Job Stability among U.S. University Presidents

James Monks

Robins School of Business

University of Richmond, VA 23173

jmonks@richmond.edu

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Abstract

This paper examines job duration among U.S. university presidents from 2001 to 2006. Using data from the American Council of Education's Survey of American College Presidents, this analysis finds that public university presidents are approximately 50 percent more likely to leave office than are their private university counterparts. This turnover translates into average job spells that are approximately 20 percent shorter for public university presidents. This job instability appears primarily to be driven by the higher propensity for public university presidents to leave one institution to become president at another institution.

1. Introduction

A number of studies have analyzed the increasing turnover rate of the United States job market. These studies have attempted to quantify the growth of job insecurity and instability and to identify its underlying causes. A related vein of literature has examined individual labor markets and changes (or lack thereof) in job tenure in particular occupations or industries. The tertiary education industry has largely been exempt from these analyses for a number of perhaps contradictory reasons. For one, an increasing percentage of the higher education work force is composed of part-time and full-time temporary workers. For example, in 1975 only 30.2 percent of faculty were part-time and 13 percent were full-time temporary. By 2005, according to calculations by the American Association of University Professors (AAUP) based on U.S. Department of Education, IPEDS Fall Staff surveys, fully 48 percent and 20.1 percent were part-time or full-time temporary, respectively. Clearly, average job duration is declining and the likelihood of job turnover is increasing among faculty. On the other hand, a significant percent of faculty have tenure and thus their jobs are considered virtually immune from market forces that might negatively influence turnover.

While faculty labor markets may be the focus of most of the existing analyses of academic labor markets, they clearly are not the only employees in higher education. A prominent employee on every campus of course is the university president (or chancellor). Ironically, the labor market for university presidents has received scant analysis by researchers of higher education (unlike CEOs in the for profit sector). The conventional wisdom is that the

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¹ See Farber (2008) and Neumark (2000) for a survey of this literature.

² A few examples are Lawless and Murphy (2008), Hicks (2007), Konzelmann, Wilkinson, and Mankelow (2007), Whitebook and Sakai (2004), Sauer (1998).

academic executive office has become more unstable over time. What remains less well known are the individual and institutional attributes that are related to presidential job stability. There is a growing literature and understanding of significant differences in remuneration and labor market conditions in the private versus the public college and university sectors. This literature has again focused primarily on faculty and the growing salary premium at private universities versus public universities (see Alexander (2001), and Zogbi (2003)). There are, however, a few studies that have analyzed the remuneration of university presidents. Unfortunately, most of these studies, due to data limitations focused solely on private university presidents, and the attributes that determine their compensation.

The job turnover and stability of the higher education's chief executives is less well understood. This study fills this void in the literature by examining the job stability of U.S. college and university presidents. In particular, this analysis investigates differences between public and private college and university presidents in their likelihood of leaving office in a five year period, reasons for departures among presidential job-movers, and differences in their average length of time in office. Additionally, this paper attempts to identify underlying causes of the higher job instability among public university presidents. In particular, this study examines differences salaries and in the prevalence and longevity of formal written contracts between the private and public university presidents as potential causes of the differences in job stability.

2. Literature Review

A few studies have examined labor market outcomes for American university presidents.

These studies have primarily focused on compensation and to a lesser degree length of time in

office. For example, a handful of researchers have examined the remuneration of university presidents (Boulanger and Pliskin (1999), Ehrenberg, Cheslock, and Epifantseva (2001); Monks (2007); Pfeffer and Ross (1988)). The existing studies of presidents' compensation structures primarily rely on data from the *Chronicle of Higher Education's* online database of university presidents' salaries and benefits. Specifically, Ehrenberg, Cheslock, and Epifantseva (2001) examine the characteristics that are most highly compensated among private college and university presidents. They find significant correlations between earnings and seniority and prior executive experience, as well as the type (Carnegie classification) and size of the institution. They do not find consistent convincing evidence of a relationship between institutional performance and presidential earnings.

Boulanger and Pliskin (1999) also investigate determinants of private institutions' presidents' earnings using salary data from the *Chronicle of Higher Education*, for 1995-96. They find that presidential remuneration is positively related to the total expenditures of an institution. They also conclude that presidents of more selective institutions earn more than presidents of less selective institutions. Time in office as president was also found to have a positive and significant influence on compensation.

Tang, Tang, & Tang (1996a) and Tang and Tang (1996b) also utilize data from the *Chronicle of Higher Education* to examine private university presidents' compensation, for the academic year 1991-92. They too report that compensation is positively and significantly related to total expenditures, academic reputation rating from *US News and World Report*, and Carnegie classification.

Pfeffer and Ross (1988) use data from the College and University Personnel Association's (CUPA) Annual Administrative Compensation Surveys for academic years 1978-79 and 1983-84 to investigate presidential remuneration. They find that both individual characteristics such as seniority, gender, and whether the individual was hired internally, and institutional features such as size, resources,

Carnegie classification, and control (public versus private) are significantly correlated with presidents' earnings.

Monks (2007) utilized data from the American Council of Education (ACE) and the *Chronicle of Higher Education* to examine differences in compensation between public and private doctoral university presidents. He reported that private university presidents were compensated by up to 50 percent more than their public university peers, conditional upon institutional characteristics, time in office, age, sex, race, and field of specialization.

Reed (2002) examined turnover among public university presidents who were appointed to their office between 1987 and 1990. She found there were no significant differences in turnover or length of time in office between male and female presidents, nor did she find significant differences in turnover by race. She reported that approximately three fourths of these newly appointed presidents were still in office six years later, and that the average time in office was 8.54 years. This study provides valuable benchmarks of presidential seniority, but unfortunately only performs a series of pair-wise comparisons between groups, without controlling concurrently for other factors.

Padilla and Ghosh (2000) also investigated university presidential turnover. They analyzed the link between institutional characteristics and presidential time in office over time. They found that the average time in office among research I university presidents was decreasing markedly over time, particularly among public university presidents. They speculated that this decline in longevity could be at least partly due to increases in presidential salaries.

This paper will contribute to the relatively sparse literature on academic presidents' job spells by using the most recent data available on length of time in office and focusing on

differentials between public and private university presidents in job turnover. In addition, this analysis examines differences between public and private university presidents in the reasons for job separations.

3. Data

The data for this analysis comes primarily from the American Council on Education's (ACE) American College Presidents' Survey, for the years 2001 and 2006. The ACE has surveyed American college and university presidents approximately every five years since 1986. The 2001 survey contained responses from 1,181 presidents, while the 2006 survey included information from 2,148 college and university presidents. These two datasets were merged in order to obtain a single data file of institutions that responded in both survey years. This matched data file contained information for the presidents of 964 institutions (see Table 1 for sample construction).

Additionally, there were forty observations in the 2001 data set with a duplicate institutional identifying variable. These forty observations were excluded from the sample used here. Another 4 institutions that were classified as Specialty Institutions (such as culinary schools, or performing arts colleges) were also excluded. Finally, 122 institutions were deleted because they did not report the 2001 president's hiring year, and another 11 were excluded because the 2006 hiring year was not reported, thus an accurate length of time in office could not be determined. These restrictions resulted in a final data set of 787 matched institutions that had valid presidential job durations, for the 2001 and 2006 survey years.

This ACE based data was merged with salary information from the *Chronicle of Higher Education* online database of executive compensation. Because the *Chronicle* did not begin collecting and reporting presidential salaries for public universities until 2004, only the 2006 ACE job holder could be matched with his or her 2006-2007 academic year compensation information. Additionally, public presidential salary data was collected only for doctoral and research universities with enrollments of 10,000 students or more (and community college presidents), while private university presidential data was collected for colleges and universities of all sizes and classification. Presidents in the subsample of the ACE data used in this paper that met these criteria were matched with their total financial compensation (salary plus benefits) from the *Chronicle* dataset.

The final data set used in this analysis thus contains information obtained from the two ACE data sets, the *Chronicle of Higher Education* online executive compensation dataset, and IPEDS data. Table 2 presents summary measures by survey year. The average length of time in office (these are uncompleted spells in office) rose from 6.5 years in 2001 to 8.7 years in 2006. This difference is statistically different from zero at the 99 percent level. Clearly, average overall time in the presidential office has gone up. Furthermore, about one in four of the college and university presidents who held office in 2001 left their position over the next five years.

Consistent with the increase in job duration found above, the average age of the officeholder increased significantly from 58.7 to 60.9. The percentage of presidents with a field in law or medicine also significantly increased over this time period from 6.6 percent to 10.7 percent. All other individual characteristics remained quite similar over the two survey years. It is, however, interesting to note that women constitute approximately one in five college and

university presidents, and racial minorities represent between 11 to 14 percent of university leaders. Not surprisingly, the field with the highest percentage of presidents is education, followed by humanities, religion and the arts, the social sciences and business, the sciences and mathematics, and then law and medicine.

In this matched sample of institutions approximately 38 percent of the institutions are publicly controlled. Forty-four percent are baccalaureate institutions, 39 percent are masters institutions, and 17 percent are doctoral/research universities, using the 2001 Carnegie classifications.

Table 3 presents summary measures separately for public and private institutions, by year. It is clear that by 2006 presidents of public institutions had an average time in office that was substantially lower than their private counterparts. While the average time in office for public university presidents was approximately half a year lower in 2001 (and not significantly different), it was one and a half years lower by 2006, and significantly different at the 5 percent level. Similarly, only 22.5 percent of the private presidents in our 2001 sample had left their presidency by 2006, while almost 29 percent of public university presidents were no longer in the same position five years later. This difference in turnover is statistically different from zero at the 10 percent level. Interestingly, this difference in turnover is mostly attributable to higher percentages of public university presidents retiring or taking a different presidency at another institution. A Chi-squared test of independence between institutional control (public-private) and reason for leaving one's presidency rejects the null of independence, at the one percent level (test statistic = 46.6, d.f.=5). It is also interesting to note that no private institution president moved to a public institution in this sample, while a few public university presidents moved to

private institutions. Generally, presidents appear to stay within sectors when moving corner offices.

There are notable differences between some of the individual characteristics of public and private university presidents, and in the type of institutions that they lead. For example, looking at the individual characteristics of presidents from the 2006 survey, one observes that over 90 percent of private institution presidents are white/non-Hispanic, while only 79 percent of public university presidents are white/non-Hispanic. About 20 percent of both public and private institutions are led by female presidents. Ironically, despite the lower job tenures the average public university president is approximately a year and a half older than his or her private counterpart. Additionally, public university presidents are more likely to have a science, mathematics, social science or business background, while private university presidents are more likely to specialize in the humanities, religion, art, or education.

These differences in fields of specialization may be the product of differences in the types of institutions that public and private university presidents lead. For example, in this sample almost 62 percent of the private institutions are baccalaureate colleges, while only 15 percent of the public institutions fall into this category. Similarly, 55 percent of public universities and 29 percent of private universities are masters institutions, respectively. Finally, almost one third of the public universities in this sample are doctoral universities, while only 9 percent of the private universities are doctoral universities.

In estimating differences in turnover and average length of time in the presidential office between public and privately controlled institutions it is important to control for these differences in individual and institutional characteristics, so that one can address whether presidents with similar characteristics and backgrounds, of comparable institutions, do in fact have varying levels of job stability and reasons for leaving.

4. Estimation Results

This paper estimates differences in the level of job stability of U.S. college and university presidents in three ways. First, using logit estimation to determine how much more likely comparable public university presidents are to exit their jobs than their private peers. Second, multinomial logit to investigate whether public and private university presidents depart office for the same reasons; and third job stability is examined by estimating differences in the length of time in office reported by current job holders.

Table 4 shows the results of the logit regression. The dichotomous dependent variable is one if the 2001 job holder exited the presidency of that institution by the time of the 2006 survey, and zero if he or she was still the president of the same institution. Before turning to the difference between public and private university presidents it is interesting to note that the only statistically significant determinants of a president's likelihood of leaving office are age and having a degree in the social sciences or business (relative to education). The older the president, the more likely it is that he or she will not be the president five years later. Similarly, presidents with a degree in the social sciences or business are more likely to leave office, other things equal, than those with a degree in education. In fact, all other degree holders are more likely to exit their presidency than those with a degree in education (although not statistically significant). This may be because those with a degree in education knew what they were getting into, or because they have fewer alternative employment options of comparable appeal to a college or university presidency.

Presidents of public universities are significantly (at the 5 percent level) more likely to leave office than private university presidents, conditional on Carnegie classification, sex, age, race, advanced degree, and field of specialization. Specifically, public university presidents are 52 percent more likely to exit their presidencies over this 5 year period than private university presidents. For example, while a private university president may have only a 12 percent predicted probability of departing office over a 5 year period, a public university president would have approximately an 18 percent probability of leaving office over the same time period.

The second column of Table 4 incorporates the presidents' current time in office in order to estimate the probability of departing conditional on time in office. While the longer a president has been in office the greater the probability of exiting, this effect is not statistically significant at conventional levels; however, conditional on duration in office public university presidents are 56 percent more likely to exit their presidencies than are private university presidents. These results clearly suggest that public university presidents have less job stability than private university presidents.

Table 5 utilizes a multinomial logit to estimate whether public and private university presidents depart office for the same reasons. The six reasons for leaving office presented in Table 3 (retired, university appointment, non-academic appointment, private university presidency, public university presidency, and other) were collapsed into three categories for the multinomial logit regression due to the small (or even zero) sample sizes in some of the outcomes. The "other" reason category contained very disparate reasons for leaving office such as forced to resign, resigned for health reasons, died in office, or became a bishop. The observations in the "other" category are excluded from the multinomial logit estimation due to

their relatively small cell size and the disparate underlying reasons. The remaining reasons for departure were collapsed into "retired", "took another (non-presidency) job", or "took a new presidency". The multinomial logit results presented in Table 5 show the likelihood of departing to one of these three options relative to staying in office over the 5 year period, from 2001 to 2006. Once again, before turning to differences between public and private university presidents it is interesting to note some of the other factors influencing reasons for job separation. For example, presidents with degrees in the fields of social science, business, medicine, or law are significantly more likely to leave office to take a "non-presidency" job relative to presidents with a background in education. Additionally, presidents of masters institutions are significantly less likely to take another job or another presidency than their counterparts from doctoral institutions. Also, as expected older presidents are more likely to retire and less likely to take another presidency. Surprisingly, older presidents are more likely to take a non-presidency job, although this result is only significant at the 10 percent level. Similarly, the longer a president has been in office the more likely he or she is to retire and less likely to take a new presidency. Finally, while public university presidents are slightly more likely than private university presidents to retire or take another non-presidency job these results are not statistically significantly different from zero at conventional levels. The primary reason for public university presidents' higher job turnover is that they are significantly (at the one percent level) more likely to leave office to take a presidency at another institution. Specifically, public university presidents are 269 percent (exp(1.305)-1) more likely than comparable private university presidents to leave office over a five year period in order to take another presidency.

Given that public university presidents are more likely to exit their jobs, it is expected that they would therefore have shorter lengths of time in office. Measuring job durations in 2001 and

2006 will allow us to estimate whether job lengths are changing over time, and whether differences in job lengths between public and private university presidents are changing over time. Additionally, the 2006 data can be matched with salary data from the *Chronicle of Higher Education* to investigate whether differences in job length seem to be at least partially correlated with differences in salaries.

Table 6 presents OLS estimates of the difference in the length of time in office (uncompleted spells) between public and private university presidents conditional on the factors outlined above. The dependent variable is the natural log of length of time in office so that the coefficients approximate the percentage effects of the regressors on job duration. Again it is interesting to note that across the two survey years, presidents with fields other than education have lower levels of average job duration. Not surprisingly, older presidents have greater average length of time in office.

Conditional upon the regressors in Table 6, the increase in the intercept coefficients imply that the baseline length of time in office was approximately 56 percent shorter in 2001 than 2006. This result suggests that presidential job durations increased over this time period, ceteris paribus. Job stability (amount of time in office) among college and university presidents increased from 2001 to 2006.

In 2001, public university presidents had an average time in office that was approximately 20 percent less (exp(-.225)-1) than private university presidents. In 2006, this difference was 23 percent. Consistent with the results on the probability of exiting office, public university presidents have lower average job lengths than private university presidents, suggesting less job stability, even as overall job stability seems to be increasing. One possible reason for the

differences in job stability may be due to differences in salary levels between public and private university presidents. It has been documented elsewhere (Monks (2007), Pfeffer and Ross (1988)) that private university presidents are paid significantly more than public university presidents. This discrepancy in salaries may be what is prompting more public university presidents to leave office in order to take another, presumably higher paying, presidency at a different institution.³

Controlling for presidential salaries would allow for the estimation of average length of time in office conditional on remuneration, and thus to examine whether the public university discount in job length is reduced or eliminated once salary differentials are accounted for. As mentioned above, the *Chronicle of Higher Education* only reports public university presidential salaries for doctoral and research institutions with 10,000 students or more. The original subsample of matched ACE institutions used in this analysis contains 137 doctoral institutions. The Chronicle reported salaries that matched the same office holder for the 2006-2007 academic year for 113 of these institutions. Specification 1 of Table 7 reports the OLS results on this subsample, without controlling for salary, in order to illustrate that public university presidents in this group have average lengths of time in office that are comparably lower than the overall sample. The coefficient on the public university variable in the complete sample and in this subsample are -.258 and -.298, respectively. Public doctoral university presidents have job durations that are statistically significantly lower than private doctoral university presidents, at the 5 percent level. Specification 2 of Table 7 includes presidential salary among the regressors.

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³ An attempt to compare 2006 presidential salaries at departing and arriving institutions, among job-movers who took new presidencies, proved futile, as a number of job-movers took positions at institutions that did not participate in the *Chronicle of Higher Education's* salary survey.

The higher the presidential salary, the longer the presidential length of time in office, on average (at the 10 percent level). Additionally, the public university effect is now one third lower and no longer statistically significant, at conventional levels. It appears that approximately one third of the public university effect on job duration is attributable to salary differences with the private sector. Conditional on presidential salaries a large portion of the public university job turnover relative to the private sector is reduced.

Of course, there may be the problem of endogeneity in this result if job duration is both caused by salary and a determinant of salary itself. Ehrenberg, Cheslock, and Epifantseva (2001) found that seniority was significant in predicting presidential salaries, at least among private university presidents. In order to address this potential problem, I use two-stage least squares. The first-stage regression is identified by using revenue per student, the number of full time equivalent students, and a dichotomous variable indicating whether the president held a previous presidency elsewhere. None of these three variables were found to be statistically significant when regressed against length of time in office, but all were individually statistically significant in determining presidential salaries (with a subset F-test value of 17.62, p-value less than .01). Column 3 of Table 7 presents the results of the two stage least squares regression. The natural log of salary was not found to be statistically significant in determining job duration suggesting that causality is likely running from duration to remuneration. Additionally, conditional on salary the coefficient on holding the presidency of a public institution is once again negative and significantly different from zero at the 5 percent level. These results imply that even conditional

⁴ I also used average faculty salary as an instrument with similar results. Results not shown.

on salaries presidents in the public sector of higher education have significantly shorter job durations than their counterparts in the private sector of higher education.

All of the above results lead to the conclusion that presidents in the public sector of U.S. higher education have higher job turnover and shorter job durations than their peers with comparable observable individual characteristics at similar institutions, and that a majority of this difference in turnover is attributable to the higher incidence of public university presidents departing to take presidencies at other institutions. The ACE survey asked presidents if they had a formal written employment contract with their institution. While 77 percent of private university presidents indicated that they had a formal written contract, only 59 percent of public university presidents reported that they had a formal written contract with their university (see Table 8). Of those that reported a written contract, the length of the contract was notably shorter for public versus private university presidents. For example, 8 percent of public university presidents had a contract of unspecified length, such as at will, or pleasure of the board, while only 3 percent of private university presidents' contract lengths were not clearly specified. Additionally, fully 58 percent of public university presidents had contracts of 3 years or less (including rolling contracts), while 49 percent of private university presidents had contracts of this length. On the other hand, 38 percent of private university presidents had contracts of 5 years or more, while only 25 percent of public university presidents enjoyed contracts of this longevity. Clearly, private university boards of trustees seem significantly more inclined to provide their presidents with formal written contracts of a specified and more generous length than are public university boards.

5. Conclusion

The above empirical evidence is unequivocal in illustrating that four year public university presidents have higher job turnover, are more likely to leave to take another presidency, and thus have shorter job spells than private university presidents. These results are conditional on individual demographic and background characteristics and institutional attributes. This heightened level of job instability among public university presidents seems at least in part to be the product of lower salaries and a dearth of formal written contracts of a specified and reasonable duration. It appears that public universities and their boards of trustees are either reluctant or unable due to legislative constraints to competitively compensate their presidents and to enter into formal employment contracts with the chief executive officers of their institutions.

The greater job security and salary advantage of holding the top office of a private higher education institution relative to a public institution creates a double edged advantage for private institutions in attracting and retaining talented executives and administrators. If public institutions continue to be unable to compensate their presidents at a level competitive with private institutions and are reticent in entering into formal written contracts that provide the president a reasonable level of job security and recourse, then ambitious and talented managers with options in the private higher education sector will avail themselves of these options and there will be a clear brain drain from the public to the private sector among university administrators.

References

- Alexander, King, (2001). "The Silent Crisis: The Fiscal Capacity of Public Universities to Compete for Faculty." *The Review of Higher Education* vol. 24(2), Winter, 2001, pp. 113-129.
- Ehrenberg, R.G., Cheslock, J., & Epifantseva, J. (2001). Paying our presidents: What do trustees value? *Review of Higher Education* 25(1), 15-37.
- <u>Fain, Paul.</u> (2007). "Many College Presidents Lack Written Employment Contracts." *Chronicle of Higher Education*, 54(12): B4.
- Farber, Henry (2008). "Job Loss and the Decline of Job Security in the United States." Princeton University, Center for Economic Policy Studies. Working Paper 1055.
- Hicks, Michael J (2007). "Job Turnover and Wages in the Retail Sector: The Influence of Wal-Mart." *Journal of Private Enterprise*, 22(2): 137-59.
- Konzelmann, Suzanne J; Wilkinson, Frank; Mankelow, Roy. (2007). "Work Intensification and Employment Insecurity in Professional Work." ESRC Centre for Business Research, ESRC Centre for Business Research Working Papers, 2007.
- Lawless, Martina; Murphy, Alan P. (2008). "Job Turnover in Irish Manufacturing 1972-2006." *Economic and Social Review*, 39(3): 235-56.
- Monks, J. (2007). "Public versus Private University Presidents Pay Levels and Structure." (2007) *Economics of Education Review* June 2007, vol 26(3):338-348.
- On the job: Is long-term employment a thing of the past? Neumark, David, editor New York: Russell Sage Foundation, 2000, pp. 527
- Padilla, A., & Ghosh, S. (2000). "Turnover at the Top: The Revolving Door of the Academic Presidency." *Presidency*, vol 3(1): 30-37.
- Pfeffer, J., & Ross, J. (1988). The compensation of college and university presidents. *Research in Higher Education* 29(1), 79-91.
- Sauer, Robert M. (1998). "Job Mobility and the Market for Lawyers." *Journal of Political Economy*, 106(1): 147-71.
- Tang, T.L., Tang, C.S., & Tang, D.S. (1996a). The pay-performance linkage revisited: Is university presidents' pay related to reputation rating. ERIC, 1-28.
- Tang, T.L., & Tang, T.L. (1996b). Pay differentials revisited: CEOs and the five highest paid employees at private colleges and universities. ERIC, 1-31.

- Whitebook, Marcy; Sakai, Laura. (2004). By a thread: How child care centers hold on to teachers, how teachers build lasting careers. Kalamazoo, Mich.: W. E. Upjohn Institute for Employment Research, 2004, pp. 145.
- Zogbi, Cindy. (2003). "Why Have Public University Presidents Done So Badly?" *Economics of Education Review*. vol 22(1), pp. 45-57.

Table 1
Sample construction

	No. of Observations
ACE 2001 Presidential Survey	1,181
ACE 2006 Presidential Survey	2,148
Institutions in both surveys	<u>964</u>
Excluded obs. based on: Obs. With duplicate unit ids	40
Specialty Universities	4
2001 hiring date not reported	122
2006 hiring date not reported	<u>11</u>
Final Sample	787

Table 2 Summary Measures

	<u>2001</u>	<u>2006</u>	
Years in Office	6.5	8.7	***
% change president between 2001 and 2006	25.2%		
Age	58.7	60.9	***
Female	0.1868	0.202	
White/Non-Hispanic	0.8882	0.864	
Field of Highest Degree Science and			
Mathematics	0.1385	0.1347	
Social Science and Business	0.2376	0.2236	
Humanities, Religion,			
Arts	0.2554	0.2592	
Education	0.2732	0.2757	
Law and Medicine	0.0661	0.1067	***
Institutional Characteristics			
Public	0.3787		
Baccalaureate	0.4409		
Masters	0.385		
Doctorate	0.1741		
No. of institutions	787		

^{*** (**, *)} indicates statistically different from 2001 value at the 1% (5%, 10%) level.

Table 3
Summary measures by control and year

	Private			Public				
	2001	<u>2006</u>		<u>2001</u>		<u>2006</u>	-	
Years in Office	7.648	10.2474	***	7.1678		8.7383	**	b
% change president	22.5%			28.9% *				
% retire	9.2%			12.1%				
% university appt.	2.7%			4.4%				
% non-academic appt.	3.5%			1.3%*				
% private presidency	4.3%			1.3%**				
% public presidency	0.0%			8.1%***				
% other	2.9%			1.7%				
Age	58.146	60.4126	***	59.6487	a	61.8047	***	b
Female	0.1963	0.2004		0.1711		0.2047		
White/Non-Hispanic	0.9305	0.9121		0.8188	a	0.7852		b
Field of Highest Degree								
Science and Mathematics Social Science and	0.0798	0.09		0.2349	a	0.2081		b
Business Humanities, Religion,	0.2311	0.1943		0.2483		0.2718		b
Arts	0.317	0.3047		0.1544	a	0.1846		b
Education	0.2863	0.3108		0.2517		0.2181		b
Law and Medicine	0.0532	0.1002	***	0.0872		0.1174		
Institutional Characteristics								
Baccalaureate	0.6196			0.1477	a			
Masters	0.2863			0.547	a			
Doctorate	0.0941			0.3054	a			
No. of institutions	489			298				

^{*** (**, *)} indicates statistically different from zero at the 1% (5%, 10%) level.

a indicates statistically different from 2001 private; b indicates statistically different from 2006 private

Table 4 **Logit Estimation Results** Dependent Variable is equal to one if a new president from 2001 to 2006

•	Coefficients	•	Marginal Effects	Coefficients		Marginal Effects
Intercept	-6.070	***		-5.523	***	
-	(1.147)			(1.195)		
Public Institution	0.416	**	52%	0.447	**	56%
	(0.210)			(0.212)		
Time in Office				0.028		
				(0.018)		
Baccalaureate College	0.350			0.331		
	(0.270)			(0.271)		
Masters University	-0.383			-0.428	*	
	(0.255)			(0.257)		
Female	0.185			0.205		
	(.0.221)			(.0.221)		
White/Non-Hispanic	0.230			0.218		
	(0.285)			(0.286)		
Age	0.060	***		0.048	***	
	(0.016)			(0.018)		
Advanced Degree	0.475			0.487		
	(0.457)			(0.460)		
Soc. Sci. & Business	0.466	*		0.516	**	
	(0.242)			(0.246)		
Sci. & Mathematics	0.456			0.509		
	(0.292)			(0.295)		
Medicine & Law	0.112			0.183		
	(0.388)			(0.389)		
Humanities & Arts	0.305			0.349		
	(0.243)			(0.245)		

Notes:

Also included among the regressors but not shown are dummy variables for missing values of age and adv. degree.

*** (**, *) indicates statistically different from zero at the 1% (5%, 10%) level.

Table 5 Multinomial logit results Dependent Variable is retired, took other job, or took new presidency relative to staying current presidency, 2001 to 2006

	Retire		Other <u>Job</u>		Other Presidency
Intercept	-15.657 (2.121)	***	-6.091 (1.974)	***	3.062 * (1.786)
Public Institution	0.137 (0.319)		0.100 (0.393)		1.305 *** (0.402)
Time in Office	0.077 (0.024)	***	-0.077 (0.042)	*	0.002 (0.043)
Baccalaureate College	0.213 (0.430)		0.154 (0.448)		-0.067 (0.466)
Masters University	-0.037 (0.388)		-0.963 (0.483)	**	-0.959 ** (0.448)
Female	0.214 (.0.336)		0.067 (.0.422)		0.476 (.0.384)
White/Non-Hispanic	0.705 (0.528)		-0.061 (0.516)		0.345 (0.491)
Age	0.189 (0.032)	***	0.058 (0.033)	*	-0.115 *** (0.033)
Soc. Sci. & Business	0.354 (0.387)		0.941 (0.473)	**	-0.187 (0.474)
Science & Mathematics	0.686 (0.443)		-0.007 (0.665)		0.631 (0.481)
Medicine & Law	0.111 (0.698)		1.197 (0.582)	**	-0.850 (0.796)
Humanities & Arts	0.081 (0.381)		0.699 (0.482)		0.248 (0.439)
Chi-square fit p-value	186.800 0.00001				

Table 6 **OLS Estimation Results** Dependent Variable is the Natural Log of Length of Time in Office

_	2001	_	2006	_
Intercept	-1.783	***	-0.971	***
	(0.323)		(0.283)	
Public Institution	-0.225	*** -20	% -0.258	*** -23%
	(0.064)		(0.053)	
Baccalaureate College	0.055		0.010	
· ·	(0.084)		(0.070)	
Masters University	0.182	**	0.096	
	(0.079)		(0.066)	
Female	-0.011		-0.084	
	(.0.067)		(.0.056)	
White/Non-Hispanic	-0.025		0.022	
	(0.084)		(0.066)	
Age	0.056	***	0.049	***
	(0.005)		(0.004)	
Advanced Degree	0.172		0.253	**
	(0.126)		(0.108)	
Soc. Sci. & Business	-0.209	***	-0.121	*
	(0.073)		(0.064)	
Science & Mathematics	-0.173	*	-0.267	***
	(0.091)		(0.077)	
Medicine & Law	-0.315	***	-0.105	
	(0.114)		(0.080)	
Humanities & Arts	-0.187	***	-0.157	**
	(0.072)		(0.061)	
R-square	0.256		0.202	
NT 4				

Notes:
Also included among the regressors but not shown are dummy variables for missing values of age and advanced degree.

^{*** (**, *)} indicates statistically different from zero at the 1% (5%, 10%) level.

Table 7
Estimation Results based on 2006 Survey
Dependent Variable is the Natural Log of Length of Time in Office

		OLS				
	Specification 1		Specification 2	_	2SLS	
Intercept	-2.279	***	-6.372	***	0.316	
•	(0.793)		(2.492)		(4.013)	
Public Institution	-0.298	**	-0.203		-0.359	**
	(0.130)		(0.197)		(0.156)	
Natural Log of Salary			0.313	*	-0.198	
			(0.181)		(0.301)	
Female	-0.129		-0.136		-0.125	
	(.0.194)		(.0.192)		(0.189)	
White/Non-Hispanic	-0.169		-0.209		-0.142	
	(0.198)		(0.197)		(0.196)	
Age	0.075	***	0.075	***	0.075	***
	(0.012)		(0.012)		(0.012)	
Advanced Degree	0.008		0.060		-0.027	
	(0.371)		(0.369)		(0.365)	
Soc. Sci. & Business	-0.115		-0.155		-0.090	
	(0.227)		(0.226)		(0.224)	
Science & Mathematics	-0.045		-0.122		0.003	
	(0.229)		(0.231)		(0.235)	
Medicine & Law	0.120		0.090		0.137	
	(0.242)		(0.240)		(0.237)	
Humanities & Arts	-0.013		0.001		-0.021	
	(0.256)		(0.253)		(0.249)	
R-square	0.304		0.324		0.27	
adjusted R-square	0.236		0.250		0.191	

Notes:

Also included among the regressors but not shown are dummy variables for missing values of age and advanced degree.

^{*** (**, *)} indicates statistically different from zero at the 1% (5%, 10%) level.

Table 8
Existence of a written contract and the length of contract

	Public		Private	
% With a written contract		59%		77%
Length of Contract				
(those with a contract)				
Not specified ^a	12	8%	9	3%
1 year	30	20%	43	13%
2 years / 2 years rolling	7	5%	18	5%
3 years / 3 years rolling	50	33%	102	31%
4 years	15	10%	31	9%
5 years / 5 years rolling	30	20%	110	33%
6 or more years	7	5%	18	5%
Total Responses	151		331	

^a responses include: at will, indefinite, pleasure of the board, pleasure of the president.