning the professional ambition because all the students of this age prefer the profession of doctor or teacher by against a bac pupil is more certain of his choice.

It is therefore to explain the social integration of Moroccan immigrants in France. Due to the dichotomous character of the dependent variable, the estimated equation for the student I becomes:
Insert $=\alpha_{0}+\alpha_{1} \mathrm{X}_{1 \mathrm{i}}+\alpha_{2} \mathrm{X}_{2 \mathrm{i}}+\alpha_{3} \mathrm{X}_{3 \mathrm{i}}+\alpha_{4} \mathrm{X}_{4 \mathrm{i}}+\alpha_{5} \mathrm{X}_{5 \mathrm{i}}+\mu_{\mathrm{i}}$ Wherein

$$
\text { Insert }\left\{\begin{array}{l}
=1 \text { if: } \mathrm{RS}=1, \text { the number of rooms } \\
\text { housing } \geq 3 \text { and the student has a } \\
\text { professional ambition } \\
=0 \text { otherwise }
\end{array}\right.
$$

And
$\mathrm{x}_{1 \mathrm{i}}$ is the set of personal variables,
$\mathrm{x}_{2 \mathrm{i}}$ is the set of family variables,
$\mathrm{x}_{3 \mathrm{i}}$ is the set of environment variables,
$\mathrm{x}_{4 \mathrm{i}}$ is the set of behavior variables,
$\mathrm{x}_{5 \mathrm{i}}$ is the set of school variables.
$\mu_{i}$ is the element of the random error vector whose probability distribution follows a logistic form.

## 2. Analysis of the results

The results are overall satisfactory. The coefficients of the variables are in the majority of cases significant at the usual levels of confidence and their sign does not contravene reality.

The numerical values of the coefficients have no direct interpretation, however, their sign and the fact that they are significant or not are interpretable. The sign makes it possible to know if the probability of being inserted is an increasing or decreasing function of the corresponding explanatory variable.

The non-significance of some coefficients makes it possible to identify variables that do not perfectly explain insertion or non-insertion.

### 2.1. Impact of individual variables

Personal characteristics can play a determining role in explaining insertion.

At first, gender, age and school entry age are characteristics negatively related to insertion. But only the variable age is a bit significant. Indeed, these results reflect that girls fit more easily than boys and the higher the age of the student and the school entry age are, the more difficult the pupil finds it to integrate.

In a second step, the age of arrival in France squared is significantly negative. As the following graph shows, from the age of 18 , students will find it difficult to integrate socially into French society.


Fig. 1: Graph representing the insertion discrimination threshold

### 2.2. Impact of family variables

The family environment appears as a powerful determinant of the integration of Moroccan immigrant students in France. Thus, the variables measuring the family environment have positive coefficients but only the rank is very significant. According to these results, the more siblings number (weakly significant) and the rank of the pupil in the family increase the less he encounters insertion problems.

### 2.3. Impact of environment variables

The coefficients of the environment variables are sometimes positive and sometimes negative, and show a good coherence. Variables measuring family income such as housing type and socio-professional category (less convincing) are a decreasing function of insertion. Students who live other than the pavilions and the HLMs find it much more difficult to fit in.

The language spoken at home acts negatively. In fact, speaking Arabic or Berber at home does not make it easier for young people to be inserted. On the other hand, the number of siblings has an impact consistent since the pupil can only fit in with a limited number of brothers and sisters without a level of education, in other words the number of siblings with no education can have a deleterious effect on the insertion.

The variable supposed to measure the impact of the family situation on the social integration of young immigrants is relevant. Note that the presence of stay-athome parents is important, and that the more comfortable the children are between their families, the easier they fit in.

As for the family problems, they can only aggravate the social situation of the pupils because of the negative sign of the coefficient relative to this variable.

In accordance with the various studies mentioned above, our study simultaneously takes into account the indicators that identify the change of place of residence in order to evaluate its significant impact on the insertion. Estimates show that one or more changes in place of residence from city to city or within the same city disrupts the student's integration.

### 2.4. Impact of behavior variables

Certain behaviors can have favorable or unfavorable effects on the social integration of immigrants in French society. Our econometric results show that the consumption of cigarettes, alcohol and drugs hinders the insertion. Similarly, part-time work is significantly negative because the less time students spend on searching for part-time work, the more the likelihood of being inserted increase.

On the other hand, the favorable effect of future career ambitions among young immigrants favors their integration.

Regional variables measuring where the student's family lives have coefficients that are not easy to interpret. It is the young people who live in Mantes la Jolie who have the strongest probability to fit in, followed by those who live in Poissy and finally those who live in Achères, Chanteloup, and Saint-Germain in Laye relatively to Trocadéro, Nanterre, Defense and Creil.

### 2.5. Impact of school variables

Overall, more favorable school variables favor insertion. It should be noted, however, that the problems between the student and his teachers are considered perfectly exogenous since this variable explains statistically the insertion of young immigrants, on the other hand the student's satisfaction of his orientation has a negative but a bit significant effect. This means that the more the student is less satisfied with his orientation, the more he can not fit in.
3. Distributions of predicted and observed values of school success

The table below shows the distributions of the predicted and observed values of the decision to fit for the entire sample. The model correctly identifies 18 of the 31 young immigrants who do not fit in and 275 of the 280 young immigrants who have become part of French society.
Table. 1: Distribution of the predicted and observed values of the decision to fit

|  | Total | 0 | 1 |
| :---: | :---: | :---: | :---: |
| Total | 311 | 27 | 284 |
| 0 | 31 | 18 | 13 |
| 1 | 280 | 9 | 275 |
|  |  |  |  |

Thus, our results are more successful in clarifying the impact of the decision to insert than in predicting the behavior of young immigrants.

## V. LESSONS LEARNED FROM TREATMENTS AND CONCLUSIONS TAKEN FROM THE ECONOMETRIC MODEL

From our sample, it appears that school and work integration is covered differently by boys and girls. Considered as forming a system and observed over time, the ambitions, educational and professional success of young immigrants confirm previous findings.

Note that we are in this case at the end of a study cycle and that our results may also reflect, in addition to differences in family residence, the tendency of young immigrants to insert themselves after obtaining their Baccalaureate.

The language spoken at home and the socio-professional family background exert an important influence on integration into French society. In addition, education is often the main instrument of social mobility in the eyes of family members.

These results constitute new arguments in favor of theses on the fidelity of the French school to its mission of insertion of the populations of foreign origin and the mobilization of the young people (and probably of their families) around the professional insertion thanks to extensive schooling (Schnapper, 1991).

The supervision of the student within his family, measured by the number of brothers and sisters living under the same roof, implies a greater relaxation of the insertion constraint. That being said, it must be admitted that the level of meaning is not always perfectly convincing, and that baccalaureate students are more sensitive to these variables.

It should be noted that a stable and problem-free family situation cannot favor the social integration of young people.

The students' work is a sign of a greater propensity to not fit in. Early contact with the labor market encourages school dropout. These effects may well offset, in the long run, through the profitability of education, the short-term benefits of being able to hold a job and, above all, productivity or higher wages.

Finally, children born in France, whose parents are educated, whose profession is more prestigious and the situation is more stable, and who have fewer children, continue their studies for a long time. This undeniably allows a good integration into the French society: the school, the cultural practices acquired in childhood, guide the pupils to the professions knowing the greatest expansion.

## VI. CONCLUSION

Academic success appears as a generally necessary condition for social success, but it is certainly not a sufficient condition. In other words, there are other insertion conditions that relate to employment and housing.

It is established that the family plays a vital role in the child's schooling and is a powerful determinant of social success. For the children of immigrants, the interactions are even more essential: the school, in order to fulfill its educational mission and play its full role as a vector for the insertion of children, must imperatively rely on the will of insertion of parents.

The social characteristics of the parents before emigration, the existence of a favorable attitude to the integration, exert a significant weight in the explanation of the educational success of their children, as well as the construction of migratory projects where the school occupies a prominent place.

In such a context, the pupil's adaptation problems are solved or in the process of being solved and this is the most general case. On the other hand, when the family lives on its own and experiences a feeling of marginalization, there is a risk of tensions between the child and the family or between the child and the school, and by then his schooling is risked too.

How, therefore, motivate parents to schooling their children and make them understand the importance of family involvement in school success and future social integration in French society.

Going so far as to say that this question is of considerable importance for the educational success and social integration of the children of Moroccan immigrants in France, there is only one step and that certainly future research will make it possible to cross.

## REFERENCES

[1] Hajila, R. (2018). " La statistique : la partie cachée du patrimoine culturel. Cours et exercices corrigés ". Nouvelle édition, Tome 1/2018 (ISBN : 978-9954-672-54-9), $n^{\circ}$ du dépôt légal : 2018MO2913.
[2] R. Hajila (2018). "Les déterminants de l'insertion et de la réussite scolaire des enfants d'immigrés marocaine en France ". Séminaire pour les étudiants en S2 du Master Spécialisé " Migrations et sociétés ", le 03 avril 2018, faculté des sciences juridiques, économiques et sociales, Rabat, Maroc. Published in Academia.edu.
[3] R. Hajila (2013). "Jeunes marocains résidants à l'étranger : les raisons de leur échec ". L'observateur du Maroc et d'Afrique du 06 au 12 septembre 2013, pp. 57.
[4] R. Hajila (2013). " Jeunes immigrés marocains en France : les raisons de leur réussite ". L'observateur du Maroc et d'Afrique du 12 au 18 juillet 2013, pp. 52.
[5] Hajila, R. (2013). " La statistique : la partie cachée du patrimoine culturel. Cours et exercices corrigés ". Tome 1 (ISBN : 978-9954-32-626-8), $\mathrm{n}^{\circ}$ du dépôt légal : 2013MO2792.
[6] Hajila, R. (2003). " Insertion et réussite scolaire : cas de la communauté marocaine en France ". Thèse pour l'obtention du doctorat ès-sciences économiques. Université Med V, Rabat, Maroc.
[7] Hajila, R. (1998). " Les déterminants des résultats et abandons scolaires des enfants d'immigrés marocains en France ". Mémoire pour l'obtention du diplôme d'études supérieures ès-sciences économiques. Université Med V, Rabat, Maroc.
[8] Ministère de l'éducation nationale et de la jeunesse, 1989, " Loi d'orientation sur l'éducation $n^{\circ}$ 89-486", Paris.

