

POLITICAL AND BUSINESS DYNASTIES IN FRANCE: A SOCIAL GRADIENT IN RETURNS TO ELITE EDUCATION ^{*}

Stéphane Benveniste ♣

September 2023

Abstract

Dynasties constitute a visible sign of intergenerational persistence and raise questions about the legitimacy of the ruling elite. Among graduates from prestigious institutions, this paper quantifies occupational following in the French political and business elites. I link self-collected nominative data on 103,309 graduates from 12 French *Grandes Écoles* born between 1931 and 1975 to their professional careers between 1958 and 2019 as politicians with national-level mandates or board members of French firms. Identifying lineage through surnames, I find that sons of political and business leaders had 2.4 times more chances than their graduate peers to also reach elite careers, emphasizing a social gradient in returns to elite education. Political dynasties were particularly sizeable, although progressively declining. These dynasties also affected the composition of the French elite: dynastical board members graduated less frequently than first-generation directors from top colleges. Yet, they are propelled much younger to top business and political positions.

JEL CLASSIFICATION: D72, I23, I26, J24, J62.

KEYWORDS: Dynasties, intergenerational mobility, elite occupations, politics, business, *Grandes Écoles*.

^{*}I would like to thank for their helpful comments Baptiste Coulmont, Arnaud Lefranc, Morgan Raux, Akiko Suwa-Eisenmann, Alain Trannoy, Louis-André Vallet. Let me additionally thank participants to the First Workshop in Economics of Education at the Paris School of Economics, the Economic History Seminar of the Paris School of Economics, the Population Association of America 2023 Annual Meeting, the ISA RC28 2023 Spring Meeting, and the 2023 ECINEQ Conference. This work was supported by the French National Research Agency Grant ANR-17-EURE-0020, and by the Excellence Initiative of Aix-Marseille University – A*MIDEX.

♣Institut national d'études démographiques (INED), F-75020 Paris, France; Aix-Marseille University (Aix-Marseille School of Economics), CNRS, Marseille, France.

“Two hundred families are the masters of the French economy and so French politics. [...] The two hundred families place their representatives in positions of power.”

Édouard Daladier, Prime Minister, Congress of the Radical Party from 1934 in Nantes

1 Introduction

Political and business dynasties, such as the *Murdochs*, *Rockefellers*, or *Kennedys* in the United States, or the *Peugeots*, *Dassaults*, or *Le Pens* in France, constitute an ostentatious sign of intergenerational persistence. They raise questions on the legitimacy of the ruling elite, may feed social resentment, and were often the bedrock of major historical turmoil. Moreover, the widening gap in economic (Piketty, 2014) and social (Savage, 2015) conditions between those in top positions and the rest of society makes understanding the path to the top of the social hierarchy more critical.

In this paper, I analyze occupational dynasties within the French elite, both in politics and business.^{1,2} I use registers from 12 of the most prestigious French higher education institutions—*Grandes Écoles*—(Bourdieu, 1989) and document that among male graduates, sons of members of the political and business elites have 2.4 times more chances than their peers to embrace similar elite careers. The former result is conditional on education and therefore constitutes a direct association of social origin to occupational attainment. Moreover, I document that these dynasties had negative repercussions on the composition of the French elite: second-generation business leaders are less likely to have graduated from a leading *Grande École* (GE), and elite members propel their kins much younger to top business and political positions.

There are two main reasons why France constitutes a very suitable context for the study of differential returns to elite education in the access to the ruling elites. First, access to top positions essentially demands a curriculum in one of the leading *Grandes Écoles* (Suleiman,

¹I investigate *allocative inequality* for the attainment of specific positions, and not *within-occupation rewards inequality*, which for instance studies earnings inequality within occupations (Torche, 2011).

²“Elite” remains polysemic and is often defined *ad-hoc*. In this paper, it includes politicians with missions at the national level and board members of French firms, as presented in section 3.

1978; Bauer and Bertin-Mouro, 1987; Bourdieu, 1989). These are pluri-centenarian institutions designed and explicitly dedicated to the education of nation leaders. Second, and as a consequence of common backgrounds in small size institutions, a high degree of interpenetration of the French political and business elites was widely documented (Birnbaum et al., 1978; Kramarz and Thesmar, 2013).

A challenge to the analysis may arise from the fact that having an elite-member father increases the prospects of admission to a *Grande École* (Bourdieu, 1989; Albouy and Wanecq, 2003; Benveniste, 2023), whose graduates are therefore partly selected. Yet, this does not constitute a serious threat, as those without the advantage of an elite-member father who are admitted to these elite colleges are themselves highly positively selected and constitute a comparison group of very competitive individuals (Mare, 1993). Risk ratios of elite dynasties are therefore presumably downward-biased when measured among GE graduates, as compared to among the whole French population. Another challenge regards the scarcity of intergenerational data including familial links—especially for an elite population, which is rarely surveyed on a representative basis. I overcome this issue by identifying lineage with surnames, a method increasingly used in the economic literature (Clark et al., 2014; Barone and Mocetti, 2020). For each graduate, I construct the probability that his father belonged to the ruling elite (as in Benveniste 2023). This probability is a function of the number of bearers of the same surname in the elite in the previous cohort and of the frequency of the surname in the French population at that time. This name-based methodology requires circumscribing the analysis to father-to-son transmissions, as women did not transmit their surnames in France until very recently and may change names across their life course.

The analysis exploits nominative data on elite members born between 1901 and 1975 who served as national politicians (Presidents, ministers, and members of Parliament), or as board members of French firms. I first confirm that the *Grandes Écoles* constitute the main entry to top positions in French society, as 26.2% of those with elite occupations graduated from one of the 12 colleges, against 0.33% of the French population. More importantly, I show that dynasties reign over the French ruling elite, especially in politics: among the analytical sample of 103,309 graduates born between 1931 and 1975, those with a father

(born up to 1901) with top political or business positions are more likely than their peers to become a member of the French elite. This result holds through a series of robustness checks regarding sample choices or estimation methods. I thereby document the existence of a “double dividend”: on top of better admission chances to the *Grandes Écoles* (Benveniste, 2023), I show that children of the elite benefit from higher returns from such education.

Political dynasties are the most notable in magnitude. Graduates whose fathers were in politics had 36.7 times more chances than their peers from the same cohort and same *Grande École* to become national politicians, whereas they evenly entered business careers. Yet, business dynasties are also prominent, as a graduate has 8.5 times more chances than his peers to become a business executive if his father was one. Heterogeneity analyses show that some colleges better level the playing field for their graduates. Yet, even conditionally on graduation from *École Nationale d'Administration*—the most suitable college for a career in politics—, those with a father involved in national politics are about 40 times more likely to also lead a political career of national importance. Nevertheless, a favorable result is that dynastical following has largely reduced over time, especially in politics, a phenomenon that had to my knowledge only been documented in the United States so far (Clubok et al., 1969; Dal Bó et al., 2009).

A second stage of the analysis, albeit not causal, suggests that there is a social cost to these dynasties. Among the 17,822 individuals holding elite positions, I find that dynastical business directors are twice less likely to have graduated from one of the 12 top *Grandes Écoles*. Besides, sons of businessmen get their first business or political positions respectively 5.4 and 9.3 years younger than their first-generation colleagues (and up to 8.0 and 11.2 years before for sons of business executives). If sons of politicians are not more likely to become board members than their peers, they benefit when they do from a 5.7-year anticipation. Yet, they experience no acceleration for national careers in politics, perhaps surprisingly as anecdotal evidence often suggests this type of phenomenon (Turchi, 2009), possibly rather for local mandates.

This study relates to two strands of the literature. The first concerns occupational following, defined as the entry of children into a parent profession. This was described

as a common feature of very diverse societies and political systems across time and space (Putnam, 1976).³ For instance, Clubok et al. (1969) document that the share of Congressmen also serving in Congress was above 20% in the late 18th century and progressively fell to a still significant 5 to 7% in the 1950s. Laband and Lentz (1985) find similar magnitudes for the 1965 Congress (8% with parents in politics) and also show that dynastical politicians enter the Congress younger, experience longer tenure, and are more likely to run reelection campaigns unopposed. Using Swedish register data, Folke et al. (2017) show that politicians extract rents to the benefit of their children and not of their siblings, which confirms that the intergenerational perspective is the most relevant. As for the private sector, legal status, work experience in given firms, or occupation also run across generations. Dunn and Holtz-Eakin (2000) find that Americans with a self-employed parent have twice the probability of working in self-employment. Corak and Piraino (2011) show that by age 28, 40% of Canadian men born in 1963 had work experience in a company in which their father also worked. Finally, the concept of micro-classes (Weeden and Grusky, 2005) connected the extensive research on class mobility to occupational following, by looking at occupation-level transmissions. Providing findings over several decades in a new context outside the US, the present paper combines the study of occupational following both for the political and business elites, which makes their magnitude and evolution possible to compare.

The literature also documented that occupational following and dynasties matter for global welfare, especially in contexts in which networks, nepotism, or capital constitute substitutes for ability or productivity. The transfer of firm control within the family hurts operating profitability (Bennedsen et al., 2007) and on the firm value (Pérez-González, 2006; Villalonga and Amit, 2006). This is also associated with worst management practices (see notably Bloom and Van Reenen 2007). An exception in the literature is provided by Sraer and Thesmar (2007), who find that French family-managed firms are more profitable. Dynasties were also found to favor less skilled individuals (Basso et al. 2021 in the context

³Occupational dynasties were documented for politicians (Clubok et al., 1969; Laband and Lentz, 1985; Dal Bó et al., 2009; Feinstein, 2010; Niess, 2012; Geys, 2017; Rossi, 2017), liberal professions (Mocetti, 2016; Aina and Nicoletti, 2018), legal professions (Laband and Lentz, 1992), physicians (Lentz and Laband, 1989), as well as self-employed and entrepreneurs (Laferrere and McEntee 1996; Dunn and Holtz-Eakin, 2000; Fairlie and Robb, 2007; Sørensen, 2007; Colombier and Masclat, 2008; Lindquist et al., 2015).

of Italian lawyers; [Geys 2017](#) for local Italian politicians). Besides, heirs may exert lower levels of effort ([Rossi, 2017](#)). Overall, researchers mainly concluded that intergenerational occupational reproduction entails a misallocation of resources. In comparison to [Geys \(2017\)](#) who studies differences in years of schooling between dynastical and first-generation Italian municipal counselors—for which nepotistic practices may be less visible—I focus on higher-level positions and more renowned individuals and consider the quality of their education through graduation from an elite institution.

The second contribution regards the role of education in intergenerational mobility. A long tradition in sociology analyzes their interconnection (see [Breen and Müller 2020](#) for a review and country cases). The tripartite relationship between Origins, Education, and Destination (often occupational attainment) was conceptualized with the “OED triangle”. Social Origin influences the level and quality of Education, which translates to the labor market Destination through returns to Education. There also remains a residual direct effect of social Origin on Destination, which is net of the average returns to Education. Therefore, another way of presenting the direct origin-destination association is that it constitutes a social gradient in returns to education. In this OED framework, educational inequality was largely documented across time and space, especially for admissions to elite higher education institutions including the French *Grandes Écoles* ([Bourdieu, 1989](#); [Falcon and Bataille, 2018](#); [Benveniste, 2023](#)). Scholars also showed that admissions to these elite institutions translate into high returns on the labor market ([Hoekstra, 2009](#); [Wakeling and Savage, 2015](#); [Anelli, 2020](#); [Chetty et al., 2023](#)). In particular, a diploma from a few specific higher education usually constitutes a prerequisite to political and business top occupations ([Bovens and Wille 2017](#), on Western democracies). Yet, residual social inequalities remain conditionally on educational attainment. [Bernardi and Ballarino \(2016\)](#) studied 14 countries and found that half to three-quarters of the association of social origin with occupational attainment is mediated by education, while one-quarter to one-half is the result of a residual direct effect.

Importantly, the residual effect of social origin on destination was studied across different levels of education. An influential work by [Hout \(1988\)](#) claimed that there was no residual origin-destination association among American college graduates in the 1980s. While it

constituted a strong support for the meritocratic virtue of higher education, this was later contradicted. Notably, [Torche \(2011\)](#) uses a finer definition of education level from the American Panel Study of Income Dynamics and shows that direct origin-occupation association is high among the low-educated, decreases for college graduates, but strengthens for those with advanced degrees.⁴ [Falcon and Bataille \(2018\)](#) confirm with French cohorts born from 1918 to 1984 this U-shaped pattern along the educational distribution of parental influence on careers. Parental influence notably increases among *Grande École* graduates. A few other studies exclusively focused on elite education. If [Chetty et al. \(2020\)](#) document very unequal admissions to 12 US elite colleges depending on parental income, they however find that most of the intergenerational income elasticity is due to the differences in attended colleges, while residual differences in returns to education within colleges are small. If admissions remain socially selective, it suggests that attending an elite college is “equalizing”. To the contrary, [Zimmerman \(2019\)](#) shows that graduation from top Chilean colleges increases mean income for affluent students, but not for their underprivileged peers. Such contradictions in the literature may arise from differences in contexts, in the definitions of origin and destination, or the mediating factors included. The present paper extends this literature and shows that graduation from an elite college does not equalize prospects of reaching elite positions.

The rest of the paper is organized as follows. Section 2 discusses the mechanisms of occupational following. Section 3 describes the data on elite positions and *Grande École* graduates. I present the matching of the nominative datasets and I use descriptive statistics to document the central role of the *Grandes Écoles* to reach elite positions in France. Section 4 details how surnames are used and explains the econometric specification. Section 5 provides the main results on dynasties in the French elite and presents robustness checks. Section 6 expands the analysis, with heterogeneity for political *vs.* business elites, as well as between colleges and across time. Section 7 tackles the consequences of these dynasties, by looking at their association with the age of the first elite position and the diploma of political and business leaders. Finally, section 8 provides some concluding remarks.

⁴Yet, this high origin-destination association at the top is not observed for all diplomas, as [Torche \(2018\)](#) shows greater mobility among Ph.D. holders.

2 Mechanisms of occupation transmission

What does explain the persistence of families at the top of the social hierarchy? [Erikson and Jonsson \(1998\)](#) suggest four channels for the differences in returns to education depending on social origin: social networks, favoritism, aspirations, and differences in productivity. [Evans and Jovanovic \(1989\)](#) add the importance of liquidity constraints as opposed to inherited capital.

Networks—and in particular family links—constitute decisive assets for entry into the labor market ([Kramarz and Skans, 2014](#); [Dustmann et al., 2016](#)). In politics, this may help to raise campaign funds, or to hire efficient staff. For instance, [Dal Bó et al. \(2009\)](#) use a regression discontinuity on close elections, and relate the success of dynastical politicians and their tendency to run in their state of birth to pre-existing networks, rather than differences in abilities. [Aina and Nicoletti \(2018\)](#) partition access to liberal professions into four successive necessary steps and consider a sign of family networking the more frequent completion of the required period of practice for children of liberal professionals. Yet, the frontier between social networking and sheer favoritism is often complicated to distinguish empirically.

Favoritism or nepotism typically take place in family businesses ([Bennedsen et al., 2007](#)), but they were also proven to influence careers in all types of companies ([Gagliarducci and Manacorda, 2020](#)), in politics ([Geys, 2017](#)), or even in medical schools ([Lentz and Laband, 1989](#)). Favoritism may include hiring choices ([Gagliarducci and Manacorda, 2020](#)) but also the direct inheritance of family businesses ([Pérez-González, 2006](#); [Bennedsen et al., 2007](#)). The probability of inheriting indeed increases with the level of expected rents for the heirs ([Mocetti, 2016](#)). Close to favoritism, there may be some degree of discrimination in favor of individuals fulfilling specific expectations—based on social norms, loyalty, homophily, or habit. Such a mechanism is exposed by [Feinstein \(2010\)](#), who compares winners to defeated candidates of elections and suggests that dynastic politicians benefit from “brand name advantages”, which survive controls on campaign expenditures, experience, time, and

geographical covariates.⁵ For the private sector, this relates to the concept of “brand equity”, i.e., the value of a brand (Aaker, 1991), for example suggested by the common use of “& sons” signs by craftsmen (Feinstein, 2010). On top of this name advantage, Laband and Lentz (1985) argue that there exists a dynastical transfer of voter loyalty, and I presume the same could apply to customers or business partners (a mechanism usually encompassed in networks but that features favoritism when it includes loyalty and priors on trustworthiness). The valuation or endorsement of specific social skills, tastes, or hobbies may also lead to homophilic behavior resembling favoritism. One may refer to Bourdieu (1979) for the theory, Hartmann (2000) for an application to the selection of French and German business leaders, and Rivera (2012, 2015) for a case study of hiring practices for elite positions in the United States. Yet, efficiency reasons may also imply favoring one’s family circle, due for instance to a reduced need for monitoring (van Aaken et al., 2020).

Aspirations and preferences may also be intergenerationally transmitted. Jennings et al. (2009) show that this is the case for political views and partisanship. Among other traits, several studies underlined the transmission of risk aversion (De Paola, 2013; Dohmen et al., 2012). Besides, Guyon and Huillery (2021) identify that conditional on test scores, socially underprivileged students aspire less to the best educational tracks than their more affluent peers. This comes from two distinct factors: disadvantaged students are less informed about educational opportunities, and they also under-estimate their ability to graduate from highly selective tracks.⁶ As for preferences, Dunn and Holtz-Eakin (2000) find that intergenerational transmission of self-employment status runs along similar gender lines—daughters are influenced by their mothers, sons by their fathers—, which they interpret as a transmission of “entrepreneurial tastes or abilities”.

Differences in productivity may alternatively arise from human capital transmission. Laband and Lentz (1983) develop a model of occupational following and argue propose as the main channel the facilitated transmission of “job-specific” or “career-related” skills. Their

⁵This “name advantage” was previously suggested for politicians by Laband and Lentz (1983) in theory, or Dal Bó et al. (2009) empirically. Examples of “brand names” are multiple and could include the names *Nehru-Gandhi* in India, *Hariri* in Lebanon, *Bush* or *Kennedy* in the United States, *Churchill* in the United Kingdom, and *Debré*, *Kosciusko-Morizet* or *Le Pen* in France.

⁶Beyond aspirations, the informational advantage of more affluent families may for instance lead to strategic selection of fields of study, which are decisive for career development (Duru-Bellat et al., 2008).

typical example is families of farmers, for whom the workplace coincides with home and whose youngsters get familiar with specific expertise at an early age. They confirm this mechanism empirically for children of lawyers (Laband and Lentz, 1992), but not for children of medical doctors (Lentz and Laband, 1989). In politics, this familial knowledge may for example serve aspiring politicians to find early career accessible positions in strategic localities. As for the private sector, Fairlie and Robb (2007) studied American family firms in 1992 and showed that 51.6% of owners had a self-employed relative, among which 43.6% worked in that family firm, which they perceive as a practice of job-specific skill transfers. Having worked in the family business is associated with higher sales and profits, a higher probability of having employees, and fewer business cessations. Besides, a specific literature compares the role of nature and nurture, with the underlying idea that biological attributes such as genes may matter for talent, ability, and productivity (see Sacerdote 2011). For example, Lindquist et al. (2015) study the intergenerational transmission of entrepreneurship with Swedish adoption data. They find that if pre-birth factors matter (notably the entrepreneurship status of biological parents), post-birth factors (adoptive parents) are at least twice as important. Besides, the ability to build one's own social network may differ depending on social origin (Marmaros and Sacerdote, 2006). Zimmerman (2019) for instance shows that among graduates of Chilean elite institutions, affluent peers are more likely to lead the same firm, whereas there is no such network effect among less privileged graduates.

As financial investment is needed to launch a business, Evans and Jovanovic (1989) finally model the choice of becoming an entrepreneur and show empirically that less affluent individuals are disadvantaged by liquidity constraints. The opportunity cost and actual cost of political campaigns imply that it matters in politics as well. Yet, compared to the rest of the previously discussed factors, the relative importance of financial capital in the family was often tempered in the literature (Dunn and Holtz-Eakin, 2000; Fairlie and Robb, 2007).

3 Data

In this section, I first describe data on the political and business elites, which include individuals born over the period 1901-1975. Then, I present data on *Grande École* graduates born between 1931 and 1975. The analysis is restricted to men, as surnames are used to track familial lineage. Indeed, nominative data on elite positions includes usual names, which are alternatively women’s maiden or spouse names. Moreover, data on college graduates provide spouse names for 21% of female graduates only. A precise match of graduates and elite members is thus only possible for males. The sample size is reduced but not drastically, even though 27.0% of graduates are women over the period, but no more than 15.1% of politicians and 19.9% of business people.⁷

3.1 Elite occupations

I proxy elite membership with two main types of positions: politics with mandates or nominations at the national level, and business with mandates at the boards of French firms.

Political representatives at the national level

I consider nominations as minister or secretary of State, and mandates of President of the French Republic, of *député* at the *Assemblée Nationale* (Member of the Parliament), of Senator, and of French member of the European Parliament. The sample includes politicians elected or nominated during the 5th Republic, since 1958 and until 2019, who were born between 1901 and 1975.⁸

Observations systematically include the first and last names, and the dates of mandates, usually completed with gender and birthdates. Missing information is partly filled in for

⁷Beller (2009) indicates that excluding women from the assessment of intergenerational mobility—as most studies do—is not trivial for the estimations. However, the high level of homogamy among the French elite (Goux and Maurin, 2003; Bouchet-Valat, 2014; Frémeaux and Lefranc, 2020) implies that fathers and mothers have similar characteristics, alleviating the issue.

⁸Data on Presidents of the Republic was self-collected. Lists of ministers and secretaries of State come from the Archive of the Prime Minister. The French MPs, senators, and French European MPs were provided respectively by the Archive departments of the *Assemblée Nationale*, *Sénat*, and European Parliament.

politicians who held several positions, when one source is more complete. A gender propensity score by first name constructed thanks to a census of births gendered by first name from the French National Statistical Institute allows additional completions. Birthdates and gender (of bearers of gender-neutral first names) were completed through ad-hoc verifications of online biographies for 334 politicians.⁹

The sample is constituted of 2,211 male politicians born between 1931 and 1975, among which 278 served in the executive power (President of the Republic, minister, or secretary of State), 1,534 had at least one mandate of *député*, 666 a mandate of senator, and 241 a mandate of European member of Parliament.¹⁰ I also include 1,894 politicians born in 1901-1930 to identify the fathers of those born in the period of study. Among these politicians, 67% served as *députés*, 35% as senators, 13% as members of the executive power, and 10% as European MPs.

Board composition

The composition of the boards of the major French firms is retrieved from *BoardEx* and *Mint Global (Orbis, Bureau van Dijk)*.¹¹ It includes information on board composition over the period 1995-2019 for 1,688 traded and 391 non-traded firms. Observations on board members also include their first and last names, and often their gender and birthdate. Information on the positions includes whether they involve executive functions and the mandate period. I consider business executives those who hold at least one executive position over their career. I complete gender thanks to the gender propensity scores by first name. Birthdates are however missing for 35.2% of male board members. This information would be troublesome to complete ad-hoc due to the larger volume and a more heterogeneous notoriety than

⁹See footnote 18, which reports all online sources exploited, including for that specific purpose.

¹⁰Naturally, many occupied several types of positions, with as much as 90% of the members of the executive power, also having a parliamentary mandate.

¹¹These sources are frequently used in the academic literature (Adams and Kirchmaier, 2016; Ahn, Daniel P. and Ludema, Rodney, 2017). Their scope is not precisely stated, but the largest French firms are included.

politicians. The analysis is restricted to observations with complete data.¹²

The cohorts of analysis, born between 1931 and 1975, include 15,670 male directors, among which 3,976 are executives (25.4%). 43% of the sample is constituted of directors registered both in *BoardEx* and *Mint Global*, while 36% are mentioned in *Mint* only, and 21% in *BoardEx* alone. Combining both sources thereby improves the coverage of board positions. Whereas data on the political elite includes mandates and nominations from 1958 to 2019, presence in the boards is only covered since 1995. Although individuals commonly hold board positions after the legal retirement age, this shift implies that the distribution of birth years differs between political and business leaders. Indeed, the modal birth year for politicians is 1946, while it is 1964 for firm directors.

Figure 1 reports the number of individuals per birth year and position type. The vertical dashed line separates individuals born before 1931 (fathers only) from those in the period of study (born between 1931 and 1975). The number of politicians per birth year is relatively stable, with a continuous decrease since the birth year 1946 though. This is explained by two principal factors. First, the data concerns men only and an increasing share of political positions are occupied by women. Assuming this change does not alter dynastical transmission among men, this is not a concern since estimates are computed within the sample of male graduates. The second factor is not restricted to politicians but also concerns businessmen: the data are subject to a lifecycle bias. Because they are younger, more recent cohorts are less likely to be observed in an elite position (I discuss potential implications for the results in section 4.2.) Data on businessmen is more time-varying. Notably, they include a limited number of business leaders before 1931, with only 273 directors who purely serve as potential fathers. As I further discuss in the rest of the paper, this implies that measures on business dynasties are subject to larger measurement errors for the first cohorts, when part of the sample is wrongly qualified as not having a business father.

¹²Looking at observables, business directors with missing birthdates appear of lower status than directors with complete information, notably for the share with executive functions (9.2% against 25.4%), or the number of positions per director (1.14 against 1.78). This small selection concerning the data provided by *BoardEx* and *Mint Global* appears as a mild issue, as we are interested in top positions, not defined restrictively. However, it constitutes a source of measurement error, as I wrongly identify some surnames as less present in the elite than they truly are.

3.2 *Grande École* graduates

Graduate data was self-collected and covers 12 of the most prestigious *Grandes Écoles*. It includes 112,936 curricula followed by 103,309 distinct male graduates born between 1931 and 1975. Appendix Table B.1 reports by college the number of students per 5-year birth cohort. Colleges in the sample include *École Polytechnique*, *EM Lyon*, *ENA*, *ENS Cachan*, *ENS Ulm*, *ESCP*, *ESPCI*, *ESSEC*, *Mines Paris*, *Ponts et chaussées*, *Sciences Po Paris*, and *Télécom Paris*.¹³ The main analysis pools graduates from all 12 institutions. As their graduates do not access similarly the political and business elites (see section 3.3), I use *Grande École* fixed effects in most specifications and I also explore the heterogeneity of the results between colleges.

Grande École registers systematically include the first and last names of each graduate. 38% of the observations inform on middle names. About one-third of the observations provide gender, which I also completed with first names. The birth year of each graduate is approximated: as a two-year post-secondary school curriculum is required before taking an admission examination, the standard age of admission to the *Grandes Écoles* is around 20 years old. Therefore, students enrolling in 1951 are assumed to be born in 1931, while those enrolling in 1970 are assumed to be born in 1950. The birth year of students who pursued multiple curricula is based on the first college they were admitted to.¹⁴

The scope and relative importance of the *Grandes Écoles* only marginally evolved over time. Appendix Table B.1 shows that the number of graduates per cohort is slightly increasing at the beginning of the period and that the share of business schools rises. Yet, GE recruitment remained remarkably stable, especially when compared to the structural changes in universities over the period (Suleiman, 1978). Besides, the relative stability of

¹³The data was collected from Alumni associations, college libraries, college archive departments, and from other public archive institutions. The present work adds *EM Lyon* and *ENS Cachan* to the list used in Benveniste (2023), in which a more detailed description of these institutions may be found. While data was not made available, the inclusion of *École Centrale Paris* and *HEC Paris* would have been beneficial, especially as the latter school is important in the training of the business elite (Vion et al., 2014), although much less than *Polytechnique*, *Sciences Po Paris*, or *ENA* (François and Lemercier, 2016).

¹⁴Admission to *ENA* is peculiar and occurs after graduate studies. 60% of *ENA* students previously attended another GE from the sample, which allows identifying their birth year beforehand. I assume that the remaining 40% did enroll at the same average age of 27.

GE admission inequalities found in the literature matters for the understanding of results, as a significant social opening of these institutions would have interacted with disparities in returns to education among their graduates, possibly widening the differential returns.¹⁵

3.3 Matching: the *Grandes Écoles* as the ticket to elite positions

I now describe the matching of the different nominative datasets of elite positions and graduates. I also provide descriptive statistics documenting that the *Grandes Écoles* are predominant in the training of political and business leaders in France.

To ensure consistency between the different sources and properly identify individuals, I implement fuzzy matching on surnames and first names.¹⁶ I first match all the different elite position datasets: politicians (executive power, MPs, senators, and European MPs) and business directors (*BoardEx* and *Mint Global*). This precedes the descriptive statistics provided in sub-section 3.1. Any match is discarded when birthdates or genders differ.¹⁷ Fuzzy matchings also link the universe of political and business leaders to GE graduates. As graduates' precise day of birth is unknown, I discard matches with more than a 10-year (5-year) difference in birth years if the GE register birth year follows (precedes) the one from elite position data. It is indeed less likely to be admitted to a college before age 15 than to enroll after age 25. The time windows may appear wide, but the exhaustively of elite member – graduate matches are then scrutinized ad-hoc using online biographies.¹⁸

¹⁵Using heterogenous samples of GE, [Albouy and Wanecq \(2003\)](#) and [Falcon and Bataille \(2018\)](#) document a slightly decreasing and sometimes stable intergenerational reproduction over the 20th century. Using a sample of GE quasi-identical to the present study, [Benveniste \(2023\)](#) shows that the dynastical reproduction among graduates was mostly stable for all cohorts born since 1916.

¹⁶I use token and bigram fuzzy matchings, which allow to detect shortened and mis-spelled surnames.

¹⁷59 individuals hold positions both in firm boards and in national politics. While the periods covered by the political and business samples are not fully congruent, it represents 3% of politicians doing *pantouflage*. This involves public agents working for the private sector—which is particularly common in France, especially among senior civil servants. [Bauer and Bertin-Mourot \(1997\)](#) argue that 47% of the 200 largest French firms' CEOs got nominated through a “State asset”, i.e., coming from civil service or being close to political power.

¹⁸I discarded false positive matches due to homonyms by comparing alternatively education when provided, exact birth dates, maiden or middle names, or known professional activities. I used *LinkedIn*, *Wikipedia* and *Who's who in France* entries, *lesbiographies.com*, *viadeo.journaldunet.com*, *marketscreener.com/business-leaders*, *dirigeants.bfmtv.com*, *dirigeant.societe.com*, *lemoniteur.fr* and <https://www.lsa-conso.fr/annuaire-professionnels-grande-consommation> websites, biographies published by the business newspaper *Les Échos*, or institutional biographies from firm websites.

Table 1 provides descriptive statistics on elite members by five-year cohort: their number, the average age they reached the elite, and the share of GE graduates. The evolution of the number of positions was discussed in section 3.1. Rather than individuals joining politics and business younger over time, the decreasing pattern of the age of the first position underlines a life cycle bias in the data. Towards the end of the period, individuals are younger and therefore less likely to have already reached a political or business top position. Across cohorts, the average age of attainment of such positions is 49.6 years old. By contrast, people born in the last cohort (1971-1975) were 44 to 48 years old in 2019 (the last year over which we observe elite positions). For the business elite, there is also selection on observables for the first cohorts: those still observed in function between 1995 and 2019 are more enduring. Business leaders born in 1931-1935 cannot be observed before 60 years old, in 1995. For the businessmen of the first cohorts, the age at first position is therefore mechanically observed older. They are also more likely to be graduates of a *Grande École*. No such selection exists for political representatives, whose positions are observed from 1958 to 2019.

With this caveat in mind but thanks to the rigorous match of graduates with their careers, I confirm the propulsive power of the *Grandes Écoles* to elite positions in France. Whereas only 0.33% of the French population born between 1931 and 1975 studied in one of these 12 relatively small colleges, 26.2% of those occupying an elite position are among their graduates. The share of GE graduates among politicians (16.0%) is lower than among business directors (27.6%). Yet, as many as 40% of politicians in the executive power graduated from these 12 institutions, against 29.5% of business executives. The share of graduates among political representatives is even increasing, a phenomenon previously described by Bourdieu (1981) as a rising importance of “professional politicians” as opposed to militants.

4 Empirical strategy

In this section, I first detail the construction of the main independent variables: the probability for a graduate that his father held an elite position. Surnames are used to link

generations (like in [Clark et al. 2014](#); [Geys 2017](#); [Barone and Mocetti 2020](#); [Basso et al. 2021](#)). In a second sub-section, I present the baseline specification to measure dynasties.

4.1 Surnames to infer the probability of an elite member father

All bearers of a given surname are descendants of a father sharing the same surname.¹⁹ Without proper information on familial linkages, the likelihood of a direct father-son link for men of successive generations sharing a last name depends on its frequency. I therefore use a birth census per surname per cohort produced by the French National Statistics Institute.²⁰ Figure [A.1](#) highlights a highly skewed distribution in France, with an abundance of rare surnames, making names a powerful and effective intergenerational tracker.

The census reports the number of births on the French territory and is therefore valid for surnames that are not associated with important immigration flows. The analysis is therefore restricted to GE graduates bearing “native” surnames.²¹ In addition to being motivated by data considerations, this alleviates the issue of self-selection in migration, namely the fact that unobserved characteristics differ between natives and migrants ([Borjas, 1987](#)). Indeed, [Meurs et al. \(2006\)](#) document higher unemployment rates and reduced access to high-status occupations for immigrants and children of immigrants in 1999 in France.

I then construct for each GE graduate a 21-year time window for the probable birth year of his father. In the middle of the 20th century, more than 90% of fathers were aged 20 to 40 at the birth of a child (whatever its order), with averages of 31.7 in 1946 and 29.5 in 1966 ([Mazuy et al., 2015](#)). The father of a graduate born in 1965 is assumed to be born between 1925 and 1945 (21 complete years). I count then for birth year y and surname S the number of bearers of the same name born 20 to 40 years before—with $y_f \in [y - 40; y - 20]$ —that are or were in type e elite (politics or business): $E_{S,y_f(y),e}$.

¹⁹In France, surnames were hereditarily transmitted through the patriarchal line until two laws of 2003 and 2008 allowed to choose between father and mother names or a combination of both. Patronyms therefore constitute a reliable link between fathers and children born between 1931 and 1975.

²⁰*Fichiers des noms patronymiques de 1891 à 1990*, édition 1999, INSEE (producer), ADISP (distributor).

²¹Appendix [C.1](#) explains how “foreign” and “native” names are distinguished. All descriptive statistics in the paper are provided for “native” names. The difference remains however limited, e.g., 2,211 out of 2,333 politicians bear “native” names. I verify the robustness of the results with the inclusion of “foreign” names.

Then I define as explanatory variables the probability at the surname-birth year level for graduates to have an elite member father: I relate $E_{e,S,y_f(y)}$ to surnames' frequency in the population. I construct $N_{S,y_f(y)}$ the number of male births of bearers of the surname S in the French population in the paternal cohort $y_f(y)$, i.e., 40 to 20 years before year y .²² I finally compute the probability for individual i (born in year y and with surname S) that his father (born in year range $y_f \in [y - 40; y - 20]$ and with surname S) held an elite position of type e as:

$$X_{S(i),y(i),e} = \frac{E_{S(i),y_f(y(i)),e}}{N_{S(i),y_f(y(i))}}$$

While the data do not provide a definite father-child link, the independent variable $X_{S(i),y(i),e}$ takes the value 0 for graduates i whose surnames have no bearer holding an elite position of type e born 20 to 40 years before them. It takes the probability of a value 1 for the others. Table B.3 provides descriptive statistics on the explanatory variables for both types of elites together, and politicians and businessmen separately. I show in section 5 that results are robust to restriction to values of $X_{S,y,e}$ above different thresholds.

4.2 Baseline specification

In the baseline empirical equation, subscripts refer to individual (graduate) i , the type of elite e or e' , surname S , and birth year y . It is as follows:

$$Y_{i,e'} = \alpha + \beta \cdot X_{S(i),y(i),e} + \gamma \cdot GE_i + \theta \cdot C_i + \epsilon_i$$

The analysis reduces the time dimension to its intergenerational component. Indeed, $Y_{i,e'}$ is a dummy variable for access to the elite e' anytime in the career of individual i , whatever the tenure. Similarly, $X_{S,y,e}$ is the probability that the father held a position of type e at least once across the career. A first reason is that sample size does not allow to capture the dynamics of the dynastical advantage concerning the timing of positions.

²²In the census, the number of births is structured by decades for most surnames, or in a few cases only by 25-year cohorts. I therefore compute for each observation a weighted average depending on the number of overlapping years with each cohort or decade. To illustrate it with total male births over 1925-1945, I sum the number of births for decades 1921-1930, 1931-1940 and 1941-1950 with factors $\frac{6}{10}$, 1, and $\frac{5}{10}$ respectively. Besides, I assume there are as many male and female births for each surname in each 21-year period, and therefore divide the outcome by two.

A second reason is that while political mandate data are very accurate, the coverage of business positions is cohort-varying. Entry and exit dates in board positions are also not always precisely provided by *BoardEx* and *Mint Global*. Considering elite membership as a career-long dimension is both convenient and reasonable, especially because our first interest lies in the intergenerational process and because careers in these elite positions are stable in France.²³

In the baseline analysis, I pool together political and business elites: e (in the independent variable) and e' (in the dependent one) are defined as both types of elites. In France, these two types of ruling elite were documented as being highly intertwined (Suleiman, 1978 using his own surveys; Birnbaum et al., 1978 with data from the *Who's Who in France*; Bourdieu, 1989). The French specificity of *pantouflage*, i.e., public agents working in the private sector, also rationalizes such global definition of the French occupational elite.

As presented in subsection 4.1, the main independent variable $X_{S,y,e}$ is a probability. Estimated with log-binomial models, the exponential of parameters β therefore report among GE graduates risk ratios to reach the elite e' between sons of elite members and others. Risk ratios above 1 reflect an increased probability of reaching an elite position (positive coefficients of row estimates), while risk ratios below 1 would indicate a reduced probability (negative coefficients). GE_i are *Grande École* fixed effects, which accommodate differential probabilities to reach the elite between colleges. Cohort fixed effects c_i capture the variation over time of the sphere of elite positions in the data, notably the time-varying coverage of the business-elite and the lifecycle bias. I defined 5-year birth cohorts, between the first 1931-1935 and the last 1971-1975. Heterogeneity analyses apply the same equation to subsamples of *Grandes Écoles* (without GE controls) or using specific types of position e or e' (politicians, businessmen, or a subset of business executives). Finally, the evolution across time is investigated by grouping cohorts over three periods of 15 years: 1931-1945, 1946-1960, and 1961-1975. I add to the main specification interactions terms of the main independent variable and a vector of indicator variables P_i for the 15-year birth periods:

²³A drawback of this data structure is that I am not able to fully correct for life cycle biases. As discussed in section 3.3, graduates from the more recent cohorts had less time to access an elite position. The inclusion of cohort fixed effects partly accounts for it, but more advanced techniques would be available if we observed outcomes and age at given times (Lefranc, 2018), while elite membership is observed once and for all.

$$Y_{i,e'} = \alpha + \beta \cdot X_{S(i),y(i),e} + \beta_P \cdot X_{S(i),y(i),e} \times P_i + \gamma \cdot GE_i + \theta \cdot P_i + \epsilon_i$$

5 Main results

In this section, I measure among *Grande École* graduates the advantage of elite member sons in the access to elite positions (pooling together political and business elites). I then verify the robustness of estimates to distinctive weighting methods and data choices.

The main result concerns intergenerational reproduction in the access to political and business elite positions for people born between 1931 and 1975. Table 2 reports, among GE graduates, risk ratios from log-binomial regressions for elite member sons compared to other GE graduates. All specifications ensure an equal weight to each five-year cohort to provide more meaningful results across time. This neutralizes the variations of graduate cohort sizes across time, documented in Appendix Table B.1. Column (2) introduces cohort fixed effects, which account for the time-varying coverage of elite positions data. Column (3) circumscribes the analysis within college, with the introduction of *Grande École* fixed effects. My preferred specification from column (4) combines *Grande École* and cohort fixed effects. I find that among the GE male graduates born between 1931 and 1975, those whose fathers were either political or business leaders had 2.4 times more chances than their peers to also access these elite positions. On top of better prospects to be admitted to the *Grandes Écoles* documented by Benveniste (2023), the present paper shows that there is a double dividend, with higher returns to such education for children of the elite.

Appendix Table B.5 shows the robustness of the result to different sample adjustments and estimation methods. Both the significance and magnitude of point estimates are very similar with unweighted regressions, not mitigating the evolution of the number of graduates over time. As we observe fewer ancestors in the first cohorts—and virtually no business director—I also confirm that results are robust to the exclusion of the first or first two cohorts (1931-1935 and 1936-1940). Estimates are moreover robust to sample restrictions to more precisely tracked paternal elite membership. For this test, I impose values of the probability of an elite member father to be either null, either over 0.10, or even over 0.25.

Finally, I show that results hold even without restricting the analysis to “native” surnames, for which we more precisely track the number of births across generations.

6 Heterogeneity analysis

This section explores heterogeneity in intergenerational elite reproduction along three dimensions: colleges, the types of elite—politics or business—, and time.

6.1 Differences between *Grandes Écoles*

The *Grandes Écoles* constitute the royal way to elite positions in French society. However, I show that GE graduation does provide different career prospects depending on one’s social background. I now investigate potential differences between colleges.

I find that the inequality of returns to education for the access to elite positions varies widely across *Grande École*. Table 3 reports estimates of risk ratios from distinctive regressions on sub-samples for each of the 12 colleges. *Télécom Paris* is the only school for which the main finding is reversed: graduates whose fathers held elite positions did themselves attain such positions with lower prospects than their peers. This college-specific result is surprising but may be a statistical exception due to the small numbers of graduates and elite members among them. Results are not significant for *ESPCI* graduates, with a particularly small sample size. Point estimates suggest greater access to the elite for graduates whose fathers were elite members for the 10 other colleges. Yet, differences are not significant for sons of political and business leaders graduating from *ENS Ulm*, *ESSEC*, *ENS Cachan*, or *Mines Paris*. By contrast, sons of elite members have 2.2 times significantly more chances than their peers to access political or business elite positions when graduating from *ESCP*, 3.0 times more chances when graduating from *Sciences Po Paris*, 3.4 for *Polytechnique*, as much as 5.8 at *ENA*, 6.5 for *EM Lyon*, and up to 10.0 times for graduates of *Ponts et chaussées*.²⁴

²⁴Except for the statistical power and therefore their significance, these results do not relate to the importance of each college in training members of the elite (see Appendix Table B.2a).

We conclude that some colleges manage to level the playing field and offer their graduates comparable opportunities, while depending on their social origin graduates from a few other institutions—notably *Ponts et chaussées*, *EM Lyon*, or *ENA*—face very distinctive career opportunities.²⁵ The data do not allow to untangle what are the precise mechanisms behind these differences. That may well be a conjunction of parental and graduate characteristics (which are, to some degree, still under the control of each college through admissions), as well as differences between colleges in the curricula, the specific preparation for labor markets, or the reach and effectiveness of college networks in comparison to familial ones.

6.2 Political versus business elites

The main analysis and the college heterogeneity results rely on a comprehensive definition of the elite, pooling political and business elites. They are, however, not perfectly homogeneous.²⁶

I therefore construct a matrix of intergenerational occupational reproduction, which relates each type of elite position occupied by fathers, to different risk ratios for their sons reaching each type of elite position. Results are reported in Table 4, in which all specifications use an equal weight for each five-year cohort and include college and cohort fixed effects. The first line concerns sons of business directors. Among *Grande École* graduates, they have almost 3 times more chances to also become a business director, about 5.6 times more chances to become a business executive, and up to 7.6 times more chances to become a national politician. Business executives provide even greater prospects to their GE graduate kins, relatively to their peers. These sons have 4.8 times more chances to become business directors, and up to 8.5 times more business executives.²⁷ Interestingly, sons of politicians

²⁵It is notable that admissions to *Ponts et chaussées* and *ENA* are already among the most influenced by parental graduation from a *Grande École* (Benveniste, 2023), suggesting that a high origin–destination association mediated by education may operate pairwise with a high direct effect of origin on destination.

²⁶Indeed, Bourdieu (1979) develops the concepts of economic and cultural capitals and ranks social agents within this typology. Businessmen and public agents are both well-endowed, but business leaders are rather associated with economic capital and public agents with cultural capital. Bourdieu (1981) more particularly characterizes political leaders as having very peculiar codes, which are not easily accessible to outsiders.

²⁷Due to the smaller number of business executives and politicians, and to a limited number of sons of business executives becoming politicians, the convergence of this particular log-binomial estimation fails.

become business directors at a comparable frequency to other GE graduates.²⁸ By contrast, political dynasties are particularly important, with as much as 37 times more chances to become a national politician for sons of political representatives. I should recall though that partly missing data in the sample of business directors creates measurement errors, implying that estimates on business dynasties are downward biased. The true gap between the intergenerational political and business following is thus likely to be smaller, although it seems unlikely that this could explain entirely the difference.

Besides, the *Grandes Écoles* do not equally train politicians or businessmen, as documented in Appendix Table B.2. Businessmen are more frequently graduates from business and engineering schools, in particular *École Polytechnique* (see Table B.2c). By contrast, 12.3% of politicians graduated from *Sciences Po Paris* and 4.9% from *ENA*, against only 1.3% from *Polytechnique*, the third most important college for becoming a politician (see Table B.2b). I therefore complete the analysis by investigating heterogeneity between political and business elites through a focus on the most important colleges for the training of each category.

Intergenerational political elite reproduction among *Sciences Po Paris* and *ENA* graduates, and business elite reproduction among *Polytechnique* graduates are reported in Table 5. All estimations weight cohorts similarly. Even-numbered columns add cohort fixed effects. I find that an *ENA* graduate has 37.5 times more chances than his peers to reach a national political position during his career if his father also did. Benveniste (2023) shows that those born between 1941 and 1990 had about 250 times more chances of admission to *ENA* if their father also studied there. On top of this large admission inequality, I show that once someone outside the elite gets admitted, *ENA* diplomas still do not provide comparable career opportunities. Similarly, *Sciences Po Paris* graduates whose fathers were in politics have 22.7 times more chances than their peers to follow in their paternal footsteps. By contrast, *Polytechnique* graduates, whose fathers were business directors had about 3 times more chances than their peers to become business directors themselves. Though much lower, it remains

²⁸The latter result contrasts with Gagliarducci and Manacorda (2020), who find that having a family member in political office in Italy results in higher earnings and employment in the labor market. However, they do not focus on elites as they cover all politicians from the local to the national level, and a representative sample of all jobs in the private sector through matched employer-employee data.

a large difference as it occurs net of education in one particular elite institution. And if we consider a narrower definition, sons of business executives who graduated from *Polytechnique* had 9.5 times more chances than their peers to also become business executives.

6.3 Evolution over time

This study emphasizes significant occupational following among the French elite for cohorts born between 1931 and 1975. We now consider the evolution of this phenomenon across cohorts. As the structure of the sample between political and business elites evolves over time, I document the evolutions separately for the business and the political dynasties. Because we are rather interested in the general trend than short-term variations, and to increase statistical power, cohorts are grouped in three periods of 15 years: 1931-1945, 1946-1960, and 1961-1975. Table 6 reports regression estimates for business—columns (1) to (3)—and political dynasties—columns (4) to (6). I include interaction terms of the probability that the father is an elite member with 15-year period indicator variables. Columns (1) and (4) include 15-year period fixed effects. Columns (2) and (5) supplement it with *Grande École* fixed effects, and columns (3) and (6) also include the weighting scheme of the main specification.

Results suggest a decrease in elite dynasties over time. The most recent period (1961-1975) serves as a reference point. Columns (3) and (6) of Table 6—including the weighting scheme and all controls—report that among GE graduates, business and political dynasties were of comparable magnitude for those born in 1961-1975: sons of business directors had 2.4 times more chances to follow in their father footsteps, against 2.7 times more chances for sons of the political elite to themselves enter politics. Business dynasties did not differ significantly among graduates born in 1946-1960 and were 3 times higher for those born between 1931 and 1945. Yet, I recall that business directors from the most ancient cohorts and their fathers were positively selected on observables, while those in the most recent period had less time to access elite positions. Although I include period fixed effects, this may induce part of the decreasing pattern of business dynasties.

The decline of the importance of political dynasties is much more pronounced.²⁹ Compared to the reference level for cohorts born between 1961 and 1975, political reproduction was 12.9 times higher for those born in 1946-1960, and as much as 29.0 times higher for those born in 1931-1945. This implies that among GE graduates, those born in 1931-1945 who had a father in politics had 77.8 times more chances than their peers to become national politicians. This fell by a factor of 2.25 for those born in 1946-1960, who still had 34.7 times more chances to attain such a position. It fell more sharply for those born in 1961-1975, with 2.7 times more chances than their peers to enter politics. Political and business dynasties are indeed of comparable magnitude in the most recent period. The clear difference in the levels of occupational dynasties between political and business elites—outlined in Table 4—is therefore driven by differences for cohorts born before 1960.

Although their broader definition of occupational categories in social classes is not entirely comparable to the focus of the present paper on elite occupations, these findings are consistent with results for France by [Falcon and Bataille \(2018\)](#). They find a decreasing origin-destination association among *Grande École* graduates between cohorts born in 1918-1940 and cohorts born in 1950-1969. They however underline a clear increase for the subsequent cohort born in 1970-1984, with which the present data only partly overlap.

7 Implications: less educated and experienced elite

I conclude this analysis by describing the implications of political and business dynasties on the composition of the elite. I use the sample of 15,670 business directors and 2,211 political representatives and test two potential consequences: education in an elite institution and the age of first position of dynastical elite members. Comparable outcomes were previously used, notably by [Geys \(2017\)](#) for education, and by [Laband and Lentz \(1985\)](#) for the age of the first position.

²⁹A weakening of political dynasties was also documented in the United States by [Clubok et al. \(1969\)](#) and [Dal Bó et al. \(2009\)](#). The former study reports shares of Congresspersons with legislator relatives falling from 24.2% in 1790 to 15.1% in the 1850s, 10.0% in 1920, and 5.0% in 1960. The second work provides similar insights, with dynastic legislators representing 11% over 1789-1858 and 7% over 1966-1994.

7.1 Education in the *Grandes Écoles*

To analyze the association of dynasties with education, I estimate separately for the business and the political elites the following equation:

$$E_i = \alpha + \gamma \cdot X_{S(i),y(i)} + \beta \cdot Z_i + \theta \cdot c_i + \epsilon_i$$

The binary dependent variable (E_i) indicates the education of individual i in an elite college. It alternatively captures education in any of the *Grandes Écoles*, in an engineering school, in a business school, or a school of administration or research (*ENA*, *Sciences Po*, *ENS Ulm*, *ENS Cachan*). $X_{S(i),y(i)}$ is the probability that the father of individual i held an elite position (alternatively in politics or business). Controls Z are elite-type dependent dummy variables that identify the degree of elite, i.e., politicians in the executive power or business executives. As the analysis is restricted to men, there is no gender control. Cohort fixed effects account for potential variations in the educational structure of the political or business elites across time.

We know that children of GE graduates are over-represented in the *Grandes Écoles* (Benveniste, 2023), and we may also expect a higher propensity to attend an elite college for sons of political and business leaders. If not, this would imply that the advantage for sons of the elite is even greater in the labor market than in GE admissions. Indeed, I find that business dynasties are associated with less graduation of business leaders from elite colleges. Table 7 reports risk ratios of graduation from any of the *Grandes Écoles* (columns 1 and 2), an engineering school (columns 3 and 4), a business school (columns 5 and 6), or a school of administration or research (columns 7 and 8) for those whose a father is in politics (odd columns) or business (even columns). Panel (a) relates to the sample of political representatives, and panel (b) to business directors.

Among national political representatives, dynasties do not reduce *Grande École* education as a classical pathway for political careers, as dynastical politicians are more likely to have graduated from these elite institutions. In particular, they are about 15 times more likely to be graduates from an engineering school. Still among politicians, the frequency of GE graduation does however not differ significantly for sons of businessmen, although point

estimates suggest they more frequently study in business schools.

A more critical conclusion is reached among board members of French firms. Sons of politicians are more likely to have graduated from an administration or research school than their colleagues, while (insignificantly) less likely to have graduated from engineering or business schools. This may suggest that college choice is more related to parental occupation than career goals. But the most important findings regard dynastical businessmen (from father to son): they are twice less likely to have graduated from a *Grande École*, and even 7 times less likely to have graduated from an engineering school.

If *Grande École* graduation should not constitute a social objective *per se*, it usually serves as a validation process for top positions in France. Although specific assets (such as job-specific skills) may substitute for education and while I cannot decisively conclude, sons of the business elite bypassing the traditional passthrough of the *Grandes Écoles* suggests favoritism. Indeed, such educational asset is difficult to supplant, and a *Grande École* curriculum would not be detrimental to skills acquired elsewhere. As alternative GE-graduated aspirants are consequently not recruited, this could constitute a misallocation of resources.

7.2 Age of first entry in elite position

Finally, I investigate whether dynastical elite members reach these careers at a distinctive age than first-generation elite members, with the following descriptive equation:

$$A_i = \alpha + \gamma \cdot X_{S(i),y(i)} + \beta \cdot GE_i + \theta \cdot c_i + \epsilon_i$$

The dependent variable (A_i) is simply the age at which the individual i attained his first elite position. $X_{S(i),y(i)}$ is similar to all previous specifications, and GE_i are *Grande École* fixed effects. Cohort fixed effects c_i are particularly important for the analysis of age at the first position, due to the time-varying coverage of positions and the life cycle bias previously discussed. OLS estimates are again computed separately for individuals in politics and business, as well as for business executives only.

The average age of the first position observed in the data is 49.6 years old (first and third quartiles are 43 and 56). Average entry in national politics happens slightly younger, at 47.8

years old [Q1: 41; Q3: 55], against 50.0 [Q1: 43; Q3: 56] for businessmen. Table 8 reports results on the association of dynasties with the age of the first elite position. Dynastic politicians get their first election or nomination at a comparable age to first-generation politicians.³⁰ Although sons of politicians do not reach the business elite significantly more than other GE graduates (as shown in Table 4), when they do, it is 5.7 years younger.

Again, the most striking difference regards sons of businessmen. Their access to elite positions is accelerated for all types of positions: they become national politicians 9.3 years before their colleagues, board members 5.4 years younger, and business executives 7.7 years younger. Sons of business executives are even propelled younger to top positions: 8.0 years to company boards, 9 years to executive positions, and 11.2 years into national politics.

May early attainment of elite positions simply entail specific assets, or to what extent does it encompass favoritism? Graduates from the same elite college and the same cohort enter politics at 38 years of age if their father was a business executive, and 49 otherwise. Such a difference is hard to rationalize only through higher aspirations, or a familial education making them so much more able. Although the present analysis cannot provide a final answer, this suggests that at least part of the difference arises from familial social networks, financial assets, or favoritism, rather than simple differences in aspirations or abilities.

8 Conclusion

This paper investigates political and business dynasties in France for men born between 1931 and 1975. I first confirm the hegemony of the *Grandes Écoles* in reaching elite positions, namely national-level political functions or firm board membership. Indeed, 26.2% of the sample of elite members graduated from 12 small colleges, which trained in comparison only 0.33% of the French population over the period. Yet, these elite graduates do not face similar career opportunities. Those whose fathers served as political or business leaders had higher chances to also become a member of the elite, which constitutes evidence of differential

³⁰This may seem surprising, as anecdotal evidence sometimes reports precocious careers of children of politicians with nepotistic practices (Turchi, 2009), but this may rather concern local mandates.

returns to education.

On top of the advantages in *Grande École* admissions (Benveniste, 2023), this paper uncovers an additional leverage for advantaged families in securing elite positions over generations. This constitutes what I refer to as a “double dividend”: first in the educational system and then in the labor market. Moreover, this could well not be the end of the story. Indeed, using a web survey and including a wide range of controls (notably for the level of education and diplomas from *Oxford* or *Cambridge*), Friedman et al. (2015) show that, in Great Britain, the upwardly mobile reaching elite occupations receive £6,500 to £8,000 lower annual earnings.

I also show that dynasties have consequences on the composition of the French elite, which may be considered adverse. Among businessmen, dynastical ones are twice less likely to be a *Grande École* graduate, and up to 7 times less likely to hold an engineering GE diploma. They are also nominated at the boards of French firms up to 9 years younger. It seems reasonable to argue that this constitutes a lack of experience in comparison to their colleagues. Although the data does not allow to decisively conclude, it is unlikely that ability with job-specific skills transfer within the family could compensate about a decade less experience as early in the career. Nonetheless, it does not necessarily mean that dynastical elite members are less qualified or less performing. They still could exploit more valuable networks or benefit from specific skills or assets transferred within the family. As defended by Geys (2017), these findings demand further assessment of the performance of second-generation elite members. Regardless, the present work establishes that social origin constitutes a gatekeeper for top careers, even among elite graduates.

I should recall that data on business elites unfortunately suffer from a few weaknesses. In particular, the coverage of the sources varies across cohorts. This could alter some of my conclusions regarding intergenerational reproduction within the business elite. I may underestimate its importance relative to political dynasties. Finally, due to data constraints, this analysis sets aside the increasing importance of women over the period, both in educational attainment and to a lesser extent in access to top positions. Bertrand et al. (2010) and Sullivan et al. (2018) suggest that gender gaps prevail among graduates of similar institutions,

programs, and even fields of specialization. As occupational following was shown to run along similar gender lines, gender differences in the intergenerational transmission of elite status may be an important channel to study, notably to further apprehend gender gaps.

References

- Aaker, D. A. (1991). *Managing brand equity*. New York: Free Press.
- Adams, R. B. and Kirchmaier, T. (2016). Women on boards in finance and STEM industries. *American Economic Review*, 106(5):277–81.
- Ahn, Daniel P. and Ludema, Rodney (2017). Measuring smartness: Understanding the economic impact of targeted sanctions. Technical report, United States Department of State.
- Aina, C. and Nicoletti, C. (2018). The intergenerational transmission of liberal professions. *Labour Economics*, 51:108–120.
- Albouy, V. and Wanecq, T. (2003). Les inégalités sociales d'accès aux grandes écoles. *Économie et statistique*, 361(1):27–52.
- Anelli, M. (2020). The returns to elite university education: A quasi-experimental analysis. *Journal of the European Economic Association*, 18(6):2824–2868.
- Barone, G. and Mocetti, S. (2020). Intergenerational mobility in the very long run: Florence 1427–2011. *The Review of Economic Studies*.
- Basso, G., Brandimarti, E., Pellizzari, M., and Pica, G. (2021). Quality and selection in regulated professions. *CEPR Discussion Papers*. n°15674.
- Bauer, M. and Bertin-Mourot, B. (1987). *Les deux cents, comment devient-on un grand patron ?* Seuil, Paris.
- Bauer, M. and Bertin-Mourot, B. (1997). *Radiographie des grands patrons français: les conditions d'accès au pouvoir, 1985-1994*. Éditions L'Harmattan.
- Beller, E. (2009). Bringing intergenerational social mobility research into the twenty-first century: Why mothers matter. *American Sociological Review*, 74(4):507–528.
- Bennedsen, M., Nielsen, K. M., Pérez-González, F., and Wolfenzon, D. (2007). Inside the family firm: The role of families in succession decisions and performance. *The Quarterly Journal of Economics*, 122(2):647–691.
- Benveniste, S. (2023). Like father, like child: Intergenerational mobility in the French Grandes Écoles throughout the 20th century. *AMSE Working Paper*, 2023 Nr 18.
- Bernardi, F. and Ballarino, G. (2016). *Education, occupation and social origin: A comparative analysis of the transmission of socio-economic inequalities*. Edward Elgar Publishing.
- Bertrand, M., Goldin, C., and Katz, L. F. (2010). Dynamics of the gender gap for young professionals in the financial and corporate sectors. *American economic journal: applied economics*, 2(3):228–55.
- Birnbaum, P., Barucq, C., Bellaiche, M., and Marié, A. (1978). *La classe dirigeante française: Dissociation, interpénétration, intégration*. Presses universitaires de France.
- Bloom, N. and Van Reenen, J. (2007). Measuring and explaining management practices across firms and countries. *The quarterly journal of Economics*, 122(4):1351–1408.
- Borjas, G. J. (1987). Self-selection and the earnings of immigrants. *The American economic review*, 77(4):531–553.
- Bouchet-Valat, M. (2014). Les évolutions de l'homogamie de diplôme, de classe et d'origine sociales en France (1969-2011): ouverture d'ensemble, repli des élites. *Revue française de sociologie*, 55(3):459–505.
- Bourdieu, P. (1979). *La Distinction. Critique sociale du jugement*. Les Éditions de Minuit,

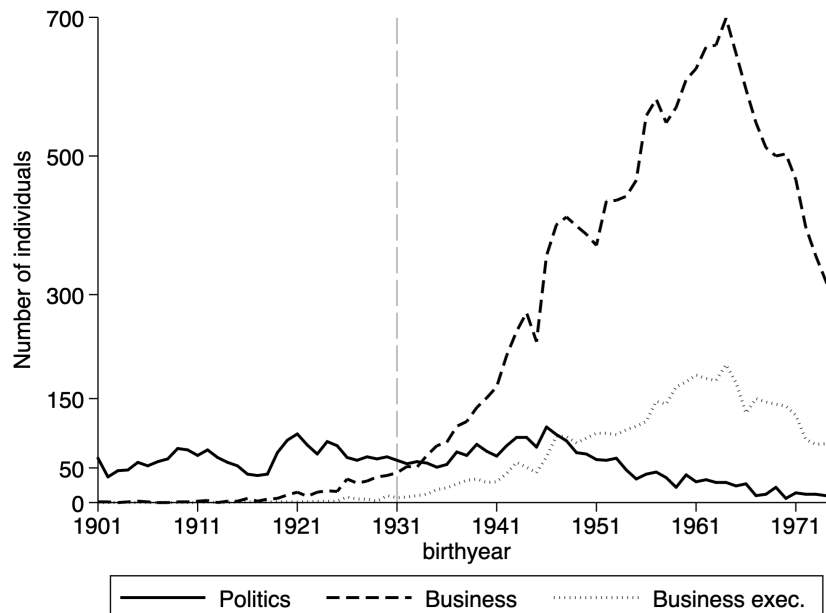
- Paris.
- Bourdieu, P. (1981). La représentation politique. *Actes de la recherche en sciences sociales*, 36(1):3–24.
- Bourdieu, P. (1989). *La Noblesse d'État. Grandes écoles et esprit de corps*. Les Éditions de Minuit, Paris.
- Bovens, M. and Wille, A. (2017). *Diploma democracy: The rise of political meritocracy*. Oxford University Press.
- Breen, R. and Müller, W. (2020). *Education and intergenerational social mobility in Europe and the United States*. Stanford University Press.
- Chetty, R., Deming, D. J., and Friedman, J. N. (2023). Diversifying society's leaders? The causal effects of admission to highly selective private colleges. *National Bureau of Economic Research Working Paper Series*, WP 31492.
- Chetty, R., Friedman, J. N., Saez, E., Turner, N., and Yagan, D. (2020). Income segregation and intergenerational mobility across colleges in the United States. *The Quarterly Journal of Economics*, 135(3):1567–1633.
- Clark, G., Cummins, N., Diaz Vidal, D., Hao, Y., Ishii, T., Landes, Z., Marcin, D., Mo Jung, K., Marek, A., and Williams, K. (2014). *The Son also Rises: 1,000 Years of Social Mobility*. Princeton University Press, Princeton.
- Clubok, A. B., Wilensky, N. M., and Berghorn, F. J. (1969). Family relationships, congressional recruitment, and political modernization. *The Journal of Politics*, 31(4):1035–1062.
- Colombier, N. and Masclet, D. (2008). Intergenerational correlation in self employment: some further evidence from French ECHP data. *Small Business Economics*, 30(4):423–437.
- Corak, M. and Piraino, P. (2011). The intergenerational transmission of employers. *Journal of Labor Economics*, 29(1):37–68.
- Dal Bó, E., Dal Bó, P., and Snyder, J. (2009). Political dynasties. *The Review of Economic Studies*, 76(1):115–142.
- De Paola, M. (2013). The determinants of risk aversion: the role of intergenerational transmission. *German Economic Review*, 14(2):214–234.
- Dohmen, T., Falk, A., Huffman, D., and Sunde, U. (2012). The intergenerational transmission of risk and trust attitudes. *The Review of Economic Studies*, 79(2):645–677.
- Dunn, T. and Holtz-Eakin, D. (2000). Financial capital, human capital, and the transition to self-employment: Evidence from intergenerational links. *Journal of labor economics*, 18(2):282–305.
- Duru-Bellat, M., Kieffer, A., and Reimer, D. (2008). Patterns of social inequalities in access to higher education in France and Germany. *International journal of comparative sociology*, 49(4-5):347–368.
- Dustmann, C., Glitz, A., Schönberg, U., and Brücker, H. (2016). Referral-based job search networks. *The Review of Economic Studies*, 83(2):514–546.
- Erikson, R. and Jonsson, J. O. (1998). Social origin as an interest-bearing asset: family background and labour-market rewards among employees in Sweden. *Acta Sociologica*, 41(1):19–36.
- Evans, D. S. and Jovanovic, B. (1989). An estimated model of entrepreneurial choice under liquidity constraints. *Journal of political economy*, 97(4):808–827.
- Fairlie, R. W. and Robb, A. (2007). Families, human capital, and small business: Evidence

- from the characteristics of business owners survey. *Industrial and Labor Relations Review*, 60(2):225–245.
- Falcon, J. and Bataille, P. (2018). Equalization or reproduction? Long-term trends in the intergenerational transmission of advantages in higher education in France. *European Sociological Review*, 34(4):335–347.
- Feinstein, B. D. (2010). The dynasty advantage: Family ties in congressional elections. *Legislative Studies Quarterly*, 35(4):571–598.
- Folke, O., Persson, T., and Rickne, J. (2017). Dynastic political rents? economic benefits to relatives of top politicians. *The Economic Journal*, 127(605):F495–F517.
- François, P. and Lemercier, C. (2016). Une financiarisation à la française (1979-2009). Mutations des grandes entreprises et conversion des élites. *Revue française de sociologie*, 57(2):269–320.
- Frémeaux, N. and Lefranc, A. (2020). Assortative mating and earnings inequality in France. *Review of Income and Wealth*, 66(4):757–783.
- Friedman, S., Laurison, D., and Miles, A. (2015). Breaking the ‘class’ ceiling? social mobility into Britain’s elite occupations. *The Sociological Review*, 63(2):259–289.
- Gagliarducci, S. and Manacorda, M. (2020). Politics in the family: Nepotism and the hiring decisions of Italian firms. *American Economic Journal: Applied Economics*, 12(2):67–95.
- Geys, B. (2017). Political dynasties, electoral institutions and politicians’ human capital. *The Economic Journal*, 127(605):F474–F494.
- Goux, D. and Maurin, E. (2003). Who marries whom in France? In Blossfeld, H.-P. and Timm, A., editors, *Who Marries Whom? Educational Systems as Marriage Markets in Modern Societies*, pages 57–78. Springer.
- Guyon, N. and Huillery, E. (2021). Biased aspirations and social inequality at school: Evidence from French teenagers. *The Economic Journal*, 131(634):745–796.
- Hartmann, M. (2000). Class-specific habitus and the social reproduction of the business elite in Germany and France. *The Sociological Review*, 48(2):241–261.
- Hoekstra, M. (2009). The effect of attending the flagship state university on earnings: A discontinuity-based approach. *The review of economics and statistics*, 91(4):717–724.
- Hout, M. (1988). More universalism, less structural mobility: The American occupational structure in the 1980s. *American Journal of sociology*, 93(6):1358–1400.
- Jennings, M. K., Stoker, L., and Bowers, J. (2009). Politics across generations: Family transmission reexamined. *The Journal of Politics*, 71(3):782–799.
- Kramarz, F. and Skans, O. N. (2014). When strong ties are strong: Networks and youth labour market entry. *Review of Economic Studies*, 81(3):1164–1200.
- Kramarz, F. and Thesmar, D. (2013). Social networks in the boardroom. *Journal of the European Economic Association*, 11(4):780–807.
- Laband, D. N. and Lentz, B. F. (1983). Like father, like son: Toward an economic theory of occupational following. *Southern Economic Journal*, pages 474–493.
- Laband, D. N. and Lentz, B. F. (1985). Favorite sons: Intergenerational wealth transfers among politicians. *Economic Inquiry*, 23(3):395–414.
- Laband, D. N. and Lentz, B. F. (1992). Self-recruitment in the legal profession. *Journal of Labor Economics*, 10(2):182–201.
- Laferrere, A. and McEntee, P. (1996). *Self-employment and Intergenerational Transfers: Liquidity Constraints or Family Environment?* INSEE.

- Lefranc, A. (2018). Intergenerational earnings persistence and economic inequality in the long run: Evidence from French cohorts, 1931–75. *Economica*, 85(340):808–845.
- Lentz, B. F. and Laband, D. N. (1989). Why so many children of doctors become doctors: Nepotism vs. human capital transfers. *Journal of Human Resources*, pages 396–413.
- Lindquist, M. J., Sol, J., and Van Praag, M. (2015). Why do entrepreneurial parents have entrepreneurial children? *Journal of Labor Economics*, 33(2):269–296.
- Mare, R. D. (1993). Educational stratification on observed and unobserved components of family background. aus: Blossfeld, Hans-Peter; Shavit, Yossi (eds.)(hrsg.): Persistent inequality. Changing educational attainment in thirteen countries. In Shavit, Y. and Blossfeld, H.-P., editors, *Persistent Inequality: Changing Educational Attainment in Thirteen Countries*. Westview Press.
- Marmaros, D. and Sacerdote, B. (2006). How do friendships form? *The Quarterly Journal of Economics*, 121(1):79–119.
- Mazuy, M., Barbieri, M., Breton, D., and d’Albis, H. (2015). L’évolution démographique récente de la France et ses tendances depuis 70 ans. *Population*, 70(3):417–486.
- Meurs, D., Pailhé, A., and Simon, P. (2006). The persistence of intergenerational inequalities linked to immigration: Labour market outcomes for immigrants and their descendants in France. *Population*, 61(5):645–682.
- Mocetti, S. (2016). Dynasties in professions and the role of rents and regulation: Evidence from Italian pharmacies. *Journal of Public Economics*, 133:1–10.
- Niess, A. (2012). Nepotism and family confiscation in the electoral system of the Third Republic. *French History*, 26(3):325–343.
- Pérez-González, F. (2006). Inherited control and firm performance. *American Economic Review*, 96(5):1559–1588.
- Piketty, T. (2014). *Capital in the twenty-first century*. Harvard University Press.
- Putnam, R. (1976). *The comparative study of political elites*. Prentice-Hall.
- Rivera, L. (2015). *Pedigree: How elite students get elite jobs*. Princeton University Press.
- Rivera, L. A. (2012). Hiring as cultural matching: The case of elite professional service firms. *American sociological review*, 77(6):999–1022.
- Rossi, M. A. (2017). Self-perpetuation of political power. *The Economic Journal*, 127(605):455–473.
- Sacerdote, B. (2011). Nature and nurture effects on children’s outcomes: What have we learned from studies of twins and adoptees? In *Handbook of social economics*, volume 1, pages 1–30. Elsevier.
- Savage, M. (2015). *Social class in the 21st century*. Penguin UK.
- Sørensen, J. B. (2007). Closure and exposure: Mechanisms in the intergenerational transmission of self-employment. In Ruef, M. and Lounsbury, M., editors, *Research in the Sociology of Organizations. The sociology of entrepreneurship. Vol. 25*. Emerald Group Publishing Limited.
- Sraer, D. and Thesmar, D. (2007). Performance and behavior of family firms: Evidence from the French stock market. *Journal of the European Economic Association*, 5(4):709–751.
- Suleiman, E. N. (1978). *Elites in French society: the politics of survival*. Princeton University Press.
- Sullivan, A., Parsons, S., Green, F., Wiggins, R. D., and Ploubidis, G. (2018). The path from social origins to top jobs: social reproduction via education. *The British journal of*

- sociology*, 69(3):776–798.
- Torche, F. (2011). Is a college degree still the great equalizer? intergenerational mobility across levels of schooling in the United States. *American journal of sociology*, 117(3):763–807.
- Torche, F. (2018). Intergenerational mobility at the top of the educational distribution. *Sociology of Education*, 91(4):266–289.
- Turchi, M. (2009). Jean Sarkozy ravive les divisions de la droite dans les Hauts-de-Seine. *Mediapart.fr*. retrieved 24 August 2021.
- van Aaken, D., Göbel, M., and Meindl, D. (2020). Monitor or advise? how family involvement affects supervisory board roles in family firms. *Schmalenbach Business Review*, 72(2):193–224.
- Villalonga, B. and Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of financial Economics*, 80(2):385–417.
- Vion, A., Joly, H., Grémont, É., and Dudouet, F.-X. (2014). Retour sur le champ du pouvoir économique en France: l’espace social des dirigeants du CAC 40. *Revue Française de Socio-Economie*, 1(13):23–48.
- Wakeling, P. and Savage, M. (2015). Entry to elite positions and the stratification of higher education in Britain. *The Sociological Review*, 63(2):290–320.
- Weeden, K. A. and Grusky, D. B. (2005). The case for a new class map. *American Journal of Sociology*, 111(1):141–212.
- Zimmerman, S. D. (2019). Elite colleges and upward mobility to top jobs and top incomes. *American Economic Review*, 109(1):1–47.

Figure 1: Distribution of the number of elite members by birth year and elite type.



Notes: The curves plot the total number of individuals holding an elite position, by position type and by birth year from 1901 to 1975. *Business exec.* refers to businessmen with an executive role in the firms. They constitute a subset of all businessmen.

Table 1: Descriptive statistics by cohort on elite members.

Birth cohort	All elite positions				Politicians				Business directors			
	Number of individuals	Average age at first position	Share who studied in a GE	who studied in a GE	Number of individuals	Average age at first position	Share who studied in a GE	who studied in a GE	Number of individuals	Average age at first position	Share who studied in a GE	who studied in a GE
all cohorts	17,822	49.6	26.2%		2,211	47.8	16.0%		15,670	50.0	27.6%	
1931-1935	561	57.3	26.6%		283	50.4	13.1%		280	65.0	40.0%	
1936-1940	906	56.6	26.6%		353	49.0	13.0%		563	62.1	35.0%	
1941-1945	1,456	56.0	25.8%		415	47.8	14.0%		1,056	59.7	30.6%	
1946-1950	2,275	54.5	27.1%		435	48.3	17.7%		1,852	56.1	29.5%	
1951-1955	2,267	52.4	26.8%		267	48.2	15.7%		2,013	53.1	28.4%	
1956-1960	2,853	50.3	25.6%		181	46.9	22.1%		2,674	50.6	25.8%	
1961-1965	3,195	46.7	25.7%		144	44.9	15.3%		3,053	46.8	26.2%	
1966-1970	2,552	43.4	25.1%		77	42.4	19.5%		2,477	43.4	25.2%	
1971-1975	1,757	39.9	27.5%		56	40.9	28.6%		1,702	39.9	27.5%	

Notes: This table reports by cohort the number of individuals holding elite positions, the average age at which they first accessed such positions, as well as the share with a diploma from one of the 12 *Grandes Écoles*. Appendix Tables B.2a, b and c break down the latter share by college.

Table 2: Main result. Among *Grande École* graduates, elite members' sons have better prospects of reaching an elite position.

Dependent variable	Dummy variable for entering an elite position			
	(1)	(2)	(3)	(4)
Father in the elite	3.463*** (1.028)	3.182*** (0.861)	2.944*** (0.816)	2.408*** (0.642)
Observations	103,309	103,309	103,309	103,309
Cohort weights	Yes	Yes	Yes	Yes
Cohort fixed effects		Yes		Yes
<i>Grande École</i> fixed effects			Yes	Yes

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Standard errors, clustered at the cohort level, are in parentheses. Each column displays estimates from a separate regression. Observations are graduates from the 12 *Grandes Écoles*. The table reports risk ratios from log-binomial estimations. Risk ratios above 1 reflect an increased probability of reaching an elite position (positive coefficients of row estimates), while risk ratios below 1 would indicate a reduced probability (negative coefficients of row estimates). Using a continuous variable as an independent variable—the probability that the father is an elite member—, estimates refer to the risk ratios for the independent variable at the value 1, i.e., having a father who is a member of the elite. The weighting scheme used for all estimations ensures that each 5-year cohort has the same weight whatever its number of observations. Cohort fixed effects are dummy variables for each cohort, except cohort 1951-1955, which serves as a reference because it is the middle of our period of study. *Grande École* fixed effects are dummy variables for each GE, except *Sciences Po Paris*, which serves as a reference because it is the college with the most graduates. See Appendix Table B.4 for the estimated risk ratios associated with all control variables.

Table 3: Heterogeneity by college: risk ratios of reaching the elite for sons of elite members.

Dependent variable	Dummy variable for reaching an elite position					
	EM Lyon (1)	ENA (2)	ENS Cachan (3)	ENS Ulm (4)	ESPCI (5)	ESCP (6)
Father in the elite	6.490*** (2.179)	5.756*** (1.341)	1.908 (1.880)	1.227 (1.489)	3.97e-07 (6.35e-06)	2.191*** (0.637)
Observations	3,664	4,365	6,946	4,158	1,611	11,905
Cohort weights	Yes	Yes	Yes	Yes	Yes	Yes
Cohort fixed effects	No	No	No	No	No	No
<i>Grande École</i> fixed effects	N/A	N/A	N/A	N/A	N/A	N/A

	ESSEC (7)	Mines Paris (8)	Polytech -nique (9)	Ponts et chaussées (10)	Sciences Po Paris (11)	Télécom (12)
	Father in the elite	1.898 (1.705)	2.214 (2.245)	3.376** (1.882)	9.965** (10.01)	3.009*** (1.102)
Observations	11,570	4,302	12,675	5,705	40,914	5,121
Cohort weights	Yes	Yes	Yes	Yes	Yes	Yes
Cohort fixed effects	No	No	No	No	No	No
<i>Grande École</i> fixed effects	N/A	N/A	N/A	N/A	N/A	N/A

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Standard errors, clustered at the cohort level, are in parentheses. Each column from each sub-panel displays estimates from a separate regression. The weighting scheme in this analysis is constructed for each college individually and ensures that each 5-year cohort has the same weight independently of the evolution of the number of graduates at the college level. Appendix Table B.6 provides similar outcomes with the inclusion of cohort fixed effects.

Table 4: Heterogeneity by type of elite: type of position of the father – type of position of the son matrix of occupational dynasties.

		Risk ratio for the son to reach		
		Business elite	Business executive	Political elite
Father position	Business elite	2.957*** (0.619)	5.612*** (1.902)	7.582** (7.218)
	Business executive	4.761*** (2.588)	8.530*** (4.233)	- -
	Political elite	1.144 (0.378)	1.068 (0.714)	36.66*** (3.620)

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Standard errors, clustered at the cohort level, are in parentheses. All cells display estimates from a separate regression. All estimations include equal weights per 5-year cohort, as well as *Grande École* and cohort fixed effects. This heat matrix reports, for graduates of the 12 *Grandes Écoles*, their risk ratios for the appointment or election to different types of positions (business, business executive, or politics) depending on the position of their fathers. The darker the cell the higher the risk ratio.

Table 5: Heterogeneity by type of elite and college: risk ratios of reaching the political elite for sons of politicians graduating from *ENA* or *Sciences Po Paris*, and risk ratios of reaching the business elite for sons of businessmen graduating from *Polytechnique*.

Dependent dummy for entering:	Politics				Business		Executive business	
	ENA		Sciences Po Paris		Polytechnique			
Subsample of graduates from	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Father in politics	42.29*** (10.37)	37.50*** (2.122)	19.44*** (7.157)	22.69*** (5.243)				
Father in business					3.378* (2.205)	3.029** (1.672)		
Father in business (executive)							11.35*** (5.488)	9.509*** (3.116)
Observations	4,365	4,365	40,914	40,914	12,675	12,675	12,675	12,675
Cohort weights	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort fixed effects	No	Yes	No	Yes	No	Yes	No	Yes
<i>Grande École</i> fixed effects	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Standard errors, clustered at the cohort level, are in parentheses. Each column displays estimates from a separate regression. The weighting scheme in this analysis is constructed by GE and ensures that each 5-year cohort has the same weight regardless of the evolution of the number of graduates at the college level.

Table 6: Heterogeneity across time: business or political dynasties.

Dependent dummy variable	Entering business			Entering politics		
	(1)	(2)	(3)	(4)	(5)	(6)
Father in business	2.473*** (0.493)	2.346*** (0.444)	2.379*** (0.468)			
Father in business × Period 1931-1945	1.050*** (460.7)	2.873*** (1,134)	3.042*** (1,249)			
× Period 1946-1960	1.245 (0.946)	0.943 (0.590)	0.918 (0.582)			
× Period 1961-1975	reference	reference	reference			
Father in politics				3.241*** (1.229)	2.623** (1.194)	2.687** (1.191)
Father in politics × Period 1931-1945				19.36*** (15.22)	28.35*** (13.12)	28.95*** (13.62)
× Period 1946-1960				10.78*** (4.859)	13.31*** (6.627)	12.90*** (6.159)
× Period 1961-1975				reference	reference	reference
Observations	103,309	103,309	103,309	103,309	103,309	103,309
Cohort weights			Yes			Yes
Period fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
<i>Grande École</i> fixed effects		Yes	Yes		Yes	Yes

Notes: *** p<0.01, ** p<0.05, * p<0.1. Standard errors, clustered at the cohort level, are in parentheses. Each column displays estimates from a separate regression.

Table 7: Consequence of dynasties: *Grande École* graduation.

(a) Of those in the political elite.

Dependent variable: graduated from	any of the 12 Grandes Ecoles		any engineering school		any business school		administration or research school	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Father in politics	3.404*** (1.082)		14.80*** (11.45)		0 (0)		2.986*** (0.925)	
Father in business		1.241 (0.664)		0 (0)		4.745 (8.402)		1.489 (0.861)
Observations	2,211	2,211	2,211	2,211	2,211	2,211	2,211	2,211
Cohort weights	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Positions controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

(b) Of those in the business elite.

Dependent variable: graduated from	any of the 12 Grandes Ecoles		any engineering school		any business school		administration or research school	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Father in politics	1.120 (0.558)		0.186 (0.293)		0.311 (0.311)		2.397* (1.172)	
Father in business		0.488*** (0.115)		0.145** (0.121)		0.787 (0.360)		0.451 (0.281)
Observations	15,670	15,670	15,670	15,670	15,670	15,670	15,670	15,670
Cohort weights	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Positions controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Estimates are risk ratios from log-binomial regressions. Standard errors, clustered at the cohort level, are in parentheses. Each column from each sub-panel displays estimates from a separate regression. Observations are individuals, who held at least one elite position. Each 5-year cohort has the same weight, whatever the number of members of the elite. Cohort fixed effects are dummy variables for each cohort, except cohort 1951-1955, which serves as a reference. See Appendix Table B.7 for the estimated risk ratios associated with all control variables.

Table 8: Consequence of dynasties: age at first elite position.

Dependent variable	Age of entry in politics			Age of entry in business			Age of entry as business executive		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Father in politics	0.956 (2.753)			-5.665*** (1.594)			0.614 (4.501)		
Father in business		-9.335*** (2.227)			-5.407** (1.747)			-7.739*** (2.074)	
Father in business (executive)			-11.22*** (0.407)			-7.982** (2.618)			-9.003** (3.205)
R ²	0.062	0.063	0.063	0.535	0.536	0.535	0.259	0.261	0.260
Observations	2,206	2,206	2,206	13,920	13,920	13,920	3,734	3,734	3,734
Cohort weights	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Grande École</i> fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

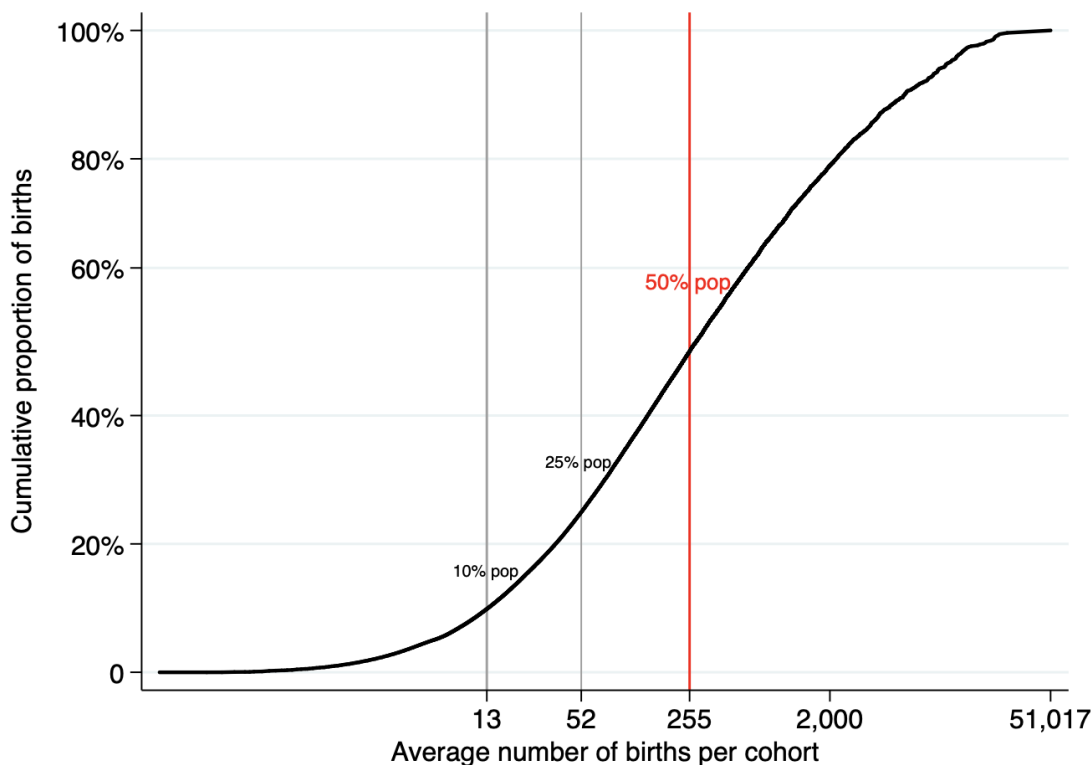
Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Standard errors, clustered at the cohort level, are in parentheses. Each column displays estimates from a separate OLS regression. Observations are individuals, who held at least one elite position. Each 5-year cohort has the same weight, whatever the number of members of the elite. *Grande École* fixed effects are dummy variables for each GE, except *Sciences Po Paris*, which serves as a reference. Cohort fixed effects are dummy variables for each cohort, except 1951-1955, which serves as a reference. R² among business directors are highly inflated by cohort fixed effects, due to time-varying data coverage documented in section 3. See Appendix Table B.8 for the estimated risk ratios associated with all control variables.

Online appendix

For Online Publication

A. Complementary figures

Figure A.1: Surnames' frequency in France (1901-1975).



Notes: The figure is based on the number of births by surname per generation of 21 years over the period 1901-1975. I use a logarithmic scale for the abscissa to emphasize the importance of rare surnames. While the number of births per generation for a single surname goes up to 51,017 (*Martin*), the figure shows that surnames with less than 13 births per generation account for 10% of all births over the period (*10% pop* vertical line). Surnames with at most 52 births per generation account for 25% of the population (*25% pop* vertical line), whereas half of the population born between 1901 and 1975 had a surname with less than 255 births per generation (*50% pop* vertical line). This only includes “native” surnames, as defined in section 4.1. Including all surnames, the 10%, 25%, and 50% cut-offs would correspond to even rarer surnames, respectively an average of 11, 46, and 230 births per generation.

B. Complementary tables

Table B.1: Number of graduates per cohort in each *Grande École*.

birth cohort	EM Lyon	ENA	ENS Cachan	ENS Ulm	ESCP	ESPCI	ESSEC	Mines Paris	Polytech -nique	Ponts et chaussées	Sciences Po Paris	Télécom Paris	all colleges
1931-1935	228	272	566	296	823	156	515	265	1,134	281	3,118	269	7,341
1936-1940	297	445	715	390	1,070	168	538	330	1,442	413	3,743	357	9,026
1941-1945	424	507	600	412	1,132	159	705	340	1,461	470	4,065	337	9,727
1946-1950	336	674	684	450	1,120	189	839	432	1,452	624	6,352	427	12,428
1951-1955	342	687	959	493	857	174	1,183	483	1,360	706	5,384	596	11,885
1956-1960	377	684	854	492	915	172	1,333	519	1,383	645	4,647	616	11,325
1961-1965	466	401	815	458	1,563	160	1,834	545	1,385	719	6,284	713	14,212
1966-1970	485	341	813	573	2,041	206	1,986	664	1,430	882	3,784	883	12,947
1971-1975	709	354	940	594	2,384	227	2,637	724	1,628	965	3,537	923	14,418
all cohorts	3,664	4,365	6,946	4,158	11,905	1,611	11,570	4,302	12,675	5,705	40,914	5,121	103,309

Notes: This table reports the number of male graduates in each of the 12 elite colleges as well as in all colleges together, by 5-year birth cohort as well as for all cohorts together. This restricts to “native” surnames as defined in section 4.1

Table B.2: Share of *Grande École* graduates among elite members, by cohort and college.

(a) Both political and business elites.

Birth cohort	all schools	EM Lyon	ENA	ENS Cachan	ENS Ulm	ESCP	ESPCI	ESSEC	Mines Paris	Polytech -nique	Ponts et chaussées	Sciences Po Paris	Télécom	Number of individuals
all cohorts	26.2%	1.1%	3.3%	0.3%	0.7%	2.7%	0.2%	3.6%	1.8%	6.1%	2.1%	10.5%	1.4%	17,822
1931-1935	26.6%	0.5%	5.5%	0.5%	0.7%	1.6%	0.0%	0.7%	1.2%	6.6%	1.6%	14.6%	1.4%	561
1936-1940	26.6%	1.0%	5.0%	0.2%	0.4%	1.0%	0.0%	1.1%	2.0%	8.1%	1.4%	14.7%	0.6%	906
1941-1945	25.8%	0.3%	5.3%	0.2%	0.7%	1.9%	0.1%	1.6%	1.9%	7.3%	1.6%	13.1%	0.4%	1,456
1946-1950	27.1%	0.5%	4.9%	0.4%	0.5%	1.7%	0.4%	2.4%	1.8%	5.6%	2.0%	14.2%	0.8%	2,275
1951-1955	26.8%	0.8%	4.3%	0.3%	0.6%	2.4%	0.3%	3.4%	2.2%	6.1%	2.5%	11.9%	1.5%	2,267
1956-1960	25.6%	1.2%	3.4%	0.5%	0.6%	2.0%	0.1%	4.4%	1.7%	6.3%	1.8%	10.3%	1.7%	2,853
1961-1965	25.7%	1.3%	1.9%	0.3%	0.7%	3.0%	0.3%	3.9%	1.8%	5.2%	1.7%	9.4%	1.8%	3,195
1966-1970	25.1%	1.0%	1.5%	0.2%	0.9%	4.4%	0.1%	4.6%	1.6%	6.0%	2.5%	6.9%	1.8%	2,552
1971-1975	27.5%	2.3%	1.5%	0.5%	1.0%	4.6%	0.2%	5.6%	1.8%	6.0%	2.9%	6.0%	1.3%	1,757

(b) Political elite.

Birth cohort	all schools	EM Lyon	ENA	ENS Cachan	ENS Ulm	ESCP	ESPCI	ESSEC	Mines Paris	Polytech -nique	Ponts et chaussées	Sciences Po Paris	Télécom	Number of individuals
all cohorts	16.0%	0.2%	4.9%	0.2%	0.6%	0.5%	0.0%	0.6%	0.3%	1.3%	0.5%	12.3%	0.0%	2,211
1931-1935	13.1%	0.4%	4.6%	1.1%	0.0%	0.0%	0.0%	0.4%	0.0%	1.1%	0.7%	8.5%	0.4%	283
1936-1940	13.0%	0.6%	3.7%	0.0%	0.8%	0.0%	0.0%	0.3%	0.8%	2.5%	0.0%	8.8%	0.0%	353
1941-1945	14.0%	0.2%	5.1%	0.0%	0.7%	0.7%	0.0%	0.2%	0.5%	1.7%	0.5%	10.4%	0.0%	415
1946-1950	17.7%	0.2%	5.3%	0.2%	0.5%	0.0%	0.0%	0.2%	0.2%	0.9%	0.7%	14.5%	0.0%	435
1951-1955	15.7%	0.0%	6.0%	0.0%	0.4%	1.1%	0.0%	0.7%	0.4%	0.7%	0.4%	12.4%	0.0%	267
1956-1960	22.1%	0.0%	8.3%	0.6%	0.6%	1.1%	0.0%	1.1%	0.0%	1.1%	0.0%	18.8%	0.0%	181
1961-1965	15.3%	0.0%	2.8%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.6%	0.0%	144
1966-1970	19.5%	0.0%	2.6%	0.0%	1.3%	0.0%	0.0%	1.3%	0.0%	1.3%	1.3%	15.6%	0.0%	77
1971-1975	28.6%	0.0%	3.6%	0.0%	1.8%	1.8%	0.0%	7.1%	0.0%	0.0%	1.8%	21.4%	0.0%	56

(c) Business elite.

Birth cohort	all schools	EM Lyon	ENA	ENS Cachan	ENS Ulm	ESCP	ESPCI	ESSEC	Mines Paris	Polytech -nique	Ponts et chaussées	Sciences Po Paris	Télécom	Number of individuals
all cohorts	27.6%	1.2%	3.1%	0.3%	0.7%	3.0%	0.2%	4.0%	2.0%	6.8%	2.3%	10.3%	1.6%	15,670
1931-1935	40.0%	0.7%	6.4%	0.0%	1.4%	3.2%	0.0%	1.1%	2.5%	12.1%	2.5%	20.7%	2.5%	280
1936-1940	35.0%	1.2%	5.9%	0.4%	0.2%	1.6%	0.0%	1.6%	2.8%	11.5%	2.3%	18.3%	0.9%	563
1941-1945	30.6%	0.4%	5.5%	0.3%	0.7%	2.3%	0.2%	2.2%	2.4%	9.4%	2.1%	14.5%	0.6%	1,056
1946-1950	29.5%	0.5%	5.0%	0.4%	0.5%	2.1%	0.4%	2.9%	2.1%	6.7%	2.3%	14.4%	1.0%	1,852
1951-1955	28.4%	0.9%	4.1%	0.3%	0.6%	2.5%	0.3%	3.7%	2.5%	6.8%	2.7%	12.0%	1.7%	2,013
1956-1960	25.8%	1.2%	3.0%	0.4%	0.6%	2.0%	0.1%	4.6%	1.8%	6.6%	1.9%	9.7%	1.8%	2,674
1961-1965	26.2%	1.4%	1.9%	0.3%	0.7%	3.2%	0.3%	4.1%	1.9%	5.5%	1.8%	9.2%	1.9%	3,053
1966-1970	25.2%	1.0%	1.5%	0.2%	0.8%	4.6%	0.1%	4.7%	1.7%	6.2%	2.5%	6.6%	1.8%	2,477
1971-1975	27.5%	2.4%	1.5%	0.5%	0.9%	4.7%	0.2%	5.5%	1.8%	6.2%	2.9%	5.6%	1.4%	1,702

Notes: These tables report by cohort the number of individuals holding elite positions, as well as their share with a diploma from each of the 12 *Grandes Écoles*. Panel (a) relates to both the political and business elites, while panel (b) relates to the political elite only, and panel (c) to the business elite only.

Table B.3: Descriptive statistics on the explanatory variables $X_{S(i),y(i),e}$.

(a) Both political and business elites.

	Average	Average (among positive)	Obs. Total	Obs. Null values	Obs. 0.00 to 0.01	Obs. 0.01 to 0.05	Obs. 0.05 to 0.10	Obs. 0.10 to 0.25	Obs. 0.25 to 0.50	Obs. 0.50 to 1.00
All	0.0027	0.0183	103,309	88,171	12,855	1,463	295	257	131	137
1931-1935	0.0002	0.0057	7,341	7,117	213	8	1	1	0	1
1936-1940	0.0003	0.0053	9,026	8,545	467	7	1	5	0	1
1941-1945	0.0007	0.0080	9,727	8,850	834	22	4	11	4	2
1946-1950	0.0016	0.0132	12,428	10,942	1,378	49	15	22	15	7
1951-1955	0.0029	0.0222	11,885	10,323	1,264	198	41	27	12	20
1956-1960	0.0012	0.0080	11,325	9,686	1,508	83	17	21	5	5
1961-1965	0.0041	0.0231	14,212	11,688	2,006	362	57	48	16	35
1966-1970	0.0027	0.0124	12,947	10,158	2,498	182	41	34	21	13
1971-1975	0.0074	0.0300	14,418	10,862	2,687	552	118	88	58	53

(b) Political elite.

	Average	Average among positive	Obs. Total	Obs. Null values	Obs. 0.00 to 0.01	Obs. 0.01 to 0.05	Obs. 0.05 to 0.10	Obs. 0.10 to 0.25	Obs. 0.25 to 0.50	Obs. 0.50 to 1.00
All	0.0010	0.0102	103,309	93,222	9,174	607	121	94	47	44
1931-1935	0.0002	0.0058	7,341	7,119	211	8	1	1	0	1
1936-1940	0.0003	0.0053	9,026	8,547	465	7	1	5	0	1
1941-1945	0.0006	0.0067	9,727	8,886	808	16	4	8	3	2
1946-1950	0.0012	0.0112	12,428	11,045	1,299	38	14	14	12	6
1951-1955	0.0021	0.0181	11,885	10,533	1,133	150	27	19	12	11
1956-1960	0.0005	0.0047	11,325	10,088	1,177	43	6	7	2	2
1961-1965	0.0017	0.0151	14,212	12,636	1,344	166	28	19	7	12
1966-1970	0.0003	0.0028	12,947	11,542	1,349	42	7	6	1	0
1971-1975	0.0014	0.0128	14,418	12,826	1,388	137	33	15	10	9

(c) Business elite.

	Average	Average among positive	Obs. Total	Obs. Null values	Obs. 0.00 to 0.01	Obs. 0.01 to 0.05	Obs. 0.05 to 0.10	Obs. 0.10 to 0.25	Obs. 0.25 to 0.50	Obs. 0.50 to 1.00
All	0.0017	0.0202	103,309	94,485	7,487	815	167	173	93	89
1931-1935	0.0000	0.0005	7,741	7,736	5	0	0	0	0	0
1936-1940	0.0000	0.0003	9,026	9,011	15	0	0	0	0	0
1941-1945	0.0002	0.0202	9,727	9,648	67	7	0	4	1	0
1946-1950	0.0004	0.0171	12,428	12,164	237	11	1	11	3	1
1951-1955	0.0010	0.0236	11,885	11,363	444	41	14	12	3	8
1956-1960	0.0007	0.0081	11,325	10,495	758	37	12	17	4	2
1961-1965	0.0025	0.0204	14,212	12,480	1,475	165	29	29	12	22
1966-1970	0.0024	0.0134	12,947	10,645	2,068	140	32	29	20	13
1971-1975	0.0060	0.0280	14,418	11,343	2,418	414	79	71	50	43

Notes: *Obs.* stands for number of observations. The upper panel (a) provides statistics for the explanatory variables related to having a father in both types of elite, while the central panel (b) relates to fathers in politics and the lower panel (c) to fathers in business. Statistics for all cohorts together are reported, as well as for each five-year cohort. The *Average among positive* computes the average of the variable among non-null values. I also report the number of observations, in total, with null values, as well as for different brackets.

Table B.4: Complementary results. Detailed estimates for the baseline regression.

Dependent variable	Dummy variable for entering an elite position			
	(1)	(2)	(3)	(4)
Father in the elite	3.463*** (1.028)	3.182*** (0.861)	2.944*** (0.816)	2.408*** (0.642)
College EM Lyon			1.636*** (0.222)	1.664*** (0.247)
College ENA			4.503*** (0.617)	4.311*** (0.578)
College ENPC (“Ponts”)			1.427*** (0.0739)	1.381*** (0.0713)
College ENS Cachan			0.267*** (0.0362)	0.270*** (0.0378)
College ENS Ulm			0.849 (0.0923)	0.848 (0.0937)
College ESCP			1.305*** (0.134)	1.350*** (0.147)
College ESPCI			0.693* (0.137)	0.726 (0.146)
College ESSEC			1.831*** (0.0801)	1.769*** (0.121)
College Mines Paris			2.028*** (0.127)	1.977*** (0.0992)
College Polytechnique			2.455*** (0.138)	2.564*** (0.128)
College Télécom			1.073 (0.101)	1.024 (0.0881)
Cohort 1931-1935		0.343*** (0.000563)		0.353*** (0.00492)
Cohort 1936-1940		0.517*** (0.000810)		0.518*** (0.00489)
Cohort 1941-1945		0.738*** (0.00103)		0.727*** (0.00580)
Cohort 1946-1950		0.870*** (0.000746)		0.881*** (0.00242)
Cohort 1956-1960		1.079*** (0.00134)		1.032*** (0.00182)
Cohort 1961-1965		1.065*** (0.000766)		1.126*** (0.0195)
Cohort 1966-1970		0.859*** (0.000384)		0.864*** (0.0226)
Cohort 1971-1975		0.606*** (0.00141)		0.601*** (0.0171)
Constant	0.0431*** (0.00470)	0.0548*** (9.45e-05)	0.0283*** (0.00308)	0.0360*** (0.000984)
Observations	103,309	103,309	103,309	103,309
Cohort weights	Yes	Yes	Yes	Yes
Cohort fixed effects		Yes		Yes
<i>Grande École</i> fixed effects			Yes	Yes

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Standard errors, clustered at the cohort level, are in parentheses. This table provides details estimates for the main analysis presented in section 5. See the notes to Table 2 for additional explanations on the regressions. Cohort fixed effects are dummy variables for each cohort, except cohort 1951-1955, which serves as a reference. *Grande École* fixed effects are dummy variables for each college, except *Sciences Po Paris*, which serves as a reference.

Table B.5: Complementary results. Robustness analysis of the baseline regression to sample restrictions and alternative estimation methods.

Dependent variable Independent variable	Dummy variable for entering an elite position Probability of having a father in an elite position			
	no control	cohort controls	<i>Grande École</i> controls	cohort and GE controls
No weighting scheme	3.102*** (0.823)	3.030*** (0.753)	2.748*** (0.670)	2.456*** (0.550)
Excluding the first cohort	3.164*** (0.922)	3.194*** (0.873)	2.693*** (0.729)	2.414*** (0.650)
Excluding the first two cohorts	2.978*** (0.888)	3.229*** (0.900)	2.584*** (0.715)	2.566*** (0.634)
$X_{S(i),y(i),e}$ only over 0.10	3.352*** (0.925)	3.152*** (0.815)	2.859*** (0.750)	2.386*** (0.650)
$X_{S(i),y(i),e}$ only over 0.25	2.925*** (0.829)	2.772*** (0.720)	2.579*** (0.693)	2.208*** (0.562)
Not excluding “immigrant” surnames	3.418*** (1.045)	3.193*** (0.838)	2.903*** (0.910)	6.318*** (1.816)

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Standard errors, clustered at the cohort level, are in parentheses. All cells display estimates from a separate regression. Estimates reported in the first line are computed with unweighted regressions, while all other estimates include the same weighting scheme as the baseline regression. All regressions include cohort and *Grande École* fixed effects. The number of observations is as follows: still 103,309 in the absence of a weighting scheme, 95,968 when I exclude the first cohort, 86,942 when I exclude the two first cohorts, 88,696 when $X_{S(i),y(i),e}$ is floored at 0.10, 88,447 when it is floored at 0.25, and 122,075 when I also include “immigrant surnames”. When restricting $X_{S(i),y(i),e}$ to a certain threshold, I withdraw from the sample observations with non-null values that are below the threshold, rather than considering them as null values.

Table B.6: Complementary results. Inclusion of cohort fixed effects for the heterogeneity analysis by *Grande École*.

Dependent variable	Dummy variable for entering an elite position					
	EM Lyon (1)	ENA (2)	ENS Cachan (3)	ENS Ulm (4)	ESPCI (5)	ESCP (6)
Father in the elite	5.301*** (2.147)	- -	1.284 (1.457)	0.937 (1.194)	2.71e-10 (6.00e-09)	1.757* (0.560)
Observations	3,664	4,365	6,946	4,158	1,611	11,905
Cohort weights	Yes	Yes	Yes	Yes	Yes	Yes
Cohort fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
<i>Grande École</i> fixed effects	N/A	N/A	N/A	N/A	N/A	N/A

	ESSEC (7)	Mines Paris (8)	Polytech -nique (9)	Ponts et chaussées (10)	Sciences Po Paris (11)	Télécom (12)
Father in elite position	1.528 (1.450)	2.283 (2.534)	2.850** (1.380)	11.75** (11.26)	3.123*** (1.111)	0.00893** (0.0215)
Observations	11,570	4,302	12,675	5,705	40,914	5,121
Cohort weights	Yes	Yes	Yes	Yes	Yes	Yes
Cohort fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
<i>Grande École</i> fixed effects	N/A	N/A	N/A	N/A	N/A	N/A

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Standard errors, clustered at the cohort level, are in parentheses. Each column from each sub-panel displays estimates from a separate regression. The log-binomial regression does not converge when restricting to *ENA* graduates and including cohort fixed effects. Results vary to a limited extent for other colleges, with regards to those in Table 3 that do not include cohort fixed effects.

Table B.7: Complementary results. Detailed estimates for the regressions on the consequences of dynasties on education among the elite.

(a) For those in the political elite.

Dependent variable: graduated from	any of the 12 Grandes Ecoles		any engineering school		any business school		administration or research school	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Father in politics	3.404*** (1.082)		14.80*** (11.45)		0 (0)		2.986*** (0.925)	
Father in business		1.241 (0.664)		0 (0)		4.745 (8.402)		1.489 (0.861)
Executive power	3.622*** (0.450)	3.594*** (0.453)	5.959*** (2.064)	5.852*** (2.079)	1.016 (0.594)	1.025 (0.616)	3.541*** (0.481)	3.517*** (0.481)
Cohort 1931-1935	0.873*** (0.0101)	0.854*** (0.00357)	1.744*** (0.139)	1.527*** (0.0111)	0.344*** (0.00527)	0.386*** (0.0166)	0.795*** (0.00784)	0.783*** (0.00410)
Cohort 1936-1940	0.892*** (0.0101)	0.872*** (0.00355)	2.519*** (0.202)	2.211*** (0.0199)	0.416*** (0.00546)	0.464*** (0.0201)	0.757*** (0.00751)	0.745*** (0.00417)
Cohort 1941-1945	0.863*** (0.00728)	0.851*** (0.00609)	1.610*** (0.108)	1.477*** (0.0468)	0.601*** (0.00819)	0.657*** (0.0263)	0.808*** (0.00763)	0.801*** (0.00647)
Cohort 1946-1950	1.136*** (0.0100)	1.119*** (0.00520)	1.148*** (0.0600)	1.034*** (0.0120)	0.460*** (0.00750)	0.502*** (0.0243)	1.176*** (0.00867)	1.164*** (0.00628)
Cohort 1956-1960	1.234*** (0.0230)	1.212*** (0.0229)	0.914 (0.0899)	0.816*** (0.0362)	1.144*** (0.0372)	1.203*** (0.0501)	1.352*** (0.0311)	1.335*** (0.0292)
Cohort 1961-1965	0.966*** (0.00404)	0.962*** (0.00347)					1.099*** (0.00656)	1.097*** (0.00657)
Cohort 1966-1970	1.078*** (0.0170)	1.056*** (0.0159)	2.096*** (0.215)	1.878*** (0.0924)	0.647*** (0.0187)	0.708*** (0.0298)	1.024 (0.0179)	1.008 (0.0156)
Cohort 1971-1975	1.955*** (0.0623)	1.915*** (0.0646)	1.579*** (0.0817)	1.564*** (0.0510)	4.622*** (0.0562)	4.842*** (0.140)	1.571*** (0.0230)	1.547*** (0.0221)
Constant	0.116*** (0.00652)	0.119*** (0.00632)	0.00648*** (0.000914)	0.00746*** (0.00115)	0.0206*** (0.00167)	0.0183*** (0.00177)	0.103*** (0.00567)	0.105*** (0.00572)
Observations	2,211	2,211	2,211	2,211	2,211	2,211	2,211	2,211
Cohort weights	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Position controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Find on the next page the second part of the table, as well as details on its reading.

(b) For those in the business elite.

Dependent variable: graduated from	any of the 12 Grandes Ecoles		any engineering school		any business school		administration or research school	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Father in politics	1.120 (0.558)		0.186 (0.293)		0.311 (0.311)		2.397* (1.172)	
Father in business		0.488*** (0.115)		0.145** (0.121)		0.787 (0.360)		0.451 (0.281)
Business executive	1.137** (0.0697)	1.139** (0.0697)	1.482*** (0.142)	1.485*** (0.143)	0.805** (0.0685)	0.805** (0.0679)	1.170* (0.0970)	1.172* (0.0971)
Cohort 1931-1935	1.415*** (0.00431)	1.411*** (0.00377)	1.348*** (0.00809)	1.347*** (0.00655)	0.691*** (0.00307)	0.693*** (0.00294)	1.685*** (0.00936)	1.672*** (0.00669)
Cohort 1936-1940	1.238*** (0.00254)	1.235*** (0.000518)	1.356*** (0.00257)	1.356*** (0.00127)	0.619*** (0.000944)	0.620*** (0.000670)	1.450*** (0.00636)	1.439*** (0.00158)
Cohort 1941-1945	1.086*** (0.00301)	1.084*** (0.00271)	1.163*** (0.00569)	1.163*** (0.00491)	0.669*** (0.00238)	0.670*** (0.00233)	1.237*** (0.00622)	1.228*** (0.00426)
Cohort 1946-1950	1.044*** (0.00171)	1.043*** (0.000952)	0.925*** (0.00238)	0.925*** (0.00155)	0.767*** (0.00140)	0.768*** (0.00106)	1.206*** (0.00413)	1.200*** (0.00156)
Cohort 1956-1960	0.905*** (0.00176)	0.904*** (0.00115)	0.867*** (0.00175)	0.867*** (0.00199)	1.106*** (0.00130)	1.107*** (0.00119)	0.803*** (0.00305)	0.799*** (0.00145)
Cohort 1961-1965	0.917*** (0.00263)	0.918*** (0.00222)	0.827*** (0.00304)	0.831*** (0.00335)	1.220*** (0.00281)	1.223*** (0.00447)	0.753*** (0.00373)	0.751*** (0.00254)
Cohort 1966-1970	0.885*** (0.00191)	0.887*** (0.00141)	0.885*** (0.00194)	0.892*** (0.00247)	1.443*** (0.00162)	1.448*** (0.00462)	0.565*** (0.00232)	0.565*** (0.00149)
Cohort 1971-1975	0.967*** (0.00116)	0.973*** (0.00170)	0.955*** (0.000590)	0.971*** (0.00388)	1.753*** (0.00132)	1.760*** (0.00807)	0.521*** (0.00156)	0.522*** (0.00249)
Constant	0.275*** (0.00466)	0.275*** (0.00473)	0.0894*** (0.00296)	0.0894*** (0.00288)	0.0753*** (0.00139)	0.0752*** (0.00137)	0.131*** (0.00305)	0.132*** (0.00308)
Observations	15,670	15,670	15,670	15,670	15,670	15,670	15,670	15,670
Cohort weights	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Position controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Find on the previous page the first part of the table. This table provides detailed estimates for all explanatory variables in the analysis of schooling of dynastical elite members. Summary results are presented in Table 7). Estimates report risk ratios from log-binomial regressions. Standard errors, clustered at the cohort level, are in parentheses. Each column displays estimates from a separate regression. Observations are individuals, who held at least one elite position. Each 5-year cohort has the same weight, whatever the number of elite members. Cohort fixed effects are dummy variables for each cohort, except 1951-1955, which serves as a reference.

Table B.8: Complementary results. Detailed estimates for the regressions on the consequences of dynasties on age at first position among the elite.

Dependent variable	Age of entry into politics			Age of entry into business			Age of entry as business executive		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Father in politics	0.956 (2.753)			-5.665*** (1.594)			0.614 (4.501)		
Father in business		-9.335*** (2.227)			-5.407** (1.747)			-7.739*** (2.074)	
Father in business (executive)			-11.22*** (0.407)			-7.982** (2.618)			-9.003** (3.205)
College_em_lyon	-1.898 (4.310)	-1.899 (4.309)	-1.899 (4.309)	-0.960** (0.399)	-0.897* (0.411)	-0.969** (0.400)	-2.128** (0.749)	-1.962** (0.714)	-2.147** (0.746)
College_ena	-5.919*** (1.002)	-5.918*** (1.004)	-5.923*** (1.001)	-3.256*** (0.390)	-3.292*** (0.383)	-3.289*** (0.382)	-1.659*** (0.460)	-1.686*** (0.474)	-1.669*** (0.470)
College_enpc	1.351 (1.808)	1.387 (1.722)	1.390 (1.722)	0.506 (0.517)	0.510 (0.519)	0.521 (0.518)	0.680 (0.748)	0.698 (0.760)	0.725 (0.761)
College_ens_cachan	1.403 (0.855)	1.403 (0.854)	1.403 (0.855)	0.738 (1.352)	0.732 (1.347)	0.736 (1.350)	-3.933* (1.964)	-3.908* (1.993)	-3.959* (1.954)
College_ens_uhm	-5.332*** (1.221)	-5.345*** (1.223)	-5.339*** (1.221)	-2.280*** (0.563)	-2.281*** (0.561)	-2.279*** (0.562)	-1.268 (0.845)	-1.316 (0.830)	-1.290 (0.838)
College_escp	-0.465 (1.925)	-0.382 (1.973)	-0.422 (1.960)	-0.296 (0.464)	-0.286 (0.462)	-0.274 (0.463)	-0.585 (0.835)	-0.586 (0.828)	-0.576 (0.843)
College_espcci	-	-	-	-0.401 (1.139)	-0.417 (1.140)	-0.403 (1.140)	2.086 (1.872)	2.042 (1.869)	2.062 (1.877)
College_essec	-1.158 (1.438)	-1.182 (1.432)	-1.175 (1.433)	-0.824 (0.465)	-0.844 (0.459)	-0.835 (0.464)	0.186 (0.703)	0.165 (0.679)	0.168 (0.704)
College_mines	-1.979 (2.469)	-1.999 (2.465)	-1.999 (2.465)	-1.834** (0.549)	-1.852*** (0.550)	-1.846** (0.551)	-1.263 (0.707)	-1.291 (0.710)	-1.278 (0.707)
College_polytechnique	0.0812 (0.823)	0.0946 (0.797)	0.0946 (0.797)	-2.205*** (0.273)	-2.210*** (0.274)	-2.199*** (0.276)	-0.855 (0.505)	-0.875 (0.502)	-0.857 (0.502)
College_telecom	15.34*** (0.845)	15.32*** (0.820)	15.32*** (0.820)	0.00140 (0.532)	-0.0148 (0.527)	-0.00822 (0.529)	1.638 (1.578)	1.609 (1.577)	1.621 (1.576)
Cohort_1931_1935	1.996*** (0.0498)	1.919*** (0.0263)	1.914*** (0.0146)	12.14*** (0.0290)	12.14*** (0.0257)	12.15*** (0.0260)	5.185*** (0.0483)	5.117*** (0.0383)	5.150*** (0.0363)
Cohort_1936_1940	0.661*** (0.0495)	0.585*** (0.0313)	0.580*** (0.0271)	9.112*** (0.0285)	9.117*** (0.0260)	9.124*** (0.0258)	5.481*** (0.0403)	5.419*** (0.0272)	5.454*** (0.0274)
Cohort_1941_1945	-0.467*** (0.0344)	-0.539*** (0.0204)	-0.544*** (0.0159)	6.717*** (0.0218)	6.721*** (0.0193)	6.725*** (0.0195)	2.671*** (0.0481)	2.622*** (0.0373)	2.636*** (0.0402)
Cohort_1946_1950	0.0106 (0.0389)	-0.0629** (0.0211)	-0.0674*** (0.0130)	3.017*** (0.0145)	3.026*** (0.0129)	3.021*** (0.0138)	0.456*** (0.0416)	0.417*** (0.0285)	0.422*** (0.0265)
Cohort_1956_1960	-1.145*** (0.0428)	-1.209*** (0.0373)	-1.224*** (0.0328)	-2.547*** (0.00959)	-2.544*** (0.0116)	-2.537*** (0.00997)	-1.608*** (0.0396)	-1.658*** (0.0344)	-1.623*** (0.0313)
Cohort_1961_1965	-3.503*** (0.0404)	-3.563*** (0.0371)	-3.575*** (0.0356)	-6.368*** (0.0148)	-6.337*** (0.0111)	-6.350*** (0.0137)	-3.620*** (0.0511)	-3.654*** (0.0429)	-3.631*** (0.0409)
Cohort_1966_1970	-5.969*** (0.0776)	-6.041*** (0.0563)	-6.050*** (0.0516)	-9.729*** (0.0164)	-9.687*** (0.0155)	-9.703*** (0.0153)	-6.326*** (0.0408)	-6.330*** (0.0285)	-6.335*** (0.0300)
Cohort_1971_1975	-7.303*** (0.0733)	-7.307*** (0.0720)	-7.355*** (0.0732)	-13.26*** (0.0203)	-13.19*** (0.0241)	-13.23*** (0.0196)	-10.02*** (0.0354)	-9.963*** (0.0270)	-10.02*** (0.0347)
Constant	48.59*** (0.0738)	48.66*** (0.0592)	48.67*** (0.0580)	53.48*** (0.0544)	53.48*** (0.0580)	53.47*** (0.0564)	52.73*** (0.115)	52.81*** (0.102)	52.77*** (0.0973)
R ²	0.062	0.063	0.063	0.535	0.536	0.535	0.259	0.261	0.260
Observations	2,206	2,206	2,206	13,920	13,920	13,920	3,734	3,734	3,734
Cohort weights	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Grande École fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: *** p<0.01, ** p<0.05, * p<0.1. Standard errors, clustered at the cohort level, are in parentheses. This table provides detailed estimates for all explanatory variables in the analysis of age at the first position. Refer to notes to Table 8 for additional details.

C. Complementary information

C.1 Identification of “foreign” surnames

This is inspired by [Benveniste \(2023\)](#). Foreign surnames are identified in two ways. First, I use the evolution of births by surname in the national census. Then, I compare the frequency of surnames among graduates to their frequency in the French birth records.

Using the complete birth census with 25-year generation divides, I qualify as “foreign” the 490,565 surnames with only one birth in the birth registers over the period 1891-1990. Out of the 786,531 remaining surnames, are classified as foreign those for which there is no birth in the timeframe of the two first generations (1891 to 1940). I also consider foreign surnames, for which natality is 10 times higher in the last generation (1966-1990), as compared to the mean of the first two generations (1891-1940), or for which natality is 10 times higher from one generation to the next. Finally, I compute by surname S a coefficient of variation of the number of births per generation. A surname for which the number of births experiences notable volatility between generations is understood as a process of immigration in a specific generation, followed by children born in France in the following generations. I compute $CV_{1891-1990}^s$ for the four generations between 1891 and 1990.³¹ Surnames with an average number of births per generation μ_t^s above 30 and a coefficient of variation above 0.6 over the period t are classified as foreign. These choices are based on visual inspection at different potential thresholds. I complete these conditions using the *Grande École* data and classify a surname as foreign if there are more students than there are births in France bearing a surname in any given generation.

³¹ $CV_t^s = \frac{\mu_t^s}{\sigma_t^s}$ where μ_t^s stands for the average number of births of bearers of the surname S over the timeframe t —here either 3 or 4 generations—and σ_t^s for the standard deviation.