

Tracking in the Italian Education System

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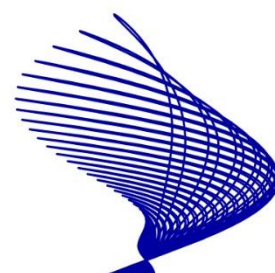


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Tracking in the Italian Education System

Marta Facchini¹, Carlo Barone² and Moris Triventi³

Abstract

In this report, we provide an overview of tracking, that is the choice of the type of secondary school, in Italy. First, we describe the structure of the Italian education system and its main reforms. We detail broad and curricular tracking both between and within schools. We focus on upper secondary school, since in Italy the school tracks branch at this node. Second, we use the Italian Household Longitudinal Study (IHLS) data to illustrate both the trends in educational attainment and the educational trajectories for four birth cohorts (1927-47, 1948-57, 1958-67 and 1968-77). Third, we report the pattern of association between tracking and social inequality for the 1958-67 birth cohort. Specifically, we show that parental education and social class of origin are strongly correlated to track placement. Moreover, the choice of upper secondary school is associated to the final educational attainment and the position in the labor market at occupational maturity. Furthermore, tracking mediates almost half of the association between social background and educational and labor market outcomes.

Keywords: Tracking, social inequality, total association, mediation analysis, Italy, origin-education-destination, life course, long-term outcomes.

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1. Description of the Italian educational system

Basic structure of the educational system

The Italian educational system has a high level of standardization regarding exams, curriculum and budget. However, in the last two decades, the process of welfare decentralization has attributed to Italian regions a small amount of competences concerning the budget (Bukodi et al., 2018; Agasisti, Catalano and Sibiano, 2013). Compared to the other economically developed European countries, the Italian educational system is characterized by a high level of inequality (Ballarino et al. 2009; Barone et al. 2010; Jackson, 2013; Bukodi et al., 2018). Additionally, the impact of social origin net of prior achievement remains large (Contini and Scagni, 2013; Contini and Triventi 2016). The Italian schooling system is more stratified than educational systems in Nordic European countries, but less stratified than educational systems in Continental Europe (Blossfeld et al. 2016). However, despite access to university is formally open to students regardless of the track attended in high school and previous performance, large disparities by social background persist in the transition from upper secondary to tertiary education (Argentin and Triventi 2011) and in the choice of field of study (Triventi, Vergolini and Zanini 2017).

Participation in early childhood education and care is below OECD average for children under the age of 3: 24% of children benefit of nursery services in Italy while on average 35% of them access this service in OECD countries. Childcare is mostly provided by private institutions and the availability of spots for children is limited. Families with advantaged socio-economic conditions and high level of parental education are more likely to have access to nursery services (OECD, 2018). Pre-primary school (age 3-6) is not compulsory. However, 96.1% of children between four and six years attend pre-primary school (age 3-6). Almost a third (28%) of the pupils is enrolled in a private institution.

Children begin compulsory schooling at the age of 6. After five years of primary school, pupils transition to middle school until the age of 14, for a total of eight (five plus three) years of comprehensive education. After lower secondary graduation, students attend upper secondary school, which lasts five years and has three main tracks: academic, technical and vocational. Although it is possible to enroll in regional vocational training, which is three years long, this choice is marginal. Since the minimum school-leaving age is 16, most of the children attend a tracked educational environment for a minimum of two years. However, still in 2017, 14% of the population aged 18-24 left education having obtained at most the lower secondary diploma, due to not enrolling in upper secondary education or to dropping out before having obtained a certificate.

After having obtained an upper secondary diploma, usually around 19, students are eligible to access higher education, which is mainly constituted by universities (Schizzerotto and Barone, 2006).

Within the broader European framework of the Bologna Process, since 2001 a three-level structure is in place, comprising a first level degree (Laurea triennale, three years), a second

level degree/Master's (Laurea magistrale, two years), followed by doctoral studies (Dottorato di ricerca, three years).

Nowadays, most programs have free access, while in a small number of cases entrance is restricted to students who have passed an admission test. Entry restrictions are imposed by the Italian Ministry of Education at national level for some key programs (architecture, veterinary science, medicine, and health-related programs), while universities are allowed to decide autonomously whether or not to establish entry tests for each specific program.

In 2016, 50.3% of upper secondary graduates enrolled at university. Notably, access to higher education does not equal degree attainment in Italy. Indeed, the incidence of dropout has been historically very high (Triventi and Trivellato 2009) and, while it reduced overtime, it still an important issue, since between one-third and half of first-year students will not successfully complete the degree. Moreover, the number of young graduates is low in comparison with the other European countries: in 2017 27% of 25-34 years old held a tertiary degree.

1.1 Main reforms

In the fifties, Italian students were sorted into different tracks just after primary school: students might attend either the general track or the vocational dead-end track in lower secondary education, as shown in Figure 1.1. In 1962, the government reunited the two tracks of lower secondary school, converting middle school into a comprehensive institution (see Figure 1.2).

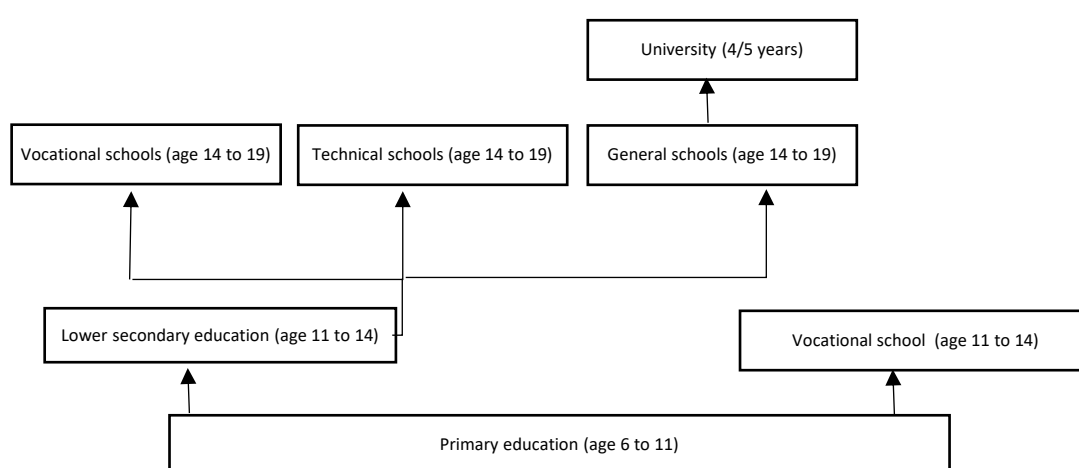


Figure 1.1. The Italian educational system before 1962.

In the first half of the 20th century, access to university was restricted to high school graduates from specific tracks: students with classical studies could enroll in all the fields of

study, those from scientific lyceum in most of the field, whereas those from technical education were not allowed to enter university. As Figure 1.3 shows, in 1969 access to tertiary education was liberalized. Consequently, also the students who graduated from technical and vocational high schools were allowed to attend university (Schizzerotto and Barone, 2006). However, the increase in the demand of education preceded the reforms. Firstly, the economic expansion that began in the mid-fifties reduced families' liquidity constraints. Secondly, the decrease of agricultural work in favor of factory work, and the increase in the job offers for technicians and clerks made educational achievement more relevant (Cobalti and Schizzerotto 1994). Notwithstanding the educational expansion, dropping out before reaching the minimum school-leaving age remained substantial until the mid-seventies.

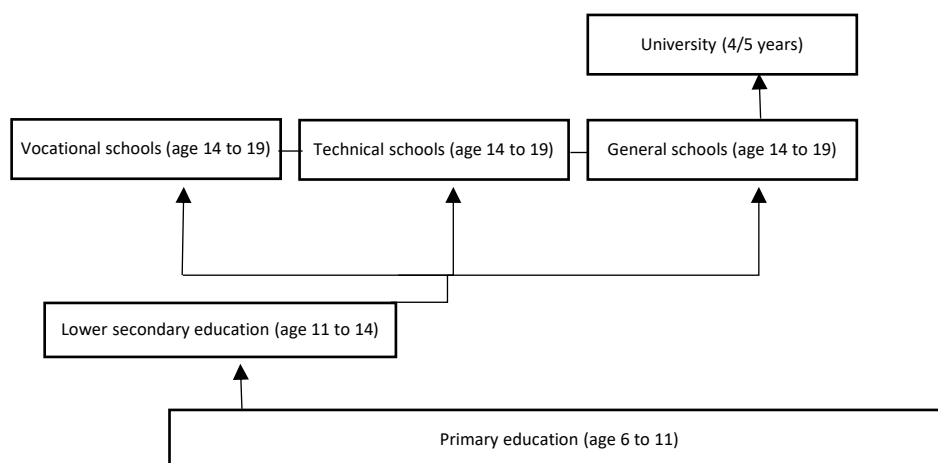


Figure 1.2. The Italian educational system after 1962.

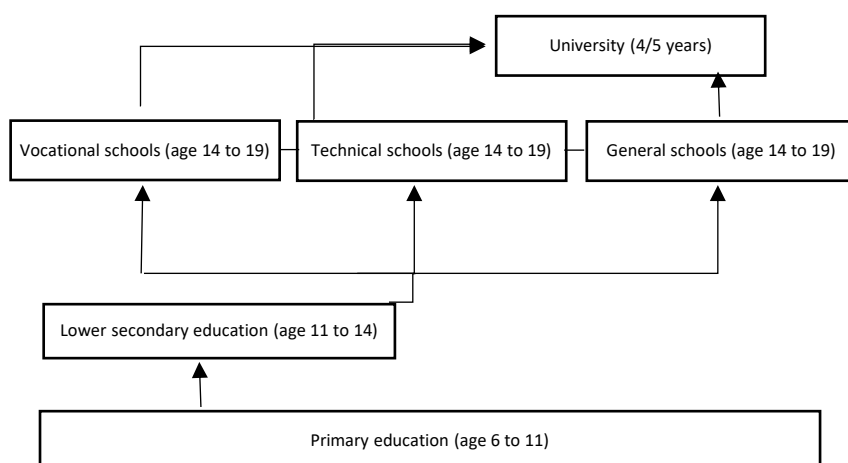


Figure 1.3. The Italian educational system after the reform of the access to higher education (1969).

In 2001, following the Bologna reform, the traditional four years degree was converted in the three plus two structure. Students enroll in the Bachelor, which is three years long, and after graduation can continue their tertiary education with the two years Master. The reform temporarily promoted enrollment in higher education and a slight reduction of inequality (Cappellari and Lucifora 2009; Argentin and Triventi 2011; Ballarino and Panichella, 2014).

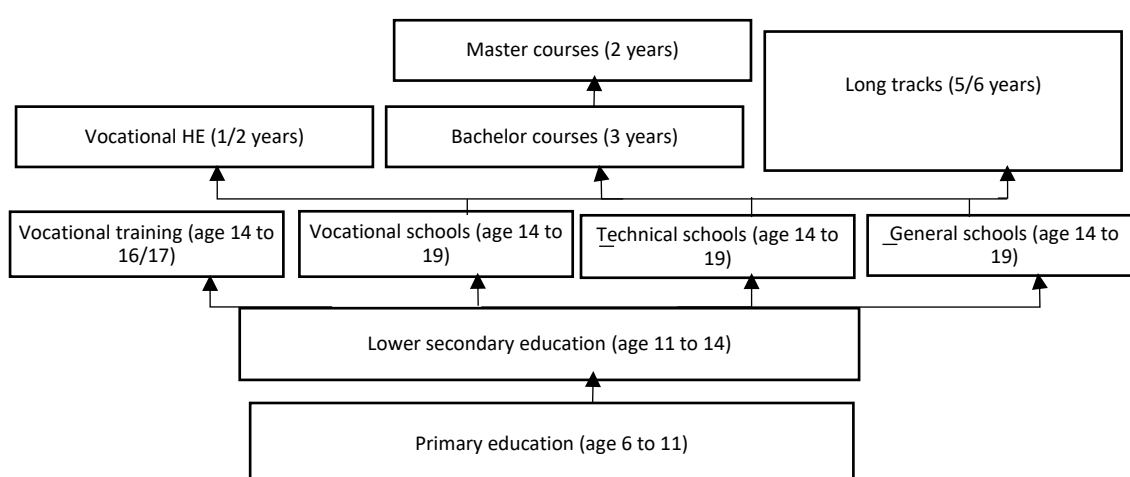


Figure 1.4. The Italian educational system nowadays, after the Bologna process (2001).

Lastly, in 2006, the minimum school-leaving age was raised to 16. As a consequence tracking is compulsory for the majority of students⁴. Figure 1.4 illustrates the current Italian educational system.

1.2 Detailed description of tracking

1.2.1 Between school tracking

Public vs. private

Enrollment in private schools is marginal in Italy at every educational level. In 2009 5.5% of children attend private schools at the upper secondary level (Bertola and Checchi, 2013). Additionally, the private sector does not provide elite education. However, private institutions help upper-class children to compensate for bad performances and obtain a high school diploma (Brunello and Rocco, 2008).

Formal tracking: broad tracking

Regarding formal parallel tracking, there is a wide range of upper secondary schools, pertaining to 3 main branches: the academic track, the technical track and the vocational track. Access is not based on ability, despite the tracks differ substantially in regard to curriculum, level of performance required, and in work/study orientation. The academic branch (Lyceum) teaches more general curricula and prepares for university. Technical schools direct the students towards economic or technological work positions, while the vocational track offers practical preparation for lower level commercial or technical jobs. Parental educational level and social origin have a substantial impact on track choice (Pisati 2001; Schizzerotto and Barone 2006; Panichella and Triventi 2014), even controlling for previous scholastic achievement (Contini and Scagni, 2013). Furthermore, social class inequalities in the main educational transitions are particularly pronounced among low achieving students and less strong among high achieving students (Bernardi and Triventi, 2018).

Formal tracking: curricular tracking

Distinguishing curricular tracking within the main branches is possible. In addition to the traditional predominantly humanistic and scientific curricula, the academic track has more recently been complemented with pedagogical, linguistic and artistic curricula. In the technical and vocational track, the schools provide a more commercial or industrial orientation. Academic, technical and vocational streams have a well-defined and rigid curriculum. Few schools (the so-called “comprehensive schools”) host students attending different tracks.

⁴ Pupils that experience multiple retentions reach the minimum-school leaving age before tracking.

Informal tracking: unofficial school ranking

In large urban areas, an informal recognition of the most prestigious schools for the academic track is generally present. However, high schools are not officially ranked.

1.2.2 Within-school tracking

Concerning within-school tracking, first, in Italy it is illegal to select children on the basis of their ability or social origin. Nonetheless, social sorting between schools exists at the lower secondary level, primarily in metropolitan areas. Second, the selection of elective subjects is not allowed since the curriculum is centralized and rigid.

Tracking mobility is formally possible, but in reality, residual. It takes place mostly in the first two years of high school and is directed mainly downward (Contini and Triventi 2016).

2. Trends in educational attainment

In this paragraph, we present the main trends in educational attainment over time. We used data from the Italian Households Longitudinal Study (IHLS). The IHLS is a panel survey carried out for five waves every two years from 1997 to 2005 on a nationally representative sample. The survey is based on a two-stage sample design stratified at the first stage by region and city type. The first wave registered retrospective information on family members, which was updated by the following waves. In this analysis, we included data from the first three waves for comparability issues and divided the sample in four birth cohorts: 1927-47, 1948-57, 1958-67 and 1968-77 for a total of 10,723 Italian citizens⁵. While the dataset includes detailed information on social origin, educational attainment and occupation (first job and at the time of the survey); school performance in lower secondary school is not available.

Figure 2.1 shows the progressive increase over time of the general level of education in the country. In particular, in the last two cohorts the majority of the individual has completed upper secondary school, while the proportion of university graduates increases mainly at the beginning and remains stable in the last three cohorts.

⁵ We chose to limit the analysis to Italian subjects, due to the low number of foreign citizens included in the sample.

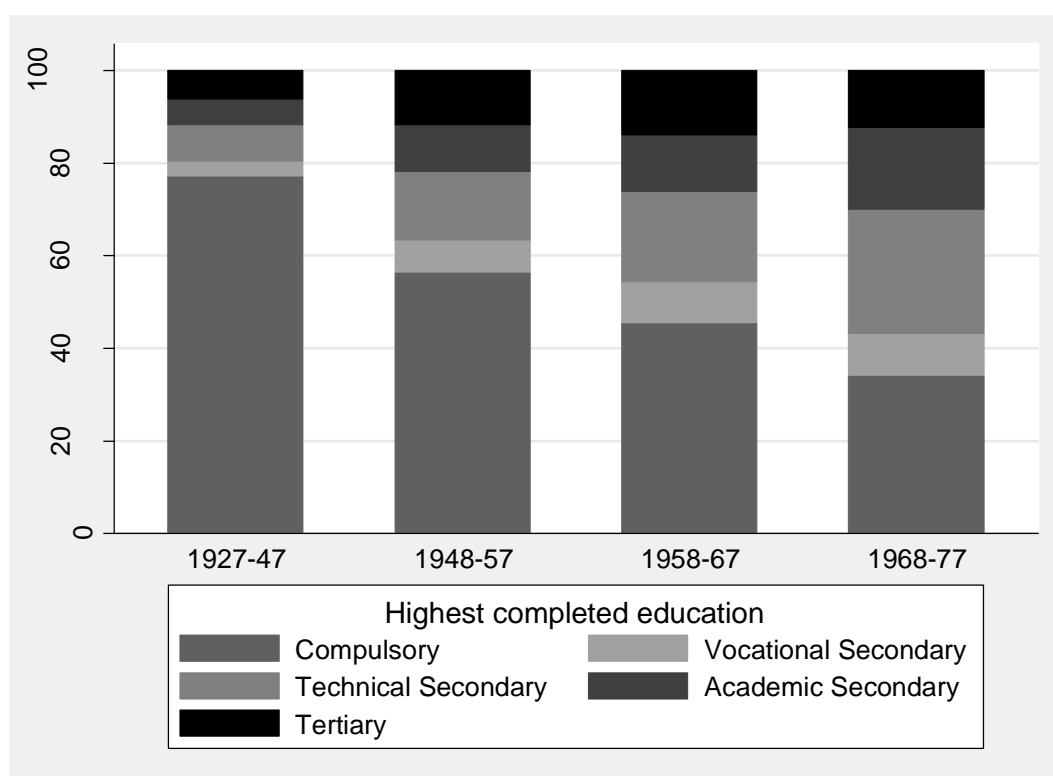


Figure 2.1. Distribution of the highest completed education by cohort (IHLS 1997, 1999, 2001).

As Figure 2.2 details, the academic and technical track grow at a similar rate and include a larger share of students than the vocational track. Alternatively, the quota of individuals with a lower secondary degree or less decreases steadily. Nonetheless, the proportion of people who attained only compulsory education is still high. In the last birth cohort more than one individual out of three does not have an upper secondary diploma.

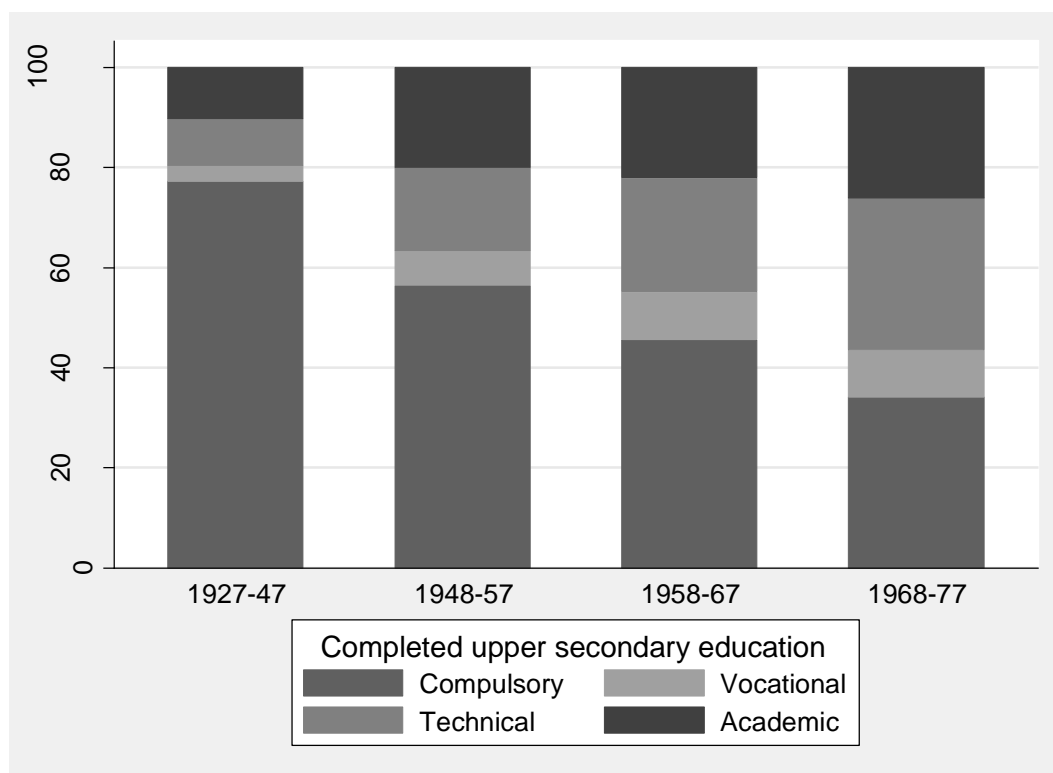


Figure 2.2. Distribution of the broad tracks of the upper secondary diploma by birth cohort, including individuals with lower secondary degree or less (IHLS 1997, 1999, 2001).

Figure 2.3 displays the distribution of the curricular tracks. The proportion of upper secondary graduates who attended the scientific lyceum increases at the expenses of the humanistic and the other academic schools. The reduction in the share of students attending the pedagogical, linguistic and artistic curricula could reflect the change of these institutions, which became more and more academically oriented over time. Lastly, the proportion of the students attending the technical and vocational curricula does not change substantially.

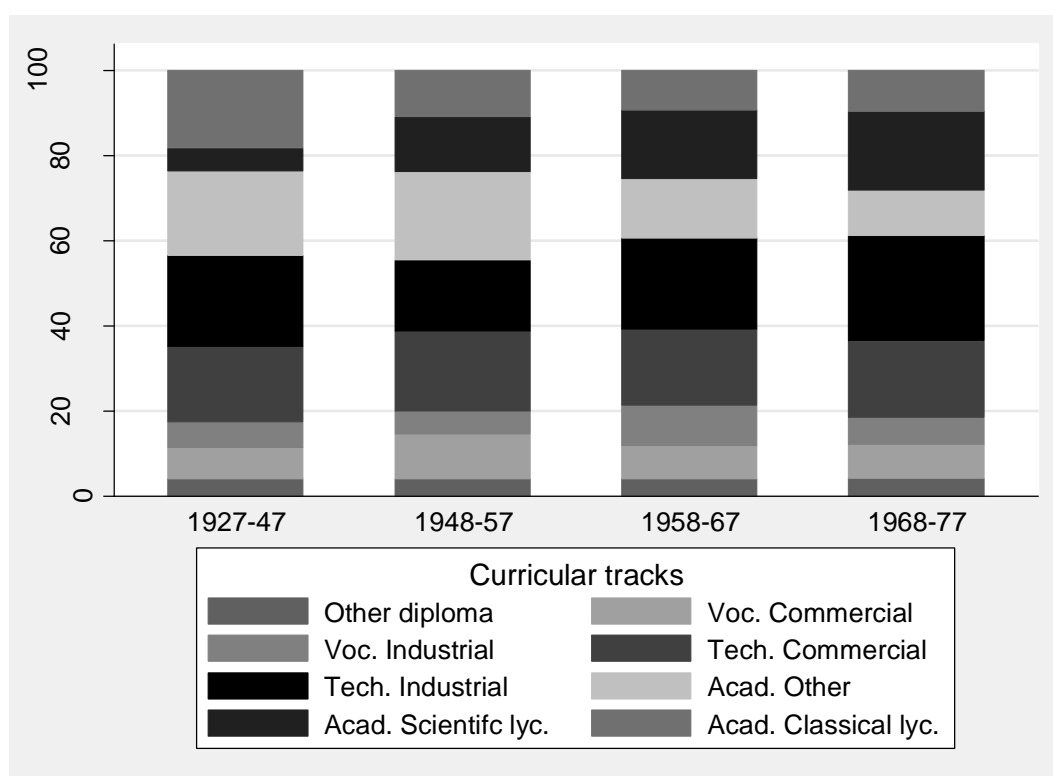


Figure 2.3. Distribution of the detailed tracks of the upper secondary diploma by birth cohort (IHLS 1997, 1999, 2001).

In this section, we report the educational trajectories of individuals differentiating between those who entered lower secondary education before the reform of 1962 or after it (Figures 2.4-2.7). Specifically, before the reform lower secondary school was divided in a general track and a vocational track. Only the former granted access to upper secondary education. The individuals who, after the reform, attended the comprehensive middle school are then divided by birth cohort

The share of lower secondary dropouts is significant before the reform, but decreases substantially. Alternatively, the proportion of upper secondary students that abandon before obtaining their diploma remains noteworthy, particularly in the technical and vocational tracks. Mobility between tracks is residual. Transition to university grows for all upper secondary graduates, but tertiary enrollment maintains a strong association with the track attended in upper secondary education. Two vocational students out of ten continue their studies, compared to five from technical schools and nine out of ten from the academic track. Lastly, the phenomenon of university dropout retains its importance: about half of university students does not achieve a tertiary degree.

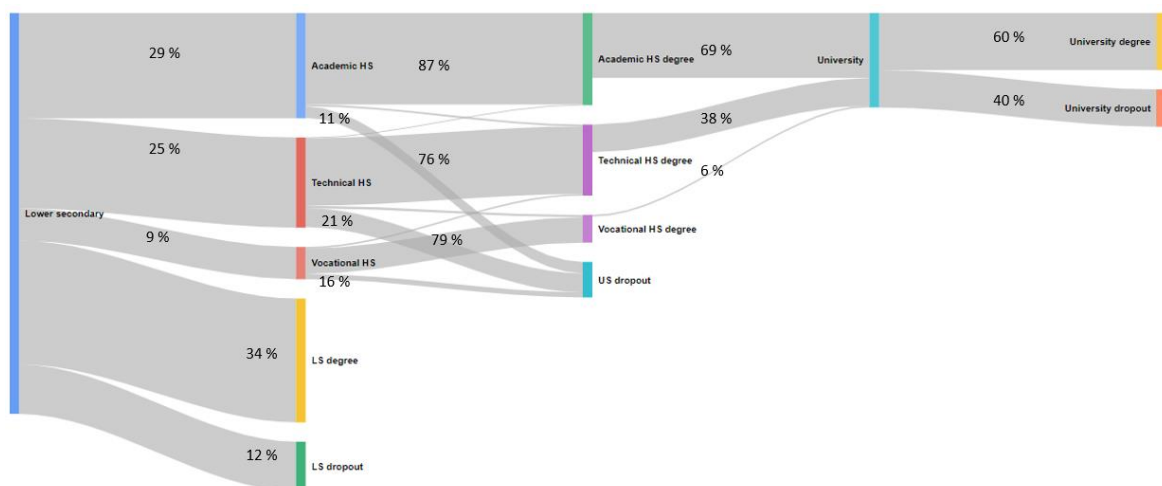


Figure 2.4. Educational trajectories for the birth cohort entering lower secondary before 1962. Source: IHLS (1997, 1999, 2001).

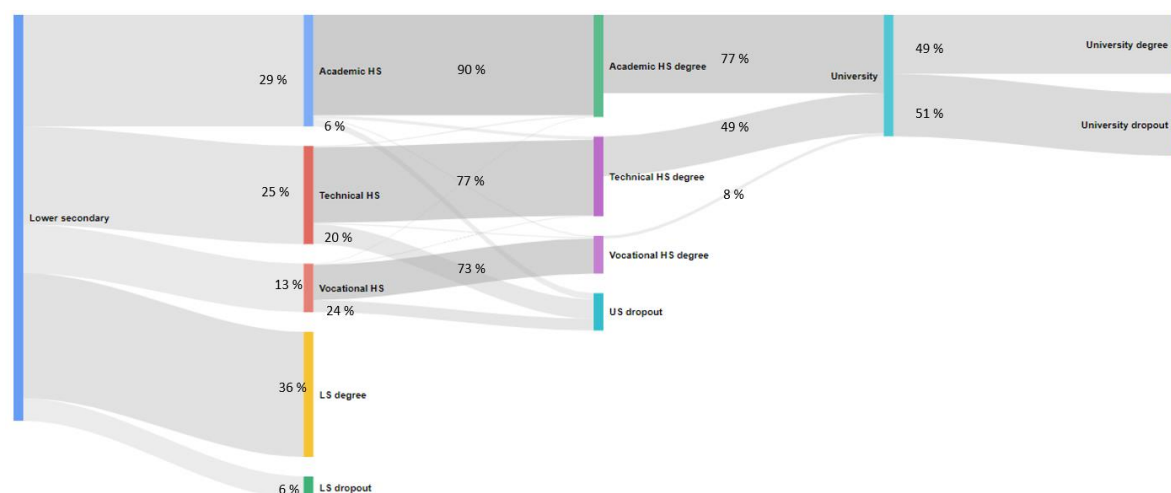


Figure 2.5. Educational trajectories for the students entering lower secondary after 1962, birth cohort 1948-57. Source: IHLS (1997, 1999, 2001).

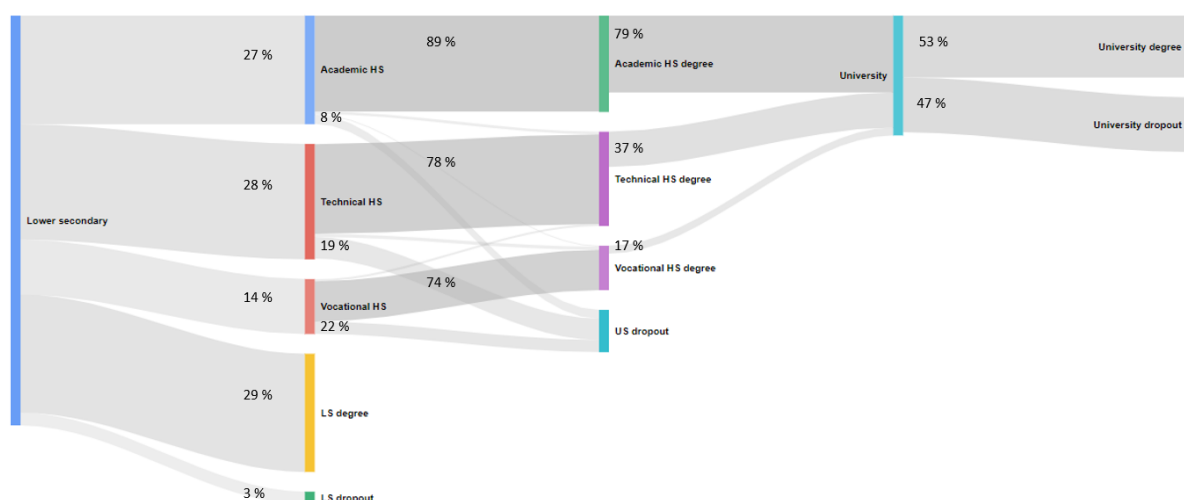


Figure 2.6. Educational trajectories for the birth cohort 1958-67. Source: IHLS (1997, 1999, 2001).

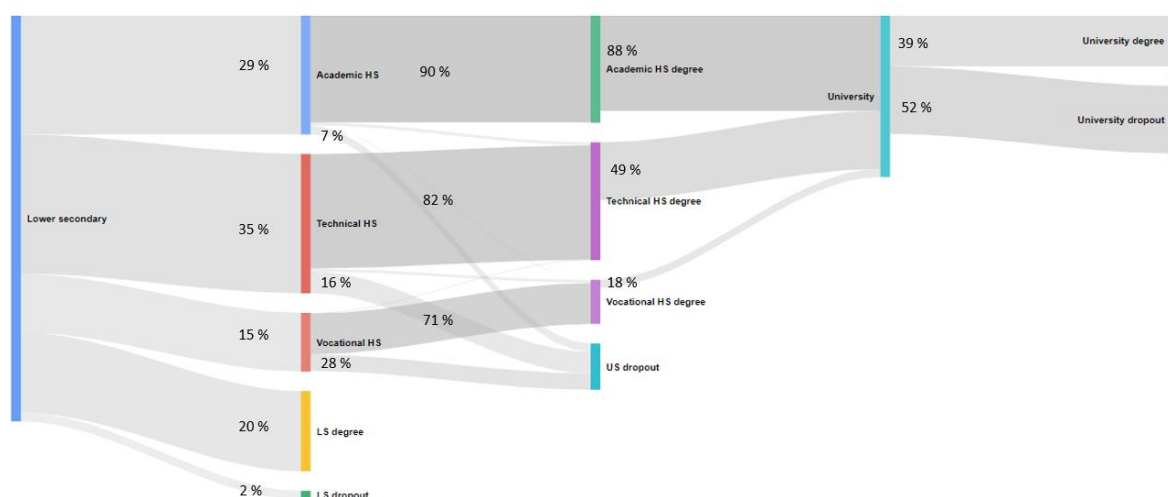


Figure 2.7. Educational trajectories for the birth cohort 1968-77. Source: IHLS (1997, 1999, 2001).

3. Tracking and social inequality (OE)

In this section, we present the descriptive patterns of the association between socio-economical background and track placement. To ease the comparison with the reports of the other countries, for the following analyses we focused on the birth cohort 1958-67. The individuals are 30 to 40 years old at the time of the first interview, therefore we can observe their final educational attainment⁶ and their position in the labor market at occupational maturity. The analytical sample includes 1,390 subjects.

⁶ Adult education is not very common in Italy, particularly for the cohorts included in the analysis.

Tracking is measured in two ways: broader and detailed. Firstly, broad tracking includes three categories: vocational, technical and academic. Secondly, detailed tracks further categorize the broad tracks of diploma according to high school curricula. The academic track is articulated in classical lyceum, scientific lyceum and specific humanistic curricula (pedagogical, linguistic and artistic). Technical and vocational tracks both provide the commercial or the industrial diplomas and qualifications.

Social origin are measured by parental education and social class of origin (for both these indicators we use the dominance approach).

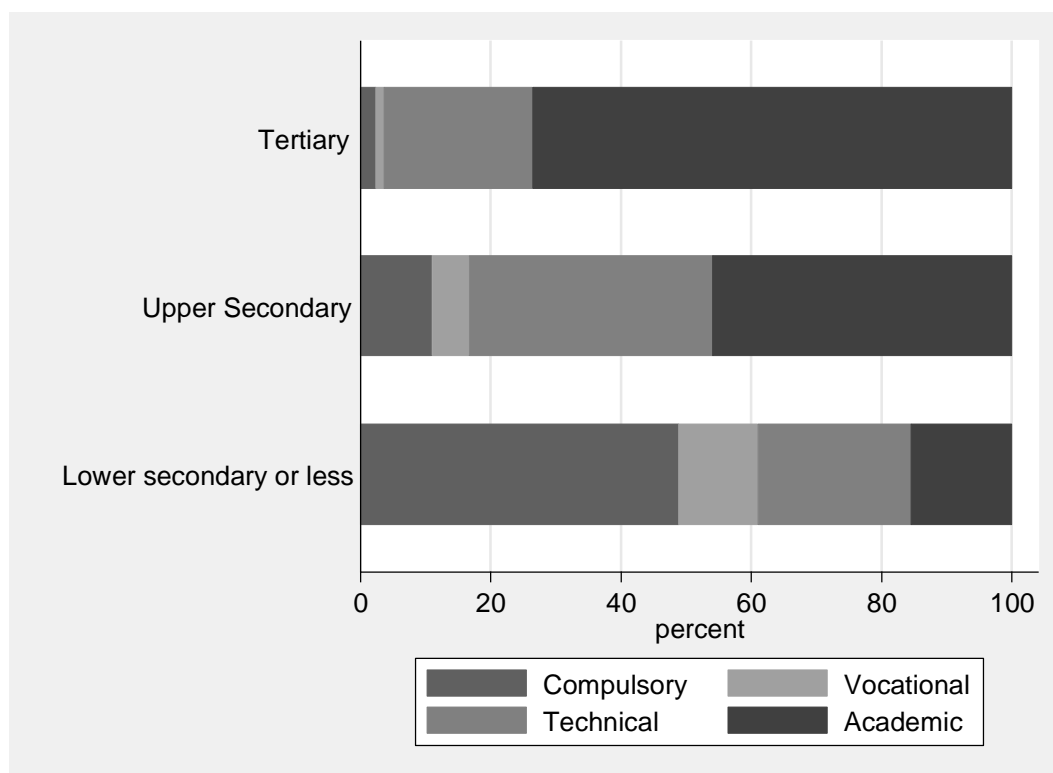


Figure 3.1. Distribution of broad track placement by parental education. Birth cohort 1968-77, the individuals who achieved compulsory education are included. Source: IHLS (1997, 1999, 2001).

Figures 3.1 and 3.2 highlight the strong reproduction of educational inequalities, both concerning the students who did not obtain an upper secondary degree and the track of diploma. Almost eight out of ten children of tertiary educated parents obtained an academic upper secondary degree, while this track was chosen by less than two out of ten children of the individuals with lower secondary education or less. While the divide between parents with an upper secondary diploma and those with a university qualification is present, especially when we look at the curricular tracking, it is apparent that the children of compulsory educated parents have lower educational chances. Lastly, having parents with an upper secondary degree seems to be more strongly associated to choosing the specific curricula of the academic track (pedagogical, linguistic and artistic lyceums).

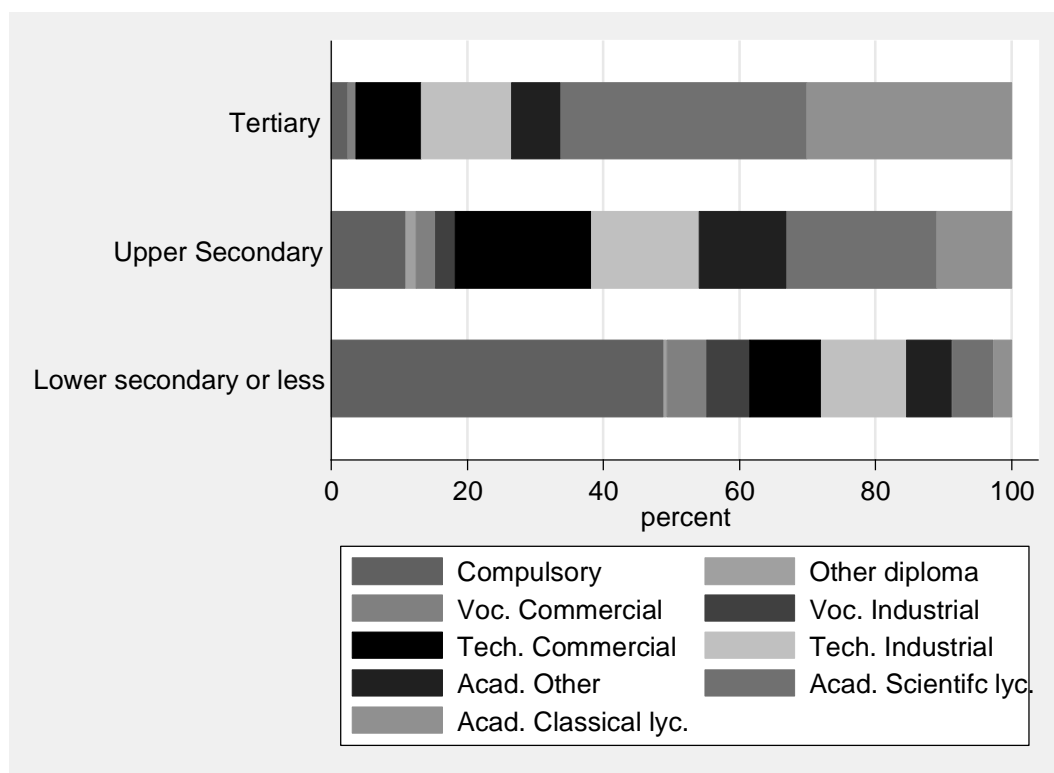


Figure 3.2. Distribution of detailed track placement by parental education. Birth cohort 1968-77, the individuals who achieved compulsory education are included. Source: own calculation based on IHLS (1997, 1999, 2001).

Figure 3.3 shows a strong similarity between the track choices of service and middle class, while Figure 3.4 highlights some differences regarding curricular tracking. Specifically, middle class students chose more frequently the specific academic curricula, the technical commercial and the industrial vocational. Lastly, the agricultural petty bourgeoisie is nearer to the educational path of the unskilled working class than to that of the urban petty bourgeoisie.

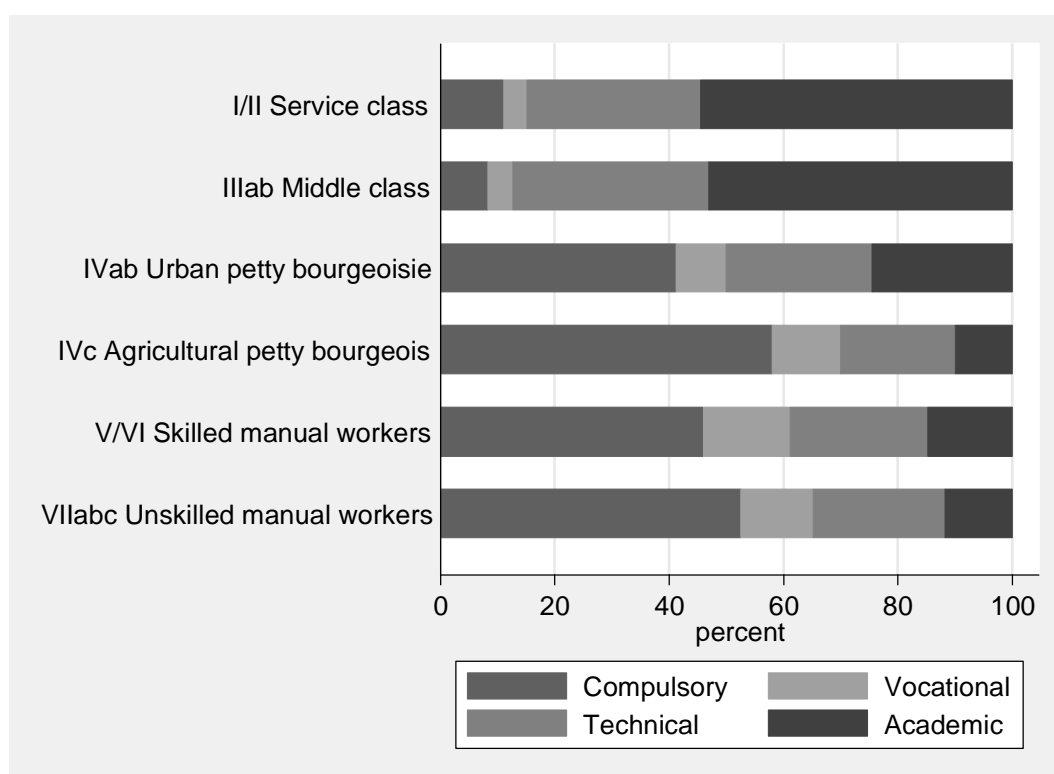


Figure 3.3. Distribution of broad track placement by social class of origin. Birth cohort 1968-77, the individuals who achieved compulsory education are included. Source: own calculation based on IHLS (1997, 1999, 2001).

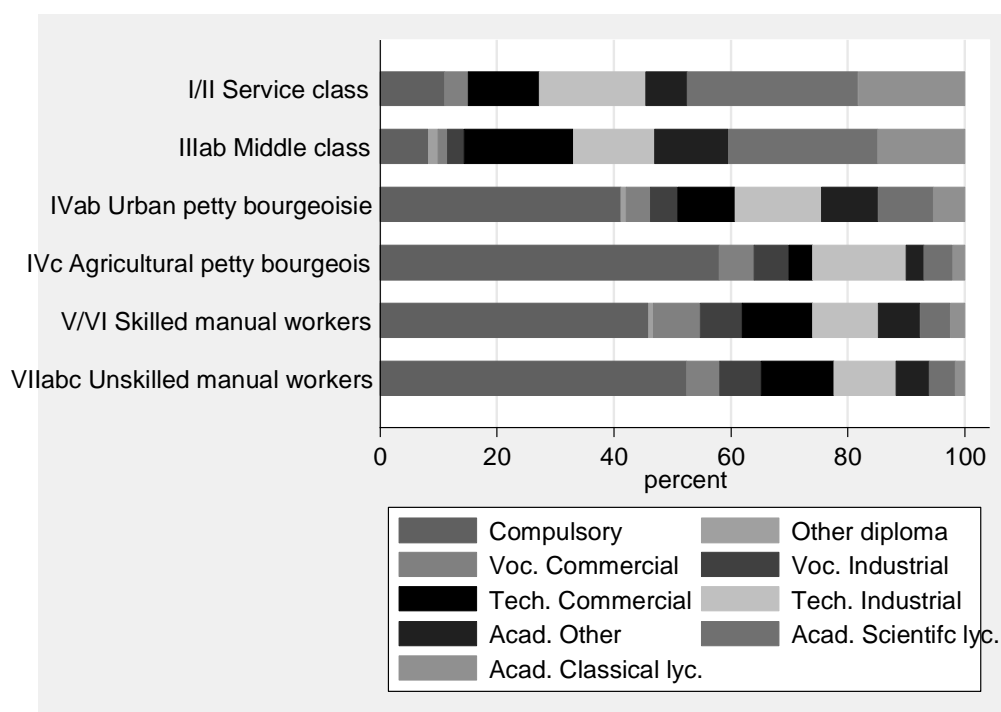


Figure 3.4. Distribution of detailed track placement by social class of origin. Birth cohort 1968-77, the individuals who achieved compulsory education are included. Source: own calculation based on IHLS (1997, 1999, 2001).

In order to appreciate how much the variation in track placement is reduced by taking into account the social background, we employ multinomial logistic regressions of tracking on the characteristics of the parents. Specifically, we regress i) broad tracking on social class, ii) curricular tracking on social class, iii) broad tracking on parental education, and iv) curricular tracking on parental education for first track of placement and then we repeat the analyses for the final track. As Table 3.1 shows, both social class of origin and parental education explain between six and eight percent of the variation in first and final track placement. Parental education seems to explain slightly more variability for the track of diploma than for the track of placement.

Table 3.1. Variation in first and final track placement explained by social background, 1958-67 birth cohort.

	Pseudo-R ²			
	First Track		Final Track	
	Broad Tracks	Curricular Tracks	Broad Tracks	Curricular Tracks
Social Class of Origin	0.078	0.065	0.078	0.067
Parental Education	0.073	0.060	0.081	0.065
N	1,390	1,390	1,390	1,390

Note: Pseudo R² obtained regressing the track of placement on social class of origin or parental education in four separate multinomial logistic regressions. Source: own calculation based on IHLS (1997, 1999, 2001).

Table 3.2. Track mobility and upper secondary drop-out (Broad Tracking), 1958-67 birth cohort.

	<i>Broad Track of Diploma</i>				
	Drop-out	Vocational	Technical	Academic	Total
<i>Broad First Track (%)</i>					
Vocational	47 (25)	125 (65)	18 (9.5)	1 (0.5)	191 (100)
Technical	76 (19)	13 (3)	321 (78)	0 (0)	410 (100)
Academic	25 (7)	3 (1)	11 (3)	325 (89)	364 (100)
Total	562 (40)	146 (11)	355 (26)	327 (23)	1,390 (100)

Source: own calculation based on IHLS (1997, 1999, 2001).

Lastly, Table 3.2 displays track mobility, that is the relationship between first and last track of placement, for broad tracking. Except for the change from a vocational to a technical high school (10%), in Italy, track mobility seems to be marginal. However, there is a sizeable difference in the share of students that drop out from upper secondary education. While less than one out of ten students drop out from academic high schools, respectively a fifth and a quarter of the vocational and technical students do not obtain a upper secondary diploma. Table 3.3 shows similar results using more detailed differentiation of tracks. Additionally, we can observe limited short-range mobility.

Table 3.3. Track mobility and upper secondary drop-out (Curricular tracking), 1958-67 birth cohort.

Detailed track at entrance (%)	Detailed track of diploma									
	Compulsory	Other diploma	Voc. Commercial	Voc. Industrial	Tech. Commercial	Tech. Industrial	Acad. Other	Acad. Scientific lyc.	Acad. Classical	Total
Other diploma	40.0	53.3	0.0	0.0	6.7	0.0	0.0	0.0	0.0	100.0
Voc. Commercial	26.6	0.0	64.9	0.0	4.3	3.2	1.1	0.0	0.0	100.0
Voc. Industrial	19.5	0.0	0.0	78.0	0.0	2.4	0.0	0.0	0.0	100.0
Tech. Commercial	23.2	0.0	2.4	0.9	72.0	1.4	0.0	0.0	0.0	100.0
Tech. Industrial	13.6	0.0	1.0	2.0	0.0	83.4	0.0	0.0	0.0	100.0
Acad. Other	12.9	0.0	0.0	1.6	1.6	0.8	83.1	0.0	0.0	100.0
Acad. Scientific lyc.	3.8	0.0	0.0	0.0	1.9	1.9	1.3	90.4	0.6	100.0
Acad. Classical lyc.	3.6	0.0	1.2	0.0	1.2	1.2	1.2	0.0	91.6	100.0
Total	40.4	0.6	5.1	5.4	11.9	13.0	7.7	10.3	5.5	100.0
N	562	8	71	75	166	181	107	143	77	1,390

Source: own calculation based on IHLS (1997, 1999, 2001).

4. Long-term consequences of tracking (ED)

In this chapter, we explore the long-term consequences of the track of diploma. Table 4.1 displays the summary statistics of the outcomes: the proportion of higher education graduates, the social class of the first occupation and the last known job, and the proportion of individuals who experienced unemployment at the moment of the survey.

Table 4.1. Outcomes at occupational maturity (30 to 40 years old), 1958-67 birth cohort.

Outcome Variables	(%)
University Degree	15.8
<i>Social class of the first job</i>	
I Higher service class	4.5
II Service class	3.5
IIIab Middle class	27.8
IVab Urban petty bourgeoisie	9.4
IVab Agricultural petty bourgeoisie	1.9
V/VI Skilled manual workers	16.1
VIIabc Unskilled manual workers	36.8
<i>Social class at coccupation maturity</i>	
I Higher service class	6.6
II Service class	4.6
IIIab Middle classIVab Urban petty bourgeoisie	30.8
IVab Urban petty bourgeoisie	18.5
IVab Agricultural petty bourgeoisie	1.5
V/VI Skilled manual workers	14.9
VIIabc Unskilled manual workers	23.1
<i>Employment status</i>	6.0
N	1,401

Source: own calculation based on IHLS (1997, 1999, 2001).

4.1 Educational attainment

Figure 4.1 displays the proportion of individuals enrolled at university and those who were able to successfully attain a degree in higher education by broad tracking for the birth cohort 1958-67. Notably, the academic track is associated with the highest transition rate (81.4%) and graduation rate (48%), while less than one vocational or technical student out of five completes tertiary education (respectively 8.5% and 14.2 %).

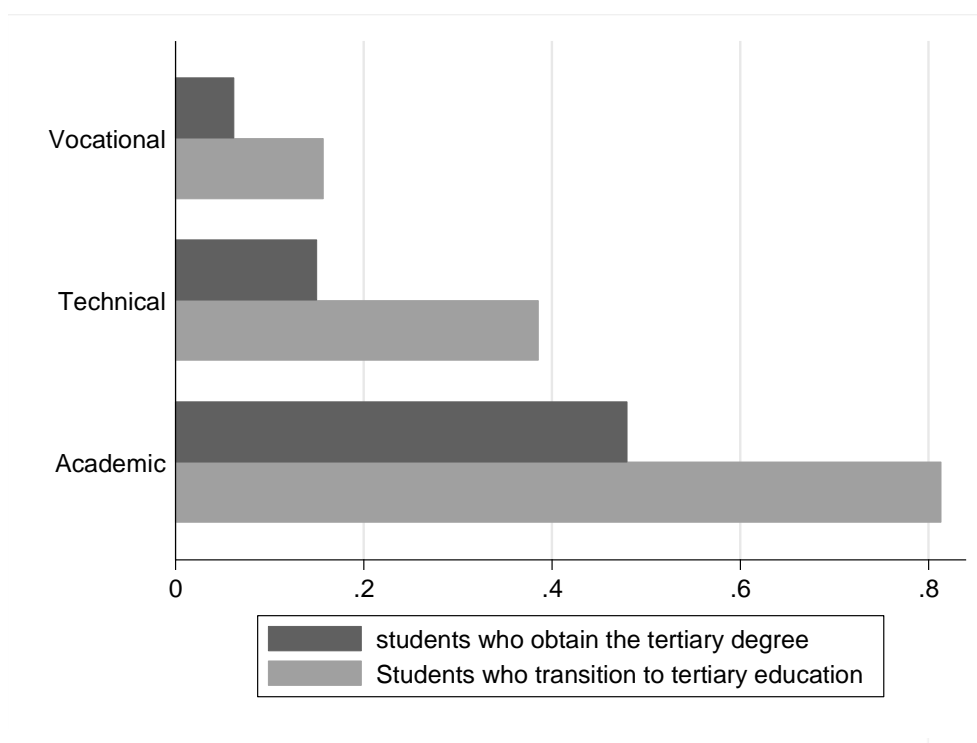


Figure 4.1. Participation in higher education and degree completion, by broad track of diploma. Birth cohort 1958-67. Source own calculation based on IHLS (1997, 1999, 2001).

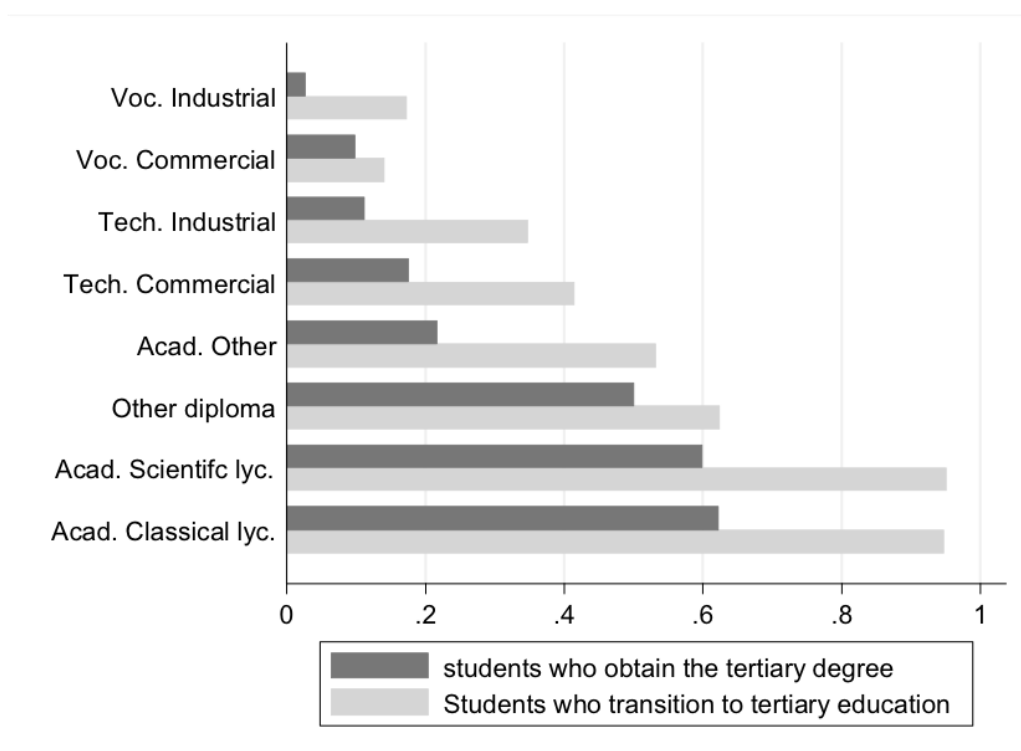


Figure 4.2. Participation in higher education and degree completion, by detailed track of diploma. Birth cohort 1958-67. Source: own calculation based on IHLS (1997, 1999, 2001).

Figure 4.2 shows the association between the detailed tracks of upper secondary education and the higher education outcomes. While the traditional academic curricula (classical and scientific lyceum) lead almost every student to attend tertiary education and increase the chances of obtaining a degree, the students coming from the more recent and less general academic high school (the category “academic: other”) tend to have prospects more comparable to the ones of technical schools’ pupils. Finally, the industrial curricula within technical and vocational school are associated with lower chances of completing university (respectively 11.7% and 2.7 %).

Table 4.2. Linear probability model of tertiary degree attainment on broad and detailed first track of placement among eligible students, birth cohort 1958-67 (robust standard errors).

Variables	M1	M2
Outcome: Tertiary degree attainment		
Broad <i>firsttrack</i>	Vocational (reference category)	
	Technical	0.06*
	Academic	0.38***
Detailed <i>first track</i>	Vocational Commercial (reference category)	
	Other Diploma	0.21
	Vocational Industrial	-0.03
	Technical Commercial	0.07*
	Technical Industrial	0.05
	Academic Other	0.14**
	Academic Scientific	0.48***
	Academic Classical	0.54***
Constant	0.06***	0.05*
N	957	957
R2	0.154	0.223

p<0.05; ** p<0.01; *** p<0.001

Source: own calculation based on IHLS. Legend: *p<0.05; ** p<0.01; *** p<0.001

Table 4.3. Linear probability model of tertiary degree attainment on broad and detailed track of diploma among eligible students, birth cohort 1958-67 (robust standard errors).

Variables	M1	M2
Outcome: Tertiary degree attainment		
Broad track of diploma	Vocational (reference category)	
	Technical	0.06**
	Academic	0.39***
Detailed track of diploma	Vocational Commercial (reference category)	
	Other Diploma	0.40*
	Vocational Industrial	-0.07
	Technical Commercial	0.08
	Technical Industrial	0.01
	Academic Other	0.12*
	Academic Scientific	0.50***
	Academic Classical	0.52***
Constant	0.06**	0.10**
N	820	820
R2	0.157	0.238

p<0.05; ** p<0.01; *** p<0.001

Source: own calculation based on IHLS. Legend: *p<0.05; ** p<0.01; *** p<0.001

Table 4.2 displays the results of the linear probability models of tertiary degree attainment on broad and detailed first track of placement, respectively in model 1 (M1) and model 2 (M2). Since enrolling at university is conditional to having obtained the upper secondary diploma, the analysis is limited to upper secondary graduates. The size of the coefficient suggests that a technical degree does not substantially improve the chances of graduating from university, in comparison with a vocational degree, for the 1958-67 birth cohort. Alternatively, the students who attended the academic tracks have considerably higher chances to obtain a tertiary degree (+ 38 percentage points). Looking at curricular tracking, we can observe a sizeable difference in tertiary degree attainment within the academic group. In particular, there is a substantive gap between specific (pedagogical, linguistic and artistic) academic curricula, on one side, and the scientific and classical lyceum, on the other. Table 4.3 repeat the analysis for the track of diploma. The pattern of association seems to remain stable, with the exception of “other diploma”. As we will see, there is a high chance of dropout in this category, thus the change in the coefficient could be a consequence of the selection that occurs during the school years.

4.2 Early labor-market outcomes

Concerning the early labor-market outcomes, Table 4.4 displays the association between first track of placement and the social class position of the first job based on the EGP classification. Specifically, in the first model (M1) we analyze broad tracking, in the second model (M2) we focus on curricular tracking and in the third model (M3) we add having obtained a tertiary degree as control variable. Access to the service class (I-II) and the higher service class (I) is easier from a technical or academic track. The size of the academic coefficient is double than the size of the technical one, however, half of the association is mediated by tertiary degree attainment. In terms of explained variance for access to the higher service class, curricular tracking increase the R squared by two third, while including higher education attainment almost doubles its value. We can see a similar pattern for entering the service class, with a somewhat stronger mediation of higher education. The share of variance explained goes from 0.070 for the first model to 0.123 for the second model and further grows when we control for the presence of a tertiary degree. Regarding the probability of entering the working class, in addition to the academic and technical high schools, also the vocational track offers some protection (-13 p.p.). Turning to detailed tracking the “academic other” curriculum behave similarly to the technical streams. Furthermore, the inclusion of tertiary degree attainment mediates only on the protective power of the classical and scientific academic curricula. This is mirrored by limited increase in variance explained.

Table 4.4. Linear probability model of early class attainment on broad and detailed first track of placement, birth cohort 1958-67 (robust standard errors).

Variables		M1	M2	M3
Outcome: Higher service class I				
Broad first track	Lower secondary or less (reference category)			
	Vocational	0.01		
	Technical	0.04***		
	Academic	0.09***		
Detailed first track	Lower secondary or less (reference category)			
	Other Diploma		-0.01*	-0.04**
	Vocational Commercial		0.02	0.02
	Vocational Industrial		-0.01*	-0.01**
	Technical Commercial		0.05***	0.03*
	Technical Industrial		0.04***	0.03**
	Academic Other		0.02	-0.01
	Academoc Scientific		0.12***	0.05*
	Academic Classical		0.15***	0.07*
Constant		0.01*	0.01*	0.01*
N		1,390	1,390	1,390
R2		0.031	0.050	0.088
Outcome: Service class I-II				
Broad first track	Lower secondary or less (reference category)			
	Vocational	0.01		
	Technical	0.07***		
	Academic	0.18***		
Detailed first track	Lower secondary or less (reference category)			
	Other Diploma		-0.01**	-0.08**
	Vocational Commercial		0.03	0.02
	Vocational Industrial		-0.01**	-0.02**
	Technical Commercial		0.09***	0.06***
	Technical Industrial		0.05***	0.02
	Academic Other		0.01	-0.04**
	Academoc Scientific		0.26***	0.11***
	Academic Classical		0.28***	0.11**
Constant		0.01**	0.01**	0.01**
N		1,390	1,390	1,390
R2		0.070	0.123	0.229

Table 4.4. Continued

Variables		M1	M2	M3
Outcome: Working class V-VI-VIIabc				
Broad first track	Lower secondary or less (reference category)			
	Vocational	-0.13***		
	Technical	-0.39***		
	Academic	-0.58***		
Detailed first track	Lower secondary or less (reference category)			
	Other Diploma		-0.08	-0.01
	Vocational Commercial		-0.11**	-0.10**
	Vocational Industrial		-0.16***	-0.14**
	Technical Commercial		-0.32***	-0.29***
	Technical Industrial		-0.47***	-0.44***
	Academic Other		-0.47***	-0.42***
	Academoc Scientific		-0.63***	-0.50***
	Academic Classical		-0.66***	-0.50***
Constant		0.81***	0.81***	0.82***
N		1,390	1,390	1,390
R2		0.218	0.232	0.262
Outcome: Unskilled working class VIIabc				
Broad first track	Lower secondary or less (reference category)			
	Vocational	-0.13***		
	Technical	-0.27***		
	Academic	-0.37***		
Detailed first track	Lower secondary or less (reference category)			
	Other Diploma		-0.16	-0.12
	Vocational Commercial		-0.18***	-0.17***
	Vocational Industrial		-0.06	-0.05
	Technical Commercial		-0.27***	-0.25***
	Technical Industrial		-0.27***	-0.25***
	Academic Other		-0.25***	-0.22***
	Academoc Scientific		-0.42***	-0.33***
	Academic Classical		-0.45***	-0.35***
Constant		0.56***	0.56***	0.56***
N		1,390	1,390	1,390
R2		0.094	0.104	0.118

Source: own calculation based on IHLS. Legend: *p<0.05; ** p<0.01; *** p<0.001

Table 4.5 reports the association between track of diploma and early labor market outcomes. The pattern of association is quite similar, while the R squared are slightly larger. It could be due to the fact that, in the 1958-67 birth cohort, 40% of the students enrolled in upper secondary education dropped out (see Table 3.2).

Table 4.5. Linear probability model of early class attainment on broad and detailed track of diploma, birth cohort 1958-67 (robust standard errors).

Variables		M1	M2	M3
Outcome: Higher service class I				
Broad track of diploma	Lower secondary or less (reference category)			
	Vocational	0.01		
	Technical	0.06***		
	Academic	0.10***		
Detailed track of diploma	Lower secondary or less (reference category)			
	Other Diploma		-0.01	-0.07*
	Vocational Commercial		0.02	0.01
	Vocational Industrial		-0.01	-0.01*
	Technical Commercial		0.07***	0.05*
	Technical Industrial		0.05**	0.04*
	Academic Other		0.02	-0.00
	Academoc Scientific		0.13***	0.06
	Academic Classical		0.15***	0.07
Constant		0.01	0.01	0.01
N		1390	1390	1390
R2		0.041	0.059	0.092

Table 4.5. Continued

Variables		M1	M2	M3
Outcome: Service class I-II				
Broad track of diploma	Lower secondary or less (reference category)			
	Vocational	0.01		
	Technical	0.10***		
	Academic	0.20***		
Detailed track of diploma	Lower secondary or less (reference category)			
	Other Diploma		-0.01	-0.14**
	Vocational Commercial		0.04	0.01
	Vocational Industrial		-0.01	-0.01*
	Technical Commercial		0.15***	0.10***
	Technical Industrial		0.06**	0.03
	Academic Other		0.02	-0.04
	Academoc Scientific		0.29***	0.13***
	Academic Classical		0.29***	0.13*
Constant		0.01	0.01	0.01
N		1390	1390	1390
R2		0.091	0.148	0.237
Outcome: Working class V-VI-VIIabc				
Broad track of diploma	Lower secondary or less (reference category)			
	Vocational	-0.15***		
	Technical	-0.42***		
	Academic	-0.59***		
Detailed track of diploma	Lower secondary or less (reference category)			
	Other Diploma		-0.10	-0.08
	Vocational Commercial		-0.19**	-0.18**
	Vocational Industrial		-0.33***	-0.30***
	Technical Commercial		-0.50***	-0.47***
	Technical Industrial		-0.50***	-0.46***
	Academic Other		-0.62***	-0.49***
	Academoc Scientific		-0.66***	-0.52***
	Academic Classical		-0.29	-0.18
Constant		0.790***	0.790***	0.79***
N		1390	1390	1390
R2		0.242	0.255	0.277

Table 4.5. Continued

Variables	M1	M2	M3
Outcome: Unskilled working class VIIabc			
Broad track of diploma	Lower secondary or less (reference category)		
	Vocational	-0.13**	
	Technical	-0.27***	
	Academic	-0.36***	
Detailed track of diploma	Lower secondary or less (reference category)		
	Other Diploma	-0.17**	-0.15*
	Vocational Commercial	-0.07	-0.06
	Vocational Industrial	-0.26***	-0.24***
	Technical Commercial	-0.28***	-0.26***
	Technical Industrial	-0.26***	-0.24***
	Academic Other	-0.40***	-0.31***
	Academoc Scientific	-0.44***	-0.35***
	Academic Classical	-0.29	-0.21
Constant	0.54***	0.54***	0.54***
N	1390	1390	1390
R2	0.099	0.107	0.117

Source: own calculation based on IHLS. Legend: *p<0.05; ** p<0.01; *** p<0.001

4.3 Labor-market outcomes at occupational maturity

Concerning the labor-market outcomes at occupational maturity, Table 4.6 displays the association between tracking (first track of placement) and both social class position and employment status at occupational maturity (it does not include inactive individuals).

Table 4.6. Linear probability model of class attainment at occupational maturity on broad and detailed first track of placement, birth cohort 1958-67 (robust standard errors).

Variables	M1	M2	M3
Outcome: Higher service class I			
Broad first track	Lower secondary or less (reference category)		
	Vocational	-0.01	
	Technical	0.06***	
	Academic	0.11***	
Detailed first track	Lower secondary or less (reference category)		
	Other Diploma	-0.02***	-0.06***
	Vocational Commercial	0.00	-0.01
	Vocational Industrial	-0.01	-0.01
	Technical Commercial	0.06***	0.04*
	Technical Industrial	0.05***	0.04**
	Academic Other	0.01	-0.02
	Academic Scientific	0.16***	0.07**
	Academic Classical	0.18***	0.09*
Constant	0.02***	0.02***	0.02***
N	1.390	1.390	1.390
R2	0.036	0.059	0.099
Outcome: Service class I-II			
Broad first track	Lower secondary or less (reference category)		
	Vocational	0.01	
	Technical	0.12***	
	Academic	0.20***	
Detailed first track	Lower secondary or less (reference category)		
	Other Diploma	-0.02***	-0.10***
	Vocational Commercial	0.02	0.01
	Vocational Industrial	0.00	-0.00
	Technical Commercial	0.16***	0.13***
	Technical Industrial	0.07***	0.04**
	Academic Other	0.02	-0.04**
	Academic Scientific	0.27***	0.10***
	Academic Classical	0.36***	0.18***
Constant	0.02***	0.02***	0.02***
N	1,390	1,390	1,390
R2	0.071	0.128	0.225

Table 4.6. Continued

Variables	M1	M2	M3
Outcome: Working class V-VI-VIIabc			
Broad first track	Lower secondary or less (reference category)		
	Vocational	-0.14***	
	Technical	-0.37***	
	Academic	-0.50***	
Detailed first track	Lower secondary or less (reference category)		
	Other Diploma	-0.04	0.03
	Vocational Commercial	-0.10*	-0.09*
	Vocational Industrial	-0.21***	-0.20***
	Technical Commercial	-0.34***	-0.31***
	Technical Industrial	-0.40***	-0.38***
	Academic Other	-0.39***	-0.35***
	Academic Scientific	-0.53***	-0.41***
	Academic Classical	-0.59***	-0.45***
Constant	0.64***	0.64***	0.64***
N	1,390	1,390	1,390
R2	0.172	0.183	0.209
Outcome: Unskilled working class VIIabc			
Broad first track	Lower secondary or less (reference category)		
	Vocational	-0.14***	
	Technical	-0.24***	
	Academic	-0.28***	
Detailed first track	Lower secondary or less (reference category)		
	Other Diploma	-0.13	-0.09
	Vocational Commercial	-0.20***	-0.20***
	Vocational Industrial	-0.06	-0.06
	Technical Commercial	-0.27***	-0.26***
	Technical Industrial	-0.21***	-0.20***
	Academic Other	-0.18***	-0.16***
	Academic Scientific	-0.31***	-0.24***
	Academic Classical	-0.38***	-0.30***
Constant	0.39***	0.39***	0.39***
N	1,390	1,390	1,390
R2	0.078	0.093	0.105

Table 4.6. Continued

Variables		M1	M2	M3
Outcome: Unemployment status				
Broad first track	Lower secondary or less (reference category)			
	Vocational	-0.01		
	Technical	-0.01		
	Academic	-0.00		
Detailed first track	Lower secondary or less (reference category)			
	Other Diploma		0.07	0.07
	Vocational Commercial		-0.03	-0.03
	Vocational Industrial		-0.00	-0.00
	Technical Commercial		-0.01	-0.01
	Technical Industrial		-0.01	-0.01
	Academic Other		0.01	0.01
	Academic Scientific		-0.01	-0.01
	Academic Classical		-0.01	-0.00
Constant		0.07***	0.07***	0.07***
N		1,390	1,390	1,390
R2		0.000	0.002	0.002

Source: own calculation based on IHLS. Legend: *p<0.05; ** p<0.01; *** p<0.001

The pattern of the access to the higher service class is extremely similar to the one observed for early labor outcomes. On the other hand, the size of the association of the tracks and access to the service class is larger for the upper secondary graduates of the technical commercial schools and of the classical academic curriculum. The mediation of tertiary degree attainment remains important. The correlation between tracking and access to the working class is marginally weaker, mainly for the academic track, and the share of variance explained is reduced. Lastly, both broad and detailed tracking, as well as tertiary degree attainment, seem relevant to a limited extent for the employment status.

Table 4.7. Linear probability model of class attainment at occupational maturity on broad and detailed track of diploma, birth cohort 1958-67 (robust standard errors).

Variables		M1	M2	M3
Outcome: Higher service class I				
Broad track of diploma	Lower secondary or less (reference category)			
	Vocational	0.00		
	Technical	0.08***		
	Academic	0.12***		
Detailed track of diploma	Lower secondary or less (reference category)			
	Other Diploma		-0.02***	-0.10**
	Vocational Commercial		0.01	-0.01
	Vocational Industrial		-0.01	-0.01
	Technical Commercial		0.09***	0.06*
	Technical Industrial		0.07**	0.05*
	Academic Other		0.01	-0.03
	Academic Scientific		0.17***	0.08*
	Academic Classical		0.18***	0.07
Constant		0.02***	0.02***	0.02***
N		1390	1390	1390
R2		0.041	0.064	0.101
Outcome: Service class I-II				
Broad track of diploma	Lower secondary or less (reference category)			
	Vocational	0.02		
	Technical	0.15***		
	Academic	0.22***		
Detailed track of diploma	Lower secondary or less (reference category)			
	Other Diploma		-0.02***	-0.17**
	Vocational Commercial		0.04	0.01
	Vocational Industrial		0.01	-0.00
	Technical Commercial		0.22***	0.17***
	Technical Industrial		0.09***	0.06*
	Academic Other		0.02	-0.05*
	Academic Scientific		0.29***	0.11**
	Academic Classical		0.37***	0.18***
Constant		0.02***	0.02***	0.02***
N		1390	1390	1390
R2		0.088	0.148	0.234

Table 4.7: Continued

Variables		M1	M2	M3
Outcome: Working class V-VI-VIIabc				
Broad track of diploma	Lower secondary or less (reference category)			
	Vocational	-0.15***		
	Technical	-0.38***		
	Academic	-0.49***		
Detailed track of diploma	Lower secondary or less (reference category)			
	Vocational Commercial		-0.10	-0.08
	Vocational Industrial		-0.19**	-0.18**
	Technical Commercial		-0.36***	-0.33***
	Technical Industrial		-0.40***	-0.38***
	Academic Other		-0.39***	-0.35***
	Academoc Scientific		-0.51***	-0.40***
	Academic Classical		-0.58***	-0.45***
	Other Diploma		-0.23	-0.13
Constant		0.60***	0.60***	0.60***
N		1390	1390	1390
R2		0.186	0.193	0.212
Outcome: Unskilled working class VIIabc				
Broad track of diploma	Lower secondary or less (reference category)			
	Vocational	-0.13**		
	Technical	-0.25***		
	Academic	-0.28***		
Detailed track of diploma	Lower secondary or less (reference category)			
	Vocational Commercial	-0.17***	-0.16**	
	Vocational Industrial	-0.08	-0.07	
	Technical Commercial	-0.29***	-0.27***	
	Technical Industrial	-0.22***	-0.21***	
	Academic Other	-0.18***	-0.17***	
	Academoc Scientific	-0.29***	-0.24***	
	Academic Classical	-0.37***	-0.30***	
	Other Diploma	-0.25*	-0.19	
Constant		0.37***	0.37***	0.37***
N		1390	1390	1390
R2		0.086	0.097	0.106

Table 4.7. Continued

Variables		M1	M2	M3
Outcome: Unemployment status				
Broad track of diploma	Lower secondary or less (reference category)			
	Vocational	-0.01		
	Technical	-0.05**		
	Academic	-0.01		
Detailed track of diploma	Lower secondary or less (reference category)			
	Vocational Commercial		-0.05*	-0.05*
	Vocational Industrial		0.01	0.01
	Technical Commercial		-0.06***	-0.06***
	Technical Industrial		-0.04*	-0.04
	Academic Other		0.01	0.01
	Academoc Scientific		-0.02	-0.02
	Academic Classical		-0.01	-0.01
	Other Diploma		0.18	0.17
Constant		0.07***	0.07***	0.07***
N		1390	1390	1390
R2		0.006	0.012	0.012

Source: own calculation based on IHLS. Legend: *p<0.05; ** p<0.01; *** p<0.001

Table 4.7 shows the association between the track of diploma and social class destination at occupational maturity. The differences between first and final tracking are i) a slightly larger R squared for the latter and ii) the technical curricula and the vocational commercial schools seems to offer a little more protection against unemployment (it could be a consequence of the large share of students who dropped out from these two tracks).

5. Decomposition of long-term inequalities (OED)

Lastly, we focus on the role of tracking as mediator of the reproduction of long-term inequality. The Tables 5.1–5.2, and the Tables 5.3-5.4 report the mediation analysis respectively for parental education and social class of origin. Specifically, we calculated the percent decrease in size of the social background coefficients after introducing broad tracking in the second model, detailed tracking in the third model, and, finally, adding higher education as control variable in the fourth model.

Table 5.1. Mediation of first track of placement for the association between parental education and life-course outcomes, birth cohort 1958-67 (OLS with robust standard errors).

Variables		(0) Total association	(1) + Broad first track	(2) + Detailed first track	(3)+Tertiary degree
Outcome: Tertiary degree among eligible students					
Parental Education	Lower secondary or less (reference category)				
	Upper secondary	0.20***	40%	60%	
	Tertiary	0.40***	33%	53%	
N		957	957	957	
R2		0.094	0.189	0.239	
Outcome: Higher service class I					
Parental Education	Lower secondary or less (reference category)				
	Upper secondary	0.09***	34%	45%	-
	Tertiary	0.17***	24%	41%	-
N		1,390	1,390	1,390	820
R2		0.038	0.052	0.068	0.093
Outcome: Service class I-II					
Parental Education	Lower secondary or less (reference category)				
	Upper secondary	0.17***	29%	41%	65%
	Tertiary	0.27***	30%	52%	-
N		1,390	1,390	1,390	820
R2		0.072	0.101	0.144	0.204
Outcome: Working class V-VI-VIIabc					
Parental Education	Lower secondary or less (reference category)				
	Upper secondary	-0.26***	58%	62%	81%
	Tertiary	-0.39***	54%	62%	82%
N		1,390	1,390	1,390	820
R2		0.065	0.182	0.190	0.144
Outcome: Unskilled working class VIIabc					
Parental Education	Lower secondary or less (reference category)				
	Upper secondary	-0.15***	60%	67%	-
	Tertiary	-0.24***	46%	58%	75%
N		1,390	1,390	1,390	820
R2		0.030	0.084	0.096	0.068

Table 5.1. Continued**Outcome: Unemployment status**

Parental Education	Lower secondary or less (reference category)				
	Upper secondary	-0.04***	0%	0%	25%
	Tertiary	0.02	-	-	-
N		1,390	1,390	1,390	820
R2		0.004	0.004	0.006	0.021

Source: own calculation based on IHLS. Legend: *p<0.05; ** p<0.01; *** p<0.001 Note: the mediation percentage is calculated only when the coefficient in the base model is significantly different from 0 at the 10% level.

The results displayed in Table 5.1 and 5.2 suggest that both first and final tracking account for ca 40% of the association between parental education and higher education attainment. Additionally, the more detailed specification of the type of diploma mediates about 50-60% of the reproduction of educational inequalities. Turning to access to the higher service class, tracking mediates more the correlation with upper secondary educated parents than the one with tertiary graduates, but the gap decreases looking at detailed curricula. The pattern for the access to the service class reported is similar. Moreover, tracking accounts for 60-70% of the association between parental education and being a skilled or unskilled manual worker, while tertiary degree attainment decreases the size of the correlation by 10-20 p.p. Lastly, first track placement does not mediate employment status, whereas track of diploma accounts for the low correlation to a small extent.

Table 5.2. Mediation of final track for the association between parental education and life-course outcomes, birth cohort 1958-67 (OLS with robust standard errors).

Course Outcomes, Data Collected 1998-99 (OLS with Robust Standard Errors):					
		(0)	(1)+ Broad	(2)+Detailed	(3)+Tertiary
Variables		association	track of diploma	track of diploma	degree
Outcome: Tertiary degree among eligible students					
Parental Education	Lower secondary or less (reference category)				
	Upper secondary	0.18***	39%	56%	
	Tertiary	0.38***	37%	58%	
N		820	820	820	
R2		0.081	0.186	0.250	
Outcome: Higher service class I					
Parental Education	Lower secondary or less (reference category)				
	Upper secondary	0.09***	44%	-	-
	Tertiary	0.17***	24%	41%	-
N		1390	1390	1390	820
R2		0.038	0.056	0.072	0.094

Table 5.2. Continued**Outcome: Service class I-II**

Parental Education	Lower secondary or less (reference category)				
	Upper secondary	0.17***	35%	47%	-
	Tertiary	0.27***	33%	59%	-
N		1390	1390	1390	820
R2		0.072	0.113	0.161	0.208

Outcome: Working class V-VI-VIIabc

Parental Education	Lower secondary or less (reference category)				
	Upper secondary	-0.26***	65%	69%	-
	Tertiary	-0.39***	62%	69%	82%
N		1390	1390	1390	820
R2		0.065	0.193	0.198	0.143

Outcome: Unskilled working class VIIabc

Parental Education	Lower secondary or less (reference category)				
	Upper secondary	-0.15***	-	-	-
	Tertiary	-0.24***	50%	67%	75%
N		1390	1390	1390	820
R2		0.030	0.091	0.099	0.072

Outcome: Unemployment status

Parental Education	Lower secondary or less (reference category)				
	Upper secondary	-0.04**	25%	25%	-
	Tertiary	0.02	-	-	-
N		1390	1390	1390	820
R2		0.004	0.009	0.015	0.025

Source: own calculation based on IHLS. Legend: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ Note: the mediation percentage is calculated only when the coefficient in the base model is significantly different from 0 at the 10% level.

Table 5.3 and Table 5.4 show a pattern of mediation between social class of origin and tertiary degree attainment similar to the one described for parental education: tracking accounts for ca 40-50% of the association. The results concerning the relationship between social background and entrance in the service class are equally near to the ones reported for parental education. Alternatively, the track of diploma mediates less the entrance in the working class. Lastly, the mediation analysis seems to be less relevant for the outcome “unemployment status.

Table 5.3. Mediation of first track of placement for the association between class and life-course outcomes.

Variables	(0) association	(1) + first track	(2) Broad Detailed first track	+ (3)+tertiary degree
Outcome: Tertiary degree among eligible students				
Prenatal social class	I-II (reference category)			
	IIIab	0.01	-	-
	Ivab	-0.23***	48%	-
	Ivc	-0.25***	-	-
	V-VI	-0.29***	45%	62%
	VIIabc	-0.30***	47%	67%
N		1,192	957	957
R2		0.101	0.176	0.233
Outcome: Higher service class I				
Prenatal social class	I-II (reference category)			
	IIIab	-0.034	-	-
	Ivab	-0.109**	27	-
	Ivc	-0.132**	31	-
	V-VI	-0.124**	25	-
	VIIabc	-0.138***	29	50
N		1390	1390	1390
R2		0.031	0.047	0.065
Outcome: Service class I-II				
Prenatal social class	I-II (reference category)			
	IIIab	-0.030	-	-
	Ivab	-0.178***	28	56
	Ivc	-0.223***	36	50
	V-VI	-0.193***	32	53
	VIIabc	-0.207***	38	57
N		1390	1390	1390
R2		0.053	0.089	0.136
Outcome: Working class V-VI-VIIabc				
Prenatal social class	I-II (reference category)			
	IIIab	0.048	-	-
	Ivab	0.201***	60	-
	Ivc	0.269***	74	-
	V-VI	0.419***	38	43
	VIIabc	0.408***	46	51
N		1390	1390	1390
R2		0.097	0.204	0.212

Table 5.3. Continued

Outcome: Unskilled working class VIIabc				
Prenatal social class	I-II (reference category)			
	IIIab	0.022	-	-
	Ivab	0.122***	50	-
	Ivc	0.179***	56	-
	V-VI	0.223***	32	41
	VIIabc	0.265***	37	44
N		1390	1390	1390
R2		0.050	0.097	0.109

Outcome: Unemployment status				
Prenatal social class	I-II (reference category)			
	IIIab	-0.005	-	-
	Ivab	-0.010	-	-
	Ivc	-0.011	-	-
	V-VI	0.003	-	-
	VIIabc	0.010	-	-
N		1390	1390	1390
R2		0.001	0.002	0.004

Source: own calculation based on IHLS. Legend: *p<0.05; ** p<0.01; *** p<0.001 Note: the mediation percentage is calculated only when the coefficient in the base model is significantly different from 0 at the 10% level.

Table 5.4. Mediation of final track between social class of origin and life-course outcomes.

Variables		(0) Total association	(1)+ Broad track of diploma	(2)+Detailed track of diploma	(3)+tertiary degree
Outcome: Tertiary degree among eligible students					
Prenatal social class	I-II (reference category)				
	IIIab	-0.02	-	-	
	Ivab	-0.17**	-	-	
	Ivc	-0.15	-	-	
	V-VI	-0.28***	43%	-	
	VIIabc	-0.28***	43%	-	
N		820	820	820	
R2		0.06	0.18	0.25	

Tables 5.4. Continued
Outcome: Higher service class I

Prenatal social class	I-II (reference category)				
	IIIab	-0.03	-	-	-
	Ivab	-0.11**	-	-	-
	Ivc	-0.13**	-	-	-
	V-VI	-0.12**	33%	-	-
	VIIabc	-0.14***	36%	-	-
N		1390	1390	1390	820
				0.07	
R2		0.031	0.051	0	0.093

Outcome: Service class I-II

Prenatal social class	I-II (reference category)				
	IIIab	-0.03	-	-	-
	Ivab	-0.18***	33%	-	-
	Ivc	-0.22***	41%	-	-
	V-VI	-0.19***	42%	-	-
	VIIabc	-0.21***	43%	-	-
N		1390	1390	1390	820
				0.15	
R2		0.053	0.103	5	0.206

Outcome: Working class V-VI-VIIabc

Prenatal social class	I-II (reference category)				
	IIIab	0.05	-	-	-
	Ivab	0.20***	-	-	-
	Ivc	0.27***	-	-	-
	V-VI	0.42***	43%	45%	60%
	VIIabc	0.41***	46%	51%	76%
N		1390	1390	1390	820
				0.22	
R2		0.097	0.217	1	0.155

Outcome: Unskilled working class VIIabc

Prenatal social class	I-II (reference category)				
	IIIab	0.02	-	-	-
	Ivab	0.12***	-	-	-
	Ivc	0.18***	-	-	-
	V-VI	0.22***	41%	45%	55%
	VIIabc	0.27***	41%	45%	-
N		1390	1390	1390	820
				0.11	
R2		0.050	0.104	2	0.077

Tables 5.4. Continued**Outcome: Unemployment status**

Prenatal social class	I-II (reference category)				
	IIIab	-0.01	-	-	-
	Ivab	-0.01	-	-	-
	Ivc	-0.01	-	-	-
	V-VI	0.00	-	-	-
	VIIabc	0.01	-	-	-
N		1390	1390	1390	820
R2		0.001	0.007	3	0.020

Source: own calculation based on IHLS. Legend: *p<0.05; ** p<0.01; *** p<0.001 Note: the mediation percentage is calculated only when the coefficient in the base model is significantly different from 0 at the 10% level

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