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Who runs the AEA?

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WHO RUNS THE AEA?

KEVIN D. HOOVER

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CENTER FOR THE
HISTORY OF POLITICAL ECONOMY
AT DUKE UNIVERSITY

Who Runs the AEA?*

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Version, 27 November 2020

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Abstract

The leadership structure of the American Economics Association is documented using a biographical database covering every officer and losing candidate for AEA offices from 1950 to 2019. The analysis focuses on institutional affiliations by education and employment. The structure is strongly hierarchical. A few institutions dominate the leadership, and their dominance has become markedly stronger over time. Broadly two types of explanations are explored: that institutional dominance is based on academic merit or that it based on self-perpetuating privilege. Network effects that might explain the dynamic of increasing concentration are also investigated.

JEL Codes: A11, B29, D72

Keywords: American Economic Association, prosopography, academic networks

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Who Runs the AEA?

1. Unpacking the Pecking Order

“Economics is very elitist.” So runs a comment from a member of the American Economic Association (AEA) in response to a survey in the “AEA Professional Climate Survey: Final Report” (AEA 2019, p. 30). Fourcade *et al.* (2015) had already noted the strong sense of elitism vis-à-vis other social sciences:

[t]here exists an implicit pecking order among the social sciences, and it seems to be dominated by economists. For starters, economists *see themselves* at or near the top of the disciplinary hierarchy. [p. 89]

But the climate survey points inward not outward. The report notes

frequent reference[s] to the elitism within the field. There is a strong sense that the AEA, the NBER [National Bureau of Economic Research], and the top journals — and de facto the profession — are controlled by economists from the top institutions. [AEA 2019, p. 29]

The report reveals that the feeling that the AEA leadership is an insular and disconnected from the membership is widely held view, but it is mainly impressionistic. Our goal in the current paper is to carefully document and analyze the hierarchical structure of the leadership of the AEA and how it has changed over time.

The AEA began in 1885 as one of many learned societies founded toward the end of the 19th century in a process that was more “the *academicization* of nineteenth century economics rather than its professionalization” (Coats 1985, p. 1699).¹ The distinguished historian of the AEA A.W. Coats noted that charges that the AEA was controlled by a limited orthodox group go

¹ Richard Ely, one of the founders and early presidents (1900-01) of the AEA and the eponym of its prestigious annual Ely Lecture, recounts the founding of the association as inspired by the German *Verein für Sozialpolitik* (Ely 1910, pp. 70-71; 1936). That society similarly acted as an agent of professionalization of the economics profession in Germany (Backhaus 1993/94), and faced similar – if substantially more heated – debates over the nature of the profession and of economics itself in the periods before and after World War I (Glaeser 2014, Janssen 2009). Thanks to Stefan Kolev for pointing out the historical connection and the relevant literature.

back to the 1890s (1985, p. 1721). Coats continues, “[w]hether this is simply an unavoidable – and some would say healthy — state of affairs is far too delicate and complex a matter to be examined [in his article in the AEA’s own flagship journal, the *American Economic Review*]” (1985, p. 1721). Coats was, in general, reluctant to take sides in such a dispute. Later, he noted the continued tension:

[The AEA] has always been an “open” society, with no significant membership restrictions, partly because of the *objections to control by a limited elite or coterie*. Consequently it has not had, nor has it attempted to have, any direct influence on doctrinal developments in the field. Nevertheless, there have been periodic protests about the organization’s *unrepresentativeness and oligarchical management*, a state of affairs reflecting the size, diversity, and geographical dispersion of its membership . . . [Coats 1987, emphasis added]

The question of whether an academic, professional society should be managed principally by, and in the interest of, its wider membership or by a narrower intellectual elite is an important matter of policy for the AEA. However, like Coats, we shall not attempt to address it directly. Any answer to the question, however, ought to be informed by a detailed understanding of the history and current situation of the governance of the AEA. Our purpose in this paper is to begin to give that detailed account — to make explicit the implicit hierarchy of the AEA. Part of a more ambitious prosopographical study of the economics profession, this paper, which makes only limited use of the data that we have collected, is mainly aimed at establishing certain facts about the hierarchy (Svorenčík 2018, 2019).² We propose two competing hypotheses to account for the structure of AEA’s leadership — either merit or privilege. We suggest some possible mechanisms to account for those facts. These are preliminary hypotheses and suggestions of questions that are worth addressing and resolving in future.

² Svorenčík (2019) provides an introduction to prosopography as a historiographical tool.

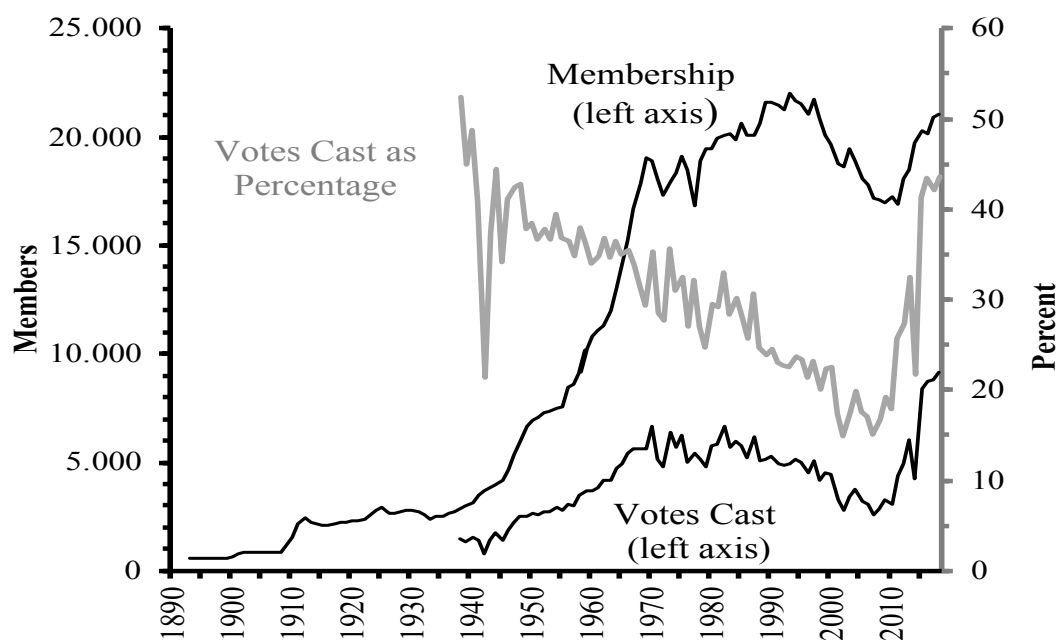
We confirm the widespread belief that the AEA possesses an extremely hierarchical structure, and we document — as has hitherto not been done — the detailed shape of that hierarchy. Beyond mere documentation, however, we offer some evidence on the dynamics of the leadership hierarchy and, particularly, begin to address such questions as, whether they are driven by objective differences of intellectual merit or instead reflect a self-perpetuating elite or other factors. In the spirit of Coats, we do not take a normative position on the issue of democracy versus elitism, but try to lay out some positive evidence that might usefully inform normative questions. Our paper has also broader ramifications for the ongoing debates about the state of our discipline and its incentive structure (Akerlof 2020, Heckman and Moktan 2020).

While we are not addressing normative questions, the positive questions that we address include: What is the educational and employment background of AEA’s leadership? Does the hierarchical structure of economics translate into the structure of AEA’s leadership? In particular what is the role of leading economics departments? Can we detect any networks within the leadership? What is their structure and how have they changed over time? Are such networks grounded in self-reinforcing clubs or do they reflect the relative status of AEA leaders as scholars and researchers?

2. How is the AEA Organized?

The AEA is the principal professional organization for economists in the United States. As Figure 1 shows, it has a large membership, which grew from 572 members in 1893 (as far back as our data go) to a peak one-hundred years later in 1993 at 22,005. Subsequently, membership

Figure 1 AEA Membership and Voting



Source: American Economic Association

suffered a large decline to a local minimum of 16,902 in 2011, only to recover sharply to 21,031 by 2018.³

Beyond its own membership, the AEA uses the umbrella title of the Allied Social Sciences Associations (ASSA) to organize and administer not only its own Annual Meeting, but the meetings of a large number of professional societies and organization related to economics, such as the Econometric Society, the American Finance Association, the Agricultural & Applied Economics Association, the History of Economics Society, the International Network for Economic Methodology, the Economic Science Association, and many others — 53 organizations altogether (Siegfried 2008). The AEA/ASSA meeting is currently held in early January, but previously held between Christmas and New Year's. The meetings feature sessions for the presentation of papers, roundtable discussions, and lectures, as well as receptions for different groups and celebratory luncheons to honor members' achievements. The association runs its annual job fair at these meetings, and local hotels are filled with representatives of university economics departments and other employers holding initial job interviews, mainly with newly or soon-to-be minted economics Ph.D.s. The association publishes seven highly regarded journals.⁴

³ We speculate that these large fluctuations may have been caused by the interaction of the membership price and the availability of AEA journals in electronic formats through university libraries. The price of membership was quite high, though it was justified in part by the fact that it came with subscriptions to the principal AEA journals. The decline in membership became quite steep after 1997, falling by 14 percent between 1997 and 2001. Once these journals became readily available online (starting in 2001), many members canceled their memberships, with the fall continuing another 10 percent until 2011. Electronic voting was introduced in 2011. And the AEA lowered the cost of memberships sharply in 2012 (a fall of 59 percent for the highest level and of 43 percent for the lowest level), and membership recovered.

⁴ The *American Economic Review* (*AER*), which commenced publication in 1911, is its flagship journal. The *Journal of Economic Literature* (*JEL*), which to some extent the successor to, and development of, the earlier *Journal of Economic Abstracts* (1963-1969), is devoted mainly to book reviews, review essays, and survey articles. The *JEL* also developed the classification system for the economics discipline (the “JEL Codes”) that are widely used to catalogue articles (Cherrier 2017).⁴ The *Journal of Economic Perspectives* was introduced in 1987 to publish articles aimed at a broad audience, mitigating the widely expressed problem that the *AER* had become too technical. In 2009, the association introduced four journals under the master title *American Economic Journal* and the subtitles *Applied Economics*, *Economic Policy*, *Macroeconomics*, and *Microeconomics*. These aimed to expand

The AEA maintains a website and engages in a variety of other activities, such as awarding honors (Distinguished Fellowships and the John Bates Clark Medal, for the most significant contributions to economic thought and knowledge by an economist under the age of forty), and promoting the interests of the economic profession (Cherrier and Svorenčik 2020). The main policymaking body is the Executive Committee, which oversees a number of standing committees (see Table 1), as well as various ad hoc committees.

The Executive Committee is headed by the President and the voting members include the President-elect, Vice-Presidents, elected representatives of the membership (henceforth Ordinary Members of the Executive Committee), an appointed Secretary and appointed Treasurer, and various voting and non-voting ex officio members, including the two most recent past presidents, and the editors of the association’s journals.

While the President is the AEA’s chief executive officer, the President-elect is responsible for the program of the annual meeting and for appointing the Program Committee and the Nominating Committee for the year that he or she holds that office.

The Nominating Committee is so vital to determining the shape of the AEA that we refer to the Executive Committee together with the Nominating Committee as the Extended Leadership of the association. Table 2 describes the nomination and election process. The Nominating Committee presents at least two possible candidates for President-elect and each of the other offices open to election in any year. The Extended Leadership, acting as an electoral

the capacity of AEA journals to publish professional articles by opening up a tier below the *AER*. In addition to the seven established journals, the AEA has recently created two new journals. Originally, published as an issue of the *American Economic Review*, the *AEA Papers and Proceedings* was spun off in 2018 to form an annual that publishes selected papers from the society’s annual meeting, as well as official reports of the society’s various officers and committees. Finally, in 2019 the AEA began publishing another new journal, *American Economic Review: Insights*, as a home for more succinct articles.

Table 1 AEA Standing Committees as of 2019

-
- Advisory Committee on Editorial Appointments¹
 - Audit Committee
 - Budget and Finance Committee
 - Committee on Economic Education
 - Committee on Economic Statistics
 - Committee on Equity, Diversity, and Professional Conduct
 - Committee on Government Relations
 - Committee on Honors and Awards²
 - Committee for Oversight of Operations and Publishing
 - Committee on the Status of LGBTQ+ Individuals in the Economics Profession
 - Committee on the Status of Minority Groups in the Economics Profession
 - Committee on the Status of Women in the Economics Profession
 - Oversight Committee for Registry of Random Controlled Trials
 - Task Force on Best Practices for Professional Conduct in Economics
 - Task Force on Outreach to High School and Undergraduate Students in Economics
-

Notes: ¹members are nonvoting *ex officio* on Executive Committee.

²selects Distinguished Fellows and Clark Medalists.

Source: AEA website: <https://www.aeaweb.org/about-aea/committees> [Accessed on December 4, 2019].

Table 2 The Nomination and Election Process

-
- **PRESIDENT-ELECT**
 - **Duties**
 - Appoints Nominating Committee
 - **NOMINATING COMMITTEE**
 - **Composition**
 - a past officer
 - at least five AEA members
 - anyone nominated by a petition of 2 percent of the membership
 - **Duties**
 - presents at least two names for each open elective office
 - **ELECTORAL COLLEGE**
 - **Composition**
 - Nominating Committee
 - Executive Committee
 - Voting strength of Nominating Committee cannot exceed that of Executive Committee.
 - **Duties**
 - Chooses a slate of nominees:
 - President-elect (one nomination)
 - Vice President (four nominations for two positions)
 - Ordinary Members of the Executive Committee Members (four nominations for two positions)
 - **DIRECT NOMINATION**
 - **Additional nominations may be made by petition of the membership.**
 - Petition thresholds:
 - President-elect: 6 percent of membership
 - All other offices: 4 percent of membership
 - **VOTING**
 - Open to all members
-

Source: *Bylaws of the American Economic Association (AEA)*: <https://www.aeaweb.org/about-aea/bylaws>
[Accessed on December 4, 2019]

college, selects the final slate of candidates. While the Vice-Presidents and Ordinary Members face contested elections, only a single nomination is normally made for the President-elect. The senior elected officers serve one-year terms; while elected members of the Executive Committee serve three-year terms, staggered so that two members are elected each year. As the name implies, after a one-year term, the President-elect becomes the President for the next year. Although not stipulated by AEA’s Bylaws, it has become a tradition that past Presidents once they leave the Executive Committee become Chairs of the Nominating Committee.⁵

Members may directly nominate candidates by petition – six percent of the membership for President-elect and 4 percent for other offices. In 2018, these would have corresponded to signatures from 1,261 members for President-elect and 841 for other offices. No candidate has been directly nominated by petition in the history of the AEA.

The officers are chosen from those nominated by a vote of the membership — currently online, although previously by mail — in which all members of the association are eligible to vote. Figure 1 shows the total ballots returned, both in absolute number, and as percentage of the membership. The earliest year for which we have data (1938), also corresponds to the highest participation rate of the membership in the AEA: 52 percent. The trend from that point is downward, until it reaches its nadir in 1997 at a little less than 15 percent. With the advent of online voting, the participation rate rose sharply between 2010 and 2018, by more than 25 percentage points to a level of 43 percent — the highest rate of participation since 1948.

Two features of the election process limit transparency. First, ballots are accompanied by a short curriculum vitae for each candidate, but nothing that indicates the candidates’ views on

⁵ Out of 70 Presidents, 3 served twice as Chairs of the Nominating Committee, 55 once, and 12 never served; of 70 Chairs, 61 served as Presidents. The average lag between the two positions is 3 years. Only twice the Chair of the Nominating Committee was occupied by some one who only later on was elected President (in 1950 and 1958).

issues facing the AEA, even for competitive offices. One respondent to the AEA’s Climate Survey complained about the practice: “a thing I’ve found super odd . . . is when there are elections for AEA officers, the information on the candidates is basically just publications.⁶ I want to know what the candidates want to do, not that they came from Harvard, work at Berkeley, and were lucky enough to get 3 *AERs*” (AEA 2019, p. 31)). Second, only the total votes cast and identities of the winners and losers are reported to the wider membership – requests from members to have the actual tallies reported having been denied by the Executive Committee.⁷ The last available data on election participation rate is from the 2018 election when it reached the level of 43.6 percent.

3. The Prosopographical Dataset and Key Analytical Categories

The current paper is based on an extensive prosopographical database covering the entire leadership of the AEA over the 1950-2019 period, including all Presidents, Presidents-elects, Vice-Presidents, Ordinary Members of the Executive Committee, as well as the losing candidates for all elective offices, and members of the Nominating Committee.

We define the *Electoral Pool* to be the Extended Leadership (= Executive Committee plus Nominating Committee) plus the losing candidates, less the Presidents-elect and Past Presidents who are members of the Executive Committee. To keep our nomenclature and

⁶ In 2020, the AEA added a short Statement of Purpose to the ballot.

⁷ One such request is contained in a letter from Kevin Hoover to John Siegfried, dated 15 December 2005. In an exchange of emails, the then Secretary-Treasurer of the AEA confirmed that, while the AEA office keeps the records of the actual votes, they are not disclosed (Siegfried to Hoover 14 December 2005). Noting that the practice pre-dated his time in office, Siegfried suggested that “[t]he ballot count is not reported, perhaps in order to avoid hurting the feelings of the person who comes in last” (Siegfried to Hoover 9 December 2005). Incredulous, Hoover replied “[e]ven my high school, where I personally suffered the agony of defeat in a student government election, reported the vote” (Hoover to Siegfried 9 December 2005). In the event, the Executive denied Hoover’s request that the individual votes be made public. In a recent exchange of emails, Peter L. Rousseau, the AEA’s current Secretary-Treasurer, confirmed that the policy is still in place and that “the main argument for” this anti-democratic practice of “not reporting vote totals” remains “that it will discourage many fine candidates from standing for election” (Rousseau to Hoover 19 September 2019).

analytical categories clear, they are defined in Table 3. The exclusions avoid double counting, since, once a member becomes President-elect, transition to President and Past President is automatic.⁸ The Electoral Pool over the 1950-2019 period consists of 1,122 positions (= 842 winners in AEA elections or appointees of the Extended Leadership plus 280 losing candidates). These positions were, in fact, filled by 635 individuals – that is, on average each individual filled about 1.8 positions in the Electoral Pool.

The information about these 635 individuals was compiled from a variety of sources, including AEA Executive Committee minutes, AEA members’ directories, which were published (typically, quinquennially) for much of the AEA’s history, various editions of Blaug’s *Who’s Who in Economics*, and online resources, such as curricula vitae and obituaries. Although the collection process was labor intensive, involving multiple research assistants over several years, we were, for the most part, able to reconstruct complete education and job histories — at least for the AEA leadership — and to collect a variety of other facts pertinent to their careers. In a small number of cases, some information is missing, and when the accuracy of data was doubtful, individuals are omitted at affected points of the analysis.

The database was collected to be used both in a more detailed study of the AEA than presented in the current paper, and in support of a much larger project on the quantitative history of the economics profession. In the current paper, however, our principal data link information about the university at which an AEA leader or losing candidate received his or her highest academic degree (typically doctorates) and their places of employment (academic or

⁸ One might have thought that we should count Presidents-elect rather than Presidents to avoid double-counting, since Presidents-elect are the ones who actually face the vote; but it is more useful to count Presidents, since the office of President-elect was created only in 1957. Only one President-elect, Jacob Marschak, died in office and thus did not become President and Past President. Marschak was replaced by Tjalling C. Koopmans as President-elect. Harold A. Innis, President in 1952, died in office on November 8, 1952 — near the end of his term.

Table 3 Definitions and Analytical Categories

-
- *Leadership* = Executive Committee, exclusive of nonvoting members (= President, President-elect, two past Presidents, Vice-Presidents, Ordinary Members of the Executive Committee)
 - *Extended Leadership* = Leadership plus Nominating Committee
 - *Electoral Pool* = Extended Leadership plus Losing Candidates for Vice-President and Ordinary Member of the Executive Committee, *excluding* Presidents-elect and Past Presidents who are members of the Executive Committee
 - *Education* refers to counting members of the Electoral Pool according to the university where they received their highest academic degree
 - *Employment* refers to counting members according to their place of employment at the time of their nomination or appointment of the Electoral Pool

***Analytical Categories
by Education***
(in rank order)

First Tier = top five institutions:

1. Harvard
2. MIT
3. Chicago
4. Columbia
5. Stanford

Second Tier = next ranked institutions with greater than 20 positions:

6. Princeton
7. Yale
8. Berkeley
9. Wisconsin
10. LSE
11. Oxford
12. Michigan
13. Pennsylvania
14. Minnesota

Third Tier = all other institutions (ranked 15–65)

***Analytical Categories
by Employment***
(in rank order)

First Tier = top five institutions:

1. Harvard
2. Stanford
3. Chicago
4. MIT
5. Princeton

Second Tier = next ranked institutions with greater than 20 positions:

6. Berkeley
7. Yale
8. UC Los Angeles
9. Columbia
10. Northwestern
11. Pennsylvania
12. Minnesota
13. Duke
14. Maryland
15. Michigan

Third Tier = all other institutions (ranked 16–136)

(continues next page)

Table 3.
Definitions and Analytical Categories
(continued)

Combined Analytical Categories

(for combined categories ranks = education rank/employment rank)

Top 6 (First Tier) = all institutions that fall into the First Tier (top 5) of either *Education* or *Employment*:

- 1/1. Harvard
- 2/4. MIT
- 3/3. Chicago
- 3/4. Stanford
- 6/5. Princeton
- 4/9. Columbia

Second Tier:

Common 5 = all institutions that appear in the Second Tier of both *Education* and *Employment* next ranked institutions with:

- 7/7. Yale
- 8/6. Berkeley
- 12/15. Michigan
- 13/11. Pennsylvania
- 14/12. Minnesota

Other Second Tier: Employment = institutions appearing only in the Second Tier of *Employment*:

- 12. UCLA
- 13. Northwestern
- 14. Duke
- 15. Maryland

Other Second Tier: Education = institutions appearing only in the Second Tier of *Education*:

- 12. Wisconsin
- 13. Oxford
- 14. LSE

Third Tier = all other institutions
(ranked 15–65/16–136)

nonacademic) at the times at which they were appointed or stood for election (winning or losing) to each office comprised by the Extended Leadership. We refer to these variables as *Education* and *Employment* and, for clarity, consistently write them in italics to underline their particular meaning in this context.⁹

With very few exceptions — more for *Employment* than for *Education* — leadership of the AEA consists almost entirely of economists holding doctoral degrees and tenured at a university or college. In 1950, approximately 200 Ph.D.s in economics were awarded in the United States. By 2018, the number had risen to about 1,100 (see Figure 2). The number of Ph.D.-granting institutions, based on the National Science Foundation’s *Survey of Earned Doctorates*, has also risen from 57 in 1950 to 141 in 2016 (Figure 3). There is clearly a pecking-order among economics departments as suppliers of economists and among these departments and a wider group of institutions (including governments, international agencies, private businesses, and nonprofit organizations) as demanders or employers of economists (see Eagly 1974, Fourcade 2009, Fourcade et al 2015).

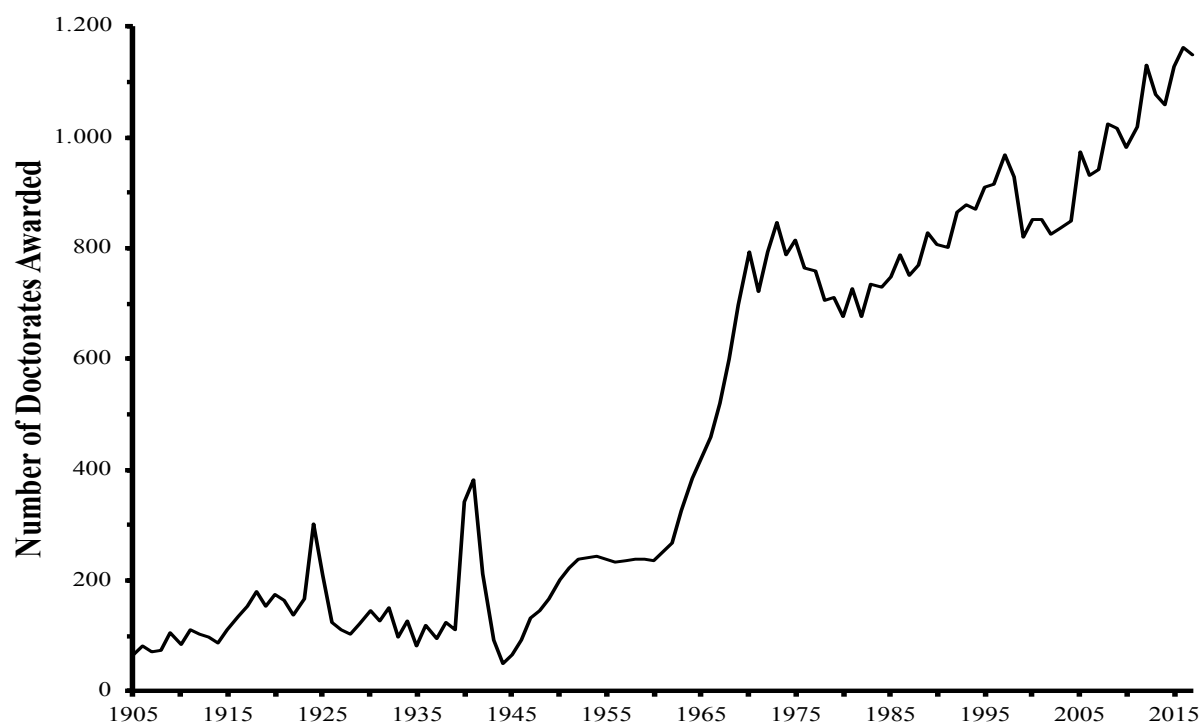
4. Some Key Observations and Hypotheses

The detailed analysis of our dataset in Sections 5 and 6 will be easier to follow if we provide a partial preview of our key findings and indicate the relevant tables and figures in those sections.

- For the entire 70-year period of our study (1950-2019), economists associated with six educational institutions — Harvard, Massachusetts Institute of Technology (MIT), Chicago, Columbia, Stanford, and Princeton — have dominated the leadership of the AEA when seen either through *Education* (Section 5.B, Figure 4) or *Employment* (Section 5.B, Figures 4 and 5). Their dominance is present via place of graduation and place of employment of AEA leadership. This conclusion is the same whether we examine the Leadership, the Extended Leadership or the Electoral Pool.

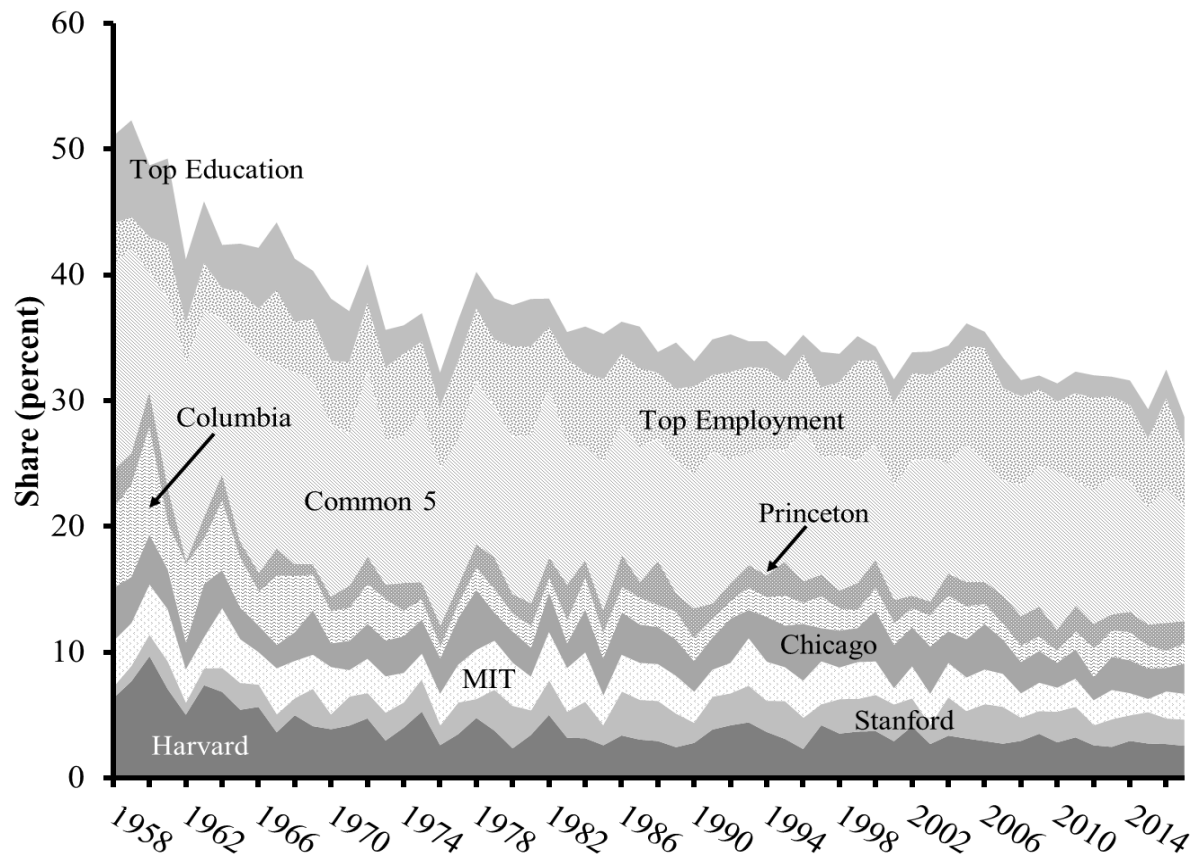
⁹ Complete employment information is missing for four individuals for times of holding all their positions in the Electoral Pool. For two further individuals employment information is available some positions but not for their periods as members of the Nominating Committee.

Figure 2
Production of Economics Doctorates in the United States, 1905-2017



Source: National Science Foundation, National Center for Science and Engineering Statistics, *Survey of Earned Doctorates*

Figure 3
New Economics Ph.D.s in the United States
Shares of Annual (percent of total)



Source: National Science Foundation, National Center for Science and Engineering Statistics, *Survey of Earned Doctorates*. The remaining Ph.D.s graduated from third tier universities.

•

- A wider group of nine institutions constitutes a second tier in the leadership.
- Private American universities account for all of the members of the First Tier and majority by education and half by employment of American universities in the Second Tier. The rise of the top six has also been accompanied by the increasing marginalization of American public universities and foreign universities (Section 5.A.2, Table 5).
- *Education* and *Employment* are not distinct: educational background of the AEA leaders are narrower than their places of employment, but a large proportion of leaders are educated at one elite institution and employed by another, making the network more closed than may first appear (Table 5.A.1, Table 4, and Section 6.E, Tables 17, 18, and 19).
- The dominance of the top six institutions has risen substantially, from an already high base, over the 70 years of the study, mainly at the expense of the third tier (Sections 5.A and 5.B, Tables 8 and 9).
 - Harvard, Chicago, and, especially, Columbia have fallen as important bases of AEA leadership relative to Princeton, Stanford, and, especially, MIT (Figures 4 and 5).
 - Taking *Education* and *Employment* jointly reveals a nested hierarchy of tiers that over time becomes more concentrated. The First Tier accounts for a fifth of all positions in the electoral pool in the first period and a third in the second. The First and Second Tiers combined account for 47 percent in the first period and 63 percent in the second (Section 5.B, Figure 6, Section 6.E, Table 7).
- Diversity of institutions not only decreases when we move from *Employment* to *Education*, but also — with the exception of Chairs of the Nominating Committee and Losing Candidates for the Executive Committee — when we move from the first period to the second. Furthermore, the Executive Committee is less diverse in both periods and between periods than the Nominating Committee (Section 5.A, Table 6).
- Economics is a disproportionately male profession with a leaky pipeline of women gradually leaving the profession as they climb the career ladder from graduation to tenured positions. Women are nominated to competitive AEA offices at a rate higher than their share of tenured female professors at Ph.D.-granting US departments and are elected at a rate well above that of men (Section 5.A.1, Table 4). Only three women, however, have served as AEA president in the history of the association.

Relative to these observations, there are at least two difficult-to-disentangle hypotheses.

On the first hypothesis, the AEA leadership is drawn from the intellectually strongest members of the association. These members are all, by virtue of their intellectual merits, mainly educated

and employed at elite universities, so it is not surprising that there is a high representation of the elite universities in the leadership.

On the second hypothesis, for various reasons a small group of elite universities were early leaders of the AEA, at a time when there were few graduate programs in economics, and the structure of leadership replication in the AEA permitted that group to favor its members in nominations and appointments — especially in appointments to the Nominating Committee, which, of course, controls the slate that the wider membership considers in the association’s democratic elections. The result is that the elite group becomes self-perpetuating, independent of considerations of merit.

- There is strong evidence for the existence of networks based on preferential attachment. There are different explanations for the linkages of preferential attachment: pure preference for certain institutions vs. preference for ability to serve the association coupled with informational limits. And these are difficult to discriminate: although it seems likely that academic quality is correlated with the ranks of institutions in the AEA leadership, these measures may themselves reflect preferential attachment based on factors other than academic merit (Section 6.A, Figures 8 and 9; and Section 6.E, Tables 17 and 19).
- Evidence for an institutional bias in the AEA leadership that cannot be accounted for by differences in academic merit are mixed but overall are highly suggestive of bias:
 - Academic age (i.e., years since receipt of Ph.D.) of first entry into the Electoral Pool and reappointment/renomination rates suggest an initial institutional bias that interacts with preferential attachment based on information of performance in office (Sections 6.C and 6.D, Tables 12-14).
 - Academic age at point of nomination to the AEA presidency (on the presumption that this office is the most likely to reflect academic merit) seems to be clearly affected by institutional bias when judged by Ph.D. institution in the first half of the sample, but are more ambiguous in the latter half; while, when judged by place of employment, the evidence is equivocal throughout (Table 14).
 - Using Nobel Prizes as markers of academic merit on balance supports institutional bias based on Ph.D. institution, but is equivocal based on place of employment (Section 6.D.2, Tables 15 and 16).

In one sense, the quantitative details of the AEA leadership merely confirm beliefs already widely held within the profession. As one AEA member quoted in the Climate Survey

puts it: “What is there, like 20,000 economists in the US – most of whom don’t work at elite schools, and yet the leadership group of the AEA is consistently represented by those from the same six schools” (AEA 2019, p. 31). Our findings are certainly consistent with this view, but there are some points on which we believe are not captured by such anecdotal observations. We explain these details in the following sections.

5. The Chosen

We now turn to the evidence that supports the observations and hypotheses summarized in Section 4.

5.A THE ELECTORAL POOL

5.A.1. *Institutional Diversity*

We begin with an examination the Electoral Pool of the AEA over our period 1950-2019. Our focus is less on the actual holders of the various offices *per se* than on the people who have made the first cut and are either appointed or allowed to stand for contested elections.

Looked at from the point of view of *Education*, the members of the Electoral Pool were graduated (in terms of their highest degree earned) from 65 different universities (see Table 4).¹⁰ Looked at from the point of view of *Employment* at the time of appointment or contesting the election, the Electoral Pool is more than twice as diverse with 136 different employers represented. (A complete list of institutions in the Electoral Pool and the numbers of individuals

¹⁰ There are fourteen people who have not earned a doctoral degree and four who have earned two Ph.D.s. All tables for which sources are not indicated are based on the authors’ database described in Section 3.

Table 4 Positions in the Electoral Pool, 1950-2019

Office	All Members			Women				
	Positions (number)	Educational Institutions (number)	Employers (number)	Positions (number)	Share of All Positions (percent)	Date of First Appointment or Nomination	Educational Institutions (number)	Employers (number)
Chair of the Nominating Committee	70	23	23	4	5.7	1957	4	4
President	70	24	23	3	4.3	1986	3	3
Ordinary Member of Executive	140	30	47	41	29.3	1955	16	29
Vice-President	140	31	38	26	18.6	1953	12	18
Losing Ordinary Member of Executive	140	31	53	8	5.7	1951	6	7
Losing Vice-President	140	37	50	12	8.6	1950	9	9
Member of the Nominating Committee	422	52	104	97	23.0	1950	17	40
Electoral Pool (all positions)	1,122	65	136					
Positions Held by Women				191	17.0		22	49

Note: Rows are ordered by increasing number of educational institutions, then by number of employers.

from each classified by *Education* and *Employment* for the whole data set is reported in the Appendix, Table A.1.)

Table 4 also shows a rank order among the positions in the Electoral Pool with the Chair of the Nominating Committee and President displaying the lowest variety of institutional affiliations for both *Education* and *Employment* and Members of the Nominating Committee displaying the least. The rank orders by variety of institutional affiliations is similar for both *Education* and *Employment*. The largest difference is Losing Ordinary Members of the Executive, which is ranked fourth (low to high) by *Education* and sixth by *Employment*. On either metric, the positions with increasing variety are mainly also filled with younger economists (measured by years from highest degree to appointment or election). The exception is that Ordinary Members of the Executive are slightly younger than Members of the Nominating Committee, which is more institutionally diverse. (The age profile is taken up in Section 6.C.2, especially Table 13).

Table 4 also reports the number share and date of the first entry for each position within the Electoral Pool of female economists. Women have been included in the AEA leadership from at least the beginning of our sample in 1950. By the mid-1950s, a woman had served in every AEA office except Chair of the Nominating Committee (first in 1957) and President (first in 1986). For these two highest offices, it is striking that that only seven positions have been occupied by women. In contrast, overall, women make up 17 percent of the Electoral Pool; although, given the “leaking pipeline,” a smaller share of the members who are at the appropriate stage of career (see Section 6.E, Table 17; Buckles 2019, Lundberg and Stearns 2019).

It is difficult, given the temporal spread of the data, to know how to judge the relative magnitudes. One possibility would be to compare the share of women in the various offices in

the Electoral Pool against the share of women in the AEA at the stage of career typical for each office. In most cases, members of the Electoral Pool are full professors at Ph.D.-granting institutions, and typically the higher a position in the Electoral Pool, the longer the member has been in the profession, as judged by academic age (see Section 6.C.2, Table 13). Surprisingly, given that the Committee on the Status of Women in the Economics Profession (CSWEP) is one of the oldest standing committees of the association, the AEA does not collect data on the proportion of women among the membership, much less by academic-age cohort.¹¹

Nevertheless, to give a rough idea of an appropriate scaling, the share of female full professors of economics in Ph.D.-granting universities rose from about 2 percent in 1974 to a little more than 14 percent in 2018 (CSWEP 1994, Figure 1, p. 493; 2018, Table 1).¹² Owing to a low share of women graduating with a PhD in economics and a subsequent leaky pipeline in their career path, the relevant pool is likely to be lower at any time than this share, since nominees — especially for higher offices — typically entered the profession many years earlier, when the number of women was even smaller. We might take 8 percent, the mid-point of the 1974 and 2018 figures as a crude yardstick, recognizing that the period of 1950-1974, for which we do not have good data, the share of women in the profession was almost certainly smaller than in 1974. By this yardstick, conditional on the size of the relevant pool of potential candidates, the overall proportion of women in the Electoral Pool may actually be higher than their share in the top ranks of the profession. And it may also be the case that their shares are

¹¹ Upon inquiring with the AEA about the share of women Andrej Svorenčik received the following response: “We do not know because we do not require that information to be an AEA member.” [Email from Melissa A. Smith, from May 7, 2020]

¹² Data on women’s participation in the economics profession is available in the annual reports of CSWEP, beginning in 1972 and available online: <https://www.aeaweb.org/about-aea/committees/cswep/survey/annual-reports>. Unfortunately, for the first two decades, the data are categorized inconsistently from year to year. Consistent data for Ph.D.-granting institutions begins only in 1994.

higher among Ordinary Members of the Executive, Vice-Presidents, and Members of the Nominating Committee. Their share is unlikely to be higher, and may well be lower, for the highest offices, Chair of the Nominating Committee and President.

Since positions are by no means evenly spread across the various institutions represented in Table 4, there is, in fact, substantially less diversity in the educational backgrounds and the employment distribution of the leadership of the AEA than these summary measures suggest. For each university supplying twenty or more individuals, Table 5 shows the number of positions and the share in the total positions in the Electoral Pool by *Education*. The 14 institutions in the table account for almost more than 80 percent of the positions for the whole 1950-2019 period. Even within this select group, the distribution is highly skewed with Harvard, the top supplying institution over the period accounting for more than a fifth of the total and the last five universities accounting for around 2 percent each. The top five institutions (Harvard, MIT, Chicago, Columbia, and Stanford) account for over half (57.1 percent) of the positions over the whole period.

Table 6 shows that except for Chairs of Nominating Committee and Losing Ordinary Members of the Executive Committee, for which the results are mixed, institutional diversity decreased between the first and second periods for every office, whether judged by *Education* and *Employment*, from the first to the second period. Taking the whole Nominating Committee (Chairs plus Members) diversity judged by *Education* fell from 42 distinct institutions represented in the first period to 35 (a fall of 17 percent); and judged by *Employment* from 81 to 60 (a fall of 26 percent). For the Executive Committee, diversity decreased by 16 percent by *Education* and 19 percent by *Employment*. Although the percentage decrease in diversity is substantial and greater when judged by *Employment* than by *Education*, the absolute level of

Table 5 Positions in the Electoral Pool by *Education*

Institution	1950-1984		1985-2019			1950-2019		
	Number	Share (percent)	Number	Share (percent)	Change in share (percentage points)	Number	Share (percent)	Cumulative Share (percent)
Harvard	124	23.1	110	18.8	-4.3	234	20.9	20.9
MIT	23	4.3	136	23.2	19.0	159	14.2	35.0
Chicago	64	11.9	52	8.9	-3.0	116	10.3	45.4
Columbia	53	9.9	19	3.2	-6.6	72	6.4	51.8
Stanford	17	3.2	43	7.4	4.2	60	5.3	57.1
Princeton	11	2.0	39	6.7	4.6	50	4.5	61.6
Yale	8	1.5	38	6.5	5.0	46	4.1	65.7
UC Berkeley	28	5.2	15	2.6	-2.7	43	3.8	69.5
Wisconsin	30	5.6	6	1.0	-4.6	36	3.2	72.7
Oxford	12	2.2	10	1.7	-0.5	22	2.0	74.7
LSE	18	3.4	4	0.7	-2.7	22	2.0	76.6
Michigan	13	2.4	8	1.4	-1.1	21	1.9	78.5
Pennsylvania	17	3.2	4	0.7	-2.5	21	1.9	80.4
Minnesota	5	0.9	15	2.6	1.6	20	1.8	82.2
Total	423		499			922		
Share of All Positions	423	78.8	499	85.3	6.5	922	82.2	100.0

Notes: Shares are number of positions held as a fraction of the possible number of positions in the Electoral Pool during the relevant period. All institutions with 20 or more positions in the 1950-2019 period are reported.

Table 6 Positions in the Electoral Pool, 1950-2019 and subperiods

Office	All Members 1950-2019			All Members 1950-1984			All Members 1985-2019		
	Positions (number)	Educational Institutions (number)	Employers (number)	Positions (number)	Educational Institutions (number)	Employers (number)	Positions (number)	Educational Institutions (number)	Employers (number)
Chair of the Nominating Committee	70	23	23	35	14	20	35	19	15
President	70	24	23	35	16	18	35	14	14
Ordinary Member of Executive	140	30	47	70	23	33	70	20	27
Vice-President	140	31	38	70	25	30	70	15	23
Losing Ordinary Member of Executive	140	31	53	70	19	39	70	23	30
Losing Vice-President	140	37	50	70	26	40	70	22	30
Member of the Nominating Committee	422	52	104	187	40	79	235	31	59
Executive Committee	350	41	66	175	31	48	175	26	39
Nominating Committee	492	55	105	222	42	81	270	35	60
Electoral Pool (all positions)	1,122	65	136	537	53	110	585	42	75

diversity is higher for *Employment* than *Education*. This suggests that the decline of diversity of the Electoral Pool is primarily driven by less diverse losing candidates and members of the Nominating Committee.

5.A.2. *The Electoral Pool Disaggregated: Two Periods*

Table 5, which divides the sample into halves, already suggests some reshaping of the hierarchical structure of the leadership’s educational background over time: a few universities dominate in both halves of the sample, which universities changes somewhat. The top five universities, based on shares in the whole sample, account for over half of all positions in both halves, but the share increases from 52.4 percent in the first half (1950-1984) to 61.5 percent in the second (1985-2019). And the University of California, Berkeley (UC Berkeley) and University of Wisconsin yield their places in the top five to MIT and Stanford. What is more, the Electoral Pool becomes less diverse over time. While eight universities account for a little less than two-thirds of the members and twelve for a little more than three-quarters in the earlier period, crossing these same benchmarks requires only six universities for two-thirds and eight for three-quarters in the later period. And the top fourteen together account for 78.8 percent in the earlier period, and 85.3 percent in the later.

Only two non-American universities are represented in Table 5, and they display different fates. Although both lose share, the London School of Economics’ (LSE’s) numbers plummeted from eighteen to four, a drop of 4.5 percentage points, while Oxford’s fell from twelve to ten, drop of only 0.5 points.

Splitting the sample period into halves, it is easy to see rocket-ascent of MIT at the expense of a wide swath of other institutions. Three of the top five lose shares – the collective

loss for Harvard, Chicago, and Columbia is 13.9 percentage points. Six of the bottom seven universities together lose another 14.1 points; while those below the top fourteen lose 6.5 points.

Places of employment are considerably more diverse in the Electoral Pool than places than places of education. Table 7 shows the share in the total of the members of the Electoral Pool by *Employment* for the fifteen institutions (of 136) with twenty or more members for the whole sample. For the whole sample, we must include the top nine institutions (compared to the top four for *Education*) to pass the 50 percent mark. Harvard is again at the top, employing 9.2 percent (versus a 20.9 percent share for *Education* in Table 5). Together all fifteen institutions account for less than two-thirds of the total, whereas for *Education* the top fourteen accounted for more than 80 percent.

Comparison of the earlier period (1950-84) to the later period (1985-2019) again shows both some continuities and some changes in the employment background of the Electoral Pool. In the earlier period, the fifteen universities in Table 7 account for 58.9 percent of the positions in the Electoral Pool; while, in the later period, their share has risen to 72.1 percent. This increasing concentration over time is also reflected in the individual entries: seven of ten institutions gaining share were in the top half of the table, while all those losing share are in the bottom half. But, even the losers showed only relatively small changes in share, compared with some of the losses for *Education* (Table 5). Thirteen points of the about 17 point increase in share for the gainers in Table 7 came at the expense of the institutions in the long tail (not displayed on the table) rather than from the losers among the top fifteen.

A final observation about Table 5 and 7. The top institutions for *Education* (Table 5) includes eight private universities and four American public universities. Setting aside two British universities, for which the American private/public distinction is not well matched, in the

Table 7 Positions in the Electoral Pool by *Employment*

1950-1984			1985-2019			1950-2019		
Institution	Number	Share (percent)	Number	Share (percent)	Change in share (percentage points)	Number	Share (percent)	Cumulative Share (percent)
Harvard	47	8.8	56	9.5	0.7	103	9.2	9.2
Stanford	25	4.7	58	9.9	5.2	83	7.4	16.6
MIT	29	5.4	47	8.0	2.6	76	6.8	23.4
Chicago	30	5.6	44	7.5	1.9	74	6.5	29.9
Princeton	22	4.1	42	7.2	3.1	64	5.7	35.6
UC Berkeley	24	4.5	39	6.6	2.1	63	5.6	41.3
Yale	24	4.5	31	5.3	0.8	55	4.9	46.2
UC Los Angeles	22	4.1	15	2.6	-1.5	37	3.3	49.5
Columbia	15	2.8	19	3.2	0.4	34	3.0	52.5
Northwestern	15	2.8	14	2.4	-0.4	29	2.6	55.1
Pennsylvania	18	3.4	11	1.9	-1.5	29	2.6	57.7
Minnesota	15	2.8	12	2.0	-0.8	27	2.4	60.1
Duke	11	2.1	11	1.9	-0.2	22	2.0	62.0
Maryland	10	1.9	12	2.0	0.1	22	2.0	64.0
Michigan	8	1.5	13	2.2	0.7	21	1.9	65.9
Total	315		423		13.3	739		100.0
Share of All Positions		58.9		72.1			65.8	

Notes: Shares are number of positions held as a fraction of the possible number of positions in the Electoral Pool during the relevant period. All institutions with 20 or more positions in the 1950-2019 period are reported.

earlier period the highest ranked public university (Wisconsin) is ranked fourth, with UC Berkeley following close behind in fifth place; but both lose share, with Wisconsin falling to eleventh and Berkeley to eighth place in the later period. Michigan too loses rank and share and among public universities only Minnesota gains, moving from fourteenth to eighth place.

For *Employment*, the developments are less stacked against the public universities. In Table 7, there are ten private and five public universities. The UC Berkeley) is the highest ranked public university: fifth in the earlier period and sixth in the later period. Three private and two public universities lose share, but together the two public universities lose a slightly greater share than the three public universities taken together`.

5.A.3. *The Electoral Pool Disaggregated: Education*

Based on the evidence of the Electoral Pool — whether measured by *Education* or *Employment* — a small group of mainly private universities dominates the leadership of the AEA. Even among that group, a smaller group is overwhelming important. If we disaggregate the Electoral Pool, the main lines of that story remain the same for each position, but some nuance can be added (see Appendix Table A.2).

Table 8 shows that in the earlier period, the MIT-educated received only a single nomination for Vice-president (and won the election); while in the later period they received 26.4 percent of the total. In contrast, Harvard’s and Chicago’s shares of the nominations fell only slightly. Table 8 reports the rate of winning elections, as well. For Vice-President in the earlier period, the rate of winning falls by tier in parallel with the fall in nomination shares. Within the First Tier, setting aside MIT with its single nomination and win, Columbia has the highest rate of success and Stanford the lowest. In the later period, the Second Tier’s rate of

Table 8 Nominations to Selected Positions in the Electoral Pool by *Education*

1950-1984				1985-2019		
	number	share (percent)	winning rate (percent)	number	share (percent)	winning rate (percent)
Vice-President	140			140		
Harvard	36	25.7	58.3	33	23.6	45.4
MIT	1	0.7	100.0	37	26.4	56.8
Chicago	16	11.4	50.0	12	8.6	50.0
Columbia	8	5.7	62.5	4	2.9	75.0
Stanford	3	2.1	33.3	10	7.1	50.0
First Tier (rank 1-5)	64	45.7	56.2	96	68.6	52.0
Second Tier (rank 6-14)	40	28.6	52.5	21	15.0	71.4
Third Tier (rank 15-65)	36	25.7	36.1	23	16.4	21.7
Ordinary Members of the Executive Committee	140			140		
Harvard	32	22.9	53.1	25	17.9	60.0
MIT	11	7.9	45.4	34	24.3	55.9
Chicago	21	15.0	38.1	8	5.7	75.0
Columbia	19	13.6	52.6	3	2.1	66.7
Stanford	3	2.1	0.0	12	8.6	50.0
First Tier (rank 1-5)	86	61.4	46.5	82	58.6	58.5
Second Tier (rank 6-14)	33	23.6	54.5	39	27.9	38.5
Third Tier (rank 15-65)	21	15.0	57.1	19	13.6	36.8

Note: Shares are number of positions held as a fraction of the possible number of positions in the Electoral Pool during the relevant period.

winning Vice-Presidential election rises by about 19 points to 71.4 percent, accounted for by a small fall in the rate for the First Tier (still better than better than 50 percent) and a more than 15-point drop for the Third Tier to 21.7 percent.

In contrast to the case of the Vice-President, for Ordinary Members of the Executive Committee in the earlier period, the rate of winning elections is inversely related to the share of nominations among the tiers, with the First Tier’s rate at less than 50 percent. Within the First Tier, Harvard has the highest success rate, while Stanford (with no wins) has the lowest. In the later period, the rate of winning increases for every First Tier institution and falls sharply for both the Second and Third Tiers, which come in with less than 40 percent wins. The biggest gainer is Stanford. Every First Tier university has at least a 50 percent rate of winning. Chicago stands at the head of the table with a 75 percent win rate.

5.A.4. *The Electoral Pool Disaggregated: Employment*

As we have already seen in our examination of the Electoral Pool in aggregate, when looked at through the lens of *Employment*, the distribution of leadership is more diversified across universities than it appears when looked at through the lens of *Education*. Nevertheless, a small number of universities dominates the Electoral Pool even when seen through *Employment*. (See Appendix Table A.3. for data disaggregated by office.)

Despite greater diversity, the patterns of increasing dominance by the First Tier between the two subperiods and for each position are still evident through the lens of *Employment*.

Once again, Table 9 aggregates the competitive positions by *Employment* to determine the number of nominations for Vice-President and Ordinary Member of the Executive Committee by institution. The broad pattern seen in earlier tables is also displayed here.

Table 9 Nominations to Selected Positions in the Electoral Pool by *Employment*

1950-1984				1985-2019		
	number	share (percent)	winning rate (percent)	number	share (percent)	winning rate (percent)
Vice-President	141			141		
Harvard	16	11.3	62.5	19	13.5	42.1
Stanford	4	2.8	50.0	12	8.5	58.3
MIT	6	4.3	83.3	10	7.1	80.0
Chicago	10	7.1	30.0	9	6.4	77.7
Princeton	10	7.1	50.0	15	10.6	46.7
First Tier (rank 1-5)	46	32.6	54.3	65	46.1	56.9
Second Tier (rank 6-15)	49	34.8	55.1	42	29.8	45.2
Third Tier (rank 16-136)	46	32.6	39.1	34	24.1	41.2
Ordinary Members of Executive Committee	140			140		
Harvard	11	7.9	45.4	11	7.9	36.4
Stanford	8	5.7	37.5	16	11.4	50.0
MIT	11	7.9	45.4	16	11.4	62.5
Chicago	9	6.4	66.7	9	6.4	55.6
Princeton	2	1.4	100.0	8	5.7	75.0
First Tier (rank 1-5)	41	29.3	53.6	60	42.9	55.0
Second Tier (rank 6-15)	40	28.6	57.5	47	33.6	48.9
Third Tier (rank 16-136)	59	42.1	42.4	33	23.6	42.4

Note: Shares are number of positions held as a fraction of the possible number of positions in the Electoral Pool during the relevant period.

Harvard receives the largest number of nominations for Vice-President (11.3 percent, with a 62.5 percent of winning) with Chicago and Princeton tied for second with 7.1 percent of the nominations each. Princeton was the more successful with 50 percent winning rate than Chicago with a 30 percent rate. In the second period, Harvard's share of nominations rose to 13.5 percent, while its winning rate fell to 42.1 percent; and Stanford took over second place with 8.5 percent nominations, with a 58.3 percent winning rate.

For Ordinary Member in the earlier period Harvard and MIT tied for first place for nominations, each receiving 7.9 percent of nominations and each with 45.4 percent winning rate. While Harvard maintained its share of nominations in the second period, MIT and Stanford tied for the top place with 11.4 percent of the nominations. Princeton had the highest rate of winning (100 percent), and Stanford the lowest (37.5 percent). The overall share of the First Tier rose from a little less than one-third in the first period to over two-fifths in the second. The Second Tier also gained nominations, though by a much smaller amount, while the Third Tier dropped from more than two-fifths of the nominations in the first period to less than a quarter in the second. The rate of winning rose for the First Tier, fell for the Second, and remained flat for the third.

Overall, the dominance of the First Tier is less pronounced than with *Education*, but it nonetheless clearly rises over time.

Shifting focus to women specifically, Table 4 for the whole sample (1950-2019), for women the rate of winning elections for Vice-President is 68 percent and for Ordinary Member of the Executive Committee, 84 percent. For comparison, Table 8 and 9 report that rates of winning for the First Tier for both Vice-President and Ordinary Member (which include men and women) were in the mid-50 percent range. It would appear then for the competitive offices,

women are not only nominated in a higher proportion than their share in the profession, they also win more frequently.¹³

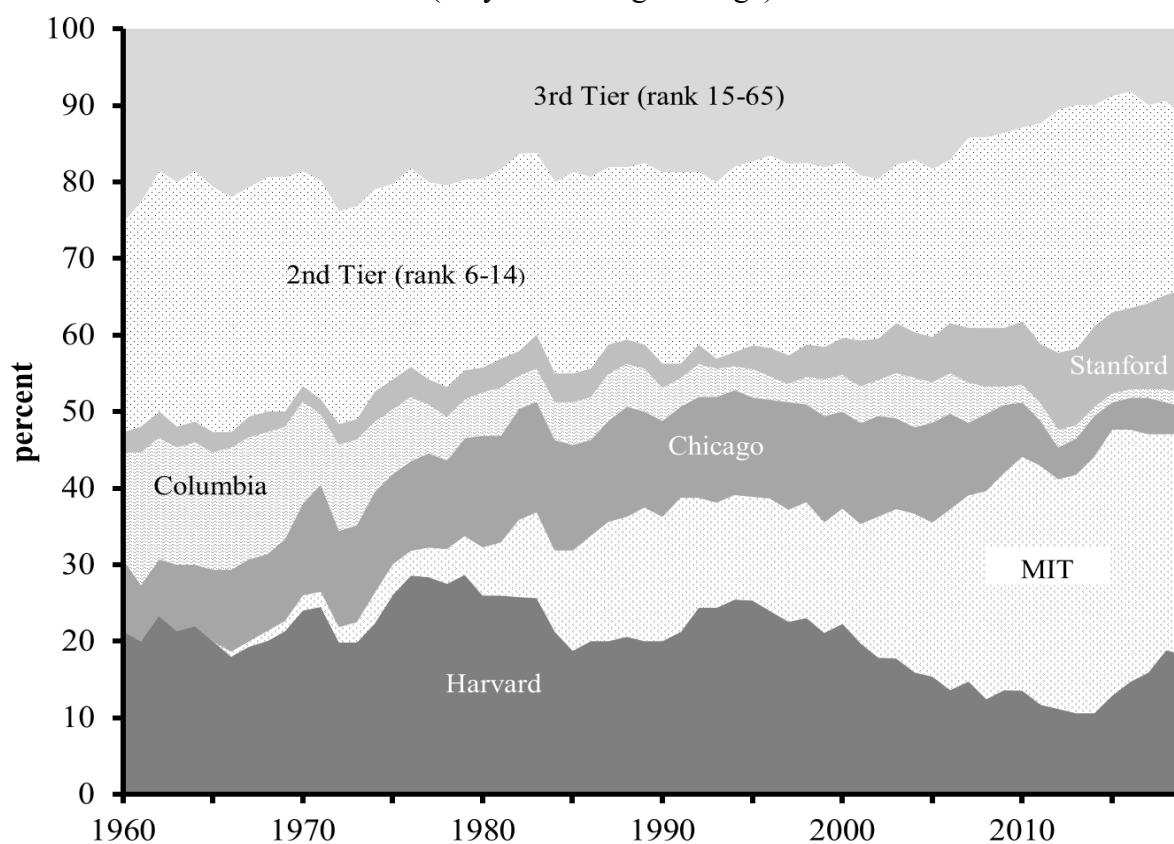
5.B KINEMATICS

Both the increasing dominance of the First Tier universities and the shifts in their relative positions can be displayed more dramatically graphically. Figure 4 breaks down the First Tier by *Education* into its component institutions and plots 10-year moving averages of their shares in the Electoral Pool alongside those from the Second and Third Tiers (compare to data in Table 5). Looked at broadly the story is one of an insurgent First Tier (rising from 48.7 percent of the positions in the decade ending in 1960 to 65.9 percent in the decade ending in 2019). The rise of the First Tier came mainly at the expense of the Third Tier, whose share fell by more than half (26.0 percent in the decade ending in 1960 to 11.8 percent in the last decade of the sample); while during the same period, the Second Tier fell only half a point (from 25.3 to 22.4 percent).

The First Tier itself was also significantly reshaped. The rise of MIT may be the most striking aspect of Figure 4. It is not too surprising that MIT does not even appear in the Electoral Pool until 1966. Lawrence Klein, who graduated in 1944, was its first Ph.D. in economics, and a

¹³ An earlier study of Donald and Hamermesh (2006) confirms the result that women win AEA elections at a rate higher than their rate of nomination. They consider this finding as a *prima facie* case of reverse discrimination by the voters, based on the fact that being female remains a positive factor in winning elections conditional on other characteristics. While reverse discrimination by the voters themselves is one interpretation – and ultimately the one that they believe to be best supported – Donald and Hamermesh suggest a possible rationalization: Voters may be motivated by unobserved (to the econometrician) characteristics of the female candidates, possibly including “organizational ability, willingness to accomplish tasks on time, and ability to interact productively with colleagues in reaching decisions. . . (p. 1289) If these characteristics are more often found in female candidates, their higher success rate would be explained. Donald and Hamermesh (p. 1284) note that all but the last of their conditioning variables (having held a high government position, top-5 university affiliation, race, subdisciplinary field, future Nobel-Prize winner) are information readily available to voters (directly or by reliable inference) from then information circulated to AEA members before each election. A problematic feature of their “rational” explanation is that it relies on information that, for individual candidates, is likely to be unobservable, not just to the econometrician, but to most AEA members as well. The membership would, then, have to be motivated by presumed group characteristics of women versus men. And perhaps they are; but no evidence is presented on that point.

Figure 4
Shares of Electoral Pool by *Education*
(10-year Moving Average)

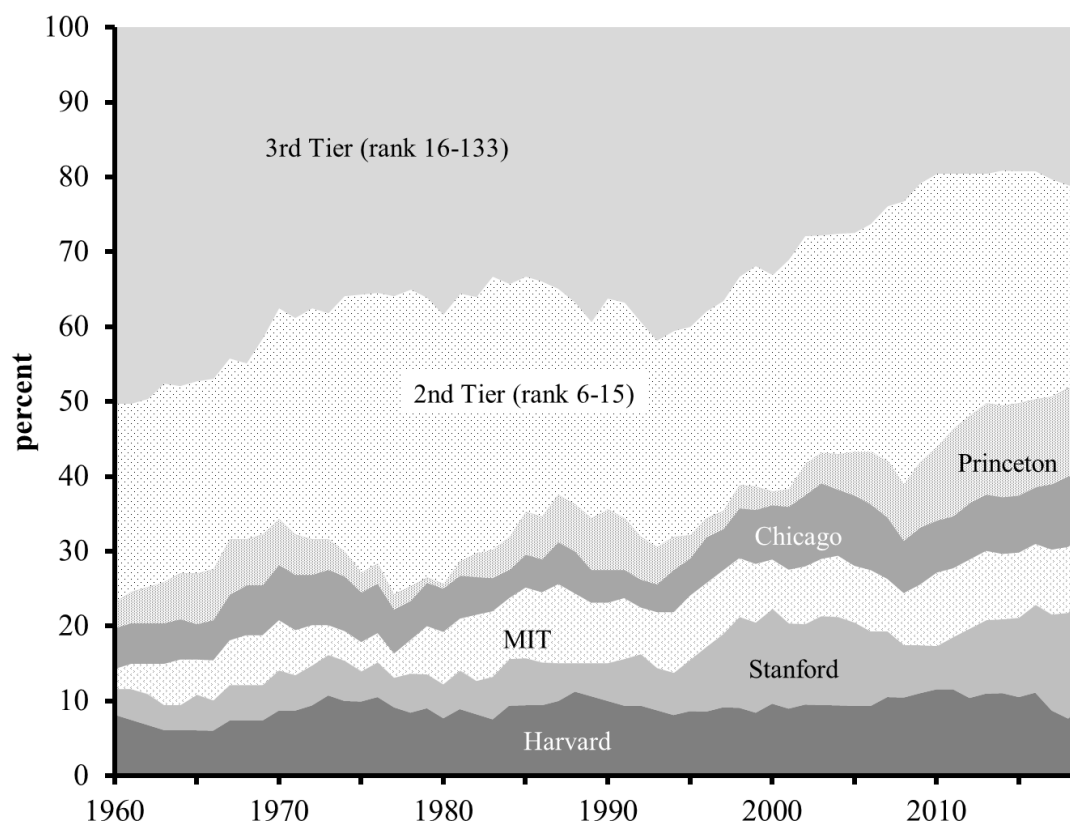


two decade lag between doctorate and first appearance in the Electoral Pool is typical (Svorenčik, 2014). But after that MIT explodes, supplanting Harvard as the top ranked. Harvard had taken 24 percent of the positions in the decade ending in 1960; its highpoint was the 1970s (28.7 percent in the decade ending in 1979), and by the last decade of the sample it had fallen to 18.2 percent. In contrast, MIT had risen to 28.8 percent. Columbia and Stanford more or less swapped places: Columbia, which had been about 12 percent of the positions in the 1950s fell to less than 2 percent in the last decade in the sample; while Stanford rose from about 2 percent to 13 percent over the same period. Chicago (10.7 percent for the 1950s) rose to nearly 15 percent at its peak in 1980, only to fall back to less than 4 percent in the last decade of the sample.

Figure 5 looks at the data on the basis of *Employment*. The generally lower numbers for the First Tier universities confirms the impression based on earlier tables that the places of employment of the Electoral Pool are more dispersed than the places of education. Nonetheless, Figure 5 tells a broadly similar story to Figure 4. The First Tier, which had held a little more than a fifth of the places in the 1950s, occupied more than half in the last decade of the sample. The entire gain came at the expense of the Third Tier: its share dropped from 50.3 percent in the decade ending in 1960 to 21.8 percent in the decade ending in 2019. The Second Tier, despite some fluctuations in between, took a little over a quarter of the positions in each of the decades at the beginning and the end of the sample.

In contrast with *Education*, Figure 5 shows that every member of the First Tier gained share with respect to *Employment* over the whole sample. The biggest gainer was Stanford, which gained nearly 12 points over the whole period. The relative positions of the universities in the First Tier changed markedly. The rank order for the decade ending in 1960 was Harvard in first place, followed by Chicago, Stanford and Princeton, tied for third, and MIT last. For the

Figure 5
Shares of Electoral Pool by *Employment*
(10-year Moving Average)

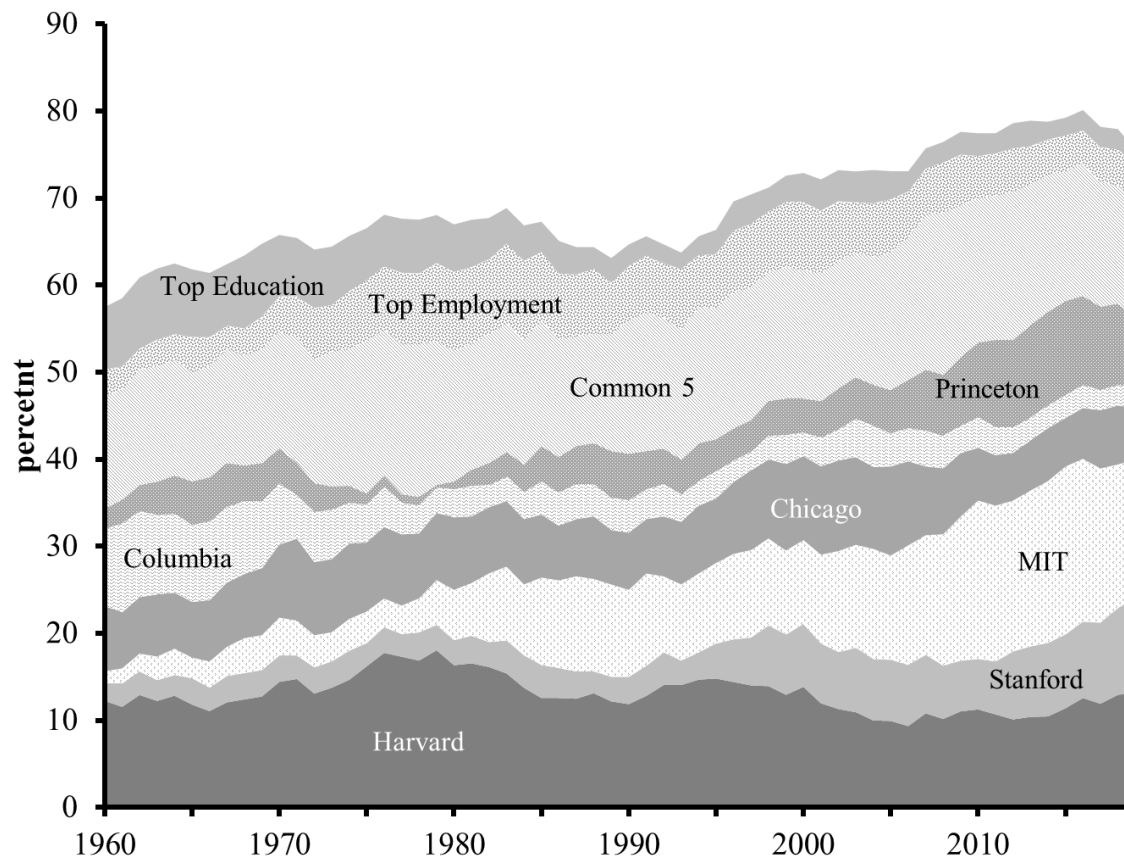


decade ending in 2019, the rank order was Stanford in first place, followed by Princeton, Chicago, Harvard, and MIT.

To see the overall significance of the individual universities, Figure 6 combines the information in Figures 4 and 5. Because the different tiers are not identical between *Education* and *Employment*, the data has been re-categorized (see Table 4). The six universities that appear in *either* the First Tier for *Education or Employment* are now referred to as the *Top 6*; the five universities that appear in the Second Tier for *both Education and Employment* are referred to as the *Common 5*; while those that appear in only one list are referred to as *Other Second Tier: Top Education* and *Other Second Tier: Top Employment* or, more simply, *Top Education* and *Top Employment*; and the remainder of the universities, combining both Third Tier lists, form the Third Tier for this and some later analyses. Top 6 universities rose steadily over the whole period from just over one-third of the positions to just short of three-fifths. This gain was mostly at the expense of the Third Tier, which fell by half from 50.3 percent in the decade ending in 1960 to 21.8 percent at the end of the sample. The Common 5 held more or less steady. While the combined Top Education and Top Employment fell a little over the sample, their relative position flipped with a nearly two to one advantage for Top Education over Top Employment at the beginning of the sample and for Top Employment over Top Education at the end of the sample.

A natural point of comparison between the data presented in the tables and figures so far would be to the pool of available candidates. Especially early in the first period, the number of Ph.D. programs was small and the institutions in the First and Second Tiers were relatively more significant producers of doctoral degrees in economics. Consistent data for production of economics Ph.D.s in the United States is available only from 1958 (Figure 3). These data show

Figure 6
Shares of Electoral Pool by *Education or Employment* by Institution
(10-year Moving Average)



Note: counts by institution; individuals educated and employed at different institutions in the top two tiers may appear twice and the complement of the data reported here is individuals who were both educated *and* employed in the Third Tier.

that the path of available Ph.D.s moves in the opposite direction to the concentration of the Electoral Pool. In 1958, the Top 6 produced nearly a quarter of the Ph.D.s in economics in the United States, with Second Tier producing a nearly identical share, and the Third Tier producing just under half. As the number of doctoral programs grew, the share of the Third Tier grew to more than 70 percent in 2017 (the last year for which data are available). During the whole period, the share of the Top 6 fell from 24.5 to 12.5 percent, and the share of the Second Tier fell from 26.5 percent to 16.2 percent.

A similar analysis to Figures 4 and 5, which not reported here, includes only leadership or extended leadership does not change the overall outcomes.

6. Accounting for the Hierarchy

Two broad patterns emerge clearly from the data. First, the leadership of the AEA is drawn largely from a small group of institutions: whether seen through the lens of *Employment* or through the lens of *Education*, where AEA members work and where they receive their professional education are strongly associated with their likelihood of becoming part of the leadership or the electoral pool of the association. Second, the dominant institutions have become more concentrated over time. What accounts for the substantial and increasing dominance of such a small number of institutions?

Two types of explanation come readily to mind. First, quality of candidates for the Electoral Pool is, for reasons unrelated to the AEA, distributed unevenly across institutions, so that it is natural that membership in the Electoral Pool should be similarly unevenly distributed. Second, the distribution reflects self-maintaining insider network that favors a narrow group of

institutions independently of the quality of the candidates. These are not mutually exclusive explanations, and they are difficult to distinguish empirically. Although it is not decisive, some evidence can be brought to bear on these explanations.

Status among economists is most often associated with research success, reflected in publications in top journals, citations, and other markers of academic merit. For various historical, institutional, and financial reasons, economics departments in some institutions are stronger on these measures of merit than others. If economists are nominated for positions in the AEA leadership on the basis of such academic merit, would naturally expect that membership in the Electoral Pool would be distributed similarly to the distribution of academic merit. The similarity of departmental quality rankings with the categories employed in our analysis lends credibility to the notion of selection on intellectual or research merit: in one worldwide ranking of departments, the median rank of the Top 6 is 5th; of the Common 5, 11th; and of Other Third Tier universities, 26th (Tilburg 2019).¹⁴ The similarity of departmental rankings and the order of departments in AEA’s leadership does not explain why academic merit is unevenly distributed in the first place. And while it is not surprising that academic merit is unevenly distributed, it seems unlikely that it is as heavily skewed as the AEA leadership: is four fifths of all the academic talent really concentrated in just six just universities?

Although economists value academic merit, it not obvious that it is the characteristic most relevant to leadership of a society. Legislative ability or administrative skills are probably more important, although in an academic association these may not be completely independent of academic merit. Still, since economics departments typically concern themselves far more

¹⁴ The top-ranked university in our study is Harvard (1st) and the bottom ranked, Wisconsin (34th). All eighteen universities in the top two tiers are included among the top 34 universities in the ranking, and only four are included that do not appear either on the *Education* or *Employment* list. The Tilburg ranking does not include every university in our third tier and ranks only universities and not other institutions that employ economists.

with academic merit than with these skills, it seems even more unlikely that they are highly concentrated in a few institutions.

In contrast to either of these merit-based explanations, the concentration may arise from mechanisms that promote particularly well-situated institutions. The AEA Climate Survey (p. 29) suggests one such mechanism: “the feeling is that it is a ‘good old boys network’ that only lets in other boys.” The desire to promote one’s own kind is described as homophily, endogamy, in-group bias, or inbreeding. The case in which it consists in colleagues and people with the same educational background and professional affiliations, sometimes referred to as “the old school tie,” is widely acknowledged as sociological force in network formation (Collins 1998, McPherson et al 2001). And it has previously been noted among economists. Colander (2015) observed a high degree of inbreeding and low diversity in top departments judged by the institutions are which they were educated. Svorenčik (2018) observed that fifty-six out of ninety most prolific economics advisers at Harvard, MIT, and Chicago graduated from one of those institutions. Both results can be interpreted as best graduates stay or, at some point of their careers, return to their graduate institution.

A commentator on an earlier version of this paper interpreted us to be suggesting group loyalty had trumped merit and suggested an alternative explanation. The commentator argued that one should not regard leadership positions in the AEA as personal rewards to the incumbents. Instead, office-holders should be seen as people who gain few personal benefits and act out of a sense of duty and public-spiritedness to fill onerous, but necessary, jobs to advance the interests of the economics profession. With that in mind, the question that the Nominating Committee faces is simply, who will do the job well? The committee members’ information is limited and is much better for people whom they knew as students or know as colleagues, which

leads them to prefer scholars from similar background to themselves. Nominations thus reflect the best choices given available information.

6.A THE MATTHEW EFFECT

It is instructive to plot the shares of the different institutions against their rank, as is done for *Education* in Figure 7 and *Employment* in Figure 8. In both cases the shares fall rapidly, though at a decreasing rate, as rank increases. Such data are often modeled using negative exponential curves, frequently referred to Zipf’s law, belonging to a family of *power law distributions*, which takes the form: $share = \alpha(rank)^{-\beta}$, where α and β are parameters. Curves of this form fit the data in Figures 7 and 8 fairly well.

Power laws arise frequently in both natural and social data (Gabaix 2016). One mechanism that may generate a power law distribution could be relevant to the case of the AEA leadership. Power laws naturally arise in social settings that display *preferential attachment*, a dynamic process in which new increments of a quantity or a good accrue in proportion to how much one currently possesses (Barabási and Albert 1999).

Preferential attachment is not merely a bias toward certain people or institutions grounded in some characteristics, such as merit or a favored institution. Rather, it is a dynamic bias in which the probability of attachment increases endogenously. The sociologist, Robert K. Merton (1968) in discussing the distribution of scientific credit coined the term “Matthew Effect” — named for the passage in the *New Testament’s Book of Matthew* (13:12), “For whosoever hath, to him shall be given, and he shall have more abundance: but whosoever hath not, from him shall be taken away even that he hath.” The appearance of a power law distribution of AEA leadership positions might suggest a network in which the presence of

Figure 7
Zipf's Law for Electoral Pool by *Education*, 1950-2019

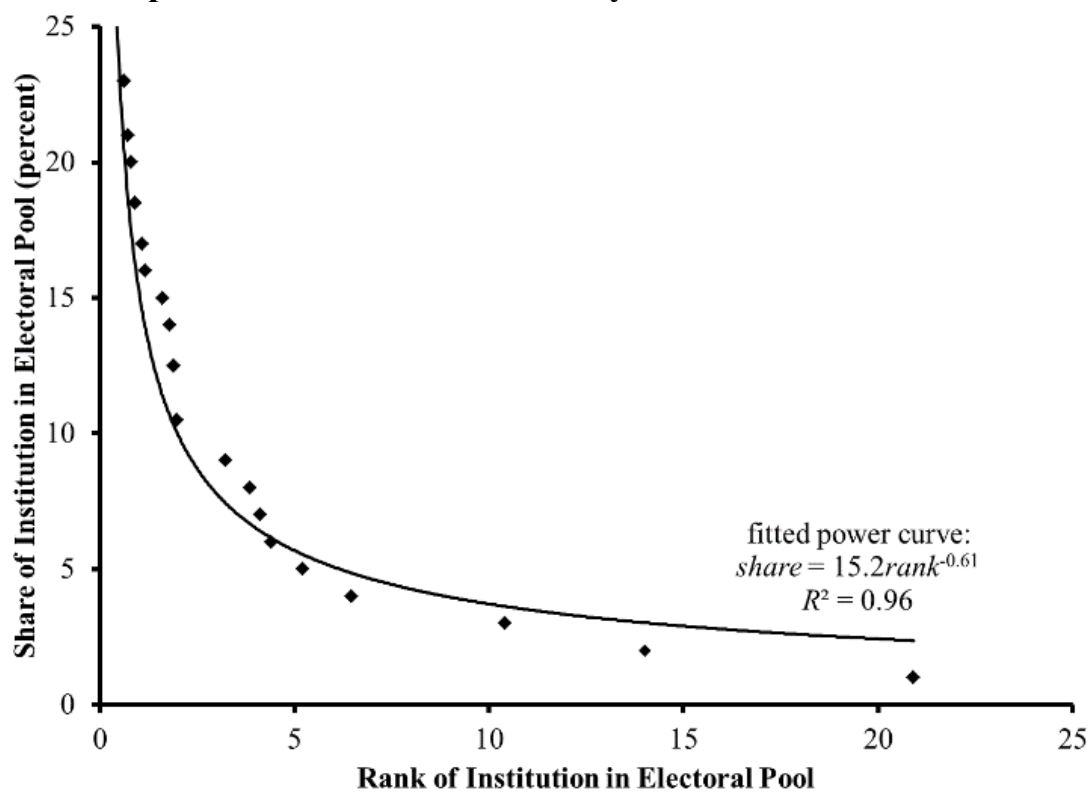
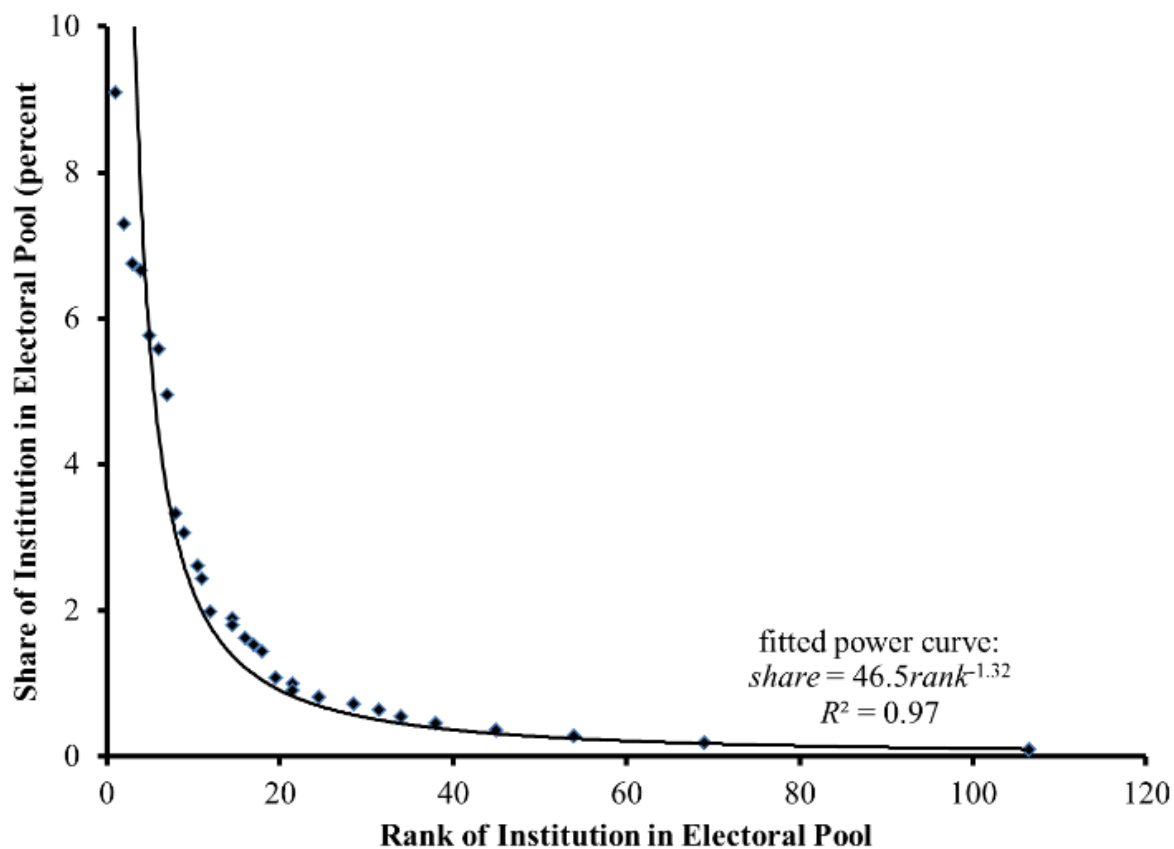


Figure 8
Zipf's Law for Electoral Pool by *Employment*, 1950-2019



incumbents associated with particular institutions renders it increasingly likely that nomination to the Electoral Pool will be drawn from those same institutions. Networks of preferential attachment would explain, on the one hand, the increasing dominance of particular institutions and, on the other hand, levels of institutional dominance that seem to exceed what might reasonably be attributed to an independently uneven distribution of merit – either academic or administrative.

To illustrate, consider the suggestion of our commentator that members of the Nominating Committee look for people with a good ability to run AEA, but have better information colleagues and former students than about the wider profession. Any initial lack of balance in the Electoral Pool is likely to develop in a path-dependent fashion over time. The dominant institutions identified in the top two tiers of the Electoral Pool are typically ones whose Ph.D. programs were already well-established long before the 1950 starting point of our study. Even MIT, which was a young program in 1950, was in some sense born well connected to other institutions in the Top 6. One puzzle in this account, however, is the somewhat radically shifting fortunes of the individual member institutions. Why, for example, does the role of Columbia in the AEA leadership collapse and that of Chicago become squeezed between the beginning and end of the sample, both to be replaced by Stanford, Princeton, and above all, MIT (see Figures 4 and 5 and, especially, Figure 6)?

Discriminating among explanations for the substantial and increasing dominance of a small group of institutions in the AEA leadership is complicated by the fact that the explanations are not necessarily mutually exclusive and that the observed facts may not provide adequate information to prefer one over the other. We might, for instance, look to standard measures of quality — citations, number of publications in top journals, and so forth — to check whether

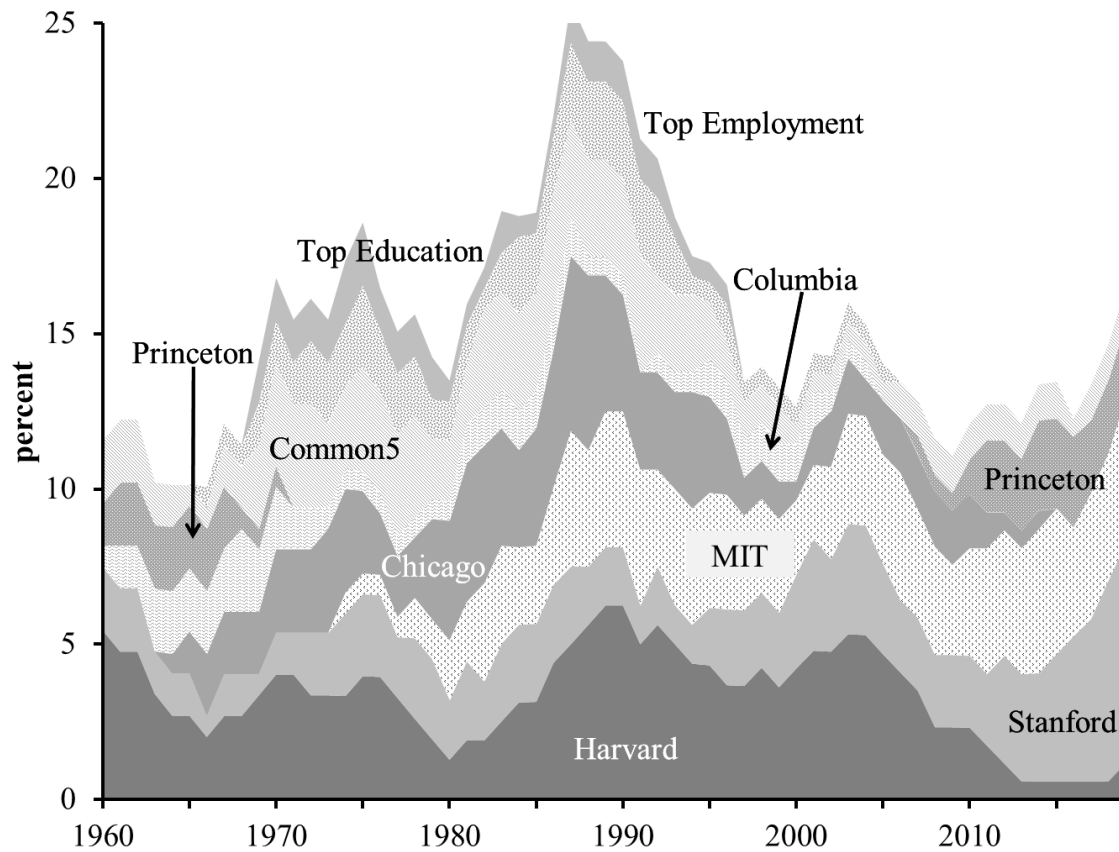
dominance tracks academic merit. A little reflection, however, suggests that the potential for institutional loyalty on the part of editors might well give yet another example of the Matthew Effect. There is, in fact, a substantial body of evidence on this proclivity (Laband and Piette 1994, Hodgson and Rothman 1999, Brogaard et al 2014, Colussi 2018, Heckman and Moktan 2020).¹⁵ More subtle information is needed, measures of merit that are independent of the competing explanations of the institutional distribution of the Electoral Pool. While we will consider some evidence, it is well to be clear from the outset that it will be at best suggestive and not decisive.

6.B STRONG INSTITUTIONAL PREFERENCE

Is there evidence for preferential attachment beyond merit — academic or administrative? The most pronounced preference for economists associated with a particular university is displayed in cases in which positions in the Electoral Pool go to people both educated and employed at the same institution. Figure 9 shows that such cases constitute a non-trivial component of the Electoral Pool. In the decade ending in 1960, the economists in the top two tiers who were educated and employed in the same university accounted for 11.6 percent of all positions. Their share rose until peaking in the decade ending in 1987; but it fell back, to that by the end of the sample it was only 16.5 percent. Figure 9 shows that Chicago no longer displays this pattern and that it has nearly vanished from Harvard as well. In contrast, it is now much more pronounced at Stanford (7.1 percent in the decade ending in 2019; i.e., 43 percent of the total cases for that

¹⁵ Laband and Piette (1994) document that authors connected to editors of journals are more likely to be published in those journals, and that their articles typically generate more citations. Similarly, Brogaard, Engelberg, and Parsons (2014) find that authors are substantially more likely to publish in a journal during periods when a colleague is editor compared to other periods and, again, that these articles generate higher levels of citations than those of unconnected authors.

Figure 9
Shares of Electoral Pool by *Education and Employment* at the Same Institution
(10-year Moving Average)



decade), MIT (4.7 percent or 28 percent of the total), and Princeton (2.4 percent or 14 percent of the total).

6.C INDIVIDUALS OR INSTITUTIONS?

Whatever counts as merit, it is likely to be distributed widely but unevenly. If nomination or election to AEA offices were based entirely on merit, it would not be surprising to find a higher share of members of the Electoral Pool in more prestigious institutions; but, conditional on equal merit, we would expect the same probability of selection. If candidates at lesser institutions are less likely to be selected (or, equivalently, must display higher merit to be selected), then institutions matter independently of merit. Of course, institutions may matter for different reasons. One possibility is that the Nominating Committee simply displays a preference for particular institutional affiliations.

6.C.1. *Renomination*

Across the whole sample, the average number of positions held by distinct individuals in the Electoral Pool is around two. Thus, once chosen for a position, it is likely that a member will also be chosen again for other positions. If merit alone matters, then, conditional on having been chosen for a first position, there would be no a priori reason to assume that the average number of positions held by an individual would be higher for people affiliated with one institution or another. And, indeed, this is close to what we see for the 1950-1984 period when viewed through the lens of *Education*. The last column of Table 10 shows the number of positions per individual within each period. The variation among the analytical categories is relatively small, though Other Second Tier universities have the highest number (2.0 versus 1.7).

Table 10
Distribution of Positions in the Electoral Pool Among
Institutional Groups and Individuals by *Education*

1950-1984					
	Positions	Share of all positions (percent)	Distinct individuals	Share of all individuals (percent)	Positions per distinct individual in period
Top 6	292	54.5	178	56.0	1.6
Common 5	68	12.7	40	12.6	1.7
Other Second Tier	61	11.4	30	9.4	2.0
Third Tier	115	21.5	70	22.0	1.6
Total/Average	536	100.0	318	100.0	1.7
1985-2019					
Top 6	400	68.1	209	65.9	1.9
Common 5	81	13.8	51	16.1	1.6
Other Second Tier	20	3.4	8	2.5	2.5
Third Tier	86	14.7	49	15.5	1.8
Total/Average	587	100.0	317	100.0	1.9

There is somewhat more variation in positions per distinct individual in the 1985-2019 period. Even though the Nominating Committee chose fewer members from the Other Second Tier, once having identified them, they used them more intensely. This could be consistent with the view that the driving force of preferential attachment is informational: the Nominating Committee has worse information about randomly chosen members outside their circle; but, after a first appointment, the information becomes substantially better, strengthening the preference for that member, although not for that category in general. There is no evidence that a similar mechanism is at work in the Third Tier, which casts some doubts on its salience.

Looked at through the lens of *Employment*, the patterns of positions per distinct member, clearly do not conform to the idea that merit is individual and independent of institution. The last two columns of Table 11, show that when grouped by place of employment, positions per distinct member fall monotonically in both periods from the Top 6 to the lower tiers. Where one works seems to continue to matter for subsequent positions, even once a member has joined the Electoral Pool.

6.C.2. *Evidence of Academic Age*

To shed further light on the significance of individuals versus institutions, consider *academic age*, measured as the number of years since an individual received his or her highest degree (typically a doctorate). Leadership naturally is held by economist with an established standing in the profession, which will be positively correlated with academic age. Computing academic age for each position in the Electoral Pool (counting both winning and losing candidates for contested positions), we see a clear age hierarchy (Table 12): the rank order from oldest to

Table 11
Distribution of Positions in the Electoral Pool Among
Institutional Groups and Individuals by *Employment*

1950-1984					
	Positions	Share of all positions (percent)	Distinct individuals	Share of all individuals (percent)	Positions per distinct individual in period
Top 6	168	31.3	87	26.2	1.9
Common 5	89	16.6	50	15.1	1.8
Other Second Tier	59	11.0	37	11.1	1.6
Third Tier	220	41.0	158	47.6	1.4
Total/Average	536	100.0	332	100.0	1.6
1985-2019					
Top 6	266	45.2	123	36.6	2.2
Common 5	106	18.0	59	17.6	1.8
Other Second Tier	52	8.8	31	9.2	1.7
Third Tier	164	27.9	123	36.6	1.3
Total/Average	588	100.0	336	100.0	1.7

Table 12
Academic Age by Position in the Electoral Pool, 1950-2019

Office	Number	Academic Age
Chair of Nominating Committee	70	37.1
President	70	36.5
Vice-President¹	280	28.0
Member of the Nominating Committee	422	22.4
Ordinary Member of the Executive¹	280	20.2

¹Counts both winning and losing candidates for contested positions.

If merit alone is the main driver of the substantial and increasing concentration of positions in the Electoral Pool, then, conditional on being meritorious, we would expect academic age to be the same on average regardless of institution. In contrast, if institutions matter independently of individual merit, then we would expect individuals selected from less prestigious institutions to have a higher academic age, having to collect higher professional merit to offset the institutional bias. A difference would suggest another basis for the preferential attachment, such as information or institutional loyalty.

Looked at through the lens of *Education* (upper panel of Table 13), there is a clear pattern of average academic age at the time of first taking a position in the Electoral Pool rising in both the earlier and later periods as we move from the Top 6 to the lower tiers. In the 1950-1984 period, the average age of the first leadership position is 3.1 years younger for the Top 6 than for the Third Tier. The only exception to the pattern is the Other Second Tier in 1985-2019 period, which at 19.3 years is well below both the Top 6 (22 years) and the Third Tier (25.7 years). Note, however, that there are only four individuals in the Other Second Tier, so this might be an artifact of an average over small numbers.

The pattern when looked at through the lens of *Employment* is more mixed (lower panel of Table 13). In the 1950-1984 period, the pattern is completely reversed, with age tending to decrease as we move to lower tiers: the average age for the Top 6 is 1.6 years higher than that of the Third Tier. The Third Tier, however, is 1.2 higher than the Other Second Tier. In the 1985-2019 period the first three groups show the pattern of increasing academic age, just as we saw when viewed through *Education*. The Common 5 is nearly equal to the Other Second Tier and takes one year longer, while the Third Tier takes 3.5 years longer than the Top 6.

Table 13
Average Academic Age to First Leadership Position

<i>Education</i>									
1950-1984				1985-2019			1950-2019		
Institutional Group	Number	Share (percent)	Academic Age	Number	Share (percent)	Academic Age	Number	Share (percent)	Academic Age
Top 6	178	56.2	18.7	171	66.8	22.0	349	60.9	20.3
Common 5	39	12.3	20.6	44	17.2	25.0	83	14.5	22.9
Other Second Tier	30	9.5	20.6	4	1.6	19.3	34	5.9	20.4
Third Tier	70	22.1	21.8	37	14.5	25.7	107	18.7	23.1
Total/Average	317	100.0	19.8	256	100.0	23.0	573	100.0	21.2

<i>Employment</i>									
1950-1984				1985-2019			1950-2019		
Institutional Group	Number	Share (percent)	Academic Age	Number	Share (percent)	Academic Age	Number	Share (percent)	Academic Age
Top 6	81	25.6	21.0	96	37.5	21.5	177	30.9	21.2
Common 5	50	15.8	20.3	46	18.0	22.5	96	16.8	21.4
Other Second Tier	33	10.4	18.2	22	8.6	22.3	55	9.6	19.8
Third Tier	153	48.3	19.4	92	35.9	25.0	245	42.8	21.5
Total/Average	317	100.0	19.8	256	100.0	23.0	573	100.0	21.2

Overall, while the evidence of renomination and academic age is not univocal, on balance it suggests that factors other than pure merit matter. The lack of perfect clarity should not be surprising; the data are, at best, imperfect measures that capture multiple influences. Beyond that, to the degree that merit does guide the nomination process, these measures are not well suited to identifying its sources – ability to do the job, academic excellence, or some other criterion. To shed light on that question, we must turn to other information.

6.D ACADEMIC MERIT OR IN-GROUP?

6.D.1. *Presidents*

Of all of the AEA leadership positions, the office of President is the one that is most clearly a recognition of academic excellence. It is the office in which the achievements of the officeholder are publicly celebrated. One of the President’s main duties is to deliver an address at the annual AEA meetings, which is invariably a reflection of the research for which he or she is known.¹⁶ Holders of the presidential office are well-known in the profession, so that it is unlikely that the informational explanation of preferential attachment applies in their cases. It may, therefore, be instructive to look at academic age with respect to the different institutional groupings of the presidents separately from other members of the Electoral Pool. The evidential logic is the same as in the two preceding cases: if merit alone is the basis for nomination to the presidency, then, conditional on having been selected, academic age should be independent of institution; while if institutions matter, academic age should be higher for candidates in lower

¹⁶ Of 123 presidents of the AEA only four have been women: three within our sample period (Alice Rivlin, Anne Krueger, and Claudia Goldin) and one in 2020 (Janet Yellen in 2020). In addition, at the time of our writing, a fifth (Christina Romer) has been nominated as president-elect in the 2020 elections.

tiers, as it permits them a longer time to build the merit needed to offset their institutional disadvantage.¹⁷

Because the total number of presidents is small in each of our subperiods (35), Table 14 groups all Second Tier Institutions (Common 5 + Other Second Tier) into a single group. Looking first at the academic age of presidents by *Education*, for the 1950-84 period, there is a clear pattern of increasing age as we move toward the lower tiers: the gap between the Top 6 and the Second Tier is 4.0 years and between the Top 6 and the Third Tier 7.1 years. The pattern is mixed in the 1985-2019 period, increasing by 0.8 years between the Top 6 and the Second Tier, but decreasing by 1.8 years between the Top 6 and the Third Tier. Note, however, that in the earlier period, the Top 6 took less than half of the total presidential positions; while, in the later period, it took more than two-thirds. In the later period, only 4 presidents were tapped from the Second Tier.

Turning to *Employment*, the pattern for both periods is for the Second Tier to display a slightly higher academic age than the Top 6 (by 1.0 years in the first period and 1.4 in the second); while the Third Tier is lower than the Top 6 (by 1.4 years in the first period and 1.1 in the second). Note, however, that only five presidents are drawn from the Third Tier in each period.

There is no clear pattern for either *Education* or *Employment of Presidents* suggesting that merit is trumped by institutional preference. The evidence thus pushes in a different

¹⁷ Diamond and Toth (2007) provide an econometric study of the determinants of nominations for AEA presidents for the decade of the 1950s only. They conclude that there is “some evidence against the belief in the importance of an ‘old-boy’ network” (p. 135). The absence of evidence is not the evidence of absence. Their data cover only members of the Executive Committee; thus, asking only whether there is a club within a club, not whether the Executive is already an exclusive group. And given the small numbers (10 presidents + 45 other members), their test has very lower power against the alternative that being educated at the “Top 3” (defined as Harvard, Columbia, Chicago) raises a member’s chance of being nominated.

Table 14
Academic Age to Presidential Election

<i>Education</i>									
	1950-1984			1985-2019			1950-2019		
Institutional Group	Number	Share (percent)	Academic Age	Number	Share (percent)	Academic Age	Number	Share (percent)	Academic Age
Top 6	16	45.7	29.8	24	68.6	40.5	40	57.1	36.2
Second Tier	10	28.6	33.8	4	11.5	41.3	14	20.0	35.9
Third Tier	9	25.7	36.9	7	20.0	38.7	16	22.9	37.7
Grand Total	35	100.0	32.7	35	100.0	40.3	70	100.0	36.5

<i>Employment</i>									
	1950-1984			1985-2019			1950-2019		
Institutional Group	Number	Share (percent)	Academic Age	Number	Share (percent)	Academic Age	Number	Share (percent)	Academic Age
Top 6	19	54.3	32.6	22	62.9	40.1	41	58.6	36.6
Second Tier	11	31.5	33.6	8	22.9	41.5	19	27.2	37.0
Third Tier	5	14.3	31.2	5	14.3	39.0	10	14.3	35.1
Grand Total	35	100.0	32.7	35	100.0	40.3	70	100.0	36.5

direction than that of renomination and academic age (previous section) in the Electoral Pool generally, and it is possible that the mechanisms are not the same for presidents as they are for competitive AEA offices.

6.D.2. *Nobel Laureates*

The Nobel Prizes in Economics may give us evidence of academic merit that is less likely to be mixed with other considerations and, therefore, of more use in sorting out the question of whether preferential attachment is driven by other factors. If we assume that the prize is more driven by merit than institutional position — which is not to say that the Matthew Effect is not in play, but only that it adheres to the individual and not to the institution — then we might be able to separate academic merit from other sources of merit.¹⁸ And it is unlikely, in the case that academic merit is dominant, that informational issues explain the distribution of Nobel laureates in the AEA leadership: Nobel laureates are generally well-known and highly regarded long before they receive their prize.

One possible issue is that the Nobel Prize in Economics was first awarded in 1969, more than half way into the first period. This lack of overlap is mitigated somewhat by the fact that most, if not all, the Nobel laureates of the first period had already established their careers by the beginning of the sample and well before they were considered for AEA leadership.

The relevant Nobel laureates are not ones who are necessarily Americans by birth or citizenship; rather they are the ones who at the time of their nomination to a position in the AEA leadership were employed at an American institution. There are 66 Nobel laureates who made

¹⁸ Of course, we cannot rule out that the Nobel Committee itself takes other factors than merit into account. Hamermesh and Schmidt (2003) study the determinants of elections of Fellows of the Econometric Society and conclude that “other characteristics [than quality of the candidates] do significantly predict election” (p. 399).

careers wholly or largely at American institutions (Table 15) out of 81 laureates minted during our sample period. Nearly two thirds took part in the AEA leadership in the sense of showing up in the Electoral Pool. The Top 6 comprises a similar proportion of the laureates among both those taking part and those not taking part in AEA leadership when judged by *Education* (64.3 and 66.7 percent) or when judged by *Employment* (59.5 and 62.5 percent). While the dominance of the Top 6 is consistent with the academic quality of those institutions being in fact higher than the other tiers, such talent is clearly not restricted to the top. There are many fewer Nobel laureates in the Common 5, but they overwhelmingly took part in the AEA leadership (4 of 4 by *Education* and 9 of 10 by *Employment*). By *Education*, the categories Other Second Tier and Third Tier comprise 34.9 percent of the Nobel laureates; by *Employment*, 39.4 percent. And, as with the Top 6, around two-thirds, show up in the Electoral Pool under whether judged by *Education* or *Employment*.

Similarly to the evidence of academic age, Table 16 can be used to explore the idea that if institutional preference is a dominant consideration, those Nobel laureates — presumed to be similar in academic merit across the board — at lower tier institutions will be drawn into various stages of AEA leadership later than those in higher tier institutions. Again, we consider both the point of being tapped for the Electoral Pool for the first time and the point of ascending to the presidency. The reference point in Table 16 is not academic age; rather it is the number of years from the receipt of the Nobel Prize. The idea is that, if institutional preference dominates academic quality as a consideration in appointments, those Nobel laureates not connected to higher tier institutions would reach various stages of AEA leadership later (i.e., have a higher number of years from receipt of the Nobel Prize to AEA leadership) than those connected to higher tier institutions — perhaps not until after winning their Nobel Prize.

Table 15
Distribution of Nobel Prize Winners by Institutions

<i>Education</i>						
AEA		Non-AEA		All		
Institutional Group	Number	Share (percent)	Number	Share (percent)	Number	Share (percent)
Top 6	27	64.3	16	66.7	43	65.2
Common 5	4	9.5	0	0.0	4	6.1
Other	11	26.2	8	33.3	19	28.8
Total	42	100.0	22	100.0	66	100.0

<i>Employment</i>						
AEA		Non-AEA		All		
Institutional Group	Number	Share (percent)	Number	Share (percent)	Number	Share (percent)
Top 6	25	59.5	15	62.5	40	60.6
Common 5	9	21.4	1	4.2	10	15.2
Other	8	19.0	8	33.3	16	24.2
Total	42	100.0	24	100.0	66	100.0

Notes: AEA and Non-AEA refer to whether or not Nobel Prize winner ever held AEA any leadership position. Only US-based Nobelists are included. Only the period 1969-2019 is considered.

Sources: Authors' dataset and biographical information on non-AEA Nobel Prize winners.

Table 16
Years from Nobel Prize to Leadership Position

	<i>Education</i>					
	First Position			President		
Institutional Group	Number	Share (percent)	Years	Number	Share (percent)	Years
Top 6	27	64.3	-19.7	18	66.7	-21.9
Common 5	4	9.5	-18.0	1	3.7	-9.0
Other	11	26.2	-14.5	8	29.6	-15.4
Total/Average	42	100.0	-18.1	27	100.0	-19.5

	<i>Employment</i>					
	First Position			President		
Institutional Group	Number	Share (percent)	Years	Number	Share (percent)	Years
Top 6	25	59.5	-18.0	17	63.0	-20.3
Common 5	9	21.4	-17.7	8	29.6	-16.6
Other	8	19.0	-19.3	2	7.4	-24.0
Total/Average	42	100.0	-18.1	27	100.0	-19.5

Sources and Notes: see Table 15.

All the entries for years from Nobel Prize in Table 16 are negative, which indicates that virtually all those Nobel laureates who appeared in the Electoral Pool did so before receiving their prize. Start with the timing of first entering the Electoral Pool by *Education*. There is a clear pattern that, as we move from, the higher to the lower tiers, there is a shorter gap between entering the Electoral Pool and receiving the Nobel Prize. The gap between the Top 6 and the Common 5 is 1.7 years (but note that there are only four laureates in the Common 5). This pattern is consistent with preferential attachment to institutions being a significant factor. The pattern is different when judged by *Employment*. While the laureates in the Common 5 enter the Electoral Pool slightly later than those in the Top 6 (0.3 years), those in the Other lower tiers enter 1.3 years *earlier*. There is no clear evidence for preferential attachment to employing institutions.

About four out of five of the Nobel laureates who served in AEA leadership became presidents by the end of the sample. When looked at by *Education*, the laureates in the Top 6 were nominated for president substantially earlier: 12.9 years earlier compared to the Common 5 and 6.5 years compared to other tiers. (Note that there is only one laureate in the Common 5. If we aggregate all the laureates in non-Top 6 tiers, their average is 14.7 years or 7.2 later than the Top 6. Again, the evidence favors the hypothesis of preference to educational institution. When looked at by *Employment*, the story is equivocal in the same way as it when considering first-entry into the Electoral Pool. Laureates in the Common 5 on average are nominated for President 3.7 years *later* than those in the Top 6, which would count in favor of preferential attachment to employing institutions over merit; yet those in tiers below the Top 6 other than the Common 5 on average are nominated 3.7 years *earlier*, which runs against the hypothesis of

preferential attachment. Note, however, that there are only two presidents employed outside the Top 6 and Common 5, making it hard to rule out an idiosyncratic draw from such sparsely populated categories.

Again the evidence of the Nobel Prize winners is not univocal, but on balance it leans strongly toward the view that institutional preference – especially toward the institution where a winner was educated – plays a part beyond any considerations of intellectual merit.

6.E. THE STRUCTURE OF THE NETWORK

The balance of evidence so far favors that view that some degree of preferential attachment exacerbates the substantial and increasing concentration of a small group of institutions in the AEA leadership. Whether it is the product of pure loyalty to favored institutions or of informational constraints, there seems to be a network of insider institutions within the governing structures of the AEA. We have already identified particular dominant institutions. We now begin to investigate the structure of that network.

Table 17 cross-tabulates the distribution of positions in the Electoral Pool by *Education* and *Employment*. Each row shows the share of nominees or appointees in each *Employment* category falling into each *Education* category; each column shows the share for each *Education* category falling into each *Employment* category, at the time of their nomination or appointment. For example, in the 1950-1984 period, the second row, first column shows that 8.4 percent of the positions were held by people educated in Top 6 universities and employed in the Common 5. The *Education* total for the 1950-1985 period again shows the dominance of the Top 6 in *Education*. In contrast, the *Employment* totals show that, although the Top 6 is important as an employer, the employment affiliations of members of the Electoral Pool are more widely distributed. Still, if we consider the Top 6 and the Common 5 together, they dominate both

Table 17 Shares of Positions in the Electoral Pool

1950-1984					
<i>Education</i> (percent)					
<i>Employment</i>	Top 6	Common 5	Other Second Tier	Third Tier	<i>Employment Total</i>
Top 6	20.5	3.2	3.4	4.3	31.3
Common 5	8.4	2.8	2.2	3.2	16.6
Other Second Tier	5.0	1.3	0.6	4.1	11.0
Third Tier	20.5	5.4	5.2	9.9	41.0
Education Total	54.5	12.7	11.4	21.5	100.0

1985-2019					
<i>Education</i> (percent)					
<i>Employment</i>	Top 6	Common 5	Other Second Tier	Third Tier	<i>Employment Total</i>
Top 6	33.2	4.1	2.7	5.3	45.2
Common 5	11.4	3.6	0.5	2.6	18.0
Other Second Tier	5.6	1.9	0.0	1.4	8.8
Third Tier	17.9	4.3	0.2	5.6	27.9
Education Total	68.0	13.8	3.4	14.8	100.0

Notes: Data are percentage shares of the total positions in the Electoral Pool in each period cross-tabulating by *Education* and *Employment*

Education (67.5 percent) and *Employment* (47.8 percent) in the first period. And the upper left-hand four cells (darker shaded area) shows that more than one-third of all positions were held by economists both educated and employed in the Top 6 and Common 5. A wider block consisting of the upper left-hand nine cells (darker + lighter shaded areas) shows that economists both educated and employed in the First and Second Tiers together account for more than half of all the positions.¹⁹

To investigate the differential roles of *Education* and *Employment*, Tables 18 and 19 in effect disaggregate the data in Table 17, with the rows indicating place of employment and the columns place of education. The data have been arranged with the goal of placing more tightly connected institutions closer together (based informally on the overall strengths of their linkages). For the 1950-1984 period, the two shaded areas of Table 18 indicate two groups of universities that appear to be tightly interconnected within each group and much less tightly connected to universities outside the group. The upper left-hand block (darker shading), comprising Harvard, UC Berkeley, MIT, Yale, and Pennsylvania, accounts for 92 (or 49 percent) of the positions in the table. Within that block Harvard dominates as the place of education, taking 59 of the 92 positions (or 64 percent of the block total). The lower right-hand block (lighter shading), comprising Chicago, Columbia, and Stanford, contains both fewer universities and fewer positions (47 or 25 percent of the positions in the table). While tightly linked, unlike the Harvard-dominated block, no one institution dominates either *Education* or *Employment*.

¹⁹ Disaggregated data for various subsets of the electoral pool are presented in the Appendix (Table A.4). These show that the share of an inner core (Top 6-Top 6) is even larger than in the Electoral Pool as a whole and has increased substantially between the two periods. Similarly, Table A.4 shows that Chairs of the Nominating Committee are different from ordinary members of Nominating Committee.

Table 18
Education and Employment Affiliations of Members
of the Electoral Pool for Selected Institutions: 1950–1984

	Place of Education (number of positions)										
	Harvard	UC Berkeley	MIT	Yale	Pennsylvania	Chicago	Columbia	Stanford	Princeton	Michigan	Minnesota
Place of Employment											
Harvard	21	6	2			3	2			1	
UC Berkeley	13	3				4					
MIT	13		5	1			3				1
Yale	10		3				1			1	
Pennsylvania	2	1	4		8	1	1				
Chicago	5					11	6				1
Columbia University				2		5	6				
Stanford		4					8	11			
Princeton	3		1	1		1		1	3		
Michigan	3									2	
Minnesota	3										

Table 19
Education and Employment Affiliations of Members
of the Electoral Pool for Selected Institutions: 1985–2019

	Place of Education (number of positions)									
	MIT	Harvard	Chicago	Princeton	UC Berkeley	Stanford	Yale	Columbia	Michigan	Pennsylvania Minnesota
Place of Employment										
MIT	22	4	1			4	3	2		1
Harvard	15	18	8	2	1	2	3			1
Chicago	3	13	9	3					1	2
Princeton	9	13	2	5				1	1	
UC Berkeley	13	3		4	2	2	5			4
Stanford	10	5	2	3	1	20	8	2		
Yale	15	2		4	1	1	5			
Columbia	6	3		5		1	2	2		
Michigan	7	1	1				2		1	
Pennsylvania	2	1		2				3		
Minnesota		2	1			3	1			

Developments that have been noted previously are reflected in the differences between the earlier period in Table 18 and the 1985-2019 period in Table 19. In some sense, the two blocks of Table 18 are merged in the later period to form a single, tightly connected block with a yet more tightly connected block as its core. Columbia and Pennsylvania have dropped out of blocks altogether, while Stanford has joined the larger block and Princeton the more tightly connected core. The single block, constituting the two distinct shaded areas, accounts for 246 of the 307 positions in the table (80 percent).

MIT replaces Harvard as the largest place of education in Table 19 (102 positions or 31 percent of the total) and in the joint block (87 of 246 positions or 35 percent of the block). But Harvard has not been totally eclipsed as judged by *Education*. It still accounts for 65 positions or 21 percent of the table total and 58 positions or 24 percent of the block total. Harvard and MIT are so closely linked by both *Education* and *Employment* that they might be regarded for some purposes as a single institution. Together they account for 59 percent of the table total and 54 percent of the block total. Comparing to the 1950-1984 period (Table 18), the two universities accounted together for 47 percent of the table total.

The more tightly connected core (darker shaded area of Table 19), comprising MIT, Harvard, Chicago, and Princeton, dominates the larger block. It contains 127 positions or 41 percent of the total for the table and 52 percent of the positions in the larger block (the darker plus the lighter shaded areas). And within this core, MIT and Harvard dominate with 76 percent of the positions by *Education* and 55 percent of the positions by *Employment*.

7. Governed by an Elite

What, in the end, have we learned about who runs the AEA? The most obvious lessons are, perhaps, hardly surprising: the AEA leadership is overwhelmingly drawn from a small group of elite, private research universities – in the sense that its leaders were educated at these universities and that, to a lesser degree, employed by them. What is less well known is that for much of the past seventy years, the AEA leadership has been drawn predominantly from just three universities – Harvard, MIT, and Chicago. The leadership is spread more widely among places of employment; but, here too, a small number of institutions dominate. While the concentration of the leadership in elite universities was already clear in the 1950s, the pattern has become more pronounced through time: even within the group of elite universities, the top group has become more important and the bottom group less; the few public institutions represented have been increasingly marginalized. The vast majority of American universities with graduate programs and employers of economists other than elite universities have, at best, enjoyed token representation among the leadership. This becomes even more striking when one considers the substantial growth in the number of Ph.D. programs, economics departments in the postwar period, and the resulting decrease in relative shares of graduates of those three programs on the annual production of new economists.

The decrease in diversity of educational and employment backgrounds of AEA's leadership is visible when we peel off the various layers of its structure. The Executive Committee is less diverse than the Nominating Committee and that in turn is less diverse than the Electoral pool. The decrease in diversity became more prominent in the second half of the period under investigation (Table 6).

An especially striking result is the rise in importance of MIT, which not only replaced Columbia in the top three, but displaced Harvard as number one.²⁰

The case of MIT and the increasing marginalization of public universities suggests that our story should be seen in the larger context of the transformation of American higher education. The history of the post-World War II period includes a massive expansion of higher education generally, the explosion of, and the increasing orientation of universities toward, sponsored research, which is, itself closely related to a massive expansion in graduate education and the output of Ph.D. holders in economics, as in other fields. While public universities grew rapidly in the early postwar period, government funding of state universities has become more stringent in the later period, opening up and widening the gap between public and private universities in available resources. MIT seems to have caught the wave of the initial boost to higher education; while the public universities seems to have suffered from the unfavorable fiscal environment.

Aside from these external considerations, there are numerous suggestions in the data of an internal dynamic to the history of the AEA leadership. In particular, the interaction of educational history and later employment suggests the importance of network effects. The structures of nomination and election to the AEA leadership have created a process that would allow, though by no means guarantee, the replication and increasing dominance of an in-group. They are relatively impervious to challenge from the outside. For many members of the AEA, this is not a happy outcome: One member responding to the Climate Survey commented “[t]he ‘representation’ of actual economists among the AEA leadership is a joke and changing it would

²⁰ The importance of MIT to the history of American economics was the subject of one of the annual *History of Political Economy* Conferences at Duke University and the related conference volume, *MIT and the Transformation of American Economic* (Weintraub, editor, 2014). Svorenčík (2014) in this volume provides a detailed quantitative analysis of MIT economics graduates and faculty.

be a necessary precursor to any real movement in the field” (AEA 2019, p. 31). As we noted at the outset, the tension between the vision of the association as an elite institution and as a democratic institution, goes back to its founding. The data deployed in this paper may sharpen the questions raised by this tension, but they by no means resolve it.

We examined two difficult-to-discriminate hypotheses: that the leadership is drawn from the intellectually most capable members or that leadership is an inside job where connections matter. Which of these hypotheses is correct obviously has normative import for the AEA. And, even if the first hypothesis is correct, and admission to the leadership follows merit, a normative question remains open as to whether *intellectual* merit should be translated into political power in a democratic institution. The “particular business and objects” of the AEA as stated in its bylaws are “1. [t]he encouragement of economic research . . . 2. publications on economic subjects. . . [and] 3. encouragement of perfect freedom of economic discussion.”²¹ The AEA has exerted a considerable effort in the past few decades, and past few years in particular, to increase diversity of its membership in terms of gender, race and representation of minorities, and to eliminate various unfair practices in the profession. Therefore, it is a serious question for the current leadership and membership whether the best way to promote research and free academic discussion is to assign the control of an association with a wide membership to those members who are the individually most accomplished researchers or to a more widely dispersed and representative group. We believe this has ramifications for ongoing debates about the current suboptimal incentive structure of our discipline (Heckman and Mokta 2020, Akerlof 2020).

Despite the importance of these normative issues, we pose the two hypotheses as positive scientific questions. Even so, it is, unfortunately, difficult to break the apparent observational

²¹ <https://www.aeaweb.org/about-aea/bylaws>, “Certificate of Incorporation,” p. 1 (accessed 11 February 2020).

equivalence between them. For example, one measure of intellectual merit, is success at scientific publication. However, there is substantial body of evidence that the social ties between journal editors and authors published matters (Laband and Piette 1994, Hodgson and Rothman 1999, Brogaard et al 2014, Colussi 2018, Heckman and Moktan 2020). Hodgson and Rothman analyzed the doctoral origins of editors of top thirty economics journals by 1995 citation impact factor. They found that MIT, Harvard, and Chicago graduates account for third of all editors and ten US departments with a highest editors’ share account for almost 61 percent suggesting that an institutional oligopoly is at play.²² Collusi analyzed top general economics journals in the period 2000-6 and concluded that 43 percent of all papers are connected to with at least of the editors. Obtaining Ph.D. from the same university in the three-year window, serving as faculty in a department at the time when an author earned the Ph.D. degree, being faculty at the same department or having co-authored a paper in the past are the social ties that Colussi considered. Heckman and Moktan (2020) corroborate these results and estimate high incest rates — share of papers with the same author affiliation as editors’. Therefore the same difficult question of merit versus self-perpetuation of an in-group arises when considering success at publication as well, so that publication and citation records are unlikely to cleanly resolve the underlying questions.

This inconclusive nature of our analysis should not detract from the importance of the subject matter and in this we subscribe to the Akerlof’s (2020) recommendation not to avoid problems for which we do not yet have a sufficiently sophisticated analysis: “Such bias leads economic research to ignore important topics and problems that are difficult to approach in a ‘hard’ way — thereby resulting in ‘sins of omission’” (p. 405). While we take no stand on the

²² Of the 757 editors Hodgson and Rothman did not identify the doctoral origin for 294 editors, mostly non-US based, which overestimates the share of US departments.

normative issues, we thus hope that our positive documentation is a start to providing good answers to the positive questions that would be helpful in addressing those issues.

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Appendix: Additional Tables

Table A.1 Institutions Included in the Data Set

	Institutions	Number of Positions by:	
		<i>Education</i>	<i>Employment</i>
1	American University		4
2	American University of Beirut		1
3	Amherst College		2
4	University of Amsterdam	3	
5	University of Arizona		3
6	Arizona State University		2
7	Armstrong World Industries		1
8	University of Birmingham	1	
9	University of Berlin	10	
10	Board of Governors of the Federal Reserve System		5
11	Boston College		1
12	Boston University		7
13	Brandeis University		3
14	Brimmer & Co. Inc		3
15	University of British Columbia		2
16	Brookings Institution	3	17
17	Brown Brothers Harriman & Company		2
18	Brown University	5	4
19	University of California, Berkeley (UC Berkeley)	43	62
20	University of California, Davis		1
21	California Institute of Technology		1
22	University of California, Irvine		1
23	University of California, Los Angeles (UCLA)	7	37
24	University of California, San Diego	4	12
25	University of Cambridge	10	
26	Carnegie Mellon University	8	9
27	University of Chicago (Chicago)	116	74
28	City College of New York	1	1
29	City University of New York		5
30	Claremont Graduate University	1	1
31	Claremont McKenna College		1
32	University of Colorado, Boulder	1	2
33	Columbia University	72	34
34	Committee for Economic Development		1
35	Congressional Budget Office		4
36	Cornell University	13	10
37	Dartmouth College		6

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Table A.1 continued

38	Duke University	2	20
39	Dun & Bradstreet		2
40	Federal Reserve Bank of Boston		2
41	Federal Reserve Board of New York		1
42	Federal Reserve Bank of Philadelphia		1
43	Federal Reserve Bank of Saint Louis		1
44	Federal Reserve Bank of San Francisco		1
45	Fisk University		1
46	Fordham University		1
47	University of Freiburg	3	
48	George Washington University		2
49	Georgetown University		4
50	Grinnell College		1
51	Harvard University	233	101
52	Haverford College		1
53	University of Heidelberg	2	
54	University of Houston		1
55	University of Illinois, Urbana Champaign	1	8
56	Indiana University		1
57	Institute for Advanced Study		2
58	Institute of Public Administration		1
59	International Monetary Fund		2
60	University of Iowa	5	3
61	Iowa State University	4	1
62	Jackson State University		1
63	Johns Hopkins University	18	12
64	Lawrence University		2
65	Lehman Brothers		1
66	University of Leiden	2	
67	Litton Industries		1
68	London School of Economics (LSE)	22	2
69	Louisiana State University		2
70	Machinery and Allied Products Institute		2
71	University of Maine		1
72	University of Manitoba	2	
73	University of Maryland	6	22
74	University of Massachusetts	2	8
75	Massachusetts Institute of Technology (MIT)	156	75
76	University of Michigan (Michigan)	21	21
77	Michigan State University		5
78	Microsoft		1

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Table A.1 continued

79	University of Minnesota (Minnesota)	20	27
80	University of Missouri	2	
81	Monsanto Company		1
82	Monthly Review		2
83	Mount Holyoke College		1
84	National Bureau of Economic Research (NBER)		4
85	National Industrial Conference Board		1
86	New School for Social Research	7	5
87	University of New Mexico		1
88	New York University	2	16
89	University of New Zealand	1	
90	University of North Carolina Chapel Hill	2	9
91	Northwestern University	12	29
92	Oakland University		1
93	Oberlin College		4
94	Ohio State University	6	
95	Oklahoma State University	1	
96	University of Oregon		1
97	University of Oxford	22	
98	University of Paris	5	
99	University of Pennsylvania	21	29
100	Pennsylvania Mutual Life Insurance Company		1
101	Pennsylvania State University	1	2
102	Peterson Institute for International Economics		1
103	University of Pittsburgh	2	2
104	Princeton University	49	64
105	Purdue University	3	
106	Queen's University	1	3
107	RAND Corporation		3
108	Rice University	3	1
109	University of Rochester	7	11
110	Rockefeller Foundation		2
111	Rutgers University		1
112	University of Saskatchewan		1
113	Smith College		1
114	University of Southern California		4
115	Southern Methodist University		1
116	Swarthmore College		8
117	Stanford University	58	81

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Table A.1 continued

118	State University of New York		1
119	State University of New York, Albany		1
120	State University of New York, Binghamton	1	
121	Stevens Institute of Technology	4	
122	Swarthmore College	1	
123	Swift & Company		1
124	Syracuse University	1	
125	Tariff Board of Canada		1
126	University of Texas		9
127	Texas A&M University		3
128	University of Toronto	2	8
129	University of Trieste	2	
130	Tufts University	2	
131	Tulane University		1
132	United Nations		1
133	University College London (UCL)	1	
134	Urban Institute		3
135	US Bureau of the Budget		2
136	US Bureau of Labor Statistics		2
137	US Civil Aeronautics Board		1
138	US Department of Agriculture		1
139	US Department of Commerce		1
140	US Department of Defense		1
141	US Department of Labor		7
142	US Federal Trade Commission		1
143	Vanderbilt University	3	9
144	Vassar College		1
145	University of Vienna	9	
146	University of Virginia		4
147	Virginia Polytechnic Institute		2
148	Warsaw University	3	
149	University of Washington		6
150	Washington University	1	4
151	Wayne State University		5
152	Wellesley College		3
153	Wesleyan University		6
154	Williams College		1
155	University of Wisconsin, Madison (Wisconsin-Madison)	36	18
156	World Bank		1
157	Yale University	46	55
Total		1,114	1,111

Table A.2
Composition of the Electoral Pool by *Education*

	1950-1984		1985-2019		1950-2019	
	number	share (percent)	number	share (percent)	number	share (percent)
President	35		35		70	
Harvard	6	17.1	5	14.3	11	15.7
MIT	1	2.9	8	22.9	9	12.9
Chicago	3	8.6	6	17.1	9	12.9
Columbia	6	17.1	3	8.6	9	12.9
Stanford	0	0.0	1	2.9	1	1.4
Second Tier (rank 6-14)	10	28.6	5	14.3	15	21.4
Third Tier (rank15-65)	9	25.7	7	20	16	22.9
Vice-President	70		70		70	
Harvard	21	30.0	15	21.4	36	25.7
MIT	1	1.4	21	30.0	22	15.7
Chicago	8	11.4	6	8.6	14	10.0
Columbia	5	7.1	3	4.3	8	5.7
Stanford	1	1.4	5	7.1	6	4.3
Second Tier (rank 6-14)	21	30.0	15	21.4	36	25.7
Third Tier (rank15-65)	13	18.6	5	7.1	18	12.9
Losing Vice-President	70		70		140	
Harvard	15	21.4	18	25.7	33	23.6
MIT	0	0.0	16	22.9	16	11.4
Chicago	8	11.4	6	8.6	14	10.0
Columbia	3	4.3	1	1.4	4	2.9
Stanford	2	2.9	5	7.1	7	5
Second Tier (rank 6-14)	19	27.1	6	8.6	25	17.9
Third Tier (rank15-65)	23	32.9	18	25.7	41	29.3
Ordinary Member	70		70		140	
Harvard	17	24.3	15	21.4	32	25.0
MIT	5	7.1	19	27.1	24	17.1
Chicago	8	11.4	6	8.6	14	10.0
Columbia	10	14.3	2	2.9	12	8.6
Stanford	0	0.0	6	8.6	6	4.3
Second Tier (rank 6-14)	18	25.7	15	21.4	33	23.6
Third Tier (rank15-65)	12	17.1	7	10.0	19	13.6
Losing Ordinary Member	70		70		140	
Harvard	15	21.4	10	14.3	25	17.9
MIT	6	8.6	15	21.4	21	15
Chicago	13	18.6	2	2.9	15	10.7
Columbia	9	12.9	1	1.4	10	7.1
Stanford	3	4.3	6	8.6	9	6.4
Second Tier (rank 6-14)	15	21.4	24	34.3	39	27.9
Third Tier (rank15-65)	9	12.9	12	17.1	21	15.0

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Table A.2 continued

	1950-1984		1985-2019		1950-2019	
	number	share (percent)	number	share (percent)	number	share (percent)
Chair of Nominating Committee	35		35		70	
Harvard	9	25.7	5	14.3	14	20.0
MIT	1	2.9	5	14.3	6	8.6
Chicago	4	11.4	5	14.3	9	12.9
Columbia	6	17.1	3	8.6	9	12.9
Stanford	0	0.0	1	2.9	1	1.4
Second Tier (rank 6-14)	7	20.0	7	20.0	14	20.0
Third Tier (rank 15-65)	8	22.9	9	25.7	17	24.3
Member of Nominating Committee	187		235		422	
Harvard	41	21.9	42	17.9	83	19.7
MIT	9	4.8	52	22.1	61	14.5
Chicago	20	10.7	21	8.9	41	9.7
Columbia	14	7.5	6	2.6	20	4.7
Stanford	11	5.9	19	8.1	30	7.1
Second Tier (rank 6-14)	52	27.8	67	28.5	119	28.2
Third Tier (rank 15-65)	40	21.4	28	11.9	68	16.1
Grand Total	537		585		1,122	

Note: Shares are number of positions held as a fraction of the possible number of positions in the Electoral Pool during the relevant period.

Table A.3
Composition of the Electoral Pool by *Employment*

	1950-1984		1985-2019		1950-2019	
	number	share (percent)	number	share (percent)	number	share (percent)
President	35		35		70	
Harvard	7	20.0	5	14.3	12	17.1
Stanford	1	2.9	4	11.4	5	7.1
MIT	3	8.6	2	5.7	5	7.1
Chicago	4	11.4	6	17.1	10	14.3
Princeton	3	8.6	4	11.4	7	10.0
Second Tier (rank 6-15)	12	34.3	9	25.7	21	30.0
Third Tier (rank 16-136)	5	14.3	5	14.3	10	14.3
Vice-President	70		70		140	
Harvard	10	14.3	8	11.4	18	12.9
Stanford	2	2.9	7	10.0	9	6.4
MIT	5	7.1	8	11.4	13	9.3
Chicago	3	4.3	7	10.0	10	7.1
Princeton	5	7.1	7	10.0	12	8.6
Second Tier (rank 6-15)	27	38.6	19	27.1	46	32.9
Third Tier (rank 16-136)	18	25.7	14	20.0	32	22.9
Losing Vice-President	71		71		142	
Harvard	6	8.5	11	15.5	17	12.0
Stanford	2	2.8	5	7.0	7	4.9
MIT	1	1.4	2	2.8	3	2.1
Chicago	7	9.9	2	2.8	9	6.3
Princeton	5	7.0	8	11.3	13	9.2
Second Tier (rank 6-15)	22	31.0	23	32.4	45	31.7
Third Tier (rank 16-136)	28	39.4	20	28.2	48	33.8
Ordinary Member	70		70		140	
Harvard	6	8.6	4	5.7	10	7.1
Stanford	3	4.3	8	11.4	11	7.9
MIT	5	7.1	10	14.3	15	10.7
Chicago	6	8.6	5	7.1	11	7.9
Princeton	2	2.9	6	8.6	8	5.7
Second Tier (rank 6-15)	23	32.9	23	32.9	46	32.9
Third Tier (rank 16-136)	25	35.7	14	20.0	39	27.9
Losing Ordinary Member	70		70		140	
Harvard	5	7.1	7	10.0	12	8.6
Stanford	5	7.1	8	11.4	13	9.3
MIT	6	8.6	6	8.6	12	8.6
Chicago	3	4.3	4	5.7	7	5.0
Princeton	0	0.0	2	2.9	2	1.4
Second Tier (rank 6-15)	17	24.3	24	34.3	41	29.3
Third Tier (rank 16-136)	34	48.6	19	27.1	53	37.9

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Table A.3 continued

	1950-1984		1985-2019		1950-2019	
	number	share (percent)	number	share (percent)	number	share (percent)
Chair of Nominating Committee	36		35		71	
Harvard	6	16.7	5	14.3	11	15.5
Stanford	1	2.8	5	14.3	6	8.5
MIT	3	8.3	2	5.7	5	7.0
Chicago	4	11.1	5	14.3	9	12.7
Princeton	3	8.3	5	14.3	8	11.3
Second Tier (rank 6-15)	11	30.6	10	28.6	21	29.6
Third Tier (rank 16-136)	8	22.2	3	8.6	11.0	15.5
Member of Nominating Committee	183		237		420	
Harvard	9	4.9	16	6.8	25	6.0
Stanford	11	6.0	21	8.9	32	7.6
MIT	6	3.3	17	7.2	23	5.5
Chicago	3	1.6	15	6.3	18	4.3
Princeton	3	1.6	10	4.2	13	3.1
Second Tier (rank 6-15)	50	27.3	69	29.1	119	28.3
Third Tier (rank 16-136)	101	55.2	89	37.6	190	45.2
Grand Total	535		587		1,122	

Note: Shares are number of positions held as a fraction of the possible number of positions in the Electoral Pool during the relevant period. In rare instances people with two affiliations are double counted.

Table A.4
Shares of Positions in Various Subsets of Electoral Pool

Education										
Executive Committee 1950-1984 (percent)						Executive Committee 1985-2019 (percent)				
Employment	Top 6	Common 5	Other Second Tier	Third Tier	Total	Top 6	Common 5	Other Second Tier	Third Tier	Total
Top 6	26.3	5.1	5.1	5.1	41.7	41.1	2.9	4.0	6.3	54.3
Common 5	10.9	1.7	3.4	2.9	18.9	13.1	2.9	0.6	1.7	18.3
Other Second Tier	4.0	1.1	1.1	5.7	12.0	6.3	1.1	0.0	1.1	8.6
Third Tier	12.6	2.3	6.3	6.3	27.4	14.9	1.7	0.6	1.7	18.9
Total	53.7	10.3	16.0	0.20	100.0	75.4	8.6	5.1	10.9	100.0

Education										
Leadership pool 1950-1984 (percent)						Leadership pool 1985-2019 (percent)				
Employment	Top 6	Common 5	Other Second Tier	Third Tier	Total	Top 6	Common 5	Other Second Tier	Third Tier	Total
Top 6	23.4	4.1	3.8	5.4	36.7	37.3	4.1	2.5	5.4	49.4
Common 5	9.2	2.9	2.9	3.8	18.7	12.0	3.5	0.6	2.9	19.0
Other Second Tier	4.4	1.0	0.6	3.8	9.8	6.0	1.6	0.0	1.3	8.9
Third Tier	17.4	3.5	5.4	8.5	34.8	14.2	2.2	0.3	6.0	22.8
Total	54.4	11.4	12.7	21.5	100.0	69.6	11.4	3.5	15.5	100.0

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Table A.4 continued

Education										
Employment	Losers 1950-1984 (percent)					Losers 1985-2019 (percent)				
	Top 6	Common 5	Other Second Tier	Third Tier	Total	Top 6	Common 5	Other Second Tier	Third Tier	Total
Top 6	19.9	2.8	2.1	5.7	30.5	32.6	5.7	0.7	4.3	43.3
Common 5	7.1	4.3	2.1	5.0	18.4	10.6	4.3	0.7	4.3	19.9
Other Second Tier	5.0	0.7	0.0	1.4	7.1	5.7	2.1	0.0	1.4	9.2
Third Tier	23.4	5.0	4.3	11.4	44.0	13.5	2.8	0.0	11.4	27.7
Total	55.3	12.8	8.5	23.4	100.0	62.4	14.9	1.4	21.3	100.0

Education										
Employment	Nominating Committee 1950-1984 (percent)					Nominating Committee 1985-2019 (percent)				
	Top 6	Common 5	Other Second Tier	Third Tier	Total	Top 6	Common 5	Other Second Tier	Third Tier	Total
Top 6	16.4	1.8	2.7	2.7	23.6	28.3	4.0	2.9	5.2	40.4
Common 5	7.3	2.7	1.4	2.3	13.6	10.7	3.7	0.4	2.2	16.9
Other Second Tier	5.9	1.8	0.5	4.6	12.7	5.2	2.2	0.0	1.5	8.8
Third Tier	25.0	8.2	5.0	11.8	50.0	22.1	6.6	0.0	5.2	33.8
Total	54.6	14.6	9.6	21.4	100.0	66.2	16.5	3.3	14.0	100.0

continues next page

Table A.4 continued

Education										
Members of Nominating Committee 1950-1984 (percent)						Members of Nominating Committee 1985-2019 (percent)				
Employment	Top 6	Common 5	Other Second Tier	Third Tier	Total	Top 6	Common 5	Other Second Tier	Third Tier	Total
Top 6	14.1	2.2	1.1	0.5	17.9	26.6	4.2	2.1	3.8	36.7
Common 5	6.5	3.3	1.1	2.7	13.6	11.4	3.4	0.4	2.1	17.3
Other Second Tier	7.1	2.2	0.0	3.8	13.0	5.1	2.5	0.0	0.8	8.4
Third Tier	26.6	9.8	4.9	14.1	55.4	24.5	7.6	0.0	5.5	37.6
Total	54.4	17.4	7.1	21.2	100.0	67.5	17.7	2.5	12.2	100.0

Education										
Chairs of Nominating Committee 1950-1984 (percent)						Chairs of Nominating Committee 1985-2019 (percent)				
Employment	Top 6	Common 5	Other Second Tier	Third Tier	Total	Top 6	Common 5	Other Second Tier	Third Tier	Total
Top 6	27.8	0.0	11.1	13.9	52.8	40.0	2.9	8.6	14.3	65.7
Common 5	11.1	0.0	2.8	0.0	13.9	5.7	5.7	0.0	2.9	14.3
Other Second Tier	0.0	0.0	2.8	8.3	11.1	5.7	0.0	0.0	5.7	11.4
Third Tier	16.7	0.0	5.6	0.0	22.2	5.7	0.0	0.0	2.9	8.6
Total	55.6	0.0	22.2	22.2	100.0	57.1	8.6	8.6	25.7	100.0