

Social Mobility and Meritocracy:
An Overview of Empirical Research
About France
(with a Brief Comparative Perspective)

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About Methodology...

To study social mobility and its temporal trends, sociologists usually analyze survey data that cross-classify the class position of adult individuals with the class position of their father during their youth.

And they distinguish between the viewpoint of observed mobility (or absolute rates of mobility) and the viewpoint of social fluidity (or relative rates of mobility). This is the latter viewpoint that informs about inequality of social opportunity.

Similarly, to study the association between class origin and level of education attained, sociologists analyze survey data that cross-classify the highest degree obtained by adult individuals with the class position of their father.

And they distinguish between the viewpoint of educational expansion or 'massification' (the absolute rates) and the viewpoint of democratization *per se* (the relative rates). This is the latter viewpoint that informs about inequality of educational opportunity.

Increasing observed mobility, but constant social fluidity...

| | <i>Destination Professional</i> | <i>Worker</i> | | | <i>Destination Professional</i> | <i>Worker</i> | |
|--------------|---------------------------------|---------------|------|--------------|---------------------------------|---------------|------|
| Origin | | | | Origin | | | |
| Professional | 125 | 75 | 200 | Professional | 150 | 50 | 200 |
| Worker | 125 | 675 | 800 | Worker | 200 | 600 | 800 |
| | 250 | 750 | 1000 | | 350 | 650 | 1000 |
| | Date t1 | | | | Date t2 | | |

Observed mobility has increased:

- * the total mobility rate is 20% in t1, but 25% in t2

- * the proportion of sons of workers who are professionals is 16% in t1, but 25% in t2

But Social fluidity or the inequality of social opportunity has been strictly constant because, in t2 as in t1, the odds for being professional rather than worker are always 9 times larger for the sons of professionals than for the sons of workers:

$$\frac{(125/75)}{(125/675)} = \frac{(150/50)}{(200/600)} = 9$$

School massification without democratization...

| <i>Degree</i> | <i>Bac</i> | <i>No Bac</i> | | <i>Degree</i> | <i>Bac</i> | <i>No Bac</i> | |
|---------------|------------------|---------------|------|---------------|------------------|---------------|------|
| Origin | | | | Origin | | | |
| Professional | 125 | 75 | 200 | Professional | 150 | 50 | 200 |
| Worker | 125 | 675 | 800 | Worker | 200 | 600 | 800 |
| | 250 | 750 | 1000 | | 350 | 650 | 1000 |
| | Cohort c1 | | | | Cohort c2 | | |

Because of the educational expansion, the proportion of baccalaureate holders has grown among both the sons of professionals and the sons of workers.

But school democratization has not intervened or the inequality of educational opportunity has remained unchanged because, in cohort c2 as in cohort c1, the odds for being a baccalaureate holder rather than not are always 9 times larger for the sons of professionals than for the sons of workers:

$$\frac{(125/75)}{(125/675)} = \frac{(150/50)}{(200/600)} = 9$$

Real societies...

... distinguish more than two social classes and they also have more complex educational systems.

But the constancy of the inequality of educational or social opportunity is always represented by the equality of homologous odds ratios, over time or across cohorts...

And, for about fifty years, starting from observed data, we know how to statistically estimate the tables that should have been obtained under the hypothesis of a strictly constant inequality of social or educational opportunity.

It is therefore possible to compare the observed data to this hypothesized situation of strict constancy.

Moreover, for thirty years, we know how to statistically estimate a transformation of the « general strength » of the association between origin and destination, or between origin and level of education attained.

A fictitious example of increasing social fluidity

| | <i>Destination Professional</i> | <i>Worker</i> | | | <i>Destination Professional</i> | <i>Worker</i> | |
|--------------|---------------------------------|---------------|------|--------------|---------------------------------|---------------|------|
| Origin | | | | Origin | | | |
| Professional | 900 | 100 | 1000 | Professional | 800 | 200 | 1000 |
| Worker | 100 | 900 | 1000 | Worker | 200 | 800 | 1000 |
| | 1000 | 1000 | 2000 | | 1000 | 1000 | 2000 |
| | Date t1 | | | | Date t2 | | |

If social fluidity had been rigorously constant, at each date, 850 of the 1000 sons of professionals should themselves be professionals, and 850 of the 1000 sons of workers should themselves be workers.

In fact, social fluidity has increased because the odds ratio was 81 in t1 and it was reduced to 16 in t2. We will say that social fluidity has increased by 37% because $\text{Log}(16) / \text{Log}(81) = 0.63$.

It is a very sensitive measure of the evolution! Indeed, at a variation of 37% in the logarithm of the odds ratio only corresponds a « displacement » of 10% of the individuals within the t1 mobility table to make it identical to the t2 mobility table.

In the 1980s and 1990s...

International sociological research on these subjects is dominated by the thesis of the constancy of social fluidity and inequality of educational opportunity. More precisely, researchers are impressed by the degree to which the constant association model proves to be close to the observed data.

This is indeed visible in the titles of two landmark books based on international comparisons:

Erikson & Goldthorpe (1992), *The Constant Flux: A Study of Class Mobility in Industrial Societies*, Oxford, Clarendon Press.

Shavit & Blossfeld (eds.) (1993), *Persistent Inequality: Changing Educational Attainment in Thirteen Countries*, Boulder, Westview Press.

This book concludes that, from the beginning of the XXth century, there has been a decline in inequality of educational opportunity in only two countries out of the 13 studied: the Netherlands and Sweden.

However, since the end of the 1990s, researchers have begun to question this conclusion of strict constancy.

*Intergenerational social fluidity has increased in France,
i.e. inequality of social opportunity has diminished*

*Odds ratios (same origins and destinations) for **men (women)** between 1977 and 2015
(Vallet (2014) and Saillard – INSEE Formation-Qualification Professionnelle Surveys)*

| | | Professions intermédiaires | Employés | Ouvriers |
|--|------|----------------------------|-------------------|----------------------|
| Cadres et Professions Intellectuelles Supérieures | 1977 | 3,5 (2,7) | 10,8 (9,4) | 91,7 (410,4) |
| | 1985 | 2,5 (2,3) | 7,6 (11,1) | 110,8 (109,4) |
| | 1993 | 2,3 (2,2) | 4,4 (5,2) | 40,9 (67,1) |
| | 2003 | 2,3 (1,8) | 5,8 (8,1) | 28,8 (63,0) |
| | 2015 | 2,3 (1,7) | 5,0 (7,0) | 22,7 (34,1) |
| Professions Intermédiaires | 1977 | | 1,8 (1,8) | 6,3 (9,2) |
| | 1985 | | 1,8 (1,8) | 4,6 (6,4) |
| | 1993 | | 1,5 (1,5) | 4,3 (7,3) |
| | 2003 | | 2,1 (1,6) | 3,8 (6,6) |
| | 2015 | | 1,5 (1,8) | 2,7 (6,2) |
| Employés | 1977 | | | 3,6 (2,3) |
| | 1985 | | | 3,3 (2,6) |
| | 1993 | | | 2,4 (2,5) |
| | 2003 | | | 2,4 (1,9) |
| | 2015 | | | 1,7 (1,9) |

The increase in social fluidity: what is the additional social circulation?

We measure the consequences of this increase as a zero-sum game: “the positions gained by some individuals have been lost by some others” (Vallet, 2014)

2. Modèle d'évolution diversifiée : effet de la variation entre 1977 et 2003, évalué sur la base du modèle de Goodman-Hout (1998) [2003 estimé Goodman-Hout – 1977 estimé Goodman-Hout et prolongé en 2003 par Ras]

| Fils | 1 | 2 | 3 | 4 | 5 | 6 | Total (en milliers) |
|--|-----------|------------|------------|------------|------------|------------|------------------------|
| Pères | | | | | | | |
| 1. Agriculteurs exploitants | +15 | -19 | +47 | +37 | -24 | -56 | (1 201) |
| 2. Artisans, commerçants et chefs d'entreprise | -2 | +5 | +12 | -5 | -6 | -5 | (1 112) |
| 3. Cadres et professions intellectuelles supérieures | -2 | +11 | -82 | +10 | +24 | +39 | (786) |
| 4. Professions intermédiaires | +3 | +2 | -1 | -32 | -15 | +43 | (1 136) |
| 5. Employés | -2 | -2 | -27 | -22 | -8 | +62 | (960) |
| 6. Ouvriers | -12 | +3 | +51 | +13 | +29 | -84 | (3 702) |
| Total (en milliers) | (369) | (719) | (1 704) | (2 189) | (1 013) | (2 901) | (8 896) |

Lecture : parmi les hommes français de 35 à 59 ans actifs occupés ou anciens actifs occupés en 2003, on compte 3 702 000 fils d'ouvriers ; en raison de l'augmentation de la fluidité sociale intervenue entre 1977 et 2003, 84 000 ne sont pas eux-mêmes ouvriers et 51 000 sont cadres ou professions intellectuelles supérieures. La réallocation des positions sociales concerne, en 2003, 406 000 hommes, soit 4,6 % de l'effectif total.

France is not the only country affected by this trend...

Breen & Luijkx in the concluding chapter of the *Social Mobility in Europe* book (2004, OUP, p. 389):

"The results from our eleven countries then point to a fairly clear conclusion: there is a widespread tendency for social fluidity to increase, even though this might not be a statistically significant trend in every case."

Breen & Müller in the concluding chapter of the *Social Mobility in the Twentieth Century in Europe and the United States* book (2020, SUP, p. 286):

"They reveal a general tendency for the association between people's class origins and their class destinations to weaken, most often in the middle cohorts, among people born roughly between 1925 and 1955."

That raises the following question. Should the declining trend in the strength of the association between class origin and class destination be interpreted as a sign that society has become more meritocratic?

About the general evolution of modern societies,
return to the optimistic theses expressed by American sociology
in the 1960s and 1970s...

Blau & Duncan (1967)

A fundamental trend towards increasing universalism characterizes the industrial society.

They anticipate that the achieved status of a man, i.e. what he has accomplished from the point of view of some objective criterion, becomes more important than his ascribed status, i.e. what he is in the sense of the family from which he originates.

Treiman (1970)

The direct transfer of status, from parents to children, would diminish with the process of industrialization of a society.

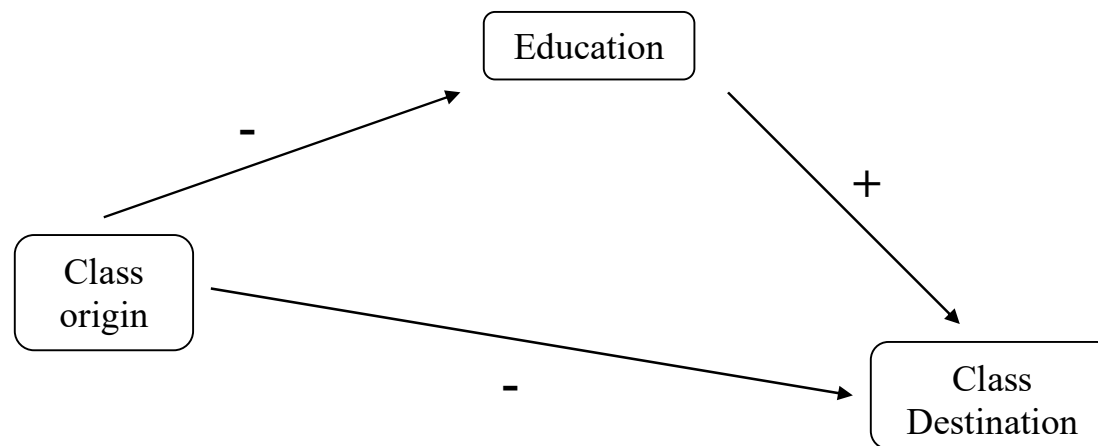
Bell (1973, p. 409)

“The post-industrial society, in its initial logic, is a meritocracy.”

In modern societies, the education obtained is the key element for the allocation of social statuses and it is also an important indicator of the individual merit.

If these theses are correct and to be able to interpret the increase in social fluidity as the advent of a more meritocratic society, one should therefore observe that...

Over time or across cohorts, and in the triangle below, statistical relationships evolve (with a decrease for the first, an increase for the second, and a decrease for the third)



Trend in the Class origin – Education association

(Vallet in Breen & Müller, 2020)

| Cohort | Men | Women |
|-----------|-------|-------|
| 1906-1924 | 1.000 | 1.000 |
| 1925-1934 | 1.031 | 0.916 |
| 1935-1944 | 0.893 | 0.790 |
| 1945-1954 | 0.755 | 0.626 |
| 1955-1964 | 0.718 | 0.616 |
| 1965-1973 | 0.707 | 0.600 |

* In France, an (irregular) decrease in the strength of the association between class origin and the highest level of education obtained

* More marked among women than among men

* Essentially concentrated in the cohorts born around the 1940 decade – i.e. before the institutional reforms that aimed at democratizing education – then followed by a quasi-plateau (Thélot & Vallet, 2000)

* Mainly driven by the improvement in the school careers of children of farmers and agricultural workers (Vallet & Selz, 2007)

Trend in the Class origin – Education association (continued)

However, beyond the level of education obtained, considering more qualitative differences such as, for instance, the precise track followed at a given level, is able to modify the conclusion.

In particular, between the 1960 and 2000 decades, there has been a reduction in class inequalities for obtaining a baccalaureate, whatever it is.

But the decline in class inequality disappears if one takes account of the precise type of baccalaureate obtained (general, technological, or vocational) (Ichou & Vallet, 2011).

Or, for instance, the reduction in class inequality is weaker and weaker when one considers a « more prestigious » baccalaureate (next slide).

Descriptive Results –

Trends in odds ratios

| | | 1962 INED survey | | 1995 Panel study | | Ratio of odds ratios (*: signif. at 5%) |
|---|------------|----------------------|---------------|----------------------|---------------|--|
| | | Higher service class | Working class | Higher service class | Working class | |
| Any <i>baccalauréat</i> | % | 56.0 | 12.4 | 81.3 | 45.5 | 0.58* |
| | Odds ratio | 9.0 | | 5.2 | | |
| Academic <i>baccalauréat</i> | % | 52.9 | 9.2 | 65.0 | 17.3 | 0.80* |
| | Odds ratio | 11.1 | | 8.9 | | |
| Scientific academic <i>baccalauréat</i> | % | 32.6 | 5.2 | 38.0 | 7.3 | 0.88 |
| | Odds ratio | 8.8 | | 7.8 | | |
| Maths/Physics scientific <i>bac</i> | % | 20.9 | 2.9 | 24.5 | 3.7 | 0.95 |
| | Odds ratio | 8.9 | | 8.5 | | |

Trend in the Class origin – Education association (end)

Falcon & Bataille (*European Sociological Review*, 2018) have used all annual French Labour Force Surveys between 1982 and 2014 to study temporal variation in inequality of educational opportunity over 11 birth cohorts born between 1918 and 1984, introducing much detail in the differentiation of higher education diplomas.

“We demonstrate that social background inequality in terms of access to higher education has diminished across cohorts, even within the highest and most selective educational levels, such as the grandes écoles.”

(next slide)

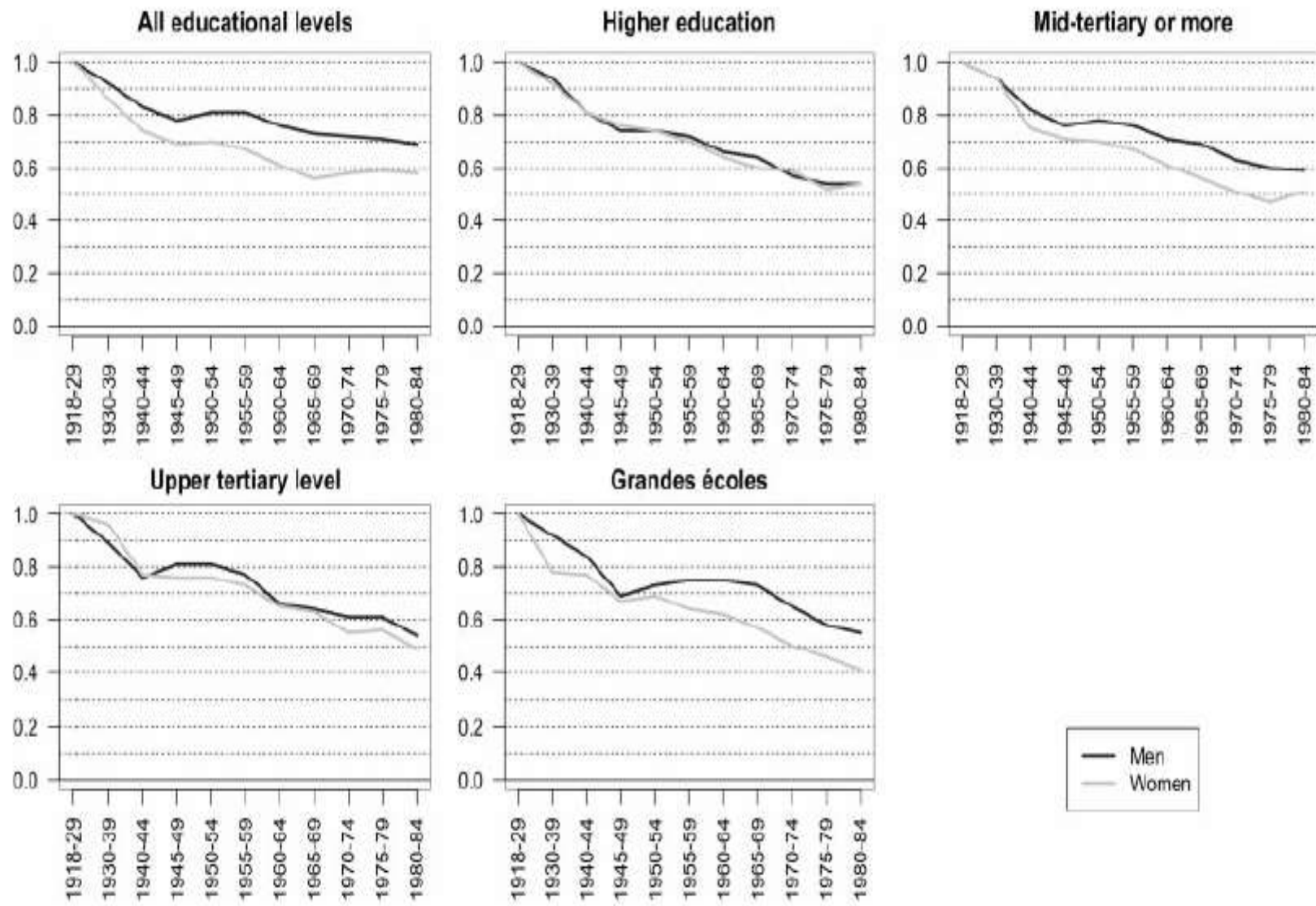


Figure 3. Unidiff parameters for the association between social background and educational attainment across cohorts.

Trend in the Education – Class destination association

(Vallet in Breen & Müller, 2020; with age controlled)

| Cohort | Men | Women |
|-----------|-------|-------|
| 1906-1924 | 1.000 | 1.000 |
| 1925-1934 | 0.980 | 0.881 |
| 1935-1944 | 0.893 | 0.796 |
| 1945-1954 | 0.809 | 0.693 |
| 1955-1964 | 0.828 | 0.601 |
| 1965-1973 | 0.753 | 0.552 |

* A weakening in the general strength of the association between level of education attained and class destination

* More marked among women than among men, and that began earlier among the former (cohort 1925-34) than the latter (cohort 1935-44)

* In absolute terms, cohort variation in class destinations according to the level of education attained has been much less pronounced for the extreme levels (at most general elementary education on one hand; higher tertiary degrees on the other hand) than for the intermediate levels. In the recent cohorts and for these intermediate levels, the probability of accessing the upper or lower service class has strongly declined while the chances of entering the working class have increased.

Trend in the Education – Class destination association (end)

A similar trend appears in period analysis, i.e. over the surveys, when the effect of class origin on class destination is also controlled.

On all those aged 25-64 currently or formerly in employment:

(Vallet in Breen, 2004; with class origin controlled)

| Survey | Men | Women |
|--------|-------|-------|
| 1970 | 1.000 | 1.000 |
| 1977 | 0.906 | 0.994 |
| 1985 | 0.851 | 0.875 |
| 1993 | 0.740 | 0.708 |

So, one detects a declining trend in the relative advantage afforded by education in attaining class destinations.

Table 3. Ratio of Higher Educated to First Jobs in Service Class by Birth Cohort

| | 1938-44 | 1945-50 | 1951-56 | 1957-62 | 1963-68 | 1969-75 |
|--------------------------------|---------|---------|---------|---------|---------|---------|
| Higher education (%) | 10.5 | 14.8 | 15.8 | 17.6 | 23.2 | 36.7 |
| First job in service class (%) | 17.0 | 19.2 | 17.7 | 17.6 | 21.3 | 27.0 |
| Ratio | 0.6 | 0.8 | 0.9 | 1.0 | 1.1 | 1.4 |

(Men and women born in metropolitan France aged 28 to 65 in 2003)

(Bouchet-Valat, Peugny and Vallet in Bernardi & Ballarino, 2016)

Trend in the (direct) Class origin – Class destination association

(Goux & Maurin, *European Sociological Review*, 1997) « *There is no evidence of a decline of the OD net association* » (p. 173).

(Vallet, 2004) Considering the three relationships OE, ED(net) and OD(net), this is certainly the direct association (with education controlled) between class origin and class destination that seems the most stable.

(Bouchet-Valat, Peugny & Vallet, 2016) « *At a more mature stage in the occupational career, we would conclude that ascription has not significantly declined in France over the past decades, even when assuming that educational returns have remained constant* » (p. 28).

Then, after relaxing the latter hypothesis: « *Overall, we observe no indication of a decreasing ascription in France over the past decades. By contrast, strong signs of an increased effect of social origin on the occupational status in both the first and the current job are visible in the most recent cohort (1969-75) and survey (2003). The second educational expansion that took place in France does not appear to have achieved its goals in terms of reducing ascription effects on the labour market* » (p. 29-30).

Trend in the (direct) Class origin – Class destination association (end)

(Goffette & Vallet, 2018, Essentiel CEREQ) For youths who left the French educational system in 1992 and those who did the same in 2010, the quality of the job position they hold five years later (evaluated with the socio-economic status of their occupation and the wage perceived) primarily depends on their diploma.

Beyond this, and considering the same diploma, one still observes moderate, but systematic differences that are associated with the socio-economic status of their parents and their level of education.

However, these gaps are smaller for « the 2010 Generation » compared to « the 1992 Generation »: « *the specific weight of the family background therefore seems to have diminished in two decades* » (p. 155).

The interaction between Education, Class origin and Class destination

The (direct) association between class origin and class destination varies with the level of education obtained: it tends to be lower the more we consider a higher level of education.

(Vallet in Breen & Müller, 2020; on all birth cohorts)

| | Men | Women |
|---|-------|-------|
| At most general elementary diploma | 1.000 | 1.000 |
| Lower vocational diploma | 0.913 | 0.883 |
| Intermediate general / vocational dipl. | 0.879 | 0.604 |
| Baccalaureate | 0.730 | 0.421 |
| Lower tertiary degree | 0.774 | 0.385 |
| Higher tertiary degree | 0.585 | 0.337 |

Therefore, at more advanced levels of education, class position attained is less affected by class origin, i.e. the allocation of status is « more meritocratic ». As the educational expansion over cohorts increases the relative weight of more advanced diplomas, that creates a compositional effect that contributes to the increase of intergenerational social fluidity.

The interaction between Education, Class origin and Class destination (continued)

The same stylized fact appears in a period analysis, i.e. across surveys (Vallet, 2004). However, the slope of the declining line (that summarizes the decline of the association between origin and destination as level of education grows) diminishes across surveys.

(Vallet in Breen, 2004; on all those aged 25-64 currently or formerly in employment)

| | Men | Women |
|---|--------|--------|
| <i>All surveys</i> <i>(1970, 1977, 1985, 1993)</i> | -0.058 | -0.101 |
| 1970 | -0.068 | -0.183 |
| 1993 | -0.033 | -0.054 |

« So, as education has expanded and the highest educational categories have grown in size, the capability of advanced education to weaken the ‘ascriptive effect’ has declined. Such a result might be interpreted in the context of signalling theory: for instance, as tertiary education is less rare in 1993 than in 1970, it might represent a less strong signal and might therefore be less powerful in offsetting the origin effect » (p. 142).

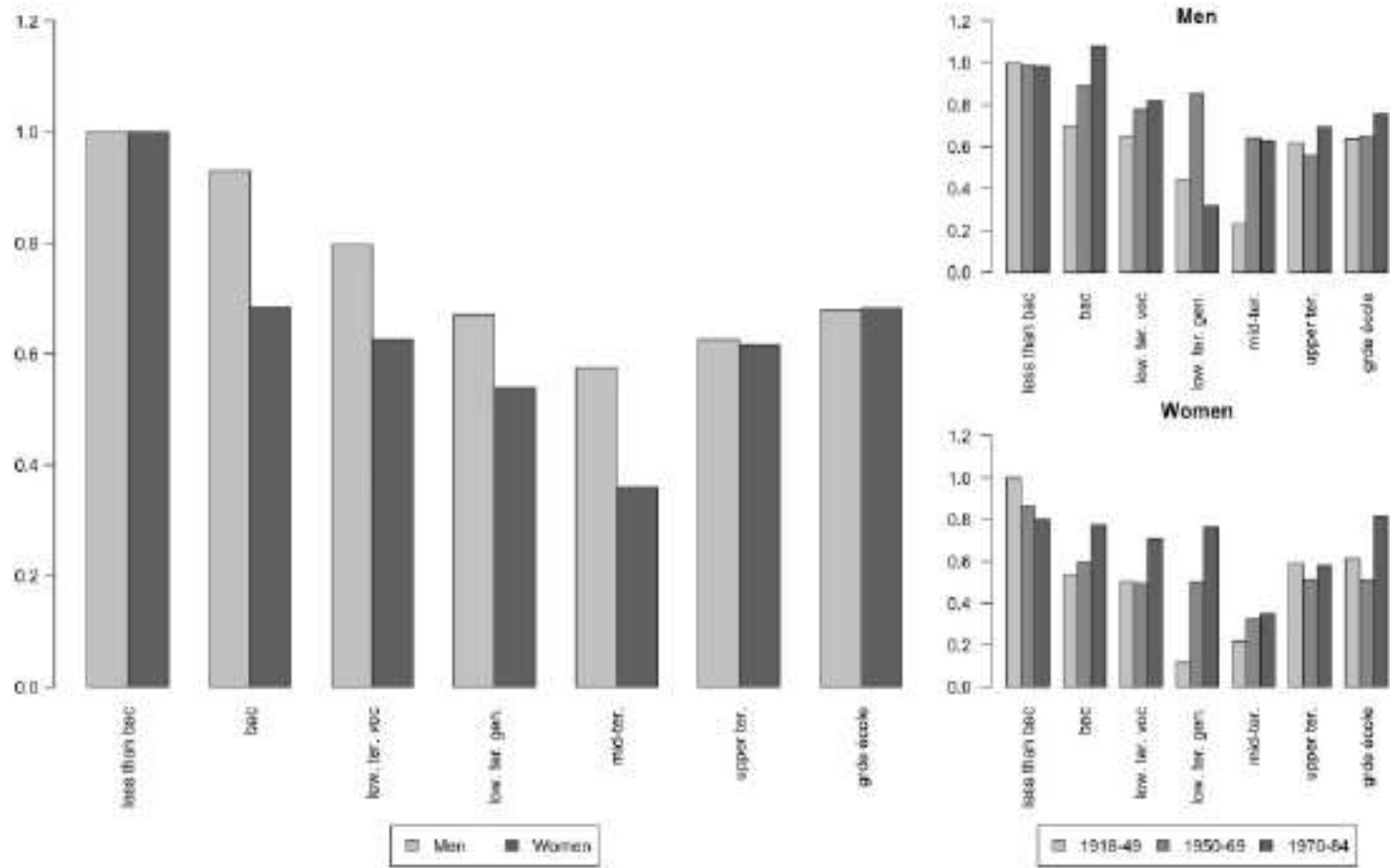
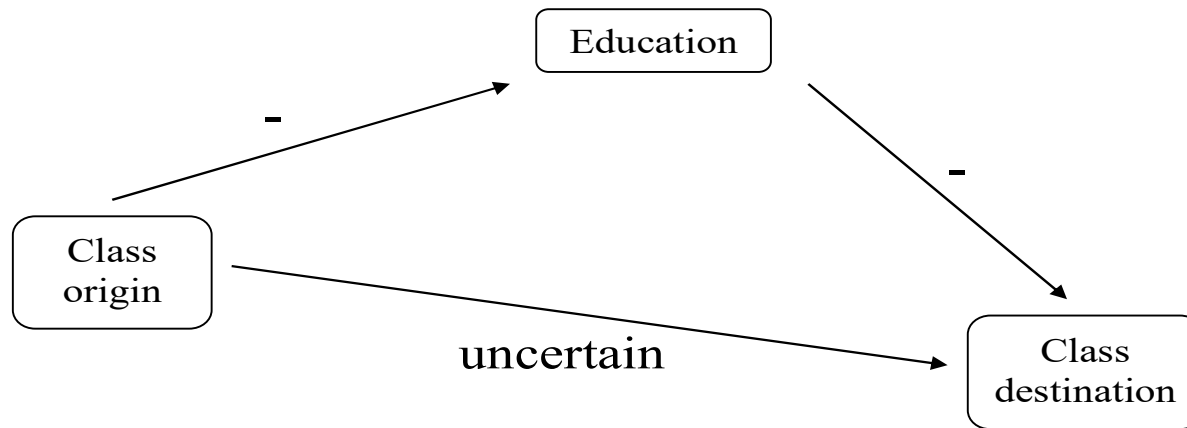


Figure 4. Unidiff parameters for variation in the association between social origin and class destination according to educational attainment (left panel—model M3 from Table A3) and to cohort (right panel—model M4 from Table A3).

Falcon & Bataille (*European Sociological Review*, 2018) – For both men and women, the ascriptive effect is the weakest for a degree of 3 or 4 years after baccalaureate, then it grows up again (a degree of at least 5 years after baccalaureate; a *grande école* diploma)

As a synthesis for France, we have observed:



And there is the interaction between Education, Class origin and Class destination that seems to be U-shaped and to weaken over time.

From a comparative perspective...

Social Mobility in Europe (2004) – Analysis of the OED triangle for five countries

- The association between class origin and educational attainment has weakened in France, the Netherlands and Sweden, but not in Ireland or Britain.
- The association between educational attainment and class destination, controlling for class origin, has weakened in all five countries.
- The ‘direct’ association between class origin and class destination has remained stable in Britain and Ireland, but it has weakened in the Netherlands.
- The interaction between education, class origin and class destination, and the associated compositional effect that were found for France – and previously the US (Hout, 1988) – are also visible for Sweden.

Education, Occupation and Social Origin (2016)

- In the 14 countries studied, there is a substantial ‘direct’ association between social origin and position (ISEI score).
- On a sample of 13 countries, the ‘direct’ association between social origin and position is temporally stable in 9 countries, declines in 2 and grows in 2.
- In 9 of 11 countries, the ‘direct’ association between social origin and position is stronger among the least educated category.

From a comparative perspective... (end)

Education, Occupation and Social Origin (2016)

- In 8 of 12 countries, the association between educational attainment and social position obtained has weakened over time (*inflation of educational credentials*).

Education and Intergenerational Social Mobility in Europe and the United States (2020) – On a sample of 8 countries

- « *Considering the broad picture, taking each country over the whole period we have studied, we find no cases in which social fluidity increased without either an equalizing effect of educational expansion or equalization in the relationship between origins and education, or both.* » (Breen & Müller, p. 287)