Online Appendix to Do Elite Universities Overpay Their Faculty?

César Garro-Marín,* Shulamit Kahn,† and Kevin Lang‡

This version: January 2026

A   Data

In this paper, we combine data from several sources: (1) individual-level data from the restricted-use version of the Survey of Doctorate Recipients (SDR) from the National Center for Science and Engineering Statistics (NCSES); (2) university and college rankings data from the *Times Higher Education* 2017 World University Rankings, the *Wall Street Journal – Times Higher Education* 2017 College Rankings, and the 2021 *US News and World Report* rankings; and (3) university characteristics from Integrated Postsecondary Education Data System (IPEDS) surveys.

We combine these sources and prepare the dataset in three main steps: (1) build a work history panel for tenure-track faculty, (2) construct a dataset with institution characteristics, and (3) associate each school with a unique ranking. Below, we describe each step in detail.

A1   Building the work history panel

We first combine the information from all the SDR waves available between 1993 and 2017 (inclusive). We restrict the sample to people employed full-time (35 hours/week for at least 40 weeks/year) in a tenure-stream (tenured or tenure-track) position at a US 4-year college or university, medical school attached to a university, or university research institute. We also drop observations where respondents were in a post-doctoral position, earned less than the minimum National Institutes of Health post-doctoral stipend ($53,760 in 2020), or worked outside the US (whether in academia or not). We identify employers using the IPEDS

*University of Edinburgh, email: cgarrom@ed.ac.uk

†Boston University, email: skahn@bu.edu

‡Boston University, email: lang@bu.edu

institution code reported by the SDR. We transform all salary figures into 2020 dollars using the yearly CPI for all urban consumers (U.S Bureau of Labor Statistics, 2023). This leaves us with an unbalanced panel tracking the work history of tenure-track faculty across US academic institutions.

A1.1 Determining faculty moves in the SDR

We pay special attention to ensuring that we track faculty moves across academic institutions correctly. The AKM model identifies the pay premiums out of variation coming from people moving across institutions. Thus, it is crucial that we record moves accurately.

We say an academic changed employers whenever we observe a change in the IPEDS code of the current employer, except when these changes result from a leave of absence or a likely coding error. We identify leaves of absence as *temporary moves* out of a primary or home institution. These are moves satisfying three conditions:

 (i) we observe the academic in three *consecutive* SDR waves;

 (ii) the academic starts in an institution (home) and moves to a *host* institution for one SDR wave;

 (iii) to then return to their home institution.

We identify approximately 51 leaves-of-absence in our data. We exclude the host school observation for them, keeping the observations in their home school only.

We also identified and manually corrected moves that were likely the result of a coding error. There were 1,732 observations where the IPEDS university code changed but the respondent reported not changing institutions. These frequently involved two institutions with similar names. Thus, a Boston University faculty member might be miscoded as Boston College faculty for one wave, while reporting not changing institutions. We manually checked these moves and corrected those we deemed to be likely mistakes.

Because we are interested in institution-level premiums, we merged IPEDS codes that identify units of the same university. IPEDS divides some large universities across different codes. For example, ASU-Tempe and ASU-Phoenix have different codes even though they belong to the same institution. We did not count these as moves in our dataset, since all are within ASU. Therefore, we assigned all university units to a single code in such cases. It is possible that we missed some moves in this process, but we wanted to be conservative in what we considered to be moves. Whenever we determined that university campuses were independent of each other, we kept them as separate IPEDS codes. For example, we keep University of Wisconsin-Madison and University of Wisconsin-Oshkosh as separate institutions.

We tried to be as conservative as possible in this process, only combining 42 institution codes into 24 codes. We can provide the list of merged codes upon request.

A2 Salaries

We excluded salary observations featuring very large one-time salary changes that were subsequently reversed *within the same institution*. We identify these outliers as follows:

1. First, we computed the growth in log of real salary adjusted for job experience ($\Delta \widetilde{\ln} w_t$):

$$\Delta \ln \widetilde{w}_t = \Delta \ln w_t - \Delta \ln \widehat{w}_t \tag{A1}$$

where $\Delta \ln w_t$ is the log change in salary, and $\Delta \widehat{\ln} w_t$ is the expected log salary change due to experience. This expected change comes from a regression of log salary on years of experience and its square:

$$\ln w_t = \alpha_o + \alpha_1 y_t + \alpha_2 y_t^2 + \nu_t$$

where y_t denote years since Ph.D. Then we define the expected change as:

$$\Delta \widehat{\ln} w_t = \widehat{\alpha}_1 \Delta y_t + \widehat{\alpha}_2 \Delta y_t^2$$

The expression in A1 measures how much actual salary growth deviates from what we should expect based on the experience profile alone.

2. We flag a *within-institution* log salary change as a *potential outlier* if, after adjusting for experience, it is larger than 0.4 in absolute value:

$$\left| \Delta \widetilde{\ln} w_t \right| = |\Delta \ln w_t - \Delta \widehat{\ln} w_t| > 0.4$$

We note that 0.4 is a conservative threshold (97th percentile of adjusted salary growth).

3. We then focus on the *potential outliers* and exclude observations as follows. We drop all observations from people with only two observations in the dataset and who worked for only one institution. For people having at least three observations and who worked for several institutions, we apply the following procedure:

4. If $\left| \Delta \widetilde{\ln} w_t \right| > 0.4$, then either w_t or w_{t-1} may be the outlier. We exclude w_t if its log distance from any other salary observation for that person is greater than 0.2.[1] That is,

$$\text{Drop } w_t \text{ if } \min_j \{ d_j | d_j = |\ln w_j - \ln w_t|, \ j \neq t \} > 0.2$$

5. If $|\Delta \widetilde{\ln} w_t| > 0.4$ but its minimum distance is less than 0.2, we apply additional sequential filters –i.e., if an observation survives filter (i) below, then we applied (ii)–:

   i. We excluded all observations where the individual's primary work activities were not teaching or research. These people are likely to be in administrative positions.[2]

---

[1] 0.2 is the 90th percentile of the adjusted wage growth.

[2] In later waves, the SDR asked if the person working in an academic institution was (1) a president, provost or chancellor or (2) a dean, department head or department chair. However, this question was not asked in most SDR waves in our study so we do not use it.

ii. We excluded all salaries that were out of line with the individual's salary trend. This judgment was made on a case-by-case basis. All these modifications were codified into a script.

A3   Building the institution characteristics dataset

We extract all university characteristics other than the position in the rankings from IPEDS. We use the institution characteristics, fall enrollment, finance, and salary modules for the years 2001, 2005, 2012, and 2017. All nominal figures are converted into 2020 dollars using the CPI for all urban consumers (U.S Bureau of Labor Statistics, 2023). We cannot meaningfully add time-varying institution characteristics to our regressions because they change very slowly, and when they do change, long and uncertain lags in their impact would prevent us from associating salary changes with changes in institutional characteristics. Thus, we average all continuous variables across the four survey waves. For all dummy variables, we assign the maximum value across the four years. For example, we classify a university as granting a Ph.D. degree if it ever granted such a degree during any of the four survey waves.

We extract the following variables from IPEDS:

- **University location:** we classify the university's location into small, medium, and large cities. This variable is a recoding of IPEDS' locale variable. Table A1 details the mapping between both variables.

- **Private university:** dummy equal to one if the university is private.

- **Undergrad-only:** dummy variable equal to one if the institution only offers undergraduate degrees.

- **Total enrollment:** sum of undergraduate and graduate enrollment for the fall semester averaged over the four survey years.

- **Total faculty:** full-time faculty for the fall semester averaged over the four survey years.

- **Endowment:** IPEDS reports finance information separately for public institutions, private not-for-profit, and private for profit. For each year, endowment variable corresponds to:

  - **Public universities and private non-profits:** we average the value of endowment assets at the beginning and end of the fiscal year.
  - **Private for-profits:** we average the value of equity at the beginning and end of the year.

We convert the yearly endowment to 2020 USD using the CPI for all urban consumers and average it across the four survey waves.

A4   University rankings

Our primary sources for the institution rankings are the *Times Higher Education* 2017 World University Rankings and the *Wall Street Journal – Times Higher Education* 2017 College Rankings. They consist of a list of institution names along with their ranking position and the state in which they are located. We linked these rankings to a unique IPEDS code using name and location. In most cases, the names in *THE* and IPEDS were similar, and the linkage was straightforward. For the few cases where the linkage was not obvious, we adhered to the following rules:

1. Whenever names only differed in the word "college" or "university," we used a Google search along with the location information to determine if they were the same institution. For example, if the IPEDS label was "Concordia College" and the *THE*-name was "Concordia University". We linked both names if and only if:

   - The institution's state is the same in both datasets.
   - A search for the term "[. . .] college" gives "[. . .] university" as the first search result (or vice versa).

2. Different campuses in a university system have different IPEDS codes. Sometimes *THE* provides only one rank for a university system without reference to the campus. In this case, we associated the rank to the flagship campus. For example, the rank for "Penn State University" was assigned to the IPEDS code for "Penn State University, University-Park."

We applied the above procedure to both the *THE* World University and the *WSJ/THE* College rankings. We categorized the institutions matched to the THE World University Rankings as *research universities*. For these institutions, the value of the institution rank is their position in the World University Ranking. The institutions (i) not matched to the World University Ranking but (ii) matched to the College Ranking were categorized as *colleges*. Their *institution rank* is their position in the College Rankings. Note that many institutions in this category are not solely undergraduate institutions.

We matched 578 (88% of the total) of the 654 institutions to a *THE* ranking. For the remaining 76 institutions, we imputed their rank using data from the *US News and World Report (USNWR)* rankings of best national universities, liberal arts colleges, and regional institutions. We took advantage of the overlap between the THE and UNSWR datasets and imputed the position of *THE*-unranked schools using a regression. We imputed a rank for 50 schools ranked in *USNWR*, leaving only 26 unranked schools (4% of the total).

A4.1   Imputing the THE ranks

The THE rankings are our primary source of university performance information. However, we were unable to match 76 institutions to a THE rank. For 50 of these institutions, we imputed their *THE* rank using data from U.S. News and World Report (*USNWR*) rankings, as follows:

1. First, we merged the *THE* rankings with each of the ten available *USNWR* ranking lists by institution name. We use 10 mutually exclusive *USNWR* lists: national universities, liberal arts colleges, four regional university lists, and four regional colleges lists. We checked all name matches manually to ensure consistency.

2. For universities ranked by both *THE* and *USNWR*, we run regressions of the *THE* position on the *USNWR* position. We run a separate regression for each of the 10 *USNWR* lists:

$$THE\ ranking_i = \alpha + \beta USNWR\ \ ranking_i + \varepsilon_i \tag{A2}$$

Table A2 shows the results of each of these auxiliary regressions.

3. We infer the position in the *THE* rankings for universities unranked by *THE* but ranked by *US News* using the predicted values of the regression in (A2):

$$\widehat{THE\ ranking}_i = \alpha + \widehat{\beta}US\ news\ ranking_i$$

Because all ten *US News* rankings are mutually exclusive, the imputed *THE* position is unique. We treat institutions in the *USNWR National University* ranking as *research universities*, and institutions in all other lists (liberal arts colleges, regional universities, and regional colleges) as *colleges.* The bottom two rows of Table A2 provides a breakdown of the imputed ranks according to the *US News* ranking list we used for the imputation.

Table A1: Institution Location Classification

Original Codes	IPEDS description	Recoding used	Description
A. 2001 IPEDS locale Classification			
1	Large city	Large city	Urban area, population above 250k
2 3, 4	Mid-size city Urban fringe of large / mid-size city	Mid size city / suburb	Urban area, population between 100k and 250, or suburbs
5, 6, 7 9	Large town, small town, rural Not assigned	Small city / rural town	Urban areas with polulation below 100k, rural areas
B. 2005-2017 IPEDS locale Classification			
11	Large city	Large city	Urban area, population above 250k
12 21, 22, 23	Mid-size city Suburbs	Mid-size city / suburbs	Urban area, population between 100k and 250, or suburbs
13 31 - 43	Small city Towns, rural	Small city / rural town	Urban areas with polulation below 100k, rural areas

Notes: The table details the conversion from the origin IPEDS location classification into the location classification we used in the analysis.

Table A2: Ranking Imputation Regressions

	NATIONAL RANKINGS		REGIONAL UNIVERSITIES				REGIONAL COLLEGES			
	(1) NATIONAL	(2) LIBERAL	(3) NORTH	(4) SOUTH	(5) MIDWEST	(6) WEST	(7) NORTH	(8) SOUTH	(9) MIDWEST	(10) WEST
US News ranking	1.762	3.115	3.101	2.671	2.883	3.872	3.681	1.715	7.927	7.938
	(0.132)	(0.139)	(0.237)	(0.361)	(0.293)	(0.395)	(1.901)	(0.623)	(1.130)	(5.318)
Constant	82.21	-20.90	326.0	550.3	456.5	439.7	624.2	694.0	382.2	585.5
	(17.665)	(15.120)	(21.710)	(24.234)	(23.468)	(25.014)	(50.416)	(23.008)	(37.954)	(68.844)
R^2	0.582	0.771	0.554	0.386	0.477	0.530	0.211	0.296	0.629	0.182
F	179.3	502.0	171.4	54.61	96.79	96.04	3.748	7.571	49.24	2.228
Observations	131	151	140	89	108	87	16	20	31	12
Number of schools imputed	6	12	5	4	3	7	4	3	3	3
Total schools imputed	50									

Notes: The table shows the regressions used to impute *THE*-rank positions to schools ranked by *USNWR* but not by *THE*. Column (1) uses the position in the THE World University ranking as the dependent variable, while columns (2)-(10) use that in *THE/WSJ* college ranking. The imputed position is unique because all the *USNWR* rankings are mutually exclusive. The last two rows show the number of schools imputed with each regression, as well as the total number of schools imputed. We classify schools imputed using column (1) as research universities, and all others as colleges.

B Tables

Table B1: Summary Statistics Including Salary Change Outliers

A. NUMBER OF MOVERS IN THE SAMPLE				B. NUMBER OF TRANSITIONS IN THE SAMPLE			
	ALL	MOVERS	SHARE OF TOTAL		TOTAL	MIN	MAX
Total observations	64,721	7,943	0.12	Transitions	2,114		
Number of people	26,392	1,805	0.07	Number of movers	1,805		
Mean obs. per person	2.45	4.40		Number of universities	654		
				Transitions per mover	1.17	1	*
				Transitions per university	3.23	1	52

C. INDIVIDUAL CHARACTERISTICS				D. UNIVERSITY CHARACTERISTICS				
	N	MEAN	SD		MEAN	SD	MIN	MAX
Years since Ph.D.	64,721	18.30	10.63	Research universities	48	28	1	99
Has tenure	64,721	0.73	0.44	Colleges	46	25	1	100
Time in current job	64,721	12.91	10.32	Log of total enrollment	8.91	1.02	5.79	10.92
Faculty rank				log(total endowment)	18.10	2.10	11.51	24.25
Assistant professor	64,721	0.24	0.43	log(endowment/students)	9.20	2.09	2.55	14.67
Associate professor	64,721	0.29	0.45	log(faculty size)	5.88	1.03	0.81	8.54
Professor	64,721	0.46	0.50	log(faculty/students)	-3.03	0.46	-5.38	-1.42
Lecturer	64,721	0.00	0.03	Share in large city	0.23	0.42	0.00	1.00
Instructor	64,721	0.00	0.04	Share in medium city	0.34	0.47	0.00	1.00
Other	64,721	0.01	0.09	Share in small city	0.43	0.50	0.00	1.00
Female	64,721	0.32	0.47	Share private	0.40	0.49	0.00	1.00
Married	64,721	0.83	0.38	Share undergraduate	0.13	0.33	0.00	1.00
Has child under 6	64,721	0.18	0.38					
Has child aged 6-11	64,721	0.20	0.40					
Has child aged 12-18	64,721	0.20	0.40					
Has child aged 19+	64,721	0.10	0.30					

Notes: The table shows summary statistics for the sample that includes observations with very large within-institution salary changes. See Appendix A for details. There are 147 research universities and 481 colleges. 26 institutions are unranked and not classified as colleges or universities. * Suppressed for confidentiality. All monetary values are expressed in 2020 USD.

Table B2: Fixed Effect Variance Estimates in AKM Model, Including Salary Changes Outliers

	UNCORRECTED	CORRECTED ANDREWS ET AL METHOD
	(1)	(2)
Individual by year level		
Variance log(*salary*)	0.148	0.148
Variance of Fixed-effects		
Individual	0.141	0.109
Institution	0.029	0.011
Correlation	-0.326	-0.409
Correlation net of field	-0.356	
Collapsed at the spell level		
Variance log(*salary*)	0.140	0.140
Variance of Fixed-effects		
Individual	0.130	0.078
Institution	0.028	0.006
Correlation	-0.317	0.059
Correlation net of field	-0.326	

Notes: The table reproduces the estimates in Table 2 in the sample that includes observations with large within-institution salary changes that were subsequently reversed. See Appendix A for details. The table shows estimates of the variances of the log salary, the individual and institution fixed effects, and the correlation between institution and individual fixed effects. Column (1) displays uncorrected estimates, while column (2) corrects for limited mobility bias using the method by Andrews et al. (2008). Panel A uses person-year observations, while panel B collapses the dataset at the employment spell level.

Table B3: Do Rankings Increase Institution Premiums? (Including Salary Change Outliers)

	Two-step estimates			One-step estimates		
	(1)	(2)	(3)	(4)	(5)	(6)
Institution type × log of ranking						
Research university	-0.0305	-0.0275	-0.0281	-0.0210	-0.0202	-0.0139
	(0.0211)	(0.0211)	(0.0217)	(0.0097)	(0.0096)	(0.0100)
Colleges	-0.0203	-0.0181	-0.0214	-0.0111	-0.0121	-0.0062
	(0.0123)	(0.0123)	(0.0152)	(0.0086)	(0.0086)	(0.0099)
Institution type (omitted=unranked)						
Research university	0.2253	0.1946	0.1849	0.1356	0.1247	0.0848
	(0.0910)	(0.0918)	(0.0982)	(0.0452)	(0.0453)	(0.0468)
Colleges	0.1373	0.1205	0.1321	0.0594	0.0560	0.0311
	(0.0649)	(0.0651)	(0.0740)	(0.0392)	(0.0396)	(0.0410)
Institution characteristics						
Large city		0.0680	0.0658		0.0425	0.0362
		(0.0245)	(0.0261)		(0.0139)	(0.0141)
Medium city/suburb		0.0203	0.0203		0.0046	0.0034
		(0.0218)	(0.0221)		(0.0113)	(0.0112)
Log of total enrollment			0.0113			0.0154
			(0.0140)			(0.0086)
Undergrad only			0.0163			-0.0006
			(0.0312)			(0.0194)
Private			-0.0042			0.0350
			(0.0283)			(0.0155)
Time in current job				-0.0058	-0.0058	-0.0058
				(0.0003)	(0.0003)	(0.0003)
Joint significance of 2 ranking variables						
F statistic	2.427	1.910	1.631	2.840	2.809	1.033
p-value	0.089	0.149	0.197	0.059	0.061	0.356
Joint significance of institution type and ranking variables						
F statistic	3.148	2.123	1.368	4.116	3.931	1.342
p-value	0.014	0.076	0.244	0.003	0.004	0.253
Correlation between individual fixed effects and log of rankings						
Universities	-0.217	-0.217	-0.217	-0.283	-0.279	-0.279
Colleges	-0.088	-0.088	-0.088	-0.163	-0.157	-0.154
Observations	654	654	654	64,721	64,721	64,721
R^2	0.019	0.031	0.033	0.910	0.910	0.910
Individual-level observations	64,721	64,721	64,721	64,721	64,721	64,721
Number of people	26,392	26,392	26,392	26,392	26,392	26,392
Number of movers	1,805	1,805	1,805	1,805	1,805	1,805

Notes: The table reproduces the estimates in Table 3 in the sample that includes observations with large within-institution salary changes that were subsequently reversed. See Appendix A for details. The table shows estimates from regressions of the institution pay premiums or the log of faculty real salary on institution characteristics. Columns (1) to (3) show two-step estimates. The first step regresses ln salary on individual, institution, and year fixed effects, years since PhD and its square, academic rank, tenured, female, married, number of children dummies (<6, 6-11, 12-18, 19+), female × married, and interactions between the children dummies and female; the second step (shown) regresses institution fixed effect estimates on institution characteristics using FGLS. One-step estimates –columns (4) to (6)– regress ln salary on individual and year fixed effects, the above time-varying individual characteristics, time in the current job, and the institution characteristics shown, clustering standard errors by institution. Real salaries expressed in 2020 USD. Institution ranking ranges from 1 (best) to 100. Research universities are mainly R1 but include some R2 institutions; colleges include all remaining ranked post-secondary institutions granting four-year degrees; excluded category: unranked. Large, medium, and small cities have populations above 250k, between 100k and 250k, and under 100k, respectively. Standard errors in parentheses.

Table B4: Does Endowment Increase Institution Premiums? (Including Salary Change Outliers)

	TWO-STEP ESTIMATES			ONE-STEP ESTIMATES		
	(1)	(2)	(3)	(4)	(5)	(6)
ln(endowment per student)	0.0089	0.0085	0.0168	0.0090	0.0097	0.0086
	(0.0046)	(0.0046)	(0.0070)	(0.0029)	(0.0030)	(0.0040)
Institution type (omitted=unranked)						
Research university	0.0927	0.0727	0.0371	0.0264	0.0154	0.0047
	(0.0521)	(0.0523)	(0.0581)	(0.0292)	(0.0293)	(0.0305)
Colleges	0.0521	0.0433	0.0360	-0.0009	-0.0097	-0.0077
	(0.0484)	(0.0483)	(0.0491)	(0.0270)	(0.0271)	(0.0267)
Institution characteristics						
Large city		0.0712	0.0736		0.0452	0.0398
		(0.0244)	(0.0263)		(0.0136)	(0.0141)
Medium city/suburb		0.0234	0.0256		0.0050	0.0039
		(0.0216)	(0.0220)		(0.0114)	(0.0113)
Log of total enrollment			0.0158			0.0181
			(0.0138)			(0.0087)
Undergrad only			0.0263			0.0095
			(0.0299)			(0.0190)
Private			-0.0312			0.0218
			(0.0325)			(0.0177)
Time in current job				-0.0058	-0.0058	-0.0058
				(0.0003)	(0.0003)	(0.0003)
Observations	654	654	654	64,721	64,721	64,721
R^2	0.017	0.030	0.036	0.910	0.910	0.910
Individual-level observations	64,721	64,721	64,721	64,721	64,721	64,721
Number of people	26,392	26,392	26,392	26,392	26,392	26,392
Number of movers	1,805	1,805	1,805	1,805	1,805	1,805

Notes: The table reproduces the estimates in Table 4 in the sample that includes observations with large within-institution salary changes that were subsequently reversed. See Appendix A for details. The table shows estimates from regressions of the institution pay premiums or the log of faculty real salary on institution characteristics. Columns (1) to (3) show two-step estimates. The first step regresses ln salary on individual, institution, and year fixed effects, years since PhD and its square, academic rank, tenured, female, married, number of children dummies ($<$6, 6-11, 12-18, 19+), female $\times$ married, and interactions between the children dummies and female; the second step (shown) regresses institution fixed effect estimates on institution characteristics using FGLS. One-step estimates –columns (4) to (6)– regress ln salary on individual and year fixed effects, the above time-varying individual characteristics, time in the current job, and the institution characteristics shown, clustering standard errors by institution. Real salaries and endowment per student are expressed in 2020 USD. Research universities are mainly R1 but include some R2 institutions; colleges include all remaining ranked post-secondary institutions granting four-year degrees; excluded category: unranked. Large, medium, and small cities have populations above 250k, between 100k and 250k, and under 100k, respectively. Standard errors in parentheses.

Table B5: Transition Probability by Ranking Quintile and Institution Type

| | DESTINATION | | | | | | | | | |
| | UNIVERSITIES | | | | | COLLEGES | | | | |
ORIGIN	BEST (1)	2 (2)	3 (3)	4 (4)	WORST (5)	BEST (6)	2 (7)	3 (8)	4 (9)	WORST (10)
Universities										
Best	0.419	0.246	0.089	0.039	0.024	0.047	0.047	0.063	0.024	N.D.
2	0.246	0.199	0.144	0.072	0.039	0.058	0.099	0.077	0.050	N.D.
3	0.149	0.186	0.238	0.071	0.033	0.063	0.078	0.119	0.048	N.D.
4	0.082	0.184	0.082	0.088	0.048	0.054	0.095	0.177	0.116	N.D.
Worst	N.D.	0.159	0.150	0.088	0.115	0.062	0.106	0.150	0.115	N.D.
Colleges										
Best	0.142	0.113	0.092	N.D.	0.043	0.092	0.177	0.191	0.085	N.D.
2	0.062	0.156	0.045	0.036	0.036	0.138	0.205	0.161	0.129	N.D.
3	0.051	0.073	0.117	0.069	0.077	0.062	0.102	0.263	0.150	N.D.
4	N.D.	0.051	0.080	0.087	0.123	0.065	0.167	0.203	0.167	N.D.
Worst	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Notes: The table shows the probability of moving across institutions with different prestige levels. The table divides research universities and colleges into ranking quintiles separately by type. Each cell shows the probability of moving from an institution in the indicated origin type and ranking quintile (row heading) to another in the indicated destination type and quintile (column heading). Because movements to unranked institutions are not shown, rows do not sum to 1. Data from cells with fewer than 5 individuals (denoted by N.D.) were suppressed to preserve confidentiality.

Table B6: Transition Probability by Ranking Quartile and Institution Type for Tenured Faculty

| | DESTINATION | | | | | | | |
| | UNIVERSITIES | | | | COLLEGES | | | |
ORIGIN	BEST (1)	2 (2)	3 (3)	WORST (4)	BEST (5)	2 (6)	3 (7)	WORST (8)
Universities								
Best	0.463	0.222	0.108	0.039	0.044	0.049	0.054	N.D.
2	0.270	0.180	0.185	0.069	0.090	0.111	0.069	N.D.
3	0.107	0.123	0.310	0.080	0.080	0.091	0.128	N.D.
Worst	N.D.	0.191	0.090	0.124	0.101	N.D.	0.180	0.112
Colleges								
Best	N.D.	0.151	0.079	N.D.	0.190	0.246	0.111	0.103
2	0.067	N.D.	0.192	0.092	0.092	0.100	0.233	0.158
3	N.D.	N.D.	0.129	0.114	0.100	0.186	0.171	0.214
Worst	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Notes: The table shows the probability of moving across institutions with different prestige levels for tenured faculty. The table divides research universities and colleges into ranking quartiles separately by type. Each cell shows the probability of moving from an institution in the indicated origin type and ranking quartile (row heading) to another in the indicated destination type and ranking quartile (column heading). Because movements to unranked institutions are suppressed, rows do not sum to 1. Data from cells with fewer than 5 individuals (denoted by N.D.) were suppressed to preserve confidentiality.

Table B7: Log Salary Changes by Ranking Quintile and Transition Type

| | DESTINATION | | | | | | | | | |
| | UNIVERSITIES | | | | | COLLEGES | | | | |
ORIGIN	BEST (1)	2 (2)	3 (3)	4 (4)	WORST (5)	BEST (6)	2 (7)	3 (8)	4 (9)	WORST (10)
Universities										
Best	0.338	0.372	0.282	0.183	0.186	0.188	0.127	0.031	0.151	N.D.
2	0.332	0.408	0.271	0.182	0.310	0.236	0.103	0.172	0.081	N.D.
3	0.275	0.241	0.089	0.335	0.319	0.340	0.289	0.241	0.025	N.D.
4	0.208	0.349	0.301	0.311	0.357	0.158	0.281	0.183	0.176	N.D.
Worst	N.D.	0.275	0.192	0.119	0.258	0.365	0.289	0.320	0.263	N.D.
Colleges										
Best	0.349	0.253	0.297	N.D.	0.382	0.321	0.301	0.204	0.173	N.D.
2	0.303	0.236	0.401	0.284	0.215	0.194	0.189	0.256	0.179	N.D.
3	0.278	0.245	0.189	0.166	0.143	0.189	0.172	0.211	0.150	N.D.
4	N.D.	0.135	0.251	0.113	0.213	0.495	0.136	0.189	0.198	N.D.
Worst	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Notes: The table shows average log changes in real salary associated with moves across institutions with different prestige. The table groups universities and colleges into ranking quintiles separately by type. Each cell shows the average log salary change associated with moves starting in institutions in the indicated origin type and ranking quintile (row heading) and ending in the indicated destination type and quintile (column heading). Table B5 shows the probabilities associated with these moves. Data from cells with fewer than 5 individuals (denoted by N.D.) were suppressed to preserve confidentiality.

Table B8: Log Salary Changes by Ranking Quartile and Transition Type for Tenured Faculty

| | DESTINATION | | | | | | | |
| | UNIVERSITIES | | | | COLLEGES | | | |
ORIGIN	BEST (1)	2 (2)	3 (3)	WORST (4)	BEST (5)	2 (6)	3 (7)	WORST (8)
Universities								
Best	0.264	0.398	0.399	0.085	0.132	0.013	0.096	N.D.
2	0.336	0.430	0.318	0.362	0.255	0.082	0.171	N.D.
3	0.169	0.220	0.118	0.296	0.442	0.210	0.290	N.D.
Worst	N.D.	0.318	0.219	0.303	0.213	N.D.	0.172	0.209
Colleges								
Best	N.D.	0.164	0.369	N.D.	0.241	0.221	0.249	0.151
2	0.211	N.D.	0.149	0.155	0.219	0.097	0.166	0.207
3	N.D.	N.D.	0.223	0.105	0.353	0.188	0.329	0.207
Worst	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Notes: The table shows average log changes in real salary associated with moves by tenured faculty across institutions with different prestige. The table groups universities and colleges into quartiles separately by type. Each cell shows the average log salary change associated with moves by tenured faculty starting in institutions in the indicated origin type and ranking quartile (row heading) and ending in the indicated destination type and quartile (column heading). Table B6 shows the probabilities associated with these moves. Data from cells with fewer than 5 individuals (denoted by N.D.) were suppressed to preserve confidentiality.

Table B9: Effect of Time-Varying Variables in AKM

	Excluding Outliers (1)	Including Outliers (2)
Years since PhD	0.0359	0.0376
	(0.0068)	(0.0072)
Years since PhD squared	-0.0002	-0.0003
	(0.0000)	(0.0000)
Is tenured	0.0073	0.0074
	(0.0070)	(0.0087)
Faculty rank (omitted=assistant professor)		
Lecturer	0.0287	-0.0173
	(0.0281)	(0.0795)
Instructor	-0.0068	-0.0040
	(0.0376)	(0.0384)
Associate professor	0.0453	0.0486
	(0.0080)	(0.0100)
Professor	0.1455	0.1582
	(0.0098)	(0.0125)
Other	0.0803	0.0866
	(0.0189)	(0.0213)
Married	0.0060	0.0093
	(0.0058)	(0.0076)
Married × female	-0.0005	0.0010
	(0.0089)	(0.0117)
Children below 6	0.0021	-0.0004
	(0.0041)	(0.0055)
Children below 6 × female	-0.0054	0.0017
	(0.0075)	(0.0090)
Children between 6 and 11	0.0037	0.0021
	(0.0038)	(0.0047)
Children between 6 and 11× female	-0.0096	-0.0091
	(0.0062)	(0.0074)
Children between 12 and 18	0.0100	0.0120
	(0.0036)	(0.0042)
Children between 12 and 18× female	-0.0190	-0.0170
	(0.0066)	(0.0079)
Children between 19+	0.0038	0.0040
	(0.0037)	(0.0044)
Children between 19+× female	-0.0083	-0.0086
	(0.0081)	(0.0098)
Individual FE	✓	✓
Institution FE	✓	✓
Year FE	✓	✓
Observations	63,376	64,721
Number of people	26,135	26,392
Number of movers	1,805	1,805
R^2	0.95	0.91

Notes: The table shows the results of regressing the log of real faculty salary on time-varying controls, institution, year, and individual fixed effects. Column (1) excludes observations with large within-institution salary changes and is the first step for the estimates shown in columns (1)-(3) of Tables 3-4 and is used for the variance estimates in Table 2. Column (2) includes salary change outliers and corresponds to the first step of columns (1)-(3) in Tables B3-B4 and the variance estimates in Table B2. See Appendix A for details on the outlier definition. Real faculty salaries expressed in 2020 USD. Standard errors clustered at the institution level in parentheses.

Table B10: Pay Premiums and Rankings for Tenured Faculty

	ALL FACULTY	TENURED FACULTY
	(1)	(2)
Institution type × log or ranking		
Research university	-0.0250	0.0003
	(0.0180)	(0.0271)
College	-0.0020	0.0323
	(0.0173)	(0.0254)
Institution type (omitted=unranked)		
Research university	0.1828	0.0930
	(0.0948)	(0.1411)
College	0.0926	-0.0305
	(0.0802)	(0.1177)
Institution characteristics		
Large city	0.0660	0.0554
	(0.0225)	(0.0334)
Medium city	0.0332	0.0616
	(0.0203)	(0.0298)
Log of total enrollment	0.0117	0.0017
	(0.0128)	(0.0188)
Undergrad only	0.0012	0.0217
	(0.0318)	(0.0459)
Private institution	0.0054	0.0327
	(0.0298)	(0.0439)
Joint significance of 2 ranking variables		
F statistic	1.064	0.929
p-value	0.346	0.396
Joint significance of institution type and ranking variables		
F statistic	1.256	0.952
p-value	0.286	0.434
Observations	434	434
R^2	0.066	0.027

Notes: The table shows the relationship between institution pay premiums and institution characteristics. The table restricts the sample to faculty remaining in the largest connected set when limiting the sample to tenured faculty. Column (1) shows results for all faculty in this connected set, while column (2) restricts the sample to tenured faculty. The table shows two-step estimates. The first step regresses the log of real salary on year, individual, and institution fixed effects, years since PhD and its square, academic rank, tenured, female, married, number of children dummies (<6, 6-11, 12-18, 19+), female × married, and interactions between the children dummies and femle; the second step (shown) regresses institution fixed effects on the institution characteristics shown. Institution ranking ranges from 1 (best) to 100. FGLS standard errors in parentheses.

Table B11: Institution Pay Premiums and Rankings by PhD Field

	BIOLOGICAL SCIENCES		ENGINEERING	
	(1)	(2)	(3)	(4)
Institution type × log of ranking				
Research university	-0.0065		-0.0078	
	(0.0306)		(0.0266)	
College	-0.0521		-0.0240	
	(0.0491)		(0.0407)	
Institution type (omitted=unranked)				
Research university	-0.0691		0.2841	
	(0.1788)		(0.1778)	
College	0.0841		0.2869	
	(0.2265)		(0.2007)	
log of UNSWR field ranking		0.0059		-0.0165
		(0.0206)		(0.0201)
Institution characteristics				
Large city	-0.0115	-0.0084	0.0096	0.0130
	(0.0508)	(0.0459)	(0.0503)	(0.0551)
Medium city	-0.0105	0.0282	0.0992	0.1044
	(0.0493)	(0.0447)	(0.0500)	(0.0530)
Private institution	0.1341	0.1064	-0.0512	0.0603
	(0.0635)	(0.0546)	(0.0607)	(0.0530)
Undergrad only	0.0265		0.0521	
	(0.0987)		(0.1078)	
Log of total enrollment	0.0381	-0.0207	-0.0548	0.0111
	(0.0346)	(0.0385)	(0.0381)	(0.0386)
Joint significance of 2 ranking variables				
F statistic	0.563		0.194	
p-value	0.570		0.824	
Joint significance of institution type and ranking variables				
F statistic	0.520		0.978	
p-value	0.721		0.422	
Observations	224	155	153	113
R^2	0.058	0.063	0.080	0.089

Notes: The table shows estimates of the relationship between institution pay premiums and institution characteristics for faculty with Biological Sciences and Engineering PhDs. The table shows results for two-step estimation when limiting the sample to Biological Sciences PhDs –column (1)-(2) and Engineering PhDs –columns (3)-(4)–. Columns (1) and (3) use the THE rankings as the main regressor, while columns (2) and (4) use the USNWR Departmental Rankings. In the first step, we limit the sample to people with a PhD in Biological Sciences or Engineering and estimate an AKM model controlling for year, individual, and institution fixed effects, and time-varying individual controls. In the second step (shown), we regress the institution fixed effect estimates on the shown institution characteristics using FGLS. Institution ranking ranges from 1 (best) to 100. Research universities are mainly R1 but include some R2 schools. Colleges include all remaining post-secondary institutions granting four-year degrees. Large, medium, and small cities have populations above 250k, between 100k and 250k, and under 100k, respectively. Standard errors in parentheses.

Table B12: Effect of Time-Varying Variables in One-Step Estimation

	(1)	(2)	(3)	(4)	(5)	(6)
Years since PhD	0.0343	0.0343	0.0343	0.0104	0.0102	0.0103
	(0.0067)	(0.0066)	(0.0066)	(0.0009)	(0.0009)	(0.0008)
Years since PhD squared	-0.0002	-0.0002	-0.0002	0.0001	0.0001	0.0001
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Is tenured	0.0140	0.0141	0.0140	0.0029	0.0058	0.0027
	(0.0072)	(0.0071)	(0.0071)	(0.0080)	(0.0077)	(0.0077)
Time in current job	-0.0058	-0.0058	-0.0058	-0.0106	-0.0106	-0.0105
	(0.0003)	(0.0003)	(0.0003)	(0.0004)	(0.0004)	(0.0003)
Faculty rank (omitted=assistant professor)						
Lecturer	0.0699	0.0716	0.0695	-0.0684	-0.0709	-0.0724
	(0.0280)	(0.0286)	(0.0287)	(0.0492)	(0.0483)	(0.0487)
Instructor	-0.0028	-0.0021	-0.0018	-0.1006	-0.1026	-0.1000
	(0.0384)	(0.0383)	(0.0383)	(0.0404)	(0.0419)	(0.0411)
Associate professor	0.0430	0.0428	0.0429	0.1148	0.1135	0.1159
	(0.0080)	(0.0079)	(0.0079)	(0.0076)	(0.0074)	(0.0074)
Professor	0.1460	0.1460	0.1461	0.3653	0.3661	0.3679
	(0.0099)	(0.0098)	(0.0098)	(0.0102)	(0.0101)	(0.0101)
Other	0.0819	0.0822	0.0822	0.0606	0.0634	0.0637
	(0.0197)	(0.0197)	(0.0197)	(0.0303)	(0.0307)	(0.0319)
Married	0.0045	0.0045	0.0045	0.0391	0.0412	0.0404
	(0.0057)	(0.0057)	(0.0057)	(0.0052)	(0.0052)	(0.0052)
Married × female	0.0001	0.0000	-0.0000	-0.0290	-0.0303	-0.0300
	(0.0089)	(0.0090)	(0.0090)	(0.0078)	(0.0077)	(0.0077)
Children below 6	0.0035	0.0035	0.0035	0.0070	0.0071	0.0071
	(0.0041)	(0.0041)	(0.0041)	(0.0048)	(0.0048)	(0.0048)
Children below 6 × female	-0.0074	-0.0079	-0.0080	0.0006	0.0007	0.0017
	(0.0072)	(0.0072)	(0.0072)	(0.0070)	(0.0070)	(0.0069)
Children between 6 and 11	0.0058	0.0058	0.0058	0.0109	0.0106	0.0100
	(0.0037)	(0.0037)	(0.0037)	(0.0041)	(0.0040)	(0.0039)
Children between 6 and 11× female	-0.0123	-0.0126	-0.0126	-0.0058	-0.0048	-0.0037
	(0.0062)	(0.0062)	(0.0062)	(0.0066)	(0.0066)	(0.0065)
Children between 12 and 18	0.0104	0.0105	0.0105	0.0198	0.0206	0.0200
	(0.0033)	(0.0034)	(0.0034)	(0.0043)	(0.0043)	(0.0043)
Children between 12 and 18× female	-0.0175	-0.0174	-0.0174	-0.0126	-0.0138	-0.0124
	(0.0061)	(0.0061)	(0.0061)	(0.0073)	(0.0073)	(0.0072)
Children between 19+	0.0041	0.0041	0.0041	0.0153	0.0141	0.0130
	(0.0036)	(0.0036)	(0.0036)	(0.0053)	(0.0053)	(0.0052)
Children between 19+× female	-0.0087	-0.0091	-0.0090	-0.0060	-0.0083	-0.0048
	(0.0080)	(0.0080)	(0.0080)	(0.0097)	(0.0096)	(0.0095)
Year FE	✓	✓	✓	✓	✓	✓
Individual FE	✓	✓	✓			
Institution type	✓	✓	✓	✓	✓	✓
Institution type × log ranking	✓	✓	✓	✓	✓	✓
Institution location		✓	✓		✓	✓
Log of total enrollment		✓	✓		✓	✓
Undergrad only			✓			✓
Private			✓			✓
Observations	63,376	63,376	63,376	63,376	63,376	63,376
Number of movers	1,805	1,805	1,805	1,805	1,805	1,805
R^2	0.95	0.95	0.95	0.53	0.53	0.54

Notes: The table shows the coefficients on the time-varying controls in regressions of the log of faculty real salary on individual and institution characteristics. Coeffients in columns (1)-(3) correspond to specifications in columns (4)-(6) of Table 3. Columns (4)-(6) use the same specification as columns (1)-(3) but do not control for individual fixed effects. Real salary expressed in 2020 USD. Standard errors clustered at the institution level in parentheses.

Table B13: Effect of Current and Origin Institution Characteristics

	(1)	(2)
Current: log institution type × log of rank		
Research university	-0.0071	-0.0144
	(0.0185)	(0.0276)
College	0.0096	0.0254
	(0.0212)	(0.0349)
Origin: log institution type × log of rank		
Research university		-0.0577
		(0.0300)
College		-0.0310
		(0.0326)
Years in current job	-0.0075	-0.0072
	(0.0014)	(0.0014)
Destination university characteristics		✓
Origin institution characteristics		✓
Observations	4,570	4,570
R^2	0.957	0.959
Within R^2	0.083	0.129

Notes: The table shows the results of regressing the log of faculty salary on current institution type and its interaction with the log of the current employer's rankings, previous institution type, and its interaction with the log of the previous employer's ranking. Other controls include individual fixed effects and time-varying individual characteristics (see Table B9). The regression limits the sample to faculty who moved across institutions at least once, so that we observe the previous employer. When indicated, the regression controls for the following current (origin) institution characteristics: log of total enrollment, city size dummies, and indicators of private and undergraduate-only institution. Standard errors clustered by current institution in parentheses.

Table B14: Do Rankings Increase the Job Satisfaction?

	Very Satisfied		Somewhat satisfied or higher	
	Two-step	One-step	Two-step	One-step
	(1)	(2)	(3)	(4)
Institution type × log of ranking				
Research university	-0.0009	0.0178	-0.0354	-0.0181
	(0.0517)	(0.0215)	(0.0411)	(0.0119)
College	0.0234	-0.0031	-0.0089	0.0029
	(0.0402)	(0.0336)	(0.0323)	(0.0187)
Institution type (omitted=unranked)				
Research university	0.0011	-0.1510	0.2889	0.0687
	(0.2502)	(0.1592)	(0.2011)	(0.0657)
College	-0.1212	-0.0926	0.1376	-0.0015
	(0.2044)	(0.1850)	(0.1657)	(0.0834)
Institution characteristics				
Large city	0.0238	0.0373	0.0069	0.0019
	(0.0658)	(0.0348)	(0.0526)	(0.0199)
Medium city	0.1042	0.0388	0.0008	-0.0088
	(0.0575)	(0.0320)	(0.0463)	(0.0211)
Log of total enrollment	0.0063	0.0349	-0.0107	0.0085
	(0.0388)	(0.0275)	(0.0313)	(0.0136)
Undergrad only	0.0621	0.0800	0.1032	0.0149
	(0.0857)	(0.0728)	(0.0686)	(0.0336)
Private institution	0.0535	0.0189	-0.0550	-0.0399
	(0.0741)	(0.0480)	(0.0596)	(0.0251)
Log of salary		0.2757		0.0868
		(0.0364)		(0.0191)
Time in current job		-0.0017		-0.0008
		(0.0010)		(0.0005)
Observations	475	37,881	475	37,881
R^2	0.012	0.693	0.012	0.645

Notes: The table shows estimates for the relationship between job satisfaction and institution charac-
teristics, after controlling for faculty pay. The dependent variable in columns (1)-(2) is an indicator of
being very satisfied with the job, while in columns (3)-(4) is an indicator of being somewhat satisfied or
very satisfied with the job. Columns (1) and (3) show two-step estimates. The first step regresses the job
satisfaction indicator on log salary, individual, year, and institution fixed effects, years since PhD and its
square, academic rank, tenured, female, married, children (<6, 6-11, 12-18, 19+), female × married, and
interactions between the number of children and female; the second step (shown) regresses institution
fixed effects on institution characteristics using FGLS. One-step estimates –columns (2) and (4)– regress
the job satisfaction indicator on year and individual fixed effects, log salary, the above time-varying indi-
vidual characteristics, time in current job, and the institution characteristics shown, clustering standard
errors by institution. Institution rank ranges from 1 (best) to 100. Research universities are mainly
R1 but include some R2 institutions; colleges include all remaining ranked post-secondary institutions
granting four-year degrees; excluded category: unranked. Large, medium, and small cities have popu-
lations above 250k, between 100k and 250k, and under 100k, respectively. Salaries expressed in 2020
USD. Standard errors in parentheses.

Table B15: Log Salary Changes by Quartile of Coworkers' Salaries

	DESTINATION				
	BEST	2	3	4	WORST
ORIGIN	(1)	(2)	(3)	(4)	(5)
Best	0.227	0.238	0.211	0.246	0.267
2	0.294	0.189	0.278	0.320	0.388
3	0.143	0.265	0.223	0.357	0.342
4	N.D.	0.218	0.434	0.193	0.351
Worst	N.D.	N.D.	0.310	0.222	0.296

Notes: The table shows the average changes in real log salary associated with moves across institutions with different levels of coworkers' pay. We follow Card et al. (2018) and classify transitions based on coworkers' salary rank. For each worker in each year, we compute the rank of the average coworker salary for that year. We then classified transitions, setting origin rank as the rank quintile in the year right before the move, and as destination rank that of the first year in the new institution. Data from cells with fewer than 5 individuals (denoted by N.D.) were suppressed to preserve confidentiality.
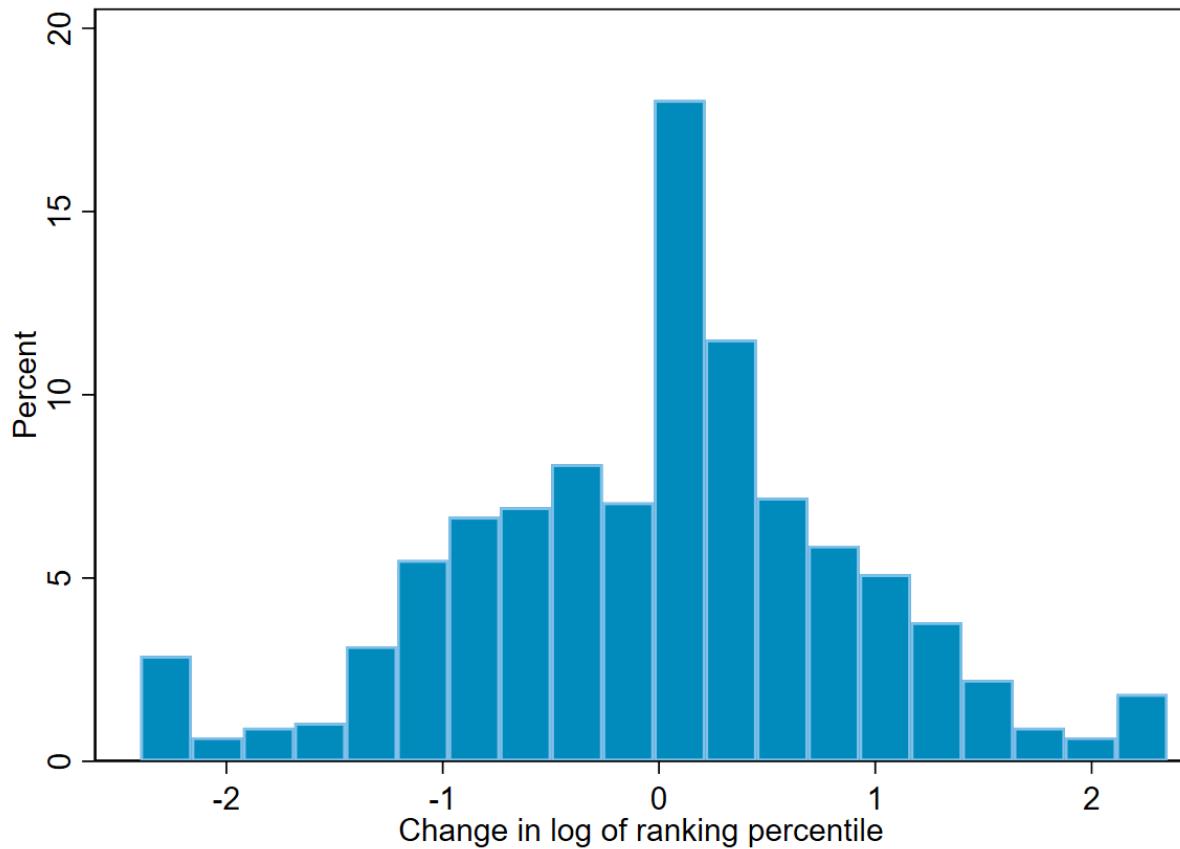
Table B16: Transition Probability by coworkers' salary quintile

| | DESTINATION | | | | |
| | BEST | 2 | 3 | 4 | WORST |
ORIGIN	(1)	(2)	(3)	(4)	(5)
Best	0.356	0.218	0.176	0.133	0.118
2	0.037	0.360	0.241	0.178	0.183
3	0.021	0.061	0.444	0.292	0.182
4	N.D.	0.033	0.066	0.530	0.357
Worst	N.D.	N.D.	0.033	0.113	0.838

Notes: The table shows transition probability across institutions with different levels of coworkers' pay. We follow Card et al. (2018) and classify transitions based on coworkers' salary rank. For each worker in each year, we compute the rank of the average coworker salary for that year. We then classified transitions, setting origin rank as the rank quintile in the year right before the move, and as destination rank that of the first year in the new institution. Each row sums up to one. Data from cells with fewer than 5 individuals (denoted by N.D.) were suppressed to preserve confidentiality.
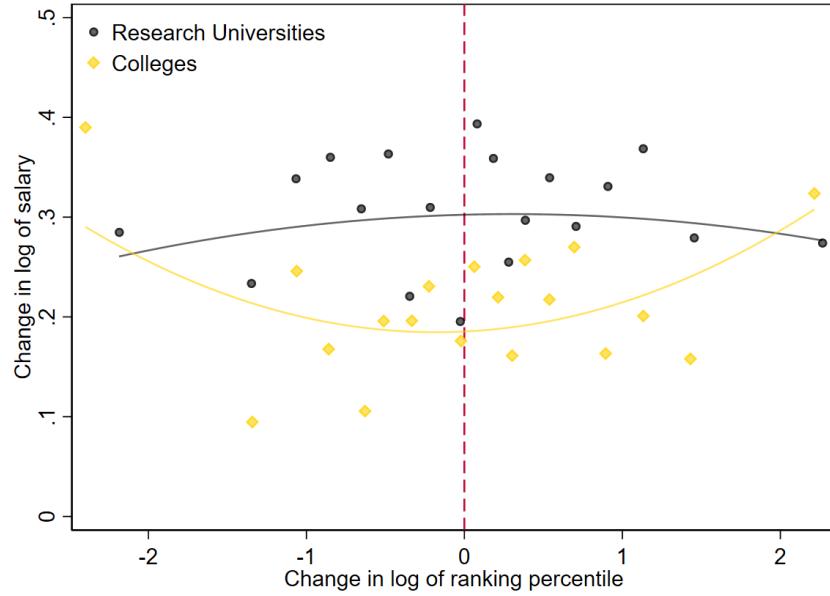
C   Figures

Figure C1: Distribution of Changes in Institution Prestige for Tenured Faculty
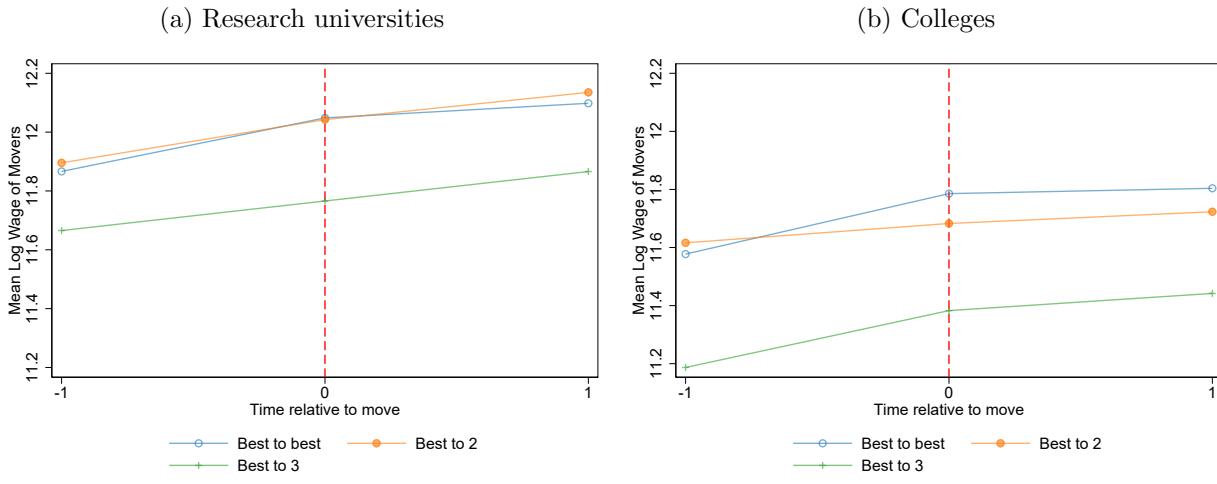

Notes: The histogram shows the distribution of changes in the institution's prestige (ranking) when tenured faculty change employers. The figure limits the sample to moves within the same institution type (university to university or college to college). Institution ranking expressed in percentiles, with lower values indicating more prestigious institutions.

Figure C2: The Relation Between Δ ln Salary and Δ ln Prestige is Symmetric Around 0
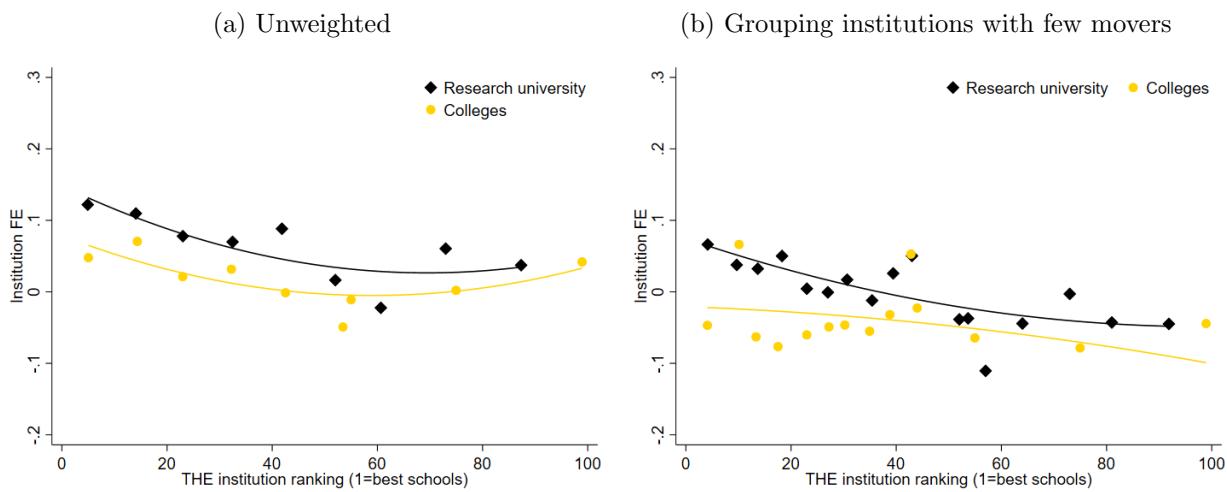
Note: The binned scatterplot shows the salary changes associated with changes in institution prestige when faculty switch employers. The figure limits the sample to moves within the same institution type (research university to research university or college to college) and fits a quadratic line separately by institution type. Institution rank is expressed in percentiles, with lower values indicating more prestigious institutions. The NSF longitudinal data and institution ranking underlying the figure are described in detail in the data section.

Figure C3: Event Studies for Moves Across Quartiles of Institution Prestige
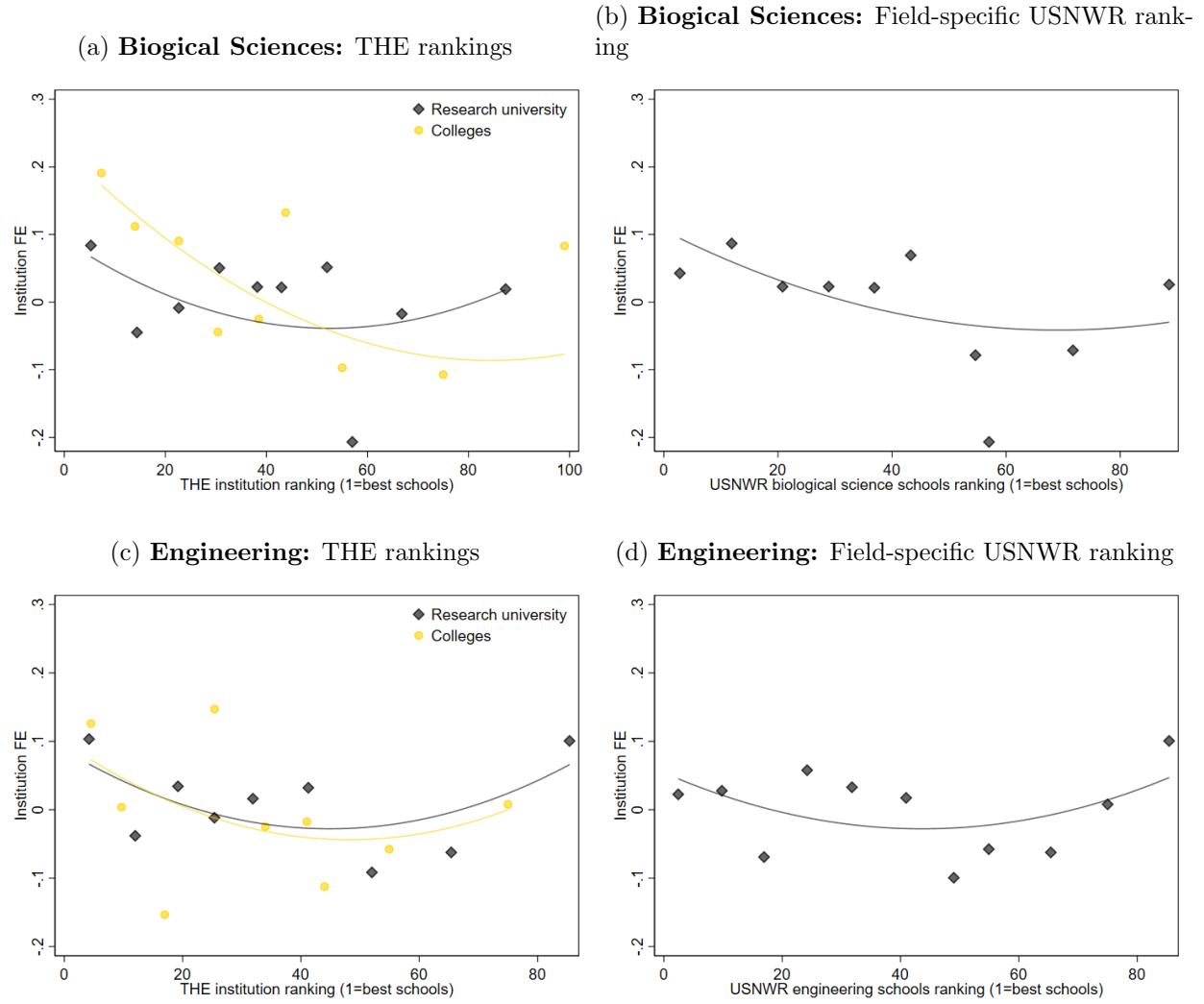
(a) Research universities

(b) Colleges

Notes: The figure shows the average log salaries of movers by institution and move types. We grouped institutions into ranking quartiles, and classified moves according to the quartile of the origin and destination institutions. Panel (a) shows faculty moves across research universities, while panel (b) shows moves across colleges. We use quartiles rather than quintiles and suppress transitions with very movers to meet the NCSES privacy requirements.

Figure C4: Relationship Between Institution Pay Premiums and Prestige is Robust

(a) Unweighted

(b) Grouping institutions with few movers
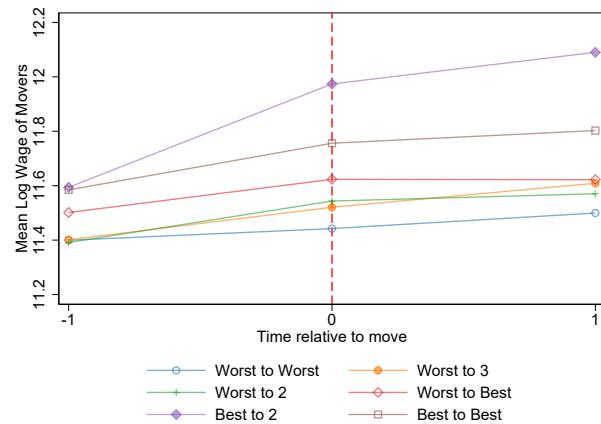
Notes: The binned scatterplots show the relationship between institution pay premiums and prestige for alternative treatments of institutions with few movers. Panel (a) shows the unweighted relationship. Panel (b) relates premiums to rankings for "pseudo-institutions" obtained by grouping similarly ranked institutions to ensure that all the institutions in our sample have at least 5 movers in them. All premiums were estimated by regressing ln salary on year, individual and institution fixed effects, years since PhD and its square, academic rank, tenured, female, married, children (<6, 6-11, 12-18, 19+), female × married, female × children.

Figure C5: Institution Pay Premiums and Rankings for Biological Sciences and Engineering PhDs

(a) **Biogical Sciences:** THE rankings

(b) **Biogical Sciences:** Field-specific USNWR ranking

(c) **Engineering:** THE rankings

(d) **Engineering:** Field-specific USNWR ranking

Notes: The figure shows the relationship between institution pay premiums and institution prestige (rankings) for PhDs in specific fields. Panels (a) and (b) estimate premiums restricting the sample to faculty with PhDs in Biological Sciences, while panels (c) and (d) limit the sample to faculty with Engineering PhDs. Panels (a) and (c) relate the premiums to the institution's THE rank. Panels (b) and (d) relate the premiums to the UNSWR rankings of Biological Sciences and Engineering Schools, respectively. All premiums were estimated by regressing the log of salary on year, individual and institution fixed effects, years since PhD and its square, academic rank, tenured, female, married, children (<6, 6-11, 12-18, 19+), female × married, female × children.

Figure C6: Event Study for Moves Across Quartiles of Coworkers' Salaries

Notes: The figure shows the average log salaries of movers by institution and move types. We grouped institutions into coworkers' salary quartiles and classified the moves according to the quartiles of the origin and destination institutions. We suppressed series for quartiles with very few movers to meet the NCSES privacy requirements.