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Do Administrators' Disciplinary Backgrounds Influence Humanities Departments' Staffing Patterns?

by

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Abstract

We examined whether the academic background (humanities or not) of key university administrators predicts the proportion of faculty in the humanities who were tenured or tenure track, full- time non-tenured, or part- time non-tenured. Data come from the public use *IPEDs* files and the restricted-access versions of the First and Second *National Humanities Department Survey*, as well as data we collected on the disciplinary backgrounds of presidents, provosts, and deans. While a number of statistically significant associations were found, these associations were not stable between the two years and were sometimes opposite what one might a priori predict. As such we cannot conclude that there are stable relationships between administrators' disciplinary backgrounds and the shares of the different types of faculty employed by humanities' departments.

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I. Introduction

There has been a growing level of concern surrounding humanities departments at institutions of higher education in the United States. Public colleges and universities have had to deal with continued cutbacks in state funding (Zuckerman and Ehrenberg, 2009). Parents and students in both public and private higher education are increasingly concerned with the levels of income associated with college majors, and the proportion of undergraduates majoring in the humanities has fallen, particularly in recent years (Humanities Indicators, 2014).

While some institutions have made large cuts in funding for humanities departments, decreasing department size, restricting institutional research support, and increasing reliance on non-tenure-track or part-time faculty, others have protected their humanities departments. Here we investigate the role of one potentially important factor – the disciplinary background of key administrators – on the proportions of faculty members who are full-time tenured or tenure-track, full-time non-tenure-track, and part-time non-tenure track.

Section II provides a description of the data we use, its sample design, and some descriptive statistics. Section III presents our empirical approaches and then, section IV describes our results. Section V provides some brief concluding remarks.

II. Data

In our econometric analyses, we ask the following question: holding constant the shares of different types of faculty at the overall institutional level and other control variables, are the disciplinary backgrounds of key administrators associated with the shares of different types of faculty members in the humanities departments in our sample? In order to address this issue we combine data from several sources.

Restricted-access data from the first and second *National Humanities Department Surveys* (NHDS) - collected by the American Academy of Arts and Sciences - provides the humanities department faculty data used in our analyses. The sample includes humanities departments at a wide range of academic institutions and a number of fields. The NHDS, collected in 2008 and 2012, provide us with faculty count data that enable us to calculate the proportion of faculty in each department who are full-time tenured and tenure-track (referred to as full-time tenure-track for simplicity), full-time non tenure-track, and part-time non-tenure track faculty.[1]

The Integrated Postsecondary Data System (IPEDs) *Fall Staff Survey* provides counts of the different faculty types at the entire academic institution in which each department in the NHDS is located. We used the 2007 and 2012 IPEDs surveys as these correspond most closely to the years for which faculty data appeared in the *NHDS* and use the IPEDs data to compute the shares of tenured and tenure-track, full-time non-tenure-track and part-time non tenure-track faculty for each institution as a whole.

[1] We combine full-time tenure and tenure-track and part-time tenure and tenure-track together; part-time tenure and tenure-track represent only a small fraction of the sample.

We constructed a dataset of the key academic administrators at each institution from the 2003-2011 editions of the *Higher Education Directory* (2012). We collected the names of the president/chancellor, provost/vice president for academic affairs, and deans likely to have been responsible for humanities departments at the institutions that participated in the first survey. The 2003-2011 time period provides information for each institution on administrators' names for several years before both waves of NHDS. Information on these administrators' fields of study at various levels of education (e.g., BS, PhD) were obtained through internet searches.

We coded administrators as being in the humanities (or not) based on their field or fields of study. For those who had earned a doctorate we used the field of that degree. If an individual did not earn a doctorate, we used the field of his/her highest level of degree. If an individual earned multiple degrees within the same class (e.g., two doctoral degrees), then we coded this person as being in the humanities if at least one of these degrees was in the humanities. Having assigned the administrators a field, we coded them as being either in the humanities or not largely according to the classification scheme in the 2009-2010 *Survey of Earned Doctorates*.[2]

In the model specifications reported here we aggregated over a number of years to reflect the fact that administrators change over time and the faculty composition in any given year reflects actions taken over a number of previous years. For example, in the few years before a round of the NHDS there may be a president with a humanities background for the first three years, followed by a president with a non-humanities background for the final year. Treating a humanities background as 1 and a non-humanities background as 0, we take the average of president background over the series of years. Thus the president position would be coded as .75 in this example.

In another model specification we aggregated over the three levels of administrators to calculate the percentage of the three levels of administrators who had backgrounds in the humanities in a given year. In still other model specifications, we aggregated in both directions at once, calculating the percentage of administrators with backgrounds in the humanities over the span of several years.[3]

Finally, to control for additional factors, other than the shares of institution-wide faculty in each category and the disciplinary background of the key administrators, we include in some specifications a number of institutional-level variables that might also influence treatments of the humanities departments. These include research expenditures per student, total enrollment, dichotomous variables for the institution's Carnegie Classification (research/doctoral universities are the omitted category), whether the institution is public or private, and student test scores. The latter is measured as the average of the 75th percentile test scores submitted by entering first year students.[4] To allow for differences in the way classes are taught across humanities fields, we also

[2] In some cases we deviated from the SED classifications. For example, we coded every theology and religion field as being in the humanities and we included linguistics in the humanities.
[3] Results for these latter two types of specifications did not yield any additional information as to the effect of administrator background on faculty types. These results are not presented here, but are available upon request.
[4] The latter is calculated by taking a weighted average of the institution's entering students' 75th percentile math and critical reading scores (converted to ACT equivalents) and its entering students 75th percentile ACT scores, where the weights are the fraction of students reporting that particular exam.

include a set of dichotomous variables for each field; these are obtained from the *NHDS* questionnaire. We omit a variable for the field of English in our models, so the interpretation of the other field coefficients is as follows: holding constant all other explanatory variables, a positive (negative) coefficient for a particular field indicates that the share of faculty in the field and within that type is larger (smaller) relative to the share of English faculty of that same type.

We include in our analysis sample departments that responded to both rounds of the NHDS and reported a positive number of faculty members in each and for which IPEDS had institutional level faculty data for both years. This resulted in a sample of 621 humanities departments from 448 different academic institutions. Table 1 presents a frequency table of the Carnegie Classification of the institutions in which the departments in the sample are located. Departments at doctoral, comprehensive, and bachelors' institutions make up, respectively, 41, 28, and 31 percent of the sample.

Summary statistics are reported in table 2. The dependent variables of primary interest to us, the shares of different types of humanities faculty members, change only minimally between the two surveys. In 2008, full-time tenure-track faculty, full-time non tenure track faculty, and part-time faculty represented, respectively, around 67, 12, and 21 percent of humanities faculty members. These percentages were very similar in 2012. In addition, there is very little change in the shares of different types of faculty at the entire institution in which these departments were located. At the university-level in 2008, we observe a lower percentage of full-time tenure-track faculty (55%) and higher shares of both full-time non-tenure track (19%) and part-time non-tenure track faculty (25%). These percentages are very similar in 2012. Comparing the institutional level percentages with the humanities departments' percentages suggests that humanities departments are not treated worse than other departments at these institutions in terms of the percentage of their faculty members that are full-time tenured or tenure-track.

Table 3 presents the frequency distribution for the departments in our sample. Religion, history, art history, English, and foreign language each represent over 10 percent of the sample. Linguistics represents 9 percent, while the history of science and technology and MLA combined English and foreign language departments are smaller, at 4 and 2 percent of the sample, respectively.

Defining whether the institution's administrators have humanities background is a bit more complicated. It is common for a position, such as the president, to be occupied by the same individual for a number of years, so that there is substantial correlation between the humanities background status of the president in one year and the next. Table 4 reports correlations of the president variable (1=humanist, 0=other) during the 2003 to 2011 period. The correlations between two years start out high and decreases as the distance between years increases. Correlations between one year and the following year hover around 0.85 to 0.90. The correlation between 2003 and 2011 is 0.39. We do not present similar tables for provost and dean, but the same patterns are observed, although with somewhat smaller magnitudes. Due to the high year to year correlations described above inserting the information for each position for a number of years prior to the NHDS years in our models would lead to a substantial multicollinearity problem, unreliable coefficient estimates, and decreased ability to detect effects.

In order to address these issues, we construct measures of the degree to which each administrative position was held by an individual with a background in the humanities by using averages taken over a number of years before the NHDS years. Using this method we define the average president variable over the 2003 to 2006 period (avPres0306) and again the average president variable from 2007 to 2011 (*avPres0711*). Analogous variables are computed for provost and dean. We present correlations of these variables in table 5. The strongest correlations are between the same position during the two time periods (president - 0.72, provost - 0.49, and dean -0.60). The remaining correlations in the table are below 0.2.

III. Empirical Strategy

Our analysis focuses on the cross section determinants of the shares of faculty of different types employed by humanities departments in a given year to ascertain whether the disciplinary backgrounds of presidents, provosts and deans are associated with the faculty shares at humanities departments at a point in time.[5]

Our equations for each year (2007 or 2012) specify that the share of humanities faculty of each type is a function of the share of the preceding 4 or 5 years that the president's, provost's and dean's highest degree was in the humanities (*avPres, avProv, avDean)*, the share of all faculty in the university that were of that type in the year (Univshare) and a vector of other control variables that have already been discussed. We cluster standard errors at the institutional level so as to allow correlation in the error term between departments within an institution. We code missing observations for an administrative positions disciplinary background as 0 and include in the equation a variable that is equal to the fraction of the time period that the observation is missing.[6] The share of faculty at the institution of a given type (full-time tenure track, full-time non-tenure-track, and part-time) corresponds to the equivalent share of humanities faculty type that is the dependent variables in the equation.

IV. Results

We analyze the 2007 and 2012 samples separately. Table 6 shows results for 2007. Estimates are presented that both include, and omit, the control variables. This table attempts to "explain" the share of each of the three faculty types in the humanities by the average background of president, provost, and dean in the several years prior and the share of the faculty at the institution as a whole that is the same type of faculty. Column 1 reports the results of regressing the share of faculty in the humanities who are full-time tenure track on the average share of president, provost, and deans with degrees in the humanities over the 2003-2006 period and the share of faculty who are full-time tenure-track in the institution as a whole. Each administrator coefficient is positive, suggesting that a higher concentration of humanists in

[5] We also estimated similar equations to try to explain how well the institutions treat their humanities departments over time by estimating changes in the faculty type shares between the two years as a function of changes in the institution's faculty type shares between the two years and changes in the administrator variables between the two years. However, such models did not yield much in the way of statistically significant findings; this may have been due to the lack of substantial variation in the administrators' backgrounds at institutions between the two periods. Results from these estimates are not reported here, but are available upon request.

[6] We also code missing observations of control variables as 0 (or, in the case of test scores, as the average of the non-missing test scores) and include missing value dichotomous variables..

administrative positions is associated with a higher percent of humanity faculty holding full-time tenure-track positions; however, none of the administrator estimates are statistically significantly different from zero. If it were statistically significant, the interpretation of *avPres0306*, for example, would be that a one-unit increase in *avPres0306* (meaning that the president(s) over this time period go from having completely non-humanities degrees to completely having humanities degrees) is associated with a 1.8 percentage point increase in the share of full-time tenure track faculty in the humanities. The 0.505 coefficient on the share of the institution's faculty that is full-time tenure track shows that there is a positive association between the share of faculty at the university as a whole who are tenure track and the share of faculty in the institution's humanities department who are tenure-track.[7]

Column 2 reports a similar specification but includes the controls outlined in section III. The coefficients on average president and average dean remain insignificant, but positive. However, the provost variable is now positive and significant. Columns 3 and 4 report similar estimates where the dependent variable is the share of humanities faculty that is full-time non-tenure track and columns 5 and 6 present similar estimates for the share of humanities faculty that is part-time. In some specifications the dean variable is seen to be significantly positively associated with the share of faculty that is full-time non-tenure-track and significantly negatively associated with the share of faculty that is part-time. At first glance, this suggests that having a dean with a humanities degree is associated with the substitution away from part-time faculty to full-time tenure track faculty in the humanities.

However, first glances may be deceiving. Table 7 presents the analog of table 6 using the 2012 NHDS data. The coefficient of the president is negative and statistically significant, even after controls are included in the estimation of the share of full-time tenure and tenure-track faculty, suggesting that in 2012, having a greater share of presidents in the recent past who had humanities degrees was associated with a smaller share of faculty in the institution's humanities department having full-time tenure-track appointments. Similarly, the coefficient for the president variables is positive and statistically significant in the part-time faculty equation, suggesting in that having a president with a humanities degree is associated with a greater share of humanities faculty being part-time. These equations also suggest that having provosts with humanities degrees is associated with a statistically smaller share of full-time non-tenure-track humanities faculty members and a larger share of part-time humanities faculty members. Finally, contrary to the results for 2007, it appears in 2012, that having a dean with a humanities degree was associated with a larger share of humanities faculty being part-time.[8]

V. Conclusion

We utilized data on the humanities background of key administrators to see if, after holding other variables constant, these backgrounds were related to the share of faculty in

[7] Ideally we would have computed the institutional faculty shares omitting all humanities departments but only one humanities department was present for most institutions in the NHDS in our sample.

[8] We also tried an instrumental variables approach because of concerns that the administrator disciplinary share variables may have been endogenous. An instrument we tried was the lagged proportion of the student body majoring in the humanities. The results from this analysis were not compelling and do not provide additional insight above-and-beyond that discussed here.

humanities departments that were full-time tenured and tenure-track, full-time non- tenure-track, and part-time. While a number of statistically significant associations were found using data from both rounds of the NHDS, these associations were not stable between the two years and sometimes were opposite what one might have expected – namely that having administrators with humanities backgrounds sometimes were not associated with outcomes that would be thought to be positive for humanities departments. While these latter findings might be explained by administrators "leaning over backwards" not to favor the disciplines to which they are closest, we conclude that given the instability of the associations we found across the two NHDS survey years, taken together our finding suggest that we cannot conclude that there are stable relationships between administrators disciplinary backgrounds and the different types of faculty employed in humanities departments.

Tenured faculty members tend to stay at academic institutions for large numbers of years and so the disciplinary backgrounds of the administrators who were in office when they were originally hired may not have accurately been reflected by the 4 or 5 year averages that we constructed. In results not reported here, we redid our analyses using the 2012 data and using all 9 years (2003 to 20011) of the administrators' disciplinary background data. However, when we did this, our results were very similar to those found in table 7.

One weakness of our study is that we focused only on the shares of different types of faculty members in the humanities departments; we did not address whether the numbers of humanities faculty members in a department were higher or lower than might be expected given the numbers of students they were handling. Unfortunately, while the NHDS contained data on teaching loads and total numbers of students taught by faculty members in each humanities department, we did not have comparable data from IPEDS for the academic institution as a whole.

References

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Table 1: Carnegie Classification

	Freq.	Pct.
Comprehensive	173	27.86
Primarily Research	255	41.06
Primarily Undergraduate	193	31.08
Total	621	100.00

Table 2: Summary Statistics

		2008	2012
Variable	Count	Mean (Std. Dev.)	Mean (Std. Dev)
HumShareFTTen	621	0.67	0.68
		(0.25)	(0.25)
HumShareFTNTen	621	0.12	0.12
		(0.18)	(0.16)
HumSharePTNTen	621	0.21	0.21
		(0.21)	(0.22)
UnivShareFTTen	621	0.56	0.56
		(0.19)	(0.20)
UnivShareFTNTen	621	0.19	0.21
		(0.13)	(0.15)
UnivSharePTNTen	621	0.25	0.24
		(0.19)	(0.20)
Research Exp./1000 Student	621	3.76	4.44
		(7.52)	(8.60)
Enrollment (in thousands)	621	12.42	13.25
		(12.73)	(13.60)
75th Percentile ACT Test Score	621	27.23	27.53
		(3.30)	(3.43)
Public	621	0.44	
		(0.50)	

Table 3: Field of Study

	Freq.	Pct.
Linguistics	56	9.02
Religion	92	14.81
History	123	19.81
Art History	117	18.84
English	96	15.46
Foreign Language	100	16.10
MLA Comb Eng/FL	27	4.35
History of Science and Technology	10	1.61
Total	621	100.00

Table 4: Correlations of Pres across Years

	a_Pres2003	a_Pres2004	a_Pres2005	a_Pres2006	a_Pres2007	a_Pres2008	a_Pres2009	a_Pres2010	a_Pres2011
a_Pres2003	1								
a_Pres2004	0.87	1							
a_Pres2005	0.79	0.91	1						
a_Pres2006	0.73	0.81	0.87	1					
a_Pres2007	0.65	0.72	0.78	0.88	1				
a_Pres2008	0.58	0.66	0.72	0.82	0.90	1			
a_Pres2009	0.49	0.55	0.60	0.69	0.76	0.85	1		
a_Pres2010	0.44	0.48	0.54	0.62	0.67	0.74	0.86	1	
a_Pres2011	0.39	0.43	0.48	0.55	0.59	0.66	0.77	0.91	1

Table 5: Correlations of avg. Pres, avg. Provost, and avg. Dean for 2003-2006 and 2007-2011

	avPres0306	avProv0306	avDean0306	avPres0711	avProv0711	avDean0711
avPres0306	1					
avProv0306	0.05	1				
avDean0306	-0.01	-0.11	1			
avPres0711	0.72	0.11	-0.09	1		
avProv0711	0.08	0.49	-0.1	0.16	1	
avDean0711	-0.02	-0.16	0.6	-0.11	-0.09	1

Table 6: Explaining 2007 Faculty Type with Average Administer Positions over Years

	Full-Time Tenure		Full-Time Non-Tenure		Part-Time Non-Tenure	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
avPres0306	0.018	0.006	-0.002	-0.009	-0.010	0.009
	(0.023)	(0.022)	(0.015)	(0.015)	(0.021)	(0.021)
avProv0306	0.016	0.042	-0.010	-0.015	-0.007	-0.030
	(0.027)	(0.026)	(0.018)	(0.018)	(0.024)	(0.024)
avDean0306	0.033	0.044*	0.029*	0.027	-0.055**	-0.061***
	(0.027)	(0.024)	(0.017)	(0.017)	(0.024)	(0.022)
UnivShareFTTen07	0.505***	0.408***				
	(0.067)	(0.064)				
UnivShareFTNTen07			0.542***	0.566***		
			(0.093)	(0.091)		
UnivSharePTNTen07					0.316***	0.210***
					(0.056)	(0.056)
Research Expenditures		-0.002		-0.001		0.003**
per 1000 students		(0.002)		(0.001)		(0.001)
Total Enrollment		-0.000		-0.001		0.001
(in Thousands)		(0.001)		(0.001)		(0.001)
Carnegie Classification:		-0.079***		-0.008		0.093***
Comprehensive		(0.030)		(0.020)		(0.027)
Carnegie Classification:		-0.032		-0.046*		0.069**
Primarily		(0.039)		(0.026)		(0.033)
Undergraduate						
Public		0.073**		-0.048**		-0.052**
		(0.028)		(0.019)		(0.026)
75th Percentile ACT		0.016***		-0.000		-0.019***
Test Score		(0.004)		(0.003)		(0.004)
Linguistics		0.180***		-0.045*		-0.125***
		(0.036)		(0.026)		(0.029)
Religion		0.051*		-0.046**		-0.013
		(0.031)		(0.023)		(0.030)
History		0.168***		-0.070***		-0.096***
		(0.027)		(0.017)		(0.025)
Art History		0.082***		-0.058**		-0.014
		(0.029)		(0.023)		(0.029)
Foreign Lang.		-0.030		0.031		-0.006
		(0.031)		(0.022)		(0.027)
MLA Comb Eng/FL		0.029		0.031		-0.066
		(0.045)		(0.035)		(0.042)
History of Science/Tech		0.275***		-0.161***		-0.129***
		(0.042)		(0.044)		(0.036)
Constant	0.373***	-0.110	0.009	0.118	0.150***	0.702***
	(0.040)	(0.106)	(0.021)	(0.075)	(0.021)	(0.117)
Observations	621	621	621	621	621	621
R-squared	0.150	0.333	0.177	0.260	0.084	0.228

Notes: Robust standard errors are in parentheses. * indicates statistical significant ant the 10% level, ** indicates statistical significance at the 5% level, and ***indicates statistical significance at the 1% level.

Table 7: Explaining 2012 Faculty Type with Average Administer Positions over Years

	Full-Time Tenure		Full-Time Non-Tenure		Part-Time Non-Tenure	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
avPres0711	-0.047*	-0.059**	0.019	0.021	0.032	0.045**
	(0.026)	(0.024)	(0.016)	(0.016)	(0.024)	(0.022)
avProv0711	-0.004	0.023	-0.058***	-0.059***	0.059**	0.032
	(0.028)	(0.025)	(0.016)	(0.015)	(0.026)	(0.023)
avDean0711	-0.039	-0.024	-0.010	-0.013	0.047*	0.036
	(0.027)	(0.025)	(0.014)	(0.014)	(0.024)	(0.022)
UnivShareFTTen12	0.405***	0.338***				
	(0.063)	(0.062)				
UnivShareFTNTen12			0.363***	0.386***		
			(0.074)	(0.074)		
UnivSharePTNTen12					0.306***	0.202***
					(0.055)	(0.051)
Research Expenditures		-0.001		-0.001		0.002*
per 1000 students		(0.001)		(0.001)		(0.001)
Total Enrollment (in		0.000		-0.002**		0.002*
Thousands)		(0.001)		(0.001)		(0.001)
Carnegie Classification:		-0.073**		-0.023		0.104***
Comprehensive		(0.033)		(0.019)		(0.029)
Carnegie Classification:		-0.010		-0.031		0.031
Primarily Undergraduate		(0.039)		(0.023)		(0.034)
Public		0.028		0.023		-0.066**
		(0.030)		(0.017)		(0.027)
75th Percentile ACT		0.017***		0.004*		-0.023***
Test Score		(0.004)		(0.003)		(0.003)
Linguistics		0.113***		-0.026		-0.078***
		(0.037)		(0.032)		(0.028)
Religion		0.023		-0.044**		0.020
		(0.031)		(0.021)		(0.028)
History		0.119***		-0.071***		-0.045*
		(0.028)		(0.017)		(0.025)
Art History		0.103***		-0.077***		-0.020
		(0.031)		(0.019)		(0.028)
Foreign Lang.		-0.090***		0.046*		0.046
		(0.030)		(0.023)		(0.028)
MLA Comb Eng/FL		0.020		0.015		-0.033
		(0.041)		(0.028)		(0.038)
History of Science/Tech		0.204***		-0.149***		-0.064
		(0.075)		(0.040)		(0.053)
Constant	0.494***	0.012	0.052***	-0.008	0.083***	0.718***
	(0.039)	(0.107)	(0.018)	(0.072)	(0.020)	(0.101)
Observations	621	621	621	621	621	621
R-squared	0.128	0.306	0.147	0.241	0.100	0.283

Notes: Robust standard errors are in parentheses. * indicates statistical significant ant the 10% level, ** indicates statistical significance at the 5% level, and ***indicates statistical significance at the 1% level.