# RESEARCH ARTICLE

WILEY

# Elite recruitment in US finance: How university prestige is used to secure top executive positions

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#### **Funding information**

Swiss National Science Foundation, Grant/ Award Number: 178817

Open access funding provided by Universite de Lausanne

#### **Abstract**

Status attainment theories assert that individuals are recruited based on the length and functional background of their training. Elite theories assume that top managers often deviate from these socially acceptable mechanisms of status attainment to entrench their advantage. In this study, focusing on the US financial sector, we investigate whether educational institution prestige-rather than the subject or length of education-increasingly influences appointments to top executive positions. We analyze 1987 US top executive managers affiliated with 147 firms from both financial and non-financial sectors in 2005 and 2018. Our study demonstrates that alumni of prestigious universities have a strikingly higher likelihood of attaining a top executive role in finance than in non-finance. Within finance it is no longer investment banking, but private equity, that contains the highest proportion of elite university graduates. Our findings suggest that notwithstanding the major power shifts between finance and non-finance-and also within the finance sector—elite groups still dominate the most symbolically valued education, and as a result, top managerial positions.

#### KEYWORDS

education, Elite Universities, elites, finance, status attainment

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#### 1 | INTRODUCTION

Over the last 30 years, finance has entrenched its position as one of the most powerful forces in the US economy. In particular, senior managers at the helm of financial businesses like private equity, asset management, hedge fund and investment banks, increasingly dominate the corporate sector. It is not surprising that finance has become one of the privileged battle grounds around elite (re)-production and the criteria regarding status attainment. Generally, status attainment theories consider that reaching the highest positions in a society requires strong educational credentials in the form of thorough functional specialization coupled with long and intensive studies (Blau & Duncan, 1967; Breen & Jonsson, 2005; Haller & Portes, 1973). Elite theories, by contrast, suspect that those at the top circumvent, suspend, or pervert these very principles—while simultaneously presenting as ardent champions of meritocracy (Bourdieu, 1998; Karabel, 2006; Khan, 2012). Recently, scholars have identified the growing importance of a high prestige university affiliation as a recruitment criterion for elite employers as a core elite-specific deviation from the principles of status attainment (Donnelly & Gamsu, 2019; Rivera, 2011; Wakeling & Savage, 2015). Employers, especially in finance, would no longer base their decisions on the content or duration of applicants' education, but increasingly on the prestige of their alma mater (Rivera, 2011, 2016).

In this article, focusing on the prestige of educational institutions, we first ask whether the prestige imparted by elite universities is more important in the financial sector than in non-financial sectors. As finance has become dominant in the last decades, we predict access to its top roles is now more competitive than in non-financial sectors—and university prestige therefore plays a bigger role. Secondly, we ask whether these (potential) differences between finance and non-finance sectors have grown over the last years. Despite major sectoral crashes, finance's overall power is still growing (Van der Zwan, 2014). We can therefore expect that the increasing value placed on university prestige in financial recruitment will continue. Thirdly, we examine whether specific financial sub-industries stand out by dint of the proportion of their top executive management educated at elite universities. We hypothesize that the impact of university prestige is largest in (investment) banking, the most powerful financial sub-sector (Ho, 2009).

To answer these questions, we analyze educational credentials in the financial sector and compare them with those in a range of non-financial sectors. Measures of universities' prestige (using: Harvard, super elite universities, top 25, and other universities as the main dimension of elite selectivity) are compared to two conventional, skill-based theories of status-transmission: educational duration based on the level of skills, and functional background (Breen & Jonsson, 2005; Ocasio & Kim, 1999). We use a data base (n = 1987), compiled from major business data services, comparing the executive teams of the largest US finance and non-finance firms in 2005 and 2018.

Our results show that university prestige is strikingly more important for top managers in the financial sector than for their non-financial sector analogs. Managers who attended a "super elite university" (Yale, Princeton, Stanford, etc.) have a 23 percentage points (and Harvard alumni even a 37 percentage points) higher likelihood to occupy a senior management position in finance. Differences with respect to length or content of education are smaller and less systematic. However, over the study period (2005–2018), attendance at a prestigious university does not become increasingly important to the attainment of elite finance roles. Differences between finance and non-finance sector stagnate or slightly decline over the period. Finally, we find that university prestige is particularly valued in private equity. We conclude that private equity has replaced investment banking as the aspirational epitome of the finance industry.

Our article advances and informs debates on elite status attainment, bringing into sharp focus the important symbolic aspects of elite education. We conclude by hypothesizing that even though power relations in US business have been thoroughly transformed by financialization, specific elite groups have been able to use "symbolic" educational advantages to continue to secure access to the most powerful and best compensated positions (Lucas, 2001).

#### 2 | SOCIAL CONGESTION AND INTENSIFICATION OF COMPETITION

Scholars argue that, fueled by individual mobility strategies and corporations' recruitment policies, the competition for positions in elite firms has intensified in recent decades (Binder & Abel, 2019; Rivera, 2016).

From the employees' side, social mobility literature focused on higher strata of social structures argues that an expanding candidate pool competes for a relatively fixed array of jobs in reputable professions and sectors (Brown, 2013; Donnelly & Gamsu, 2019). Such labor market crowding in the top echelons of the professional system is explained by a general increase in educational levels that produces a larger cohort of well-educated young people. In addition, well trained and talented global professionals, especially those from emerging economies such as China or India, now also compete for elite jobs in western financial centers (Brown, 2013, p. 684; Lauder et al., 2012; Livingstone & Guile, 2012). These observations on the congestion dynamic on the employee side were mirrored by discourses and strategies on the employers' side. What matters for companies would increasingly be the estimated performance, rather than the certified knowledge and educational content acquired through disciplinary specialization or long studies. Therefore, it becomes paramount to identify, attract and retain exceptional professionals. A convenient, quick, and clear way to select and retain these supposedly "best and brightest" (Alvesson & Robertson, 2006; Halberstam, 1972), is to source them from elite universities such as Harvard, Princeton or Yale, who have a long tradition of selecting future leaders (Karabel, 2006; Rivera, 2016).

#### 2.1 | Financialization and the rise of the financial elite

This intensification of the competition for elite positions seems to be particularly prevalent in the financial sector (Donnelly & Gamsu, 2019; Rivera, 2012, 2016). This results from the new dominant functions these sectors have acquired over the last 30 years of financialization—and the concomitant decline in US manufacturing (Davis, 2009; Davis & Kim, 2015; Epstein, 2005; Helleiner, 1996; Krippner, 2005; Van der Zwan, 2014). Financialization, broadly defined as "the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of domestic and international companies" (Epstein, 2005) has established new hierarchies between industries.

This shift toward an increased concentration of power in the financial sector is closely linked to the growing ideological and practical dominance of shareholder value maximization (Fligstein & Shin, 2007; Lazonick & O'Sullivan, 2000). The rise of the shareholder value conception of businesses redistributes power internally within firms. The decisional agency of top management is curbed (or at least monitored) by activist, often institutional, shareholders: investment and hedge funds, investment banks or private equity funds. Consequently, the senior managers of these institutional shareholders become important new players—to the detriment of the inhouse corporate elites (Braun, 2021; Folkman et al., 2007; Useem, 1996). Unlike the traditional economic elites, this new group of economic elites is no longer necessarily at the top of large, multi-divisional and publicly quoted firms (Davis, 2009). Many of the new elite institutions are considerably smaller, very specialized and are organized as partnerships or limited liability partnerships (Soener & Nau, 2019).

Despite their typically low headcount and their private legal form, senior managers in these firms have significant market power over the largest private corporations: as active investors they pressurize the management of listed firms; as buyers and private owners, they impose restructuring and managerial re-engineering of firms; as passive investors, they demand alignment with specific standards, and steer firms through index compositions (Fichtner et al., 2017). In addition, financial managers have emerged as the actors with the highest compensation levels. The literature shows that financial sector employees earn more than peers in other sectors and contribute to the rising income inequalities in the US (Ajdacic, 2022; Kaplan & Rauh, 2010; Philippon & Reshef, 2012). Finance professionals are heavily over-represented among the top income groups compared to non-financial sectors (Kaplan & Rauh, 2010).

#### 2.2 | New recruitment strategies

Recent scholarship suggests that enhanced competition has not resulted in an enforcement of selectivity in terms of educational length or functional background. Rather, selection intensification has been accompanied by a shift toward an enhanced valuation of university prestige.

The length of education is traditionally an important measure of skill levels (Becker, 1964). In human capital and status attainment theories, skills are either measured by the number of years that people were in the educational system, or by the highest degree achieved (Breen & Jonsson, 2005). In the US, particularly in highly advanced industries (technology or finance), the value placed on the length of education is not always evident. Overly long studies are sometimes considered a weakness, because they inculcate an intellectual mindset that hinders an entrepreneurial "move fast and break things" attitude, or are detrimental to the desired work culture of the firm. Even leading elite prep schools and elite universities are intrinsically suspicious of exclusively academic excellence and prefer candidates with "character" or at least a "well-rounded profile" (Ho, 2009; Karabel, 2006; Khan, 2012).

Another branch of theorists that focus on skills and ability emphasize the importance of educational content to reach top management positions. They contend that the recruitment of CEOs is shaped by a correspondence between managers' functional specialization and organizational objectives (Fligstein, 1987; Ocasio & Kim, 1999). Functionally specialized candidates' access to the highest positions is based on "claims to define and resolve the important problems in an organization" (Fligstein, 1987). The correspondence is not necessarily automatic: it does not always mean that all CEOs of pharmaceutical firms have a degree in pharmaceutics or medicine, or that all top managers in tech are software engineers. Sometimes, organizational forms and dynamics lead to a preference for managers with broadly useful degrees such as finance or marketing, which can be useful in different industries. Ho (2009), challenging the functional background thesis, states that the financial sector recruits candidates from all disciplines and that, inversely, graduates from all disciplines aspire to financial industry careers (Ho, 2009).

More recently, scholars have drawn attention to the increasing importance of university prestige as a recruitment criterion (Binder & Abel, 2019; Rivera, 2016). According to Rivera (2011), the general intensification of competition leads to a strategic use of elite universities' signaling value. When elite professional service firms evaluate the CVs of potential candidates, evaluators prefer candidates from the "top universities" regardless of their grades, coursework, major, area of specialization, or prior work experience. It is "not the length (e.g., number of years of schooling) or content (e.g., degrees completed, coursework taken, skills acquired) of education" (Rivera, 2011, p. 72) that elite employers use to recruit or promote candidates. Similar processes of hierarchization of universities have also been found in the UK: Donnelly and Gamsu (2019) find that graduates from British elite universities (such as Oxford, Cambridge, Imperial College or the LSE) have a much higher chance of selection in finance, accountancy and consultancy, especially in well paid "client facing" positions. Wakeling and Savage (2015) confirm that attendance at an elite university is highly predictive for elite status and inclusion in the highest household income category. Recent literature (Neely, 2022) suggests that compared to other sectors, elite pedigrees are particularly relevant in finance. Elite university attendance provides access to trust-based networks that financial firms, especially those operating in volatile and uncertain market environments (hedge funds, private equity), use for recruitment, fundraizing or private investment information (see also Eaton, 2022; Eaton & Gibadullina, 2020).

#### 3 | RESEARCH QUESTIONS

Our aim is to unpick potentially novel mechanisms of status attainment among elites. Therefore, analyzing not only those who "get in", but also those who "get on" (Friedman & Laurison, 2020), we investigate the functioning of university prestige for careers in finance and evaluate its importance in comparison to skills and functional background theories.

**Question 1** Are prestigious universities more decisive in accessing top executive positions in the financial sector compared to the non-financial sector?

Recent elite theories argue that in highly contested and trust-based sectors such as finance, university prestige plays a more important role than in less contested sectors outside finance (Donnelly & Gamsu, 2019; Neely, 2018; Rivera, 2011, 2016). This suggests there is a clear difference between financial and non-financial elites, in terms of university prestige. We hypothesize that top managers in finance are more likely to have degrees from more prestigious universities compared to top managers from non-financial industries. This hypothesis contradicts two alternative explanations based on human capital theory and theories of conception of control: that the differences between finance and non-finance derive mainly from the length of education, and that the difference is based on variations in functional background.

**Question 2** Have differences in terms of universities' prestige between top executive in finance and non-finance increased over time?

The literature on elite attainment suggests that the competition for elite education intensified starting from the 1990s (Brown, 2013) and has consistently run hot since (Rivera, 2011). We hypothesize that differences in attendance at high prestige universities have grown between 2005 and 2018 comparing the finance and non-finance sectors. However, there are counter indications: the crisis of 2008 led to criticism of the financial elites and the foundations of their hegemony (Fligstein, 2021). A plausible counterhypothesis might be that financial institutions have recently stopped exclusively recruiting elite university graduates.

**Question 3** Can we discern differences within the financial sector around the attendance of top executive management at the most prestigious universities?

Scholars often consider finance as a monolithic sector (Rivera, 2011) or tacitly assume that investment banking represents the core of "finance" (Godechot, 2016; Ho, 2009). However, the financial ecosystem has diversified; new sectors such as private equity, hedge funds or asset management have emerged (Arjaliès et al., 2019; Boussard, 2017; Folkman et al., 2007)—see Appendix D of Supporting Information S1. We hypothesize that the traditional core of finance—investment banks—attract most graduates from the prestigious universities. A competing hypothesis emerges from recent research which has shown that firms in "second wave finance" have risen to pre-eminence in terms of influence, compensation levels or working conditions (Benquet & Bourgeron, 2021). As a second hypothesis, we therefore suggest that more top managers of second wave finance firms have an education from a top university compared to those from first wave firms.

#### 4 | DATA, MEASURES AND METHODS

#### 4.1 | Data

Our analysis is based on the FINELIS database, which has been built up over 2 years utilizing both automated and manual data collection, and made robust by meticulous data quality procedures. Sources are large scale business databases (Boardex, Capital IQ, Orbis), augmented by hand collected information from annual reports, the business press, Wikipedia, or other biographical sources. Our sample is composed of top managers from key financial and non-financial sectors (initial sample n = 2471; after list-wise deletion n = 1987). Compared to other recent elite data bases, for instance based on rich lists (Eaton & Gibadullina, 2020), it includes all the financial sub-sectors, allows for detailed comparison within finance and with the US economy as a whole.

We first chose the 10 most important firms in four financial industries (investment banks, hedge funds, private equity firms, asset managers) and in five non-financial industries (manufacturing, food & retail, pharmaceutical,

commodities and insurance). We have concentrated on firms headquartered in the US and on stand-alone firms—hedge funds, private equity firms or asset managers forming subsidiaries of large banks were excluded. Firms were included in data from 2005 to 2018. Some firms figure in the 10 most important corporation in both years, others are only present in one snapshot (2005 or 2018). Financial firms were chosen based on volume of assets under management (AuM); banks (which often earn a large part of their overall income from fees) based on league tables compiled by the financial press. Non-financial firms were chosen based on market capitalization from the Forbes 2000 list. In each firm we selected executive top management team members based on annual reports. For the non-public firms with more opaque organizational forms (LLCs, LLPs) we chose to include partners and individuals presented as part of the top executive team on the firms' websites. We include between 2 and 38 individuals from each firm.

# 4.2 | Measures

#### 4.2.1 | Dependent variables

We use two dependent variables. A first—binary—variable distinguishes those top managers occupying a position in the financial sector from those in the non-finance sector. We also use a categorical variable to distinguish between financial sub-sectors and the non-financial sector.

#### 4.2.2 | Independent variables

Since we seek to understand the influence of different educational dimensions on the achievement of top positions, our independent variables comprise educational parameters—the *content of education* is mapped according to university subject. We distinguish between "Business", "Engineering" and "Other disciplines." Business is by far the most important university subject for the members of our sample (59%) and includes all studies in business administration, management, economics, or finance. Engineering is the second most important discipline and comprises all applied technical studies (electrical engineering, computer engineering, machine engineering or space engineering). All the remaining university subjects were aggregated: "other disciplines" includes law, natural sciences, medicine, humanities, and social sciences. The variable is coded as a dummy: if the person has studied a subject at BA, MA or PhD level, we assign a value of 1; if not, we assign a value of 0. Individuals can also be coded as having studied several disciplines. The *length of education* is measured by the educational degree—we anticipate that the degree obtained indicates study duration (Breen & Jonsson, 2005). We identify the highest attained degree and utilize the categories "No degree or Bachelor's degree", "Master's degree" (including MBA), "JD" and "PhD." The category "No degree or Bachelor's degree" is the reference category.

Categorizations of "elite universities" in the literature are astonishingly diverse. Brint et al. (2020), based on Brint and Yoshikawa (2017), identify "leading U.S. educational institutions" using the U.S. News & World Report (USNWR) ranking. They include all research universities that have been within the top 25 of the ranking at least once since its start in 1988. Useem and Karabel (1986) distinguish between what they call "superior college credential" (Columbia, Cornell, Dartmouth, Harvard, Johns Hopkins, MIT, Pennsylvania, Princeton, Stanford, Williams, Yale) and "superior management credential" (Columbia, Dartmouth, Harvard, MIT, Northwestern, Stanford, UCB, UCLA, Chicago, Michigan, Pennsylvania). Rivera insists that a gulf exists in the mind of elite employers between a "selective university affiliation"—the top 25 (Brint et al., 2020; Charles et al., 2009)—and what she terms "super elite universities" (Rivera, 2011). Solely Harvard, Yale, Princeton, Stanford and the Wharton School of Business at the University of Pennsylvania were considered as "super elite universities" by Rivera's interviewees (Rivera, 2011, p. 78). This view is implicit in Karabel (2006), who studies the history of US elite selection through the so called "big three": Harvard, Yale, and Princeton. Others contend that Harvard, and in particular Harvard Business School, is pre-eminent in the

public imagination and constitutes a "golden passport to life in the upper class" (McDonald, 2017). In this perspective, Harvard is the epitome of US elite education. Even though Harvard has dropped in the USNWR rankings recently, it can be argued that the elite status of universities is not always aligned with formal rankings. Due to its historical importance Harvard stands out in terms of elite status as the most prestigious US university. Based on this literature we distinguish between "Harvard", "super elite universities" (Princeton, Yale, Stanford, and University of Pennsylvania's Wharton School of Business), the top 25 universities (according to Brint et al., 2020) and all remaining universities. Our overall data strategy is to first identify the most prestigious university, and then classify individuals by the most prestigious university attended. To understand changes in the selectivity over time (between 2005 and 2018), we use also an interaction term between the year of survey and the variable (prestige of university).

### 4.2.3 | Control variables

As control variables we use sex (female vs. male), race (white vs. non-white), nationality (American vs. non-American) and year of survey. For race, we searched for photos of the individual and categorized the person using the categories "white" and "non-white" (including categories Middle Eastern, black, Asian, Indian, native). See Hermanowicz and Clayton (2020) or Brint et al. (2020) for a similar and recent coding scheme. Our underlying assumption is that race is a categorization system enforced on individuals by social institutions. We resolved any uncertain cases by assigning the variable to a missing value. When coding nationality for individuals holding dual nationality (US and "other" nationality), we gave priority to the "other" nationality. We assume that a second nationality signifies a relative outsider status (compared to those with only US citizenship). Age is coded as a continuous variable.

Table 1 presents descriptive statistics of the individual variables by subsector of the pooled comparative sample, including both 2005 and 2018 data.

|--|

	Private equity	Hedge funds	Investment banks	Asset management	Non-finance	Total
Harvard	32.6	17.0	15.7	15.2	6.3	12.1
Super elite	26.8	24.5	23.4	18.8	13.4	17.5
Top 25	6.5	12.5	11.9	10.0	15.9	13.5
Other Unis	34.2	46.0	49.0	56.0	64.5	56.9
Business	74.2	59.0	67.5	70.4	52.8	59.2
Engineering	7.1	13.0	4.5	7.2	21.5	15.9
Other discipline	27.7	36.5	32.2	22.8	31.5	30.7
BA/no degree	23.3	30.1	30.4	32.3	26.0	27.1
MA	61.3	35.5	50.7	52.3	49.3	50.2
JD	12.8	14.5	16.7	11.9	15.2	14.6
PhD	2.6	19.9	2.2	3.4	9.5	8.0
Female	8.1	9.0	13.3	20.0	17.0	15.2
Age (years)	56.2	61.6	58.6	62.4	57.3	58.1
Non-White	11.0	10.6	8.8	10.7	10.5	10.4
Non-American	21.0	7.3	19.4	14.5	14.9	15.6
Total	12.0	7.7	11.0	9.6	59.7	100

### 4.3 | Analytical strategy

We compare proportions of different university types of top managers between finance and non-finance. To estimate the effects of university prestige, length of education and functional background on the probability of working in finance for top managers, we use three Ordinary Least Squares (OLS) regressions (Appendix B of Supporting Information S1). The three models can be written as follows:

Working in finance<sub>i</sub> = 
$$\beta_0 + \sum_{k=1}^{3} \beta_{1,k} \times \text{University type}_{k,i} + \varepsilon_{1,i}$$
 (1)

Model (1) indicates the gross effect of the type of university (*University type* is a categorical variable taking the values "Harvard", "Super Elite Universities", "Top 25 universities" comparing to the reference category "Other universities") on our binary outcome variable *Working in finance*.

In Model (2) we integrate the length of education (with the categorical variable *Highest degree*, which takes the values "MA/MBA", "JD", "PhD" comparing to the reference category is "No degree/BA"), functional background (a set of three binary variables: *Business*, *Engineering* and *Other discipline*), as well as a series of socio-demographic control variables (sex, age, race, nationality, and year of survey).

Working in finance<sub>i</sub> = 
$$\beta_0 + \sum_{k=1}^{3} \beta_{1,k} \times \text{University type}_{k,i} + \sum_{h=1}^{3} \beta_{2,h} \times \text{Highest degree}_{h,i}$$
  
+  $\sum_{m=1}^{3} \beta_{3,m} \times (\text{functional background})'_{m,i} + \sum_{a=1}^{5} \beta_{4,q} \times (\text{social charasteristics})'_{q,i} + \varepsilon_{2i}$  (2)

In Model (3) we add an interaction term between *Year of survey* (a dummy variable) and *University type*, to estimate the evolution of top university attendance between 2005 and 2018:

Working in finance<sub>i</sub> = 
$$\beta_0 + \sum_{k=1}^3 \beta_{1,k} \times \text{University type}_{k,i} + \sum_{h=1}^3 \beta_{2,h} \times \text{Highest degree}_{h,i}$$

$$+ \sum_{m=1}^3 \beta_{3,m} \times (\text{functional background})'_{m,i} + \sum_{q=1}^5 \beta_{4,q} \times (\text{social charasteristics})'_{q,i} \qquad (3)$$

$$+ \sum_{l=1}^3 \beta_{5,l} \times (\text{Year}_i * \text{University type}_{l,i}) + \varepsilon_{3i}$$

To further assess differences between each financial subsector and all the non-financial industries, we ran a multinomial logistic regression. By controlling for potential cofounders, our approach shows how the effect of the type of university, the length of study and the functional background varies with the specific financial subsector. We propose an equation using the log-maximum likelihood method:

$$\log\left[\frac{f(s)_{i}}{f(0)_{i}}\right] = \beta_{0} + \sum_{k=1}^{3} \beta_{1,k} \times \text{University type}_{k,i} + \sum_{h=1}^{3} \beta_{2,h} \times \text{Highest degree}_{h,i}$$

$$+ \sum_{m=1}^{3} \beta_{3,m} \times (\text{functional background})'_{m,i} + \sum_{q=1}^{5} \beta_{4,q} \times (\text{social charasteristics})'_{q,i}$$

$$(4)$$

where:

- $f(s)_i = \text{For } s \text{ in } [1;4]$ , the probability for the individual i to work in the finance subsector {Private equity; Hedge funds; Investment banks; Asset management}
- $f(0)_i$  = The probability for the individual i to work in a non-financial sector

# 5 | RESULTS

#### 5.1 | Finance versus non-finance

In a first step, we study whether university prestige was particularly pronounced in finance. We examine whether university prestige is a more important factor in reaching the financial elite compared to securing positions of power in non-financial sectors. Simultaneously, we examine skill-based explanations related to content or duration of training.

Descriptive evidence comparing finance and non-finance shows large differences in terms of their top management's university attendance (Figure 1).

Figure 2 shows that on average, the more prestigious the university, the higher the probability that graduates will work in finance. In other words—compared to non-elite university graduates, Harvard alumni are 40 percentage points more likely to be recruited to a senior management position in finance than in non-finance. The likelihood is still 27 percentage points larger for graduates of super elite universities compared to non-elite universities. When we examine top 25 universities, we see no differences between finance and non-finance. These effects remain when we introduce control variables, or variables that are part of alternative hypotheses, such as the length and the content of education.

The length of studies, measured by the degree, are barely different between top managers in finance and those in non-finance. Financial firms do not recruit senior management based on type of degrees; nor do longer studies apparently represent a selection criterion for finance firms. Holding a Master's degree (vs only a Bachelor's degree) reduces by 7 percentage points the likelihood to work in finance. Even though this is not significant at a 5% threshold, the same effect is observed in the finance sector data regarding PhDs (with an 8 percentage points decrease). In terms of functional background, individuals with an engineering degree are 26% points less likely to be in finance. Business degree holders are 9 percentage points more likely to be financial senior managers.

Finally, the likelihood for Harvard alumni, respectively graduates of a super elite university, to work as a top financial manager (rather than as a top non-finance manager) decreases by 6 (respectively 9) percentage points between 2005 and 2018. However, these changes are statistically insignificant, and we therefore cannot identify a clear trend.

#### 5.2 | Differences within finance

In a second step, we examine the differences between sub-sectors in finance and compare them to non-finance businesses.

Figure 3 shows that in non-financial sectors, the proportion of top managers with a degree from Harvard (as well as from super-elite universities) is lower than in hedge funds, private equity, mutual funds, and investment banks. Interrogating the differences within finance, it is clear that the proportion of top managers with degrees from prestigious universities is highest in private equity, followed by hedge funds, investment banks and asset management.

Figure 4 shows that top managers with a Harvard degree are, on average, 25 percentage points more likely to work in private equity than in non-finance. For super elite universities, this difference is 13 percentage points. There is no significant difference between the top 25 universities and all other universities categories when working in finance is compared to working in non-finance. PhD Holders (compared to a BA or no degree) are 15 percentage points more likely to work in a hedge fund than in a non-financial sector. In all other sub-sectors of finance, this likelihood is reversed: in private equity and investment banking by 11 percentage points, and in asset management by 6 percentage points. Finally, the table shows significant differences (at the 0.1% threshold) for people holding an engineering degree. Compared to working in a non-financial sector, holders of an engineering degree are 10 percentage points less likely to be top managers in private equity, 9 percentage points in investment banking, and 7 percentage points in asset management. For individuals with an engineering degree, working in a hedge fund is the only financial sector showing no significant difference from working in non-finance.

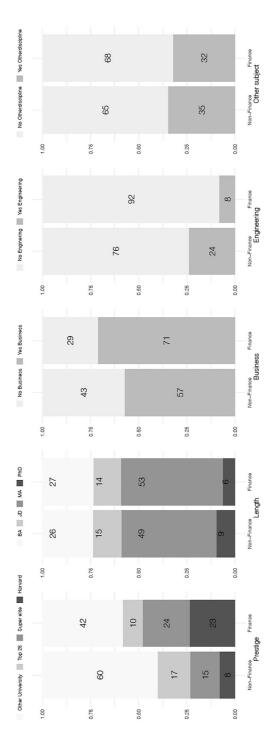


FIGURE 1 University prestige, length and subject according to sector (finance vs. non-finance)

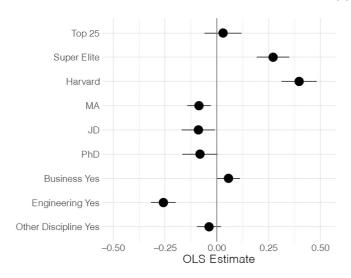


FIGURE 2 Coefficient plot of Ordinary Least Squares (OLS) regression on Finance versus Non-finance

# 6 | DISCUSSION

#### 6.1 | Convergence or divergence between finance and non-finance?

Compared to non-financial firms, to "get on" in a large US financial firm and secure a top executive position, it is a clear advantage to possess a degree from a prestigious university. The discriminating effect between finance and non-finance is largest for Harvard, the most prestigious US University (Useem & Karabel, 1986). While the effect remains significant for other "super elite universities" such as Yale, Princeton, Stanford or Pennsylvania, we find no difference in the proportion of top managers having attended one of the top 25 US universities—even though these universities count among the very best globally and are used by many elite studies as exemplars of top universities (Brint et al., 2020). This "exponential selectivity" confirms Rivera's thesis on the importance of university prestige for contemporary elite recruitment.

Does this mean that the functional background of top managers is irrelevant (Fligstein, 1987; Ocasio & Kim, 1999)? Our results show that the functional link between initial education and subsequent sector is still important. Compared to non-finance, engineering graduates have a 31 percentage points lower chance, and business graduates a 9 percentage points higher chance, to work in finance. Aside from engineering, the functional background of financial top managers can be rather diverse. The effects of educational length—measured by the type of degree (Breen & Jonsson, 2005)—are smaller, but also intriguing. Contrary to the initial hypothesis that well remunerated senior managers in finance hold advanced degrees (Kim et al., 2015), we find that they are more likely to hold merely a BA degree. Overall, these findings confirm Rivera's (2011) argument that university prestige matters strongly in finance, whereas functional background and length of education are secondary.

In his 1996 book, Useem discusses the possibility of a coming "convergence" of the traditional business elites and top executives in financial intermediaries (Useem, 1996). This convergence would occur, according to Useem, mostly via attendance at the same narrow cohort of elite universities and business schools. Our analyses show that already in 2005, the educational credentials of the two groups have not only converged but are in fact reversed. This, we argue, is a result (or the combination) of two processes: on the employers' side, as emphasized by ethnographic studies of recruitment processes (Rivera, 2011), financial firms, when selecting and promoting their top managers, prioritize university prestige. On the employees' side, those holding a Harvard or super elite university degree seek to pursue careers in the financial industry rather than in other sectors. Adding to literature which shows that top managers in

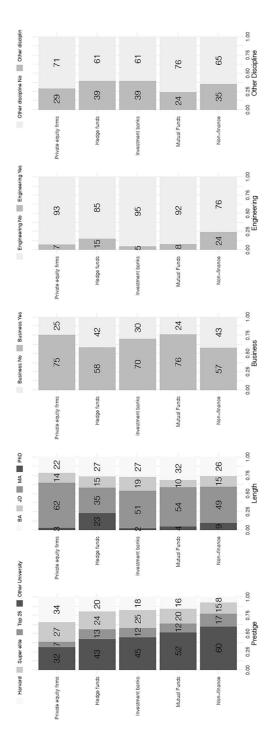


FIGURE 3 University type according to detailed sector (financial sub-sectors vs. non-finance)

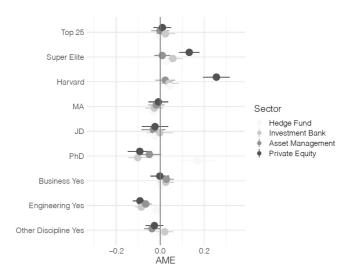


FIGURE 4 Coefficient plot of Multinomial Regression (Finance sub-sectors vs. Non-Finance)

financial intermediaries enjoy higher compensation levels compared to non-financial sectors (Kaplan & Rauh, 2010; Philippon & Reshef, 2012), these educational factors support the conclusion that financial elites have become the dominant player, and now supersede traditional elite groups at the pinnacle of industrial firms. We assume that such elite university based networks might limit or counter the presumed fracturing of the corporate elite as a whole (Mizruchi, 2013; see also Eaton, 2022).

# 6.2 | Longitudinal trends

Pinning down the surge in importance of university prestige in the financial industry remains problematic. Authors discussing "social congestion", or the "war for talent" seem to consider the 1990s as a discernible starting point (Brown & Tannock, 2009; Michaels et al., 2001). We therefore asserted that the differences between finance and non-finance, in attendance at high prestige universities, have grown over the last 20–30 years.

Our findings demonstrate that between 2005 and 2018, differences in terms of attendance at prestigious universities between top personnel within finance and non-finance have flatlined or slightly decreased. Even when we dive into specific financial sub-sectors, we cannot detect significant deviations from this trend, which appears to apply to all financial sub-sectors. There seemed to be no change in the aftermath of the 2008 financial crisis, that could be due to new recruitment strategies of the banks or new regulation policies.

We can discount the concept of a consistently upward trend in the importance of university prestige across the last decades. We can also counter the thesis that a previously upward trend was significantly reversed in the aftermath of the 2008 financial crisis. The historical evolution of the importance of university prestige to the recruitment of financial top managers remains opaque. It could be that the process Rivera identified for the recruitment of early career professionals has not yet reached top management positions or is genuinely limited to early career recruitment strategies. It is more likely, we suggest, that university prestige has long been present and is not solely a "modern" trend. Mills (1956), Pierson (1969) and Karabel and Useem (1987) have previously shown that attendance at select elite colleges was already widespread among business leaders by the middle of the 20th century.

# 6.3 | Differences within the financial field

We predicted our analysis would show that investment banks, as the nexus within the financial world, would attract more top managers with a degree from a prestigious university when compared to second wave financial sub-sectors such as private equity, hedge funds or asset management (Benquet & Bourgeron, 2021). Our analysis does show that not all financial sub-sectors' top management is equally likely to hold a prestigious university degree. However, the data shows that it is not senior managers of investment banks, but those from private equity firms, that are more likely to hold such a degree. The likelihood that Harvard graduates work in private equity is 25 percentage points higher, and for graduates of super elite universities 13 percentage points higher, compared to non-financial sectors.

What makes private equity so special? Besides the higher status and compensation levels in this sector, we find that an elite pedigree is particularly relevant here. Recent literature shows that in "patrimonial organizations" (Neely, 2022) elite university networks and the trust they confer are crucial for recruitment, promotion, fund raising or the access to valuable private investment information (Eaton, 2022; Eaton & Gibadullina, 2020). While hedge funds managers also have high proportions of its top managers with a degree from top universities (compared to peers in investment banking or asset management), PhD degrees—for which one has to study for many years—are significantly more valued in the hedge fund industry. As Neely (2022, pp. 61–82) shows, there are several tracks to the hedge fund industry, including the "academic track." More than in other financial sectors, mathematical and academic skills are valued in the hedge fund industry, and form a common currency among firms' founders and partners (Neely, 2022). In all other finance sub-sectors, the top managers have slightly, yet significantly, shorter degrees compared top managers in non-financial sectors. In terms of functional background, top managers in second wave finance such as private equity and hedge funds, are no more likely to hold a business degree (or any other specific degree) than peers in non-financial industries. We conclude that functional background is less important than the university prestige in second wave finance firms.

Overall, it seems that large bureaucratic banks might have become socially more open, are no longer totemic in the finance sector and have been usurped by more exclusive boutique private equity firms, which offer their top management massive self-enrichment. This reshuffled finance hierarchy confirms the efficiency of signaling degrees in a congested system: the more a position is sought after (because of higher prestige, more power and higher compensation), the more vital the possession of an elite university degree becomes to attain it.

### 7 | CONCLUSIONS

As a result of financialization in the US economy, senior managers of the most important financial intermediaries have become a powerful and extremely well compensated cohort within the business elite. In this article, we investigated the hypothesis that this intensification of competition has led to a growing importance in university prestige across the financial sector, and to increasing differences between finance and non-finance businesses. To evaluate this we investigated the importance of university prestige compared to two skills-based explanations—the length of education and the functional background. Based on a comparative sample of financial and non-financial US business elites in 2005 and 2018, we show that graduates from top universities are strikingly more likely to occupy senior management positions in finance than in non-finance. The more prestigious the university, the more pronounced the differences between finance and non-finance. However, against expectations, this likelihood that graduates from prestigious universities occupy top positions in finance has not increased over time. A detailed analysis of financial sub-sectors shows that alumni of prestigious universities were the most likely to work in private equity—not, as anticipated, in investment banking.

Our study confirms the central role that the imaginary about elite universities continues to play in the recruitment and promotion of American business elites (Rivera, 2011). Our results reinforce Rivera's finding on the social efficiency of university prestige for elite recruitment. The more prestige a university attracts, the more graduating from it

discriminates between choosing careers in finance and non-finance sectors. Additionally, our results on educational credentials also confirm the evidence for the dominant status of finance in economic power, or compensation, seen in earlier works (Davis, 2009; Kaplan & Rauh, 2010; Useem, 1996). Examining the transformation within the financial sector, we no longer consider (investment) banking as the most prestigious discipline within finance (Morrison & Wilhelm, 2007). This emblematic institution of first wave finance has been replaced by private equity (Appelbaum & Batt, 2014). Though recently overshadowed in the public arena by the meteoric rise of passive asset managers like Blackrock, Vanguard, or State Street (Fichtner et al., 2017), private equity remains at the heart of the financialized

US economy, and continues to grow in terms of deal count, deal value and invested capital (Bain & Company, 2021).

Degrees from super elite universities are competed over and used by the upper classes to secure top positions in the sectors with the best remuneration, the highest prestige, and the greatest power (Useem & Karabel, 1986). As Lucas has suggested in his "theory of effectively maintained inequality", socio-economically advantaged groups "secure for themselves and their children some degree of advantage wherever advantages are commonly possible" (Lucas, 2001, p. 1652). As the attainment of top positions becomes ever more contested and the competition to join elite firms intensifies, they will not only rely on the length of education, but also on what Lucas (2001) calls "qualitative advantages", such as university prestige. Despite meritocratic rhetoric and high profile tweaking of admission policies, US elite universities continue "to draw most of their students from the most affluent segments of American society" (Karabel, 2006, p. 537).

Future research on economic elites must consider these changes and adapt sampling foci and methodological strategies accordingly. As Davis (2009) argues, the US economy is no longer organized exclusively around large corporations; it is shaped by financial markets where new actors at the top of smaller, non-public, and less visible organizations have made enormous gains in prestige, power, and income. Considering these firms more systematically could help solve one of the remaining puzzles we identify: what is the historical timing of the reversal of power relations between finance and non-finance? Future research could fruitfully study the early years of the emergence of second wave finance in the 1980s and 1990s to identify the moment at which financial sectors began to attract the largest proportion of super elite university graduates.

#### **ACKNOWLEDGMENTS**

The authors would like to thank the participants of the SASE virtual conference in 2021 (Network G: Labor Markets, Education, and Human Resources), the participants of the Sociology of Finance workshop the congress of the Swiss Sociological association 2021 in Geneva, as well as Kevin Young and Albina Gibadullina for their generous comments on earlier versions of this article. This research has been funded by the Swiss National Science Foundation (grant No 178817).

Open access funding provided by Universite de Lausanne.

# **CONFLICT OF INTEREST**

There are no conflicts of interest.

#### DATA AVAILABILITY STATEMENT

The data that support the findings will be available on SWISSUbase at https://www.swissubase.ch/fr/catalogue/studies/13244/15494/description following an embargo from the date of publication of 2 years.

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#### **ENDNOTE**

We did not control for possible regional effects, as all of the super-elite universities except Stanford are located in the East where also most of the financial institutions are headquartered. When we analytically separated Stanford, the effect of Harvard remained largely the same.

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How to cite this article: Bühlmann, F., Schoenberger, F., Ajdacic, L., & Foureault, F. (2022). Elite recruitment in US finance: How university prestige is used to secure top executive positions. *The British Journal of Sociology*, 73(4), 667–684. https://doi.org/10.1111/1468-4446.12971