# Public versus Private University Presidents Pay Levels and Structure 

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## Keywords

higher education, compensation, public institutions, private institutions

## Comments

Suggested Citation
Monks, J. (2004) Public versus private university presidents pay levels and structure (CHERI Working Paper \#58). Retrieved [insert date], from Cornell University, ILR School site:
http://digitalcommons.ilr.cornell.edu/cheri/21/
Required Publisher Statement
Published by the Cornell Higher Education Research Institute, Cornell University.

# Public versus Private University Presidents Pay Levels and Structure 

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# Public versus Private University Presidents Pay Levels and Structure 


#### Abstract

A number of existing studies have examined the determinants of private university presidents' compensation, but none have estimated the recent earnings differential between public and private university presidents. This paper fills this void and estimates that public university presidents earn approximately 50 percent less than observably comparable private university presidents. This salary discount is robust to controls for institutional size, quality, wealth, individual characteristics of the office holder, and estimation technique.


## Introduction

Each year the Chronicle of Higher Education publishes an issue focusing on college and university presidents' earnings. The usual emphasis is on those individuals who are among the most generously compensated among our nation's leaders of institutions of higher learning. For example, the most recent Chronicle of Higher Education issue devoted to presidents' remuneration featured an article by Basinger (2004a) titled, "High Pay, Hard Questions." This article began with the sentence, "A growing number of college presidents are on easy street ...." The same issue also included articles with the headlines, "Lucrative at the Top" (Basinger and Henderson, 2004) and "Proving Presidential Worth" (Basinger, 2004b). This emphasis is not limited to this year's issue, but rather is the norm for releasing and reporting on presidents' salaries. For example, the 2002 issue on presidential pay contained the article, "The Growing \$500,000 Club." All of these articles emphasize the generous compensation provided to top earning presidents of some colleges and universities relative to the compensation of faculty and staff. The discussion in these articles also mentions that presidents' salaries are usually significantly below the salaries of CEOs and other leaders of organizations of similar scale, scope, complexity, and wealth.

The Chronicle of Higher Education not only publishes a series of annual articles on presidential earnings, but also has built a database of presidents' (and other top 5 earning individuals on campus) earnings, obtained from the publicly available IRS Form 990 that all non-profits are required to file with the IRS and to make available to the public upon request. Until recently, however, this database only contained information on private college and university presidents' earnings. In 2003, the Chronicle began gathering and making available information on the compensation of public university presidents for the academic years 2001-02
and 2002-03. The current database provides information on the compensation of public doctoral/research extensive university presidents' salary and benefits. While the data at this point only provide a snap-shot in time of public doctoral extensive university presidents' compensation, it does allow for a cross-sectional analysis of the compensation of public university presidents.

Existing studies of presidents' compensation structures primarily relied on the Chronicle's data on the remuneration of private university presidents. Specifically, Ehrenberg et al. (2001) examine the individual characteristics and institutional attributes that are most highly compensated among private college and university presidents. They find that seniority and prior experience are significant individual characteristics in determining earnings, and Carnegie classification and size are important institutional attributes associated with presidential earnings. On they other hand, they find only weak evidence that private institutions' presidents' salaries are related to measures of institutional performance.

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 compensation and salary are positively related to total expenditures. Surprisingly, they find that research university presidents do not earn significantly more than non-liberal arts college presidents, while doctoral university presidents earn significantly more and masters university presidents earn significantly less. They also find support for the hypothesis that presidents of more selective institutions earn more than presidents of less selective institutions. Tenure as president was also found to have a positive and significant affect on earnings.

Tang et al. (1996a, 1996b) also utilize data from the Chronicle of Higher Education to examine private institution presidential compensation, for the academic year 1991-92. They find
that compensation is positively and significantly related to total expenditures, academic reputation rating from US News and World Report, and Carnegie classification. They also examined the pay of the other top five paid administrators and found that their salaries were related to Carnegie classification and total expenditures but not reputation rating.

Similarly, Pfeffer and Ross (1988) use data from the College and University Personnel Association's (CUPA) Annual Administrative Compensation Surveys for academic years 197879 and 1983-84 to examine presidents' compensation. 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 significant in determining presidents' compensation.

Only the above mentioned Pfeffer and Ross (1988) paper examines the pay of public university presidents relative to their private counterparts. An updated examination of the compensation of public relative to private university presidents' salaries is warranted for a number of reasons: 1.) the data from the Pfeffer and Ross (1988) study is now twenty years old; 2.) compensation of private university presidents, both in constant and real terms, has increased in recent years; and 3.) King (2001), Zogbi (2003), and others have found a growing premium for private university faculty compensation relative to public university faculty. These developments over the past two decades suggest that the relative pay of public and private university presidents may differ from the relative pay of the early 1980s.

This paper will update the earlier study by Pfeffer and Ross (1988), which only peripherally touched on the private versus public earnings differential, and complement the studies by Ehrenberg et al. (2001) and Boulanger and Pliskin (1999) by examining the reward structure of public versus private university compensation. Specifically, this study examines the
compensation of public doctoral/research extensive university presidents' salaries relative to their private doctoral/research extensive university peers conditional on individual and institutional characteristics. Additionally, this analysis investigates whether the returns to individual and institutional characteristics are the same across university control. Are private and public university presidents rewarded for the same things? Finally, an Oaxaca (1973) decomposition is utilized to estimate what public university presidents would receive if they were compensated in a manner that was comparable to their private university counterparts.

## Data

The data for the following analyses comes from the Chronicle of Higher Education online database of public and private doctoral university presidents' compensation, for academic years 2001-02 and 2002-03. The Chronicle only began gathering in a comprehensive data set the compensation of public university presidents' salaries in 2003. The information they accumulated on public university salaries was for the academic years 2001-02 and 2002-03. In 2004, this data was updated to include salary information for the academic year 2003-04. Unfortunately, the private university salary information is currently only available up to academic year 2002-03. As a result, the data set only has information across both public and private universities for the 2001-02 and 2002-03 academic years.

The population of institutions examined is limited to doctoral/research extensive universities. The Carnegie Foundation classifies institutions based primarily on their mission and scale. Doctoral/research extensive universities are defined by the Carnegie Foundation as institutions that usually offer a wide range of baccalaureate programs, and are committed to graduate education through the doctorate. Additionally, doctoral/research extensive universities
usually award 50 or more doctoral degrees per year across at least 15 disciplines. ${ }^{1}$ The institutions drawn from the Chronicle database contain 191 institution-years (excluding university system data) across 145 institutions (see Table 1). ${ }^{2}$ The sample includes 98 public institutions and 47 private institutions. Because the data for the public institutions is drawn from the 2002 Chronicle survey, which contained salary information for either academic year 2001-02 or 2002-03, and the private institution salary data come from 2 separate surveys, most public institutions provide information for either 2001-02 or 2002-03, while most private institutions in the data provide salary information for 2001-02 and 2002-03.

From this sample of 191 institution-year observations I exclude 12 respondents who reported zero earnings. These individuals included 10 clergy and 2 person-years from the University of Denver, whose current president does not draw a salary from the institution. Additionally, another four observations were excluded because the president was a clergy who did report earnings a salary. Ehrenberg et al.'s (2001) study reveals that the compensation of presidents who are clergy differs substantially from those who are not. Six observations were eliminated because the president was an interim president. Another three observations were excluded because the president was only in office for part of the reported year. This results in a sample of 166 person-year observations.

The focus in the following analyses is on salaries rather than total compensation including benefits because the reporting of benefits across institutions is dramatically

[^0]inconsistent (see Niklin, 2000). In general, most private institutions report a dollar value of benefits, while the public information often does not contain the dollar value of benefits but rather a check list of benefits provided (housing, car, memberships, etc.). ${ }^{3}$ Furthermore, public university presidents often receive their salary from both the institution and from a private foundation established to supplement the publicly provided compensation (see Basinger and Henderson, 2003). The salary information used here for public university presidents includes salary from both the institution and from private foundation sources used to supplement the presidents' salaries. This private foundation does not included board membership income and other compensation earned by the president for his or her services outside of the institution.

Table 2 provides summary measures of presidents' salaries across institutional control and survey years. For academic year 2001-02, the average public university president in this sample has earnings of $\$ 246,529$, while the average private university president earned $\$ 461,711$. This represents a $\$ 215,182$ difference in average earnings across institutional control. This differential is not primarily the result of a few university presidents skewing private earnings upward, nor is it the result of a few skewing public earnings downward. The difference in median earnings is a comparable $\$ 199,385$. Similarly, the mean and median differences in earnings for academic year 2002-03 are $\$ 248,148$ and $\$ 257,750$, respectively. Public university presidents have average and median earnings that are approximately 45 to 50 percent less than their private university counterparts. This differential appears robust to the sample restrictions imposed above and to the obvious differences in responding public institutions across the two survey years. Additionally, including state university system leaders only increases the 2002-03

[^1]average public salary from $\$ 258,178$ to $\$ 274,258$, still significantly below the average private university presidents' salary.

In order to further investigate this differential the Chronicle salary data is merged with individual information from the American Council on Education (ACE) Annual Survey of College Presidents conducted in the fall of 2001, and with institutional data from the Integrated Post-secondary Educations Data Sharing (IPEDS) data set. Because the ACE data was for presidents in the fall of 2001 and the salary data was for 2001-02 and 2002-03 there were 16 observations where the president in the Chronicle data did not match the president from the ACE survey. This occurred because the president was new to the position. Because this eliminates individuals in the first year or two in office, the subsequent analyses should be viewed as salary information conditional on being in office for at least two years and may not reflect starting salaries for presidents. Additionally, there were 34 observations from institutions that did not respond to the 2001 ACE survey. This results in a sample of 116 person-years. A comparison of public versus private salaries in this new sample of institutions is comparable to the fuller sample discussed above. The differences in mean and median earnings in academic year 2001-02 are \$208,192 and $\$ 198,329$, respectively. The differences in mean and median earnings for 2002-03 are $\$ 234,508$ and $\$ 266,492$. These differences (and the underlying levels) are comparable to the differences found before reducing the sample of institutions to match the ACE data.

An examination of the distribution of public and private presidents' salaries reveals not just a significant difference in the middle of the distributions but also a rather modest overlap of earnings (see Figures 1 and 2). In fact, only 8.3 percent ( 2 individuals) of private university presidents earn less than the highest paid public university president in 2001-02, and 12 percent (3 individuals) earn less than the top earning public president in 2002-03. Clearly, the typical
public university president, as measured by either average or median earnings, only earns approximately what the lowest 5 percent of private university presidents earn. The entire distribution of public presidents' earnings is shifted to the left of the distribution of earnings of private university presidents.

As revealed in Table 2 the number of public institutions reporting salary information for 2001-02 is less than half the number reporting data for 2002-03, while most private institutions report salaries for both 2001-02 and 2002-03. Despite this difference in samples the percentage difference in earnings between public and private presidents is comparable across the two survey years. Table 3 shows selected variable means by year and institutional control. The public institutions reporting salary data for 2001-02 tended to be larger in terms of both enrollments (full-time equivalent fall 2001 enrollment) and total revenue (current fund revenue for 2000-01). It is also interesting to note that private universities have significantly higher average reputation ratings from the 2000 issue of the US News and World Report ranking of universities. Additionally, private universities have higher 2001-02 average faculty salaries, as expected, and lower average enrollments. Despite being smaller in size the private institutions have average current fund revenues that are not statistically significantly different from the public universities. It is also interesting to observe that private university presidents are more likely to have held a prior presidency (although this difference is not significant), while public university presidents are more likely to have been employed outside of education in one or both of their two most recent previous positions. Public university presidents are also more likely to have been promoted from within the institution. So it appears that private university presidents are likely to be hired from a previous presidency, while public institutions are more likely to either promote from within or go outside education altogether to obtain their presidents.

It is also interesting to note that private universities appear more likely to hire a president with a background (field of highest degree earned) in the social sciences or business, while public institutions are more likely to employ a president with a background in the humanities or arts, although this last difference is not statistically significant.

## Regression Results

The summary measures outlined above reveal that public university presidents earn approximately 50 percent less than their private peers, but also that they are leaders of institutions with sometimes significantly different attributes. The following regression analyses attempts to examine the differences in earnings between public and private university presidents conditional on observable individual and institutional characteristics. The dependent variable in the analyses is the natural log of salary. Specification (1) of Table 4 regresses the natural log of salary against the US News and World Report reputation rating from 2000 as a measure of institutional quality and prestige, the full time equivalent enrollment for the fall of 2001, the number of years in office, a dummy variable for whether the individual held a presidency in either of his or her two most recent previous jobs, the years of experience in their two most recent previous jobs, and dummy variables for field of highest degree, gender, year, and whether employed at a public or private university. Because the data are a pooled-cross section some of the institutions and presidents appear more than once in the data. An attempt to control for this using random effects failed to find a positive estimated error component under a number of different specifications. As a result, ordinary least squares estimation was used throughout the following analyses.

Before turning to the public versus private differential it is interesting to note a number of other significant determinants of presidential salary. As expected, institutional quality, as measured by the US News and World Report reputation rating is positively and significantly related to higher presidential salary. Each year US News and World Report surveys college and university presidents, provosts, and deans and ask them to rate the overall quality of their peer institutions. This reputation rating is significant in determining presidential remuneration. For example, a one standard deviation increase in reputation rating of .7 (ratings are on a scale of 1 to 5 , with 5 begin the best) results in earnings that are approximately 7 percent higher. This result is consistent with the finding of Tang et al. (1996a, 1996b). It is unclear whether this positive correlation of salary and reputation is the result of more prestigious institutions paying more or because of the high correlation of reputation and institutional resources (reputation and revenue per student have a correlation coefficient of .7 in this sample). It may be that institutions with greater resources pay more for their presidents. Specification (2) replaces the US News and World Report reputation rating with the natural log of revenue (for academic year 2000-01) per student (FTE fall 2001). The results are qualitatively the same. Higher revenue per student results in significantly higher presidential salary. The specification with the reputation rating fits the data slightly better as measured by the R-squared value and the $t$-statistic on the individual regressors of reputation rating versus the natural log of revenue per student. Additionally, including both the reputation rating and the natural log of revenue per student reduces the adjusted R-squared and results in neither coefficient being significant. I will therefore limit the discussion to specification (1) using reputation rating. These results are largely consistent with existing studies. In particular, Pfeffer and Ross (1988) find significantly higher earnings for presidents from institutions with greater resources, Boulanger and Pliskin
(1999) and Tang et al. (1996a, 1996b) report a positive relationship between presidential salaries and total expenditures, and Ehrenberg et al. (2001) find that private institutions with greater endowment per student pay their presidents more. Interestingly, Ehrenberg et al. (2001) find that freshmen test scores are not significantly correlated with presidential pay. This may be the product of high collinearity between measures of quality and institutional resources as discussed above. ${ }^{4}$

As expected, larger institutions pay their presidents more than universities with fewer enrolled students. This is consistent with Ehrenberg et al. (2001) and Pfeffer and Ross (1988) both of whom found significant returns to institutional size. Also, average earnings were about six percent higher in academic year 2002-03 than 2001-02.

It is also interesting to note that average earnings for female presidents were 1.7 percent higher than average earnings for male presidents, although this is not statistically significant. On the other hand, Ehrenberg et al. (2001) found that female presidents earned almost 12 percent less than male presidents at doctoral and research universities between 1992-93 and 1996-97, although this too is not significantly different from zero. It appears that greater parity between the sexes has been achieved in the convening seven to eight years.

While there are no significant differences in compensation across fields of study, it is interesting to observe that presidents with a background in science and mathematics or a professional field (business, law, medicine) earn between 5 and 8 percent more than their peers from the social sciences. Also, one's duration in office, and prior experience do not seem to have a significant effect on presidential remuneration. I also tested for a relationship between salary

[^2]and whether the individual was promoted from within the institution, worked outside of education in either of his or her two most recent previous jobs, and years spent on the faculty. None of these were significant in determining presidential salary and were excluded from the regressors.

The single biggest determinant of presidential salary is whether one is employed at a public or private university. Presidents at public universities earn approximately 49 percent less than otherwise comparable presidents at private institutions. This would be equivalent to a difference in reputation rating of about 7.5 , on a 1 to 5 scale, or an increase in full-timeequivalent enrollment of almost 97,000 students (the maximum full-time-equivalent enrollment in this sample is approximately 47,000 students). The magnitude of the private university premium is largely unchanged when controlling for revenue per student.

An alternative estimation strategy for analyzing public versus private presidential salaries is to perform separate regressions for each sector. Table 5 provides separate regression results for public and private university presidents. A Chow test rejects the null of equal coefficients between the two sectors at the 1 percent level. While the slope coefficients appear qualitatively quite similar the overall regression line fits the private university data much better. The Rsquared for the private university sector is .802 , while it is only .327 for the public university sector. Additionally, the coefficients on year, full-time-equivalent enrollment, and reputation rating are all positive and statistically significant in the private sector, while only reputation rating is significant in the public sector. Additionally, the presidents in the private sector with a background in science or mathematics earn a significant premium relative to the omitted group in the social sciences, while this premium is not apparent in the public sector. It is also noteworthy
that the returns to institutional size are greater (although not significantly so) in the private sector, while the larger universities are in the public sector.

Applying the estimated coefficients in the private sector to the characteristics of the presidents in the public sector allows one to predict what the public university presidents would have earned had they been compensated in the same fashion as private university presidents. The average predicted natural log of earnings for public university presidents is 13.075 versus an average actual natural log of earnings of only 12.403. These translate into average predicted earnings of $\$ 476,680$ and average actual earnings of $\$ 243,457$, or an earnings discount of approximately 49 percent. Not only would public university presidents earn almost twice as much if they were compensated in the same manner as private university presidents, but because of the larger enrollments at public universities and the larger return earned at private universities for enrollments the average public university president would be predicted to earn almost 4 percent more than the average private university president.

Of course, there may be unobserved differences in quality between the average private and public university president. It may be that private university presidents possess stronger leadership and management abilities, and that their earnings premium is primarily a function of compensation for these characteristics. Nonetheless, if public institutions are unable or unwilling to adequately compensate for these abilities, then they will be at a competitive disadvantage relative to private institutions.

## Conclusion

In summary, institutional attributes are much more important in determining presidential remuneration than individual characteristics. Specifically, institutional size, quality, and control
all are significant determinants of university presidents' salaries. Control of the university, public or private, is far away the largest determinant of presidential salary, with public university presidents earnings approximately 50 percent less than comparable private university presidents. In comparison, the difference in average faculty salaries across institutional control in this sample was approximately 20 percent, and based on American Association of University Professors (AAUP) data was 21 percent. ${ }^{5}$ Ehrenberg (2203b) provides a comprehensive summary of the private versus public university faculty salary differential. The public versus private university presidential earnings differential appears to be much larger than the faculty earnings differential across university sectors.

The estimated regression coefficients from the Pfeffer and Ross (1988) study for 1983-84 suggest a public presidential earnings disadvantage of approximately 35 percent among research university faculty. ${ }^{6}$ Similar to the results found by King (2001) of a widening private university faculty earnings premium it appears that private university presidents are also experiencing a growing gap in earnings relative to their public peers. Ehrenberg et al. (2001) also briefly examine summary measures of presidential pay across sectors using CUPA data for 1999. They find a private presidential earnings premium of approximately 33 to 34 percent, across all sectors of higher education, although they caution that the CUPA data do not reflect a random sample and so may not reflect an accurate earnings differential. If, however, their estimate is in fact accurate this suggests that the public presidential earnings differential is most pronounced among doctoral and research extensive universities. This too parallels findings in the public versus

[^3]private earnings differentials among faculty. In short, it appears that public university presidents earn significantly less than private university presidents, particularly at doctoral and research extensive institutions, and that this premium is growing.

This gap in presidential earnings may pose a number of problems for public institutions. First, public universities may have an increasingly difficult time attracting the best and most capable administrators as salaries and opportunities in the private sector of higher education and outside of academia lure talented faculty and administrators away from public universities. Second, public universities may have a difficult time retaining highly qualified presidents and administrators as public university presidents begin viewing their presidencies, and other top administrative positions, as springboards to more lucrative positions at private universities. In fact, casual evidence of this is reported by Ehrenberg et al. (2001) who report that one quarter of the private presidents in their sample held a previous presidency at a public institution, including three of the Ivy League presidents in 1996-97, who were previously presidents of Big Ten universities. On the other hand, only one private president in their sample left during the survey years to become a president at a public institution. There is anecdotal evidence that this recent raiding of public university presidents by top-tier privates has led to deliberate attempts by public universities to narrow the salary gap. The most recent 2004-05 data from the Chronicle of Higher Education does not convincingly support this claim. The average public university presidents' salary for 2004-05 is $\$ 283,906$. This translates to approximately a five percent compound annual increase from the average 2002-03 public university presidents' salary. While private university presidents' salaries for 2004-05 are not yet available it is likely that they too saw their salaries increase by at least this percentage, as well. Even if private university
presidents' salaries experienced much smaller increases over the past two years, this increase among the publics does little to narrow the 50 percent gap.

Public institutions of higher education are increasingly at a salary disadvantage relative to their private institution competitors. This salary disadvantage appears to exist from the classroom to the corner office. This salary disadvantage will make it increasingly difficult for public institutions to compete for highly qualified job applicants and will inevitably result in a decline in institutional quality.

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## Table 1 <br> Sample Construction

Total Institution-Years ..... 191
Number of institutions ..... 145
public
private
98 (out of a possible 103)*
47 (out of a possible 49)*
Less:
Zero salary (10 clergy, 2 at U. Denver) ..... 12
Clergy with salaries ..... 4
Interim President ..... 6
Partial year in office ..... 3
Subtotal ..... 166
Mis-match of presidents w/ ACE data ..... 16
Did not reply to ACE survey ..... 34
Final institution-year sample ..... 116

* Digest of Education Statistics, 2002, Table 244 count of doctoral/research extensive institutions for academic year 2001-2002.


## Table 2 <br> Summary Measures

Sample of 166 Institutions

|  | Academic Year 2001-02 |  |  | $\$$ <br> difference | $\%$ <br> difference |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Public | Private |  |  |  |
| Mean |  |  |  |  |  |
| Median | $\$ 246,529$ | $\$ 461,711$ | $* * * *$ | $\$ 215,182$ | $47 \%$ |
| St. Deviation | $(\$ 43,479)$ | $\$ 450,110$ | $* * * *$ | $\$ 199,385$ | $44 \%$ |
| No. of institutions | 26 | $(\$ 94,573)$ | $* * *$ |  |  |
|  |  | 35 |  |  |  |


|  | Academic Year 2002-03 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Public | Private |  |  |  |
|  |  |  |  |  |  |
| Mean | $\$ 258,178$ | $\$ 506,326$ | $* * *$ | $\$ 248,148$ | $49 \%$ |
| Median | $\$ 250,000$ | $\$ 507,750$ |  | $\$ 257,750$ | $51 \%$ |
| St. Deviation | $(\$ 66,123)$ | $(\$ 108,000)$ | $* * *$ |  |  |
| No. of institutions | 67 | 38 |  |  |  |

Sample of 118 institutions

|  | Academic Year 2001-02 |  |  | $\$$ <br> difference | $\%$ <br> difference |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{\text { Public }}$ | $\underline{\text { Private }}$ |  |  |  |
| Mean | $\$ 244,597$ | $\$ 452,789$ | $* * *$ | $\$ 208,192$ | $46 \%$ |
| Median | $\$ 248,225$ | $\$ 446,554$ | $* * *$ | $\$ 198,329$ | $44 \%$ |
| St. Deviation | $(\$ 44,523)$ | $(\$ 94,011)$ | $* * *$ |  |  |
| No. of institutions | 21 | 24 |  |  |  |


|  | Academic Year 2002-03 |  |  |  |  |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- |
|  | Public | Private |  |  |  |
|  |  |  |  |  |  |
| Mean | $\$ 251,129$ | $\$ 485,637$ | $* * *$ | $\$ 234,508$ | $48 \%$ |
| Median | $\$ 239,008$ | $\$ 505,500$ | $* * *$ | $\$ 266,492$ | $53 \%$ |
| St. Deviation | $(\$ 56,640)$ | $(\$ 97,090)$ | $* * *$ |  |  |
| No. of institutions | 46 | 25 |  |  |  |

Notes: St. deviation in parentheses. *** Significantly different from the public value at the $1 \%$ level.

Table 3
Summary Measures by Control and Year

|  | Academic Year 2001-02 |  |  | Academic Year 2002-03 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public | Private |  | Public | Private |  |
| USNWR reputation rating 2000 | 3.2 | 3.8 | ** | 3.0 | 3.7 | ** |
| Ave. faculty. salary AY 2001-02 | \$73,457 | \$86,167 | *** | \$68,914 | \$85,786 | *** |
| FTE enrollment fall 2001 | 24,576 | 10,513 | *** | 19,942 | 10,633 | ** |
| Current Fund Revenue 2000-01 (\$ 000) | \$852,572 | \$848,037 |  | \$587,505 | \$854,943 |  |
| Years in presidency | 5.1 | 7.4 | ** | 7.2 | 8.1 |  |
| Prior presidency | 20\% | 43\% |  | 24\% | 45\% |  |
| Outside Education | 29\% | 4\% | ** | 27\% | 8\% | ** |
| Promoted from Within | 20\% | 5\% |  | 21\% | 5\% | ** |
| Years on Faculty | 19.6 | 17.0 |  | 15.7 | 16.7 |  |
| Field of highest degree |  |  |  |  |  |  |
| Social Science/Business | 24\% | 50\% | * | 28\% | 52\% | * |
| Science/Mathematics | 33\% | 25\% |  | 24\% | 24\% |  |
| Humanities/Fine Arts | 33\% | 13\% |  | 26\% | 12\% |  |
| Law | 10\% | 13\% |  | 11\% | 12\% |  |
| Medicine | 0\% | 0\% |  | 4\% | 0\% |  |
| Other Field | 0\% | 0\% |  | 7\% | 0\% | * |
| Age | 60.85 | 58.46 |  | 61.67 | 59.56 | * |
| Female | 14\% | 8\% |  | 20\% | 12\% |  |
| White | 90\% | 95\% |  | 93\% | 95\% |  |
| Married | 85\% | 100\% | * | 93\% | 96\% |  |
| On an external board | 95\% | 95\% |  | 86\% | 94\% |  |
| No. of institutions | 21 | 24 |  | 46 | 25 |  |

## Table 4

## Regression Results <br> Dependent variable is the natural log of salary

|  | (1) |  | percentage difference | (2) |  | percentage difference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intercept | $\begin{aligned} & 12.570 \\ & (0.126) \end{aligned}$ | *** |  | $\begin{aligned} & \hline 12.058 \\ & (0.315) \end{aligned}$ | *** |  |
| Public university | $\begin{aligned} & -0.678 \\ & (0.054) \end{aligned}$ | *** | -49.2\% | $\begin{aligned} & -0.698 \\ & (0.052) \end{aligned}$ | *** | -50.2\% |
| Academic year 2002-03 | $\begin{gathered} 0.060 \\ (0.035) \end{gathered}$ | * | 6.2\% | $\begin{gathered} 0.058 \\ (0.035) \end{gathered}$ |  | 6.0\% |
| USNWR reputation rating 2000 | $\begin{gathered} 0.091 \\ (0.031) \end{gathered}$ | *** | 9.5\% | --- |  |  |
| Natural log of revenue/student | -------- |  |  | $\begin{gathered} 0.075 \\ (0.028) \end{gathered}$ | *** | 7.8\% |
| FTE enrollment fall 2001 | $\begin{gathered} 0.007 \\ (0.003) \end{gathered}$ | *** | 0.7\% | $\begin{gathered} 0.010 \\ (0.002) \end{gathered}$ | *** | 1.0\% |
| Female | $\begin{gathered} 0.017 \\ (0.047) \end{gathered}$ |  | 1.7\% | $\begin{gathered} 0.001 \\ (0.048) \end{gathered}$ |  | 0.1\% |
| Years in office | $\begin{gathered} 0.003 \\ (0.005) \end{gathered}$ |  | 0.3\% | $\begin{gathered} 0.006 \\ (0.005) \end{gathered}$ |  | 0.6\% |
| Prior presidency | $\begin{gathered} 0.043 \\ (0.039) \end{gathered}$ |  | 4.4\% | $\begin{gathered} 0.017 \\ (0.040) \end{gathered}$ |  | 1.7\% |
| Years in 2 prior position | $\begin{aligned} & -0.002 \\ & (0.002) \end{aligned}$ |  | -0.2\% | $\begin{gathered} -0.002 \\ (0.002) \end{gathered}$ |  | -0.2\% |
| Science/Mathematics | $\begin{gathered} 0.049 \\ (0.045) \end{gathered}$ |  | 5.0\% | $\begin{gathered} 0.048 \\ (0.045) \end{gathered}$ |  | 4.9\% |
| Humanities/Fine Arts | $\begin{aligned} & -0.003 \\ & (0.047) \end{aligned}$ |  | -0.3\% | $\begin{gathered} -0.014 \\ (0.048) \end{gathered}$ |  | -1.4\% |
| Professional Field/Other | $\begin{gathered} 0.084 \\ (0.052) \end{gathered}$ |  | 8.8\% | $\begin{gathered} 0.046 \\ (0.052) \end{gathered}$ |  | 4.7\% |

No. of Observations

R-squared
0.825
0.823
adj-R-Squared
0.799 0.796

Notes:
Includes dummy variables for missing values of duration, prior presidency, reputation rating, and years of previous experience.
*** $(* *, *)$ indicates significance at the $1(5,10)$ percent level.

Table 5
Separate Regression by Control
Dependent Variable is the natural log of salary

Public

| Intercept | 12.000 | $* * *$ | 12.494 |
| :--- | :---: | :---: | :---: |
|  | $(0.176)$ | $* * *$ |  |
| Academic Year 2002-03 | 0.051 | $(0.166)$ |  |
|  | $(0.059)$ | 0.066 | $*$ |
| FTE enrollment Fall 2001 | 0.004 | $(0.033)$ |  |
|  | $(0.004)$ | 0.008 | $*$ |
|  |  | $(0.004)$ |  |

Female
-0.010
0.003
(0.068)

USNWR reputation rating 2000 | 0.104 | $*$ | 0.069 |
| :---: | :---: | :---: |
|  | $(0.059)$ | $*$ |

Years in office

| -0.001 | 0.008 |
| :---: | :---: |
| $(0.008)$ | $(0.008)$ |

Prior presidency
0.023
0.058
(0.070)
(0.041)

Years in 2 prior positions
-0.003
0.004
(0.002) (0.003)

Science/Mathematics

Humanities/Fine Arts

Professional Field/Other
Private
12.494
0.066 *
(0.033)
0.008
(0.004)
(0.072)
0.069 *
(0.040)
0.008
(0.008)
0.021
0.127
(0.077)
-0.053
-0.034
(0.071)
(0.047)
(0.069)
0.081
(0.086)

67
0.327
$11.282^{* * *}$
0.070
(0.067)

No. of Observations
R-squared
Chow test stat
(df: 15,86)
Notes:
Includes dummy variables for missing values of duration, prior presidency, reputation rating, and years of previous experience.
*** $(* *, *)$ indicates significance at the $1(5,10)$ percent level.

Figure 1
Distribution of Presidential Salaries by Control
Academic Year 2002


Figure 2
Distribution of Presidential Salaries by Control
Academic Year 2003



[^0]:    ${ }^{1}$ The following discussion throughout the paper will refer to doctoral/research extensive universities as simply universities.
    ${ }^{2}$ Penn State University, Temple University, University of Delaware, and the University of Pittsburgh because they are quasi-public institutions failed to report recent salary information to the Chronicle of Higher Education. Cornell University is also quasi-public, containing both private and publicly supported colleges within the university. Additionally, Cornell's president's reported benefits were $150 \%$ of salary. Cornell is also excluded from the sample.

[^1]:    ${ }^{3}$ The most recent data for public university presidents in 2004-05 reported both salary and total compensation. Approximately 23 percent reported zero benefits, compared to a high of benefits equal to 117 percent of salary. It still appears that there is tremendous inconsistency and measurement error in the reporting of benefits.

[^2]:    ${ }^{4}$ Ehrenberg et al. (2004) provide cross-sectional regression results including and excluding average professor salaries. They express concern for the possible endogeneity of faculty salaries in these regressions, so I limit the comparison of results to those that exclude faculty salaries.

[^3]:    5 "Unequal Progress: The Annual Report on the Economic Status of the Profession, 2002-03." Ronald G. Ehrenberg, Academe, March-April 2003. Table 4, p. 36.
    ${ }^{6}$ Pfeffer and Ross (1988) use a linear, rather than log-linear, specification and interact the dichotomous control variable with a number of other variables so a comparable average public earnings discount is difficult to calculate for doctoral and research institutions from their results.

