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Did policy reforms really decrease inequalities of access to French higher education ? A comparison between Generation 1998 and 2010¹.

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Abstract :

Since the 1980s, equal opportunities were at the heart of all educational reforms and the fight against inequalities became the priority whether they are geographical, social or cultural. Starting from this point, the aim of this work is to analyze if the various reforms allowed a democratization of higher studies, especially with regard to prestigious courses.

We use a multinomial logistic regression to compare the Cereq database *Generation* 1998 and 2010.

Our results show that in spite of a reduction of some inequalities, access to various areas of higher education and more particularly access to prestigious and selective training courses, remains affected by inequalities, in particular by gender and social inequalities.

Keywords: Access, France, Higher Education, Inequalities

JEL classification: C25, I24, I28

¹ I wish to thank Dorothée Peitzmann for her help with the English version of this work. The responsibility of the final version remains, of course, with the author.

Inequalities are at the center of political concerns in almost all countries.

In France, as early as 1792, it was proposed to open primary schools to all children. During the XIXth century, successive governments strived to improve primary education and to develop female education (Guizot law, 1833; Falloux law, 1850; Duruy law, 1867).

At the end of the XIXth, the Ferry Laws made education free, compulsory and secular. Education became a social mobility for children with farming and working background. At the end of the 1920s, the secondary school also became free and until the end of the 1960s it underwent many reforms set up to face massification of schooling (Berthoin reform, 1959; Fouchet reform, 1963-1966). The 1960s also showed an important draft in favor of co-education, which was eventually implemented at all levels of the French education system during the 1970s (Haby law, 1975).

However, despite a quantitative democratization (Prost, 1986) due to the massification of schooling (Lévy-Garboua, 1976), school achievement and the access to higher levels of education remain highly correlated to social origin (Crahay, 2000). Indeed, increased access to education first benefits to those who belong to the most advantaged groups, until they reach an access rate equal to 100%; the most disadvantaged groups will only benefit from it if the expansion continues. This process is generally called «Maximally Maintained Inequality» (Raftery & Hout, 1993). Thus, the decrease of inequalities highly depends on the strategic behavior of individuals with a higher background when they select their school. (Lucas, 2001; Ball et alii, 2002). This problem has been pointed out by Passeron and Bourdieu as early as 1964. They underlined that the share of the most disadvantaged groups in higher education remained very low. According to them, this is due to an educative system which reproduces social inequalities and maintains children in their position inside a social hierarchy. Thus, there is a cumulative and sustainable effect of inequalities during schooling (Duru-Bellat, 2003 ; Jaoul-Grammare, 2010, 2014) in such a way that inequalities of access of higher education come from prior schooling. Moreover, they are magnified by the duality of the French higher education system –universities and elite schools.

Thus, since the 1980s, equal opportunities were at the heart of all educational reforms and the fight against inequalities became the priority whether they are geographical, social or cultural.

Starting from this point, the aim of this work is to analyze if the various reforms allowed a democratization of higher studies, especially as far as prestigious courses are concerned. We will focus on five vectors of inequalities: age, gender, cultural origin, geographical origin, and social origin.

We try to answer this question in three parts. We first describe the special features of the French Higher Education system and the reforms set up in favor of equal opportunities since the end of the 1970s (I). We then present the database and the methodology used (II). In the last part, the results and conclusions are shown (III).

1. The French system of higher education and the reforms

a. The French system of higher education or...the two systems of French higher education

The French higher education system is characterized by a dual system: universities and "elite schools" (Appendix 1). Universities are scientific, cultural and professional public institutions and they offer a good standard of education in all disciplines at a relatively modest annual cost. The awarded qualifications are harmonized with those of other European countries (LMD system). They also include internal institutions and schools which offer technical and short-term training (2 or 3 years) where the selection procedure for admission is rather strict. Major public institutions and elite schools (*"les grandes écoles"*) offer five-year courses including two years of initial preparation in preparatory classes ("Classes Préparatoires aux Grandes Ecoles", CPGE) are famous for their competitive selection entry exams. Indeed, even if these latter only cover 4% of students (Table 1), we often speak of two divided and ordered higher education systems.

 Table 1. Distribution of students in French higher education in 2014 (in thousands; France+French Overseas Departments)

Establishment	Universities	Health	Engineering	DUT ²	BTS ³	CPGE ⁴	Others	Total
		studies	schools					
Nb.	1053	284.7	141.6	116.4	255.2	95	524.8	2470.7
%	43%	12%	6%	5%	10%	4%	21%	100%

Source of data: RERS 2015

² DUT: Diploma awarded after 2-year technical studies; it depends on universities.

³ BTS: Diploma awarded after 2-year technical studies; it depends on high schools.

⁴ CPGE: Post-secondary preparatory school.

This feature of the French education system is at the root of many inequalities that policy tries hard to fight against. Indeed, in 2014, only 6% of the students in post-secondary preparatory schools have a father who is a worker, whereas 50% have a father who is an executive (RERS, 2015). If we have a look at the nationality of the students, we can see that in post-secondary preparatory schools, only 4% are international students (RERS, 2015).

These inequalities don't appear in higher education; they come from prior schooling. Indeed, the starting point of inequalities observed in higher education takes place already in secondary education (MEN, 2012) : 41% of those children with an executive father have a diploma level equal to "bac+5" (Master degree level) compared to 4% whose father is an unskilled worker.

This phenomenon has been underlined by Bourdieu and Passeron since 1964. According to them, educational inequalities result from the functioning of the school: school is a tool of social reproduction which repeats social inequalities. It does not favor equal opportunities but reinforces inequalities. So, since almost 40 years, the fight against inequalities became the top priority of all educational reforms.

b. To fight against inequalities in French education

From 1975 onwards, the main objective of policy reforms is to offer the same opportunities to all individuals. In order to provide all the children with the same secondary training and to avoid precocious course choices, René Haby (Haby law, 1975) proposed to postpone the course choice after four years in secondary school instead of two. With the notion of "mixed ability high school", this law represented the result of a process of unification and democratization of the educational system. However, this law did not succeed in creating a unique educational background because the various choices of studies at the entrance to the eighth grade acted as a kind of filter.

Nevertheless, the "mixed ability high school"⁵ aroused a general dissatisfaction and new propositions were expected in order to promote democratization and fight against schooling failure.

At the beginning of the 80s, the Savary law (1981) created the "Educational Priority Areas" (*ZEP*) in order to fight against geographical inequalities. School establishments located in these areas receive additional means to help them fight against school failure due to

⁵ Standardized secondary education for all pupils regardless of their level of achievement.

social inequalities. The aim is to "*reduce [social] inequalities by a selective strengthening of educational action in areas and in social backgrounds where the school failure rate is the highest*" (Circular n° 81-238; 01/07/1981).

In 1990, the first relaunch of the priority education strengthened the educational policy of the ZEP and put an emphasis on academic achievement. "The main objective of this policy is to obtain a significant improvement in the academic achievement of pupils, especially the most underprivileged » (Circular n° 90.028 ; 01/02/1990). Priority education was linked to Urban Affairs. The second relaunch (1997) created the "Education Priority Networks" (REP^6) which became in 2006, the "Ambition-Success Networks" (RAR^7) or "Academic Success Network" (RRS^8). In 2010-2011, they have been replaced by the "School College High school Ambition Innovation Success" ($\acute{E}CLAIR^9$) which took the difficulties related to the school climate as violence into account. These latter finally disappeared in 2014 in favor of the new "Education Priority Network" (REP) and the "Reinforced Education Priority Network" ($REP+^{10}$).

In 1989, the Jospin law largely modified the educational system. Its objective was to fight against school exclusion and to allow all graduates to access higher studies. "*Education is the first national priority. The public service of education is designed and organized according to the pupils and students. It contributes to equal opportunities* (...) » (Article 1, Jospin law 10/7/1989). This law thus proposed that, within the following ten years, 80% of an age group would pass the baccalaureate examinations and all pupils would get at least a professional qualification. This law also aimed at fighting against geographical inequalities and school exclusion.

Despite all these efforts, the secondary school did not become as a "mixed ability high school" but remained as unchanging and unfair as before and it underwent a new reform in 1993 (Bayrou law). Schooling backgrounds have been diversified especially for those pupils who were struggling. The secondary school system was again modified by Ségolène Royal (at that time 'Appointed Minister to secondary Education') who wanted to help overcome precocious course choices (1999), then again by Jack Lang (2001) whose aim was to improve the supervision of the cultural diversity of the pupils and thus fight against failure at school.

⁶ Réseau d'Education Prioritaire

⁷ Réseaux Ambition Réussite

⁸ Réseau de Réussite Scolaire

⁹ École Collège Lycée pour l'Ambition, l'Innovation et la Réussite

¹⁰ Réseau d'Education Prioritaire Renforcé

In 1998, Claude Allègre proposed a high-school reform emphasizing on "the equality in the diversity". Even if teachers accused him of creating a two-tiered system to the detriment of underprivileged pupils, the reform entered into force in 2002. Simultaneously and with the aim to build a common European higher education system in harmony with the Bologna process and the LMD system, Allègre proposed to coincide European university system. One of the objectives of the LMD reform (2002-2006) is to fight against all inequalities: "*The public service of higher education contributes* (...) *to fight against discrimination, to the reduction of cultural or social inequalities and to the achievement of equality between men and women* (...). *To this end, it ensures inclusion of individuals, without distinction of origin, social background and health condition* (...) » (French Education Code, 2013; modified articles of 2000 and 2006).

In 2005, the Fillon law for "*the future of school*" aimed at raising the level of education of the young French by introducing four objectives: the success of all the young French people, the improvement of language teaching, the assurance of equal opportunities, and the integration of young people in the labor market. In order to ensure equal opportunities, schools guarantee the acquisition of a "*common core of knowledge*" and the educational system has been given many objectives, for instance, at the end of the schooling, 100% of the pupils should have passed a recognized degree; 80% of an age group should have passed a university degree.

The following year (2006), the law for *Equal opportunities* proposed by Jean-Louis Borloo, Minister of Employment at that time, introduced various measures in favor of employment and education. The Borloo law created a "charter of work-experience" with the objective to improve labor market integration of students.

One of the objectives of the law concerning the "*relaxing of the schooling map*" (2007) is to favor equal opportunities and social diversity in schools. Indeed, until this date, pupils went to secondary schools which corresponded to his/her home address. This system was criticized because of a lack of freedom for families in selecting their preferred school but also because it was considered responsible for the increase in the number of school segregation cases.

By the end of 2008, the charter of the "*Cordées de la réussite*" was set up within the framework of "*Dynamique Espoirs Banlieues*", in order to promote equal opportunities and success when integrating higher education courses. It created a partnership between elite schools of higher education and high schools from underprivileged areas. It is aimed at

students with sufficient motivation and capabilities to integrate prestigious classes, the objective being to reinforce social equity with regard to these training courses.

Despite all these reforms, "*priority education*" has never been reexamined thirty years after its creation by Alain Savary, "*the successive measures piled up, losing little by little in efficiency*" (MEN, 2015). In fact deep reforms remain missing whereas we observe a succession of little modifications, in the short term, without real effects (Thomas, 2014).

In this paper, our objective is to analyze the effects of these various reforms on access to higher education. To answer this question, we use the Céreq databases 'Génération 1998' and 'Génération 2010' and we estimate a multinomial logistic regression.

2. Data and methodology

The data used here come from the CEREQ¹¹ general databases "Generation 98" and "Generation 2010". They consist in longitudinal investigations with regard to the first years of working life of a number of young people, who left the educational system in 1998 and 2010 respectively. The investigation offers indicators on schooling and insertion. In 1998, the database listed 55,000 individuals; and 33,000 in 2010. Among these databases, we have selected those persons with a training level either equal to or higher than $IV+^{12}$.

a. Measurement of inequalities

Per individual, we have selected the variables listed in Table 2.

The orientation chosen after the baccalaureate is split up in 5 choices: *University*; *IUT* (Diplomas awarded after 2-year technical studies; it depends on university); *BTS* (Diplomas awarded after 2-year technical studies; it depends on secondary school); *CPGE* (post-secondary preparatory school), Health and social training (*HST*) and Medical studies (*PCEM*).

¹¹ CEREQ (Centre d'Etudes et de Recherche sur les Qualifications) is a French public establishment which depends upon the French Ministry of National Education, the Ministry of Economy, Industry and Employment and the Ministry of Labor, Social Relations, Family, Solidarity and Towns. It gives advice in educational policies and is an expert in the production of statistical series, at regional and national levels, as well as for quantitative research on education, insertion and employment. Among the statistics produced by the CEREQ, we find the investigations called « Generation ».

¹² Level 4 = Baccalaureate; Level 4+ = 1 year after the baccalaureate; Level 3 = 2 years after the baccalaureate; Level 2 = Both 3 and 4 years after the baccalaureate; Level 1 = 5 years and more after the baccalaureate.

We have not considered business and engineering schools since they represent less than 1% of these individuals.

In order to measure inequalities, we take into account their age and 4 vectors of inequalities: their gender and geographical, social and cultural origins.

The geographical origin is estimated by the type of the geographical area from which the individual comes when he/she enters higher education. It can take 3 values: urban center, suburb and rural area (the French overseas departments are included).

The social origin is estimated by the occupation of the father. If the information is missing, we estimate it with the mother's one. We have only considered 2 possibilities: the father is an executive or not.

The cultural origin is estimated by the place of birth of the father. If the information is missing, we estimate it with the mother's one. We have retained 2 modalities: France and abroad.

Variable	Modalities				
Orientation after the baccalaureate	University / IUT / BTS / CPGE / FSS / PCEM				
Age	-				
Gender	Man/Woman				
Geographical origin	Urban center/Suburb/Rural area and overseas departments				
Social origin	Executive / Not executive				
Cultural origin	France / Abroad				

Table 2. Variables and modalities selected in the analysis

b. Methodology

Problems of inequalities are very difficult to understand and depending on the populations to which evaluation methods are applied, it sometimes happens that results allow for different conclusions (Selz & Vallet, 2006): when odds-ratios are applied to the whole population, inequalities of access to diploma according to their social origin seem to have decreased; but if we reduce the sample to a given degree, inequalities remain stable (Blossfeld & Shavit, 1993).

In order to measure the impact of various inequalities on the course choice in higher education and, especially the access to prestigious courses, we have estimated for each year - 1998 and 2010- a multinomial logistic regression. It's the generalization of the binary regression to a dependent variable Y which can take k values Y = 0, 1, ..., k-1.

The objective is to analyze the effect of many variables X on the choice of Y. The estimation of the model depends on the choice of a reference situation for Y, Y=0.

The model is written as follows: $Ln\left(\frac{P(Y=i/X)}{P(Y=0/X)}\right) = \alpha_i + b_i(X) = \alpha_i + \beta_{ij}X_j$

This is equivalent to choose Y=0 as the reference and to estimate k-1 logistic binary regressions.

As $\sum_{i} P(Y = i) = 1$, the model becomes: $P(Y = 0/X) = \frac{1}{1 + exp[\alpha_1 + b_1(X)] + \dots + exp[\alpha_{k-1} + b_{k-1}(X)]} = \frac{1}{1 + \sum_{i=1}^{k-1} exp[\alpha_i + b_i(X)]}$

$$P(Y = j/X) = \frac{exp[\alpha_j + b_j(X)]}{1 + \sum_{i=1}^{k-1} exp[\alpha_i + b_i(X)]}, \quad j=1,..., k-1$$

Finally:
$$(Y = j/X) = \frac{exp[\alpha_j + b_j(X)]}{\sum_{i=0}^{k-1} exp[\alpha_i + b_i(X)]}$$
, j=0,..., k-1 and $\alpha_0 = \beta_{0l} = 0$

Here, we estimate the effect of all variables Xj (age, gender, social, cultural and geographical origins) on the course choice at the time of entering higher education. For the variables Xj, the reference modalities are: male, urban center, France, not executive. For the dependent variable, the reference is the university.

3. **Results**

a. Descriptive statistics

The distribution of these samples knew some evolution between 1998 and 2010 (Table 3). First of all, the distribution of individuals in the various training courses has changed: if the share remained relatively stable in short studies-*IUT*, it knew a decrease in university, short studies-*BTS* and an increase in Health and social training (*HST*), in medical studies and in *CPGE* (elite schools). The increase in Health and social training and in medical studies could be explained with the increase of the restricted intake in medical studies. Indeed, in France since 1972, medical studies are regulated with a restricted intake in order to control the number of students authorized to continue their studies after the first year. From 1998 to 2010, this number doubled (from 3,700 to 7,400). On the contrary, the increase of the number of students in elite schools could be read as a decrease of inequalities.

If we look at the vectors of inequalities, we also observe some evolution, especially as far as the geographical and social ones are concerned. For the first, we observe an improvement with a more consistent distribution which seems to benefit elite schools. Indeed the geographical origin of students in these schools appears more diversified. Whereas social inequalities seem to have increased and to affect each course in the same way.

		1998	2010
Course	BTS	24.6	21.8
	CPGE	9.1	13.4
	HST	4.7	6.5
	IUT	11.6	11.1
	PCEM	1.9	7.2
	University	48.0	40.0
Gender	Female	55.6	55.1
	Male	44.4	44.9
Geographical origin	Suburb	15.5	36.8
	Rural area	11.3	27.3
	Urban center	73.1	35.9
Cultural origin	Abroad	13.0	14.7
	France	87.0	85.3
Social origin	Executive	27.7	34.4
	Not executive	72.3	65.6
Age	Minimum	16	13
	Maximum	35	35
	Median	23	23
	Mean	23.39	23.58

Table 3. Description of 1998 and 2010 samples

1998	BTS	CPGE	HST	IUT	PCEM	University	Total
Female	44.9	47.0	88.4	38.0	55.4	63.8	55.6
Male	55.1	53.0	11.6	62.0	44.6	36.2	44.4
Suburb	22.7	8.4	18.7	15.0	16.5	13.0	15.5
Rural area	16.5	5.4	14.8	12.8	8.1	9.2	11.3
Urban Center	60.9	86.2	66.5	72.2	75.4	77.7	73.1
Abroad	14.2	9.3	7.6	10.6	12.9	14.1	13.0
France	85.8	90.7	92.4	89.4	87.1	85.9	87.0
Executive	16.8	52.2	22.2	24.7	25.0	29.9	27.7
Not executive	83.2	47.8	77.8	75.3	75.0	70.1	72.3
2010	BTS	CPGE	HST	IUT	PCEM	University	Total
Female	42.6	50.7	87.5	34.8	74.1	60.3	55.1
Male	57.4	49.3	12.5	65.2	25.9	39.7	44.9
Suburb	36.7	37.6	35.0	35.2	37.3	37.3	36.8
Rural area	33.7	22.5	30.3	31.2	24.8	24.2	27.3
Urban center	29.6	39.9	34.6	33.6	37.9	38.5	35.9
Abroad	15.0	11.5	8.5	14.9	14.8	16.5	14.7
France	85.0	88.5	91.5	85.1	85.2	83.5	85.3
Executive	20.6	55 2	27.0	22.0	13.6	35.1	34.4
	20.0	55.5	27.0	52.0	45.0	55.1	54.4

Table 4. Distribution of individuals in higher education according to the source of inequality (%)

b. Estimations

In comparison to the university, the age plays a negative role especially for short technical studies as well as health and social studies (Table 5). Paradoxically, it has a little positive impact upon selective classes such as medical studies or elite schools. These impacts are slightly identical for both generations.

In spite of a reduction of the odd-ratios, boys (OR 1.8 to 1.4) and people with French parents (OR decreases from 1.5 to 1.3) are likely to integrate a prestigious course rather than the university. Gender inequalities have decreased but they are still present in short technical studies (from 2.6 to 2.2 in BTS and from 333 to 2.9 in IUT), though they have remained favorable to women in health and social studies (from 3.9 to 4.5), which is of course due to the fact that these studies concern female trainings. Inequalities have switched in medical studies: whereas in 1998 (OR = 1.4) they were favorable to men, they became favorable to women in 2010 (OR = 1.9).

Concerning the social inequalities, individuals with a higher social background always had twice the chance of accessing post-secondary preparatory schools than going to the university. Social inequalities have increased in medical studies and short technical studies (*IUT*): they had formerly been favorable to underprivileged people and have now become so to individuals with a higher social background. In short technical studies (*BTS*) and health studies, social inequalities have always been in favor of underprivileged people (OR respectively equals to 1.26 and 1.6).

On the whole, cultural inequalities have decreased (the OR decreased or became nonsignificant) except for health and social studies with an odd ratio increase from 1.8 to 2.2 in favor of French students.

Concerning the geographical inequalities, they have become non-significant for almost all courses and especially for post-secondary preparatory schools. However, we cannot say that they have really decreased because in 1998 medical studies as well as health and social studies were in favor of individuals who came from the suburbs (ORs respectively equal to 1,4 and 1,3), whereas in 2010 this advantage disappeared. In short technical studies (BTS) the advantage of students who come from the suburban and rural areas has also diminished (OR from 1.7 to 1.2 and 1.4).

		Esti	Estimations for 1998			Estimations for 2010			
		В	Signif.	odd-ratio (OR)	В	Signif.	odd-ratio (OR)		
BTS	Constante	8.813	***		8.916	***			
	Age	-0.394	***	0.674	-0.399	***	0.671		
	[gender=Female]	-0.955	***	0.385	-0.778	***	0.459		
	[gender=male]	ref.							
	[geog=Suburb]	0.550	***	1.733	0.159	***	1.172		
	[geog=Rural area]	0.512	***	1.669	0.369	***	1.446		
	[geog=Urban center]	ref.							
	[cult=abroad]	0.099	**	1.104	-0.085	ns	0.918		
	[cult=France]	ref.							
	[social=Executive]	-0.487	***	0.615	-0.503	***	0.605		
	[social=Not executive]	ref.							
PGE	Constante	-2.711	***		-2.982	***			
	Age	0.049	***	1.050	0.073	***	1.075		
	[gender=Female]	-0.606	***	0.546	-0.340	***	0.712		
	[gender=male]	ref.							
	[geog=Suburb]	-0.448	***	0.639	0.008	ns	1.008		
	[geog=Rural area]	-0.439	***	0.645	0.003	ns	1.003		
	[geog=Urban center]	ref.							
	[cult=abroad]	-0.412	***	0.662	-0.309	***	0.734		
	[cult=France]	ref.							
	[social=Executive]	0.804	***	2.234	0.733	***	2.081		
	[social=Not executive]	ref.							
IST	Constante	0.008	Ns		2.444	***			
	Age	-0.145	***	0.865	-0.226	***	0.798		
	[gender=Female]	1.365	***	3.914	1.493	***	4.451		
	[gender=male]	ref.							
	[geog=Suburb]	0.369	***	1.446	0.007	ns	1.007		
	[geog=Rural area]	0.399	***	1.491	0.114	ns	1.121		
	[geog=Urban center]	ref.							
	[cult=abroad]	-0.610	***	0.544	-0.785	***	0.456		
	[cult=France]	ref.							
	[social=Executive]	-0.236	***	0.790	-0.197	***	0.821		
	[social=Not executive]	ref.							
UT	Constante	4.840	***		3.348	***			
	Age	-0.240	***	0.787	-0.178	***	0.837		
	[gender=Female]	-1.185	***	0.306	-1.081	***	0.339		
	[gender=male]	ref.							
	[geog=Suburb]	0.031	Ns	1.032	0.027	ns	1.027		
	[geog=Rural area]	0.190	***	1.209	0.285	***	1.330		
	[geog=Urban center]	ref.							

Table5. Multinomial Logistic Model for 1998 and 2010

	[cult=abroad]	-0.304	***	0.738	-0.036	ns	0.965
	[cult=France]	ref.					
	[social=Executive]	-0.175	***	0.840	-0.036	ns	0.965
	[social=Not executive]	ref.					
PCEM	Constante	-4.008	***		-4.131	***	
	Age	0.045	***	1.046	0.074	***	1.077
	[gender=Female]	-0.340	***	0.712	0.666	***	1.946
	[gender=male]	ref.					
	[geog=Suburb]	0.265	**	1.304	0.041	ns	1.042
	[geog=Rural area]	-0.113	Ns	0.893	0.121	ns	1.128
	[geog=Urban center]	ref.					
	[cult=abroad]	-0.135	Ns	0.874	-0.092	ns	0.912
	[cult=France]	ref.					
	[social=Executive]	-0.305	***	0.737	0.326	***	1.385
	[social=Not executive]	ref.					

Significance level: * p < 0.1 ; ** p< 0.05 ; *** p< 0.01 ; NS = non-significant.

Lecture: "1.946": in 2010, a girl had nearly twice much chance than a boy to access medicine studies than university.

Conclusion

The aim of this paper is to analyze the impact of French educational reforms on the course selection when entering the higher education classes.

Our results show that in spite of the reduction of some inequalities, access to various areas of higher education and, more particularly, access to prestigious and selective training courses remain affected by inequalities, especially gender and social inequalities. We agree with the conclusion of Maurin (2013) who underlined the no real taking into account by reforms of the gap of means which exists between favored students of post-secondary preparatory schools and university students. According to Duru-Bellat, Kieffer and Reimer (2010), it is the structure of the French higher education –which is differentiated and ranked–, which confers to social inequalities an increasing role. Moreover, with the LMD reform, we observe an increase in the schooling time to eventually reach the first admitted level of diploma as well as an increase in tuition fees which entail an increase of social inequalities (Jaoul-Grammare, 2013).

Thus, despite a "quantitative democratization" of education (Prost, 1986), many inequalities remain at both levels: social (Beaud, 2008; Crahay, 2002; Jaoul-Grammare, 2014) and geographical (Bénabou *et alii*. 2005). This might be an explanation for recent conclusions of the PISA report (2012), according to which, the French educational system is very unequal, and France one of those OECD countries where the impact of social origin on the success at school is the most important.

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Appendix 1. The French higher education system