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AUTHOR Tang, Thomas Li-Ping; And Others
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ABSTRACT

An analysis of the total compensation of presidents and the five highest-paid employees at 190 private colleges and universities in 1993 looked at the additional variables of institutional expenditure level, institution type, reputation, and student Scholastic Assessment Test (SAT) scores. Results indicated that institutional expenditures, reputation, and institution type are somewhat related, and that presidents' compensation was also related to these three factors. However, compensation of the other five highest-paid employees was not found to be related to reputation, only to other institutional variables. The study concluded that: (1) presidents' pay is related to performance; (2) agency theory can be applied in this situation, in which the incentive system encourages mutual monitoring through the organization concerning pay and performance; and (3) since presidents' pay is related to objective performance data, procedural justice exists in the compensation system. Data analysis summaries are appended (Contains 36 references.) (MSE)

The Pay-Performance Linkage Revisited: Is University Presidents' Pay Related to Reputation Ranking?

Thomas Li-Ping Tang
Middle Tennessee State University
Cindy Shin-Yi Tang and David Shin-Hsiung Tang
Harvard University

Running head: CEO PAY

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Address all correspondence to Thomas Li-Ping Tang, Box 516, Department of Management and Marketing, College of Business, Middle Tennessee State University, Murfreesboro, TN 37132. Telephone: (615) 898-2005, Fax: (615) 898-5308, E-Mail: TTANG@MTSU.EDU.

Abstract

This article focuses on the total compensation of CEOs and the five highest-paid employees at 190 private colleges and universities. We find that only university CEOs' total compensation is related to the academic reputation ranking of the university, whereas the other five highest-paid professors' total compensation is not.

The Pay-Performance Linkage Revisited: Is University Presidents' Pay Related to Reputation Ranking?

Over the years, American people have been fascinated and obsessed with other people's pay, chief executive officers' (CEOs') pay in particular. Pay and benefit figures related to athletes, entertainers, and corporate executives have been widely publicized and available to the public (e.g., Howard & Miller, 1993; Tosi & Gomez-Mejia, 1994).

Recently, CEO pay at U.S. corporations and non-profit organizations has created a round of headlines and has caught many people's attention (e.g., Bongiorno & Hof, 1994; Business Week, 1993; Crystal, 1991, 1992; McCarroll, 1992; Nelson-Horchler, 1991; Tully, 1992; Zagorin, 1993). Many people think that American CEOs are overpaid. In fact, CEOs are making more than ever (Crystal, 1990). Human resource managers and researchers are increasingly aware of the importance of distributive and procedural justice in organizations (Cropanzano & Folger, 1991; Greenberg, 1987) and the use of pay-for-performance compensation systems (Heneman, 1992; Hills, Bergmann, & Scarpello, 1994; Milkovich & Newman, 1993; Welbourne & Gomez-Mejia, 1995; Welbourne, Balkin, & Gomez-mejia, 1995).

CEO pay has received more coverage than it deserves because there are very few CEOs in the society and their pay accounts for only a small share of corporations' total labor costs. However, CEOs' pay is significantly higher than that of an average worker. CEOs have a disproportionate ability to influence organization

performance (Haleblian & Finkelstein, 1993). Moreover, CEOs pay can help set the tone or culture of the organization (Lawler, 1981; Noe, Hollenbeck, Gerhart, & Wright, 1994). Therefore, the link between CEO pay and performance seems to be an important factor in compensation and organizational strategy (Gomez-Mejia & Balkin, 1992a, 1992b; Tosi & Gomez-Mejia, 1994).

The major purpose of the present study was to apply agency theory and examine the relationship between university CEOs' total compensation and university expenditures, institution type, reputation rank, and SAT scores. The same relationships were also examined for the five highest-paid employees. It is not clear whether the pay-performance linkage will be valid for both university CEOs and the five highest-paid employees.

CEO Pay at Private Colleges and Universities

Recently, salaries of the university CEOs (presidents) and the five highest-paid employees at 190 private colleges have been revealed in Chronicle of Higher Education (Lederman, 1993a, 1993b; The Chronicle of Higher Education, 1993). In 1991, Daniel L. Ritchie, Chancellor at the University of Denver, was paid $1, whereas Joe B. Wyatt, chief executive of Vanderbilt University was paid $395,725 (The Chronicle of Higher Education, 1993). These two people were the lowest and highest paid CEOs in the survey. When benefits were combined in the data analysis, John Silber, president of Boston University, topped the list. John Silber's total compensation was $414,715, while Joe B. Wyatt's was $410,916.

The highest-paid individual, not a university CEO, in the whole survey was Wayne Isom, a professor of cardiothoracic surgery at Cornell University. Dr. Wayne Isom made $1,770,730 in pay and benefits in the 1990-1991 academic year. In fact, there were six professors, all in the medical profession, who made more than $1 million in 1991.

Agency Theory

Gomez-Mejia and Balkin (1992b) found that agency theory can be meaningfully used to analyze internal control relationships between allocators (principals) and those receiving allocations (agents). Agency theory can be used to provide a theoretical framework to predict the basis of pay for "nonprogrammable" jobs, or jobs consisting of tasks that are difficult to structure and where incumbents enjoy extensive discretion, such as CEOs.

Since available information on agents' activities may be very limited, difficult to interpret, or too time-consuming and cumbersome to collect, most incentive systems have tried to track "objective" quantifiable indices of firm performance (e.g., return on equity, earnings per share, or changes in stock prices) (Gomez-Mejia & Balkin, 1992a). If designed properly, the incentive structure of CEOs will encourage mutual monitoring throughout the entire organization because their neck is on the line. Welbourne, Balkin, and Gomez-Mejia (1995) stated:

> With few exceptions, such as Eisenhardt's (1985) work with salespeople and Gomez-Mejia and Balkin's (1992b) study on faculty pay, this research has concentrated on the

relationship between chief executive officers (CEOs) as agents and firm owners as principals. (p. 883)

Using a sample of 353 management professors across 90 universities, Gomez-Mejia & Balkin (1992b) found that performance outcomes, i.e., top-tier articles published by professors (agents), have the greatest impact on faculty pay. With articles published in top-tier journals, a principal merely has to count publications that can be assumed to be of high quality. They argued that "principals rate research over teaching for faculty pay allocations" because professors' top-tier publications can be used to enhance institutional prestige, increase visibility in the academic field, and attract scarce resources (p. 947). Thereby, professors' top-tier journal articles are considered as one of the most important performance measures available.

Others argue, however, that the major mission of university professors is to teach students. Previous research has shown that there is no strong link between teaching and pay (Katz, 1973; Konrad & Pfeffer, 1990). Gomez-Mejia and Balkin (1992b) found that the correlation between top-tier publications and teaching evaluations is statistically significant but low.

In industry, the size of the organization, ability to pay, and type of industry are associated with CEO pay. Further, as we have discussed earlier, most incentive systems have tried to track "objective" measures of firm performance (e.g., return on equity, earnings per share, or changes in stock prices) (Gomez-Mejia & Balkin, 1992a). In the present study, we investigated the

relationship between CEO pay and several objective measures in the academic setting (expenditures, type of institution, reputation ranking, and SAT scores).

Variables Examined in the Present Study

Expenditures. The size of the organization also has impacts on employees' pay in that large organizations tend to pay more than small ones. Among colleges and universities, it is expected that university expenditures can be considered as one of the most important proxies to measure the "size" of the university operations. It is predicted that those with larger expenditures will be able to pay more than those with smaller ones.

Types of Institution. Employees' productivity varies with different abilities and motivation among workers. Productivity differences among employees account for large differences in "ability to pay" both within and across industries (Hill et al., 1994).

There is evidence of long-term interindustry wage structure in which similar jobs are paid different wages across different industries (Hills, Bergmann, & Scarpello, 1994). Labor-intensive industries (e.g., education and services) tend to be lower paying than are industries whose technologies are less labor-intensive (e.g., petroleum and pharmaceuticals) (Milkovich & Newman, 1993). The fair-wage model explains why secretaries and janitors in high-wage industries (i.e., petroleum) are paid more than secretaries and janitors doing the same tasks in other industries (i.e., education) (Milkovich & Newman, 1993).

In the present study, three types of educational institutions were examined according to the Carnegie classification: Research Institutions, Doctorate-Granting I Institutions, and Liberal-Arts Institutions. Market factors probably are the driving force for the possible compensation differences among these different types of institutions. Very high salaries have been paid to highly skilled cardiologists and CEOs in major research institutions.

For liberal arts institutions, it is very likely that the markets from which their faculty come have a much higher supply than the demand for their services. Liberal arts institutions, without large science and professional programs (e.g., medical school, law school, business school, etc.), are probably staffed by more professors of English, History, and social sciences than is the case in large research institutions. There is, in many of these fields, an excess of supply over demand. This would have the effect of driving down the average salaries of the university CEOs and the five highest paid faculty in these schools while the market for those in major research institutions is much different.

Therefore, Research Institutions, Doctorate-Granting I Institutions, and Liberal-Arts Institutions may be considered different "industries" within the educational systems of higher education. It is reasonable to expect that major research institutions will have larger expenditures than liberal arts institutions. Further, people's pay will be related to the type of institution they are in. It is predicted that university CEOs' pay will be related to expenditures and the type of institution.

Reputation Ranking and SAT Scores. Compared to those who attend public institutions, students who attend private colleges and universities are paying a premium for their education and will expect higher-quality teaching and return on their investment to justify this additional expenditure. Two measures are considered to be related to the quality and performance of universities and colleges (i.e., the academic reputation ranking and the mid-point SAT score) which are available from America's Best Colleges (1992), an independent source, published by the U.S. News and World Report.

It is debatable whether these two measures can be used as the "best proxies" of the performance of colleges and universities and whether these two documents will provide a complete accounting of university CEOs' effort, actions, and performance. However, these data are widely available to the public (students, parents, and high school counselors) and can be used as a buyer's guide in pursuing, comparing, and selecting colleges and universities.

Only universities with the best academic reputation will be able to attract the best and brightest students (with highest SAT scores). America's Best Colleges offers the overall ranking for the "top 25" universities and colleges and reputation ranking for "all" schools. The overall rankings are determined based on the combined percentiles of the following areas: reputation, selectivity, faculty resources, financial resources, graduation rate, and alumni satisfaction. It appears that the overall rankings would be an ideal measure for the purposes of this study.

However, the overall rankings are available only for the top 25 universities and colleges. Thereby, the reputation rankings (available for all universities and colleges) will be used.

Students with high SAT scores do not always attend the best private universities and colleges. For example, 383 national merit scholars attend Harvard and Radcliffe, 227 Rice University (135 of them are funded by the institution), 212 University of Texas at Austin (165 funded), 152 Stanford, and 140 Texas A & M University at College Station (108 funded) (America's best colleges, 1993). Many national merit scholars attend "public" universities and are supported by these institutions. It is reasonable to expect that private universities and colleges with good reputation rankings will be able to attract many, but not all, students with high SAT scores.

When the academic reputation ranking and the mid-point SAT score are compared, we may argue that the mid-point SAT score is considered as an important part of the academic reputation ranking, whereas the academic reputation ranking is probably a better and broader performance indicator of the quality of the college. That is, academic reputation ranking may be a better measure of university quality (performance) than mid-point SAT score.

On the basis of the agency theory and the aforementioned rationale, it stands to reason that CEOs with a high total compensation will come from university with a large expenditures, from major research institutions, and from universities with a high

academic reputation ranking. Hypothesis 1 will be tested as follows:

Hypothesis 1: CEOs' overall pay will be related to the expenditures, types of institution, and academic reputation ranking of the college.

Method

Compensation and Institutional Data

Research data of the present study were obtained from The Chronicle of Higher Education (1993) which collected information from a tax document known as Form 990, submitted to the Internal Revenue Service each year by all private non-profit institutions. This tax document does not always provide a complete accounting of what university president and officials earn, but it is the best measure available to the public. The following data were presented in that report: 1991-92 expenditures, pay and benefits of CEO (labeled as L1 in the present study) and five highest-paid employees (labeled as L2, L3, L4, L5, and L6). In this study, "pay" is defined as all salaries, fees, bonuses, and severance payments that each person received, whereas "benefits" include all welfare benefit programs, such as health and pension plans. Total compensation consists of pay and benefits. There are 33 Research Institutions, 20 Doctorate-Granting I Institutions, and 137 Liberal-Arts Institutions in this study. Thus, data related total compensation, expenditures, and types of institutions were obtained.

University Performance Data

University performance data were obtained from America's Best Colleges (1992). All these 190 colleges can be found in the two major leagues of higher education: (1) National Universities and (2) National Liberal Arts Colleges. Sample academic reputation rankings for National Universities were listed as follows: Harvard (1), Princeton (3), Yale (3), Stanford (3), CIT (8), and MIT (1). For National Liberal Arts Colleges, a separate set of rankings was used, for example, Williams College (1), Amherst College (1), Swartmore College (3), and Wellesley College (3).

In terms of mid-point SAT scores, the scores used are: e.g., Harvard (1400), Princeton (1355), Yale (1365), Stanford (1345), CIT (1405), MIT (1370), Williams (1335), Amherst (1340), Swartmore (1335), and Wellesley (1210). For colleges with only ACT scores (n = 16, 8.4 %) (instead of SAT scores), the SAT score will be coded as a missing value in the data analysis process.

Results

CEO Pay and Performance at Private Colleges and Universities

We select the following four factors to predict university CEOs' and the five highest-paid employees' total compensation (pay and benefits combined): (1) the 1991-1992 expenditures of the university (i.e., size, ability to pay), (2) the type of institution (Research, Doctorate-Granting I, and Liberal-Arts)(i.e., industry), (3) the academic reputation ranking of the university, and (4) the mid-point of SAT score. Table 1 shows the

mean, standard deviation, and correlations of major variables. Table 2 shows the results of multiple regression analyses.

Table 2 shows that the expenditures can be used to explain 43.23 percent of university CEOs' total compensation. Further, academic reputation ranking and type of institution reflected 7.87 percent and 1.89 percent of CEOs' total compensation, respectively. These three variables can explain 52.98 percent of university CEOs' total compensation.

Insert Tables 1, 2, and 3 about here

Table 2 also shows the predictors for the five highest-paid employees. The total compensation of the highest-paid employee was only related to the university expenditures. The total compensations of the second, third, fourth, and fifth highest-paid employee were all highly related to both the expenditures and the type of institution.

Our major finding suggests that only university CEOs' total compensation is related to the academic reputation ranking of the university, whereas the other five highest-paid employees' total compensation is not. Hypothesis 1 was supported. The amount of information explained by the academic reputation ranking concerning university CEOs' pay was 7.87 percent. It appears that CEOs at more reputable private universities deserve more pay than those at less reputable institutions.

The differences in these nine variables (CEOs total compensation, the five highest-paid employees' compensation, expenditures, academic reputation rankings, and SAT scores) among Research Institutions, Doctorate-Granting I Institutions, and Liberal-Arts Institutions were examined using a multi-variate analysis of variance (MANOVA). Table 3 shows that when all these variables were considered, there was a significant difference among these three types of institutions, F (18, 280) = 27.37, $p < .001$, Wilks' Lambda = .131. Further univariate F-tests (df = 2, 148) showed that the significant differences were related to all the nine variables examined.

Discussion

University expenditures, academic reputation ranking, and type of institution are somewhat related to each other. Major Research Institutions have higher expenditures, better reputation rankings, and higher Mid-point SAT scores than other institutions. CEOs and the highest-paid employees at major Research Institutions also made more money than those at other institutions.

Our research showed that CEOs' total compensation was related to university expenditures, reputation rankings, and institution type, whereas the five highest-paid employees' compensation was related to expenditures and institution type with the exception of the highest-paid employees. Thereby, only university CEOs' pay was related to reputation rankings, where the other five highest-paid employees' pay was not.

The results of this study strongly support the notion that university CEOs' pay can be determined by allocators (principals) based on the expenditures, the academic reputation ranking of the university, and the type of institution. Thereby, it is feasible for trustees and board members (principals) to use the academic reputation ranking as a guide in deciding university CEO's pay (agent).

Our present findings show several important points. First, CEOs pay is related to performance. Second, agency theory is working (Gomez-Mejia & Balkin, 1992b). Therefore, the incentive system encourages mutual monitoring throughout the organization concerning pay and performance. Third, since CEO pay is related to objective performance data, then the procedural justice exists in the compensation system. People in the organization may perceive distributive and procedural justice in pay (Cropanzano & Folger, 1991; Greenberg, 1987; Hills et al., 1994).

It should be pointed out that only limited variables were examined in our present data analyses. Future research may also include different types of measures of university performance and characteristics of the university and the CEO. Some examples are listed as follows: funding sources (e.g., endowments, tuition, contracts, current donations), size of the university (e.g., students, faculty, and staff), performance outcome measures (e.g., degrees offered, number of different schools), and characteristics of the university (e.g., nature of diversity among schools, affiliation (e.g., Notre Dame vs. Rochester Institute of

Technology), changes in student size, change in reputation, source of the university CEO (e.g., inside, outside, industry), age, and years of tenure in the position, etc.).

American university CEOs' pay is relatively reasonable compared to the CEOs in large corporations. In order to be competitive in the educational market, university CEOs are keenly aware of the importance of the rankings. When the performances of these universities are considered, it appears that most of the big winners earn their money. It has been pointed out that for university CEOs, big paychecks are not only deserved but necessary in order to compete for talent with private employers in recent years.

We strongly agree with Stephen Joel Trachtenberg, CEO of George Washington University who made $304,988 in the survey, that university CEOs are underpaid. Their pay is far less than they could earn in the private business sector (Tang, Tang, & Tang, 1995). However, considering the overall picture of pay in higher education, we think that CEO pay at private universities is appropriate and fair.

Many CEOs, trustees, and academic consultants agree that university CEOs spend more time than most corporate CEOs in contending with such tough issues as shared governance and competing constituencies. The operations are becoming increasingly business-oriented and complex, yet still non-profit.

Large Research Institutions probably will be able to attract scarce resources, such as research grants, private donations,

research talents, and probably excellent students. We can speculate that these talented students at major Research Institutions will become successful CEOs, researchers, leaders, and rich alumni in all different fields of the society. It has been found that the chief development officer (fund-raiser), directors of admissions, and alumni affairs will receive higher pay in private universities' internal pay structure than in public universities. It is clear these key personnel may have critical impacts on important university resources, based on the resource dependency theory.

Further, it can be argued that the relationship between professors' effort and their publications in top-tier journals is probably stronger than the relationship between university CEOs' effort and their academic reputation rankings. Reputation ranking is probably achieved by the combined efforts of university faculty, staff, students, alumni, and supporters under the leadership of the CEO. Thus, the relationship between CEOs' pay and academic reputation ranking will not be as strong as the relationship between professors' pay and first-tier publications.

Moreover, others may argue that the reputation ranking is significantly related to the "history" and the image of the university. University CEO with a relatively short tenure on the job probably will not be able to alter the image and the history of the university dramatically. Therefore, it is possible that it is the reputation ranking that dictates the compensation of university CEOs.

Based on The Best Business Schools (Byrne & Associates, 1993), at Harvard University, the pre-MBA annual pay is $52,790 and the post-MBA average pay is $84,960. It is interesting to know that the pre-MBA pay at Harvard ($52,790) is higher than the post-MBA pay of students graduated from 20 of the top 40 business schools. In a survey presented in The Best Business Schools, graduates from Harvard and Stanford offer the highest ratings answering the question: "To what extent has your school's reputation helped you in your career so far?" "Reputation still counts for a lot. All those years of pumping MBAs out into the marketplace has helped solidify Harvard's reputation" (Byrne & Associates, 1993).

With great expenditures, universities may expand and acquire research space, support, and talents which may further enhance the reputation of the university in the academic and scientific market and the community. University expenditures, reputation, and type of institution are signs of power, control, and authority. Obviously, for those university CEOs who possess power, control, and authority, they will be able to demand a higher level of compensation than those who do not.

One recent example may illustrate this. As we have discussed earlier, Vanderbilt University's Joe B. Wyatt received the highest pay of any chief executive among 190 private colleges and universities in the survey. It is not surprising to see that the "overall ranking" of Vanderbilt University has increased from the 25th in 1992 to 20th in 1993, and to 18th in 1994, according to the most recent ranking of America's Best Colleges (1994, 1995 College

Guide). Please note that Vanderbilt University's "overall ranking" is better than its "academic reputation ranking" which has been maintained at the same level for both 1992 and 1993.

Vanderbilt University's Joe B. Wyatt can probably rest peacefully in his own mind that his $395,725 a year pay in 1991-1992 was justified. His pay is related to his performance. This is an example that the agency theory is working in the academic field for CEOs.

Harvard University has been ranked by America's Best Colleges as the number one university in the nation five years in a row. However, many other universities are catching up in the battle of rankings. For university CEOs, they can not afford to take a nap (snoozing) while the competitors are hard at work in the race of academic rankings. Both university reputation ranking and CEO pay are on the line.

A recent survey, conducted by the New York-based Institute of International Education (IIE), found that 438,618 foreign students have enrolled in the 2,483 colleges and universities that responded to the study in 1992-93. Richard Krasno, president and CEO of IIE stated that "Continuing growth of international student enrollments in the face of nearly global economic recession and rising costs demonstrates the high value placed by other countries on U.S. higher education". Nine of the 10 top nations with nationals in the U.S. are from Asia. California, New York, and Texas have attracted the most foreign students. Further, more than 35 percent the foreign students have been enrolled in private institutions,

compare to 19 percent of U.S. students. Moreover, the survey reveals that business/management programs, with 88,120 students, are the highest fields in demand for international students. The second highest field of study is engineering with 77,280 foreign students. In order to attract the brightest college students, the customers, CEOs in private universities have to consider that being the best in a global competition is the name of the game.

In a recent book, The Cost of Talent, Derek Bok (1993), former president of Harvard University and dean of the Harvard Law School, calls attention to an even larger and more important issue: Do we compensate highly educated people in the United States in ways that serve the best interests of the nation? What effect do differences in earnings have on the career choices of the talented? Do we pay CEOs and professionals in ways that motivate them to work hard at the right things? Bok (1993) asserts that the lucrative rewards for talented people in the fields of business, law, and medicine act as magnets to deprive the low-paying but vitally important teaching and public service professions of desperately needed talents. These issues need to be examined very seriously.

For universities and colleges in the United States, downsizing has already affected many campuses. Employees' perception of pay fairness may be better in a flat organizational structure (few levels) than that in a tall structure (many hierarchical levels). However, egalitarian structures are more susceptible to pay compression which may lead to low morale and high turnover.

For many people who value money, the big payoff at the top of the organization may serve as a goal or motivator.

Only managers (professors) with the best credentials will be able to have good job moves in order to increase their pay and to become CEOs. Moreover, it appears that only CEOs who move to the top Research Institutions with large expenditures and good academic reputation rankings will reach their top pay in private universities and colleges. We may use the analogy of a fish in a pond. A big fish that changes from a small pond to a large pond may enjoy its growth and become the biggest one.

In the largest business organizations, the CEO is quite often most instrumental in setting his own pay. CEOs usually serve on each other's board in deciding their peer CEO's pay. Apparently altruistic behaviors are really egoistically motivated which can be labeled as reciprocal altruism. This is less likely to be the case in the university where presidents are subject to control by boards of regents (governors), or other governance bodies.

When the procedures and processes associated with the allocation of CEO pay (the means) are just, it is very difficult to question the outcomes (the ends) that have resulted. Our own attitudes toward money can be perceived as our "frame of reference" in which we examine our everyday life (Tang, 1992). Our perception of pay equity and pay fairness depends on our "frame of reference" and the type of comparisons. The meaning of money is in the eye of the beholder. There is no exception when we consider the fairness of CEO pay.

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Table 1

Mean, Standard Deviation, and Correlations of Major Variables

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. L1	170,283.72	77,405.52		50	57	61	60	60	66	-62	-51	52
2. L2	190,610.12	218,415.66			97	95	96	94	76	-68	-31	35
3. L3	160,537.15	160,003.01				98	98	96	78	-71	-34	38
4. L4	148,630.99	133,026.39					99	98	82	-77	-35	40
5. L5	138,683.08	121,388.22						99	83	-78	-36	41
6. L6	135,084.21	116,633.44							84	-79	-35	41
7. Exp.	169,071.75	330,398.60								-83	-35	43
8. Type	2.55	.77									24	-37
9. Rank	63.74	42.24										-87
10. SAT	1,131.71	117.59										

Note. L1-University CEO. L2-Highest-paid employee. L3-Second highest-paid employee. Exp.-Expenditures (Expressed in $1,000). Type-Type of Institution (1 = Research, 2 = Doctorate Granting I, 3 = Liberal-Arts). Rank-Academic Reputation Ranking. N varies between 169 and 190. All decimals for correlations have been omitted. All correlations are significant (ps < .001).

Table 2

Predictors of Total Compensation for University CEOs and The Five Highest-Paid Employees

Variable	Predictors	R Square Change	F Change	p
L1-CEO	1. Expenditures	.43238	143.969	.0000
	2. Reputation Rank	.07865	30.239	.0000
	3. Institution Type	.01886	7.501	.0068
L2-First	1. Expenditures	.57088	251.436	.0000
L3-Second	1. Expenditures	.59298	275.356	.0000
	2. Institution Type	.01300	6.203	.0136
L4-Third	1. Expenditures	.66464	374.566	.0000
	2. Institution Type	.02312	13.924	.0003
L5-Fourth	1. Expenditures	.68383	408.780	.0000
	2. Institution Type	.02351	15.105	.0001
L6-Fifth	1. Expenditures	.67991	401.451	.0000
	2. Institution Type	.02046	12.836	.0004

Note. L1-CEO: University CEOs. L2-First: The highest-paid employee. L3-Second: The second highest-paid employee.

Table 3

MANOVA Results of Major Variables

Position		Type of Institution (1) Research	(2) Doctorate	(3) Liberal-Arts	Univariate F
L1-CEO	M	281,601.4	171,996.4	147,942.9	60.06
	SD	82,333.4	83,013.3	46,583.0	
L2-First	M	526,613.9	216,950.7	110,614.9	71.42
	SD	373,340.0	74,727.6	29,091.3	
L3-Second	M	415,656.3	186,315.0	98,206.5	87.16
	SD	257,310.1	51,556.2	22,517.1	
L4-Third	M	375,432.8	174,719.4	92,693.6	124.16
	SD	189,220.7	48,281.7	21,896.8	
L5-Fourth	M	349,741.3	167,274.9	86,986.6	136.38
	SD	167,206.7	42,365.2	21,090.5	
L6-Fifth	M	330,940.2	160,585.4	83,786.9	140.13
	SD	152,247.9	42,705.1	24,446.5	
Expenditures (in $1,000)	M	770,056.7	210,921.4	37,451.4	255.54
	SD	331,709.5	177,128.6	20,518.1	
Ranking	M	30.8	95.4	61.8	14.63
	SD	28.1	47.0	39.7	
SAT	M	1,232.5	1,105.5	1,115.4	14.17
	SD	115.3	122.9	105.4	

Note. Total compensation data were analyzed using a multi-variate analyses of variance (MANOVA), F (18, 280) = 27.38, p = .000, Wilks' Lambda = .131. All Univariate F-tests (df = 2, 148) are significant (ps < .001).