

Comparisons of Union vs Non-Union Business Professoriates

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In the aftermath of the recent economic recession, many state supported institutions of higher learning face significant budget reductions. As business professors are typically among the highest paid faculty at many public colleges and universities, these positions are often among the first considered when cuts are planned. This study compares the salaries paid to business school faculty at two public universities (union and non-union represented). The research found that there were no significant differences between faculties at the union represented university. There were however, differences at the non-union represented university as well as between a union and the non-union represented university.

INTRODUCTION

This research extends work presented at the International Academy of Business Disciplines (IABD) and published in *Quarterly Review of Business Disciplines* (QRBD), (Weber, Weber & Breaker, 2014). Although faculty salaries have only recently begun to be debated loudly (Hansen, 1988), they are often the largest single academic budget item (Hern, 1999). With the recession in the United States deeply impacting states' willingness to continue to support higher education, many institutions have experienced significant loss in state revenues. (Kinne et.al, 2012; Zumeta, 2012; Zumeta, 2014; Delaney & Doyle, 2011). In times of budget crisis, those academic departments with the largest salaries might be the focus of budget cuts. However cutting faculty salaries may not be the best approach. Public university income comes primarily from the state and from student tuition and fees (Kine et. Al, 2012; Zumeta, 2012). How much the faculty contributes to those tuition revenues is determined not only by the number of hours spent in the classroom (Faiweather, 1996) but also by the number of students taking their classes. This study examines the salaries of the business college faculties at union and non-union represented universities to determine the productivity of these faculties.

BACKGROUND

Many may argue that faculty salaries are not only an issue of supply and demand, but that they are market driven. Accordingly, universities must pay competitive faculty salaries if they want to obtain and

retain top faculty (The average, 2012). While this is generally true, it is also a widely held belief that faculty in business departments command salaries that are among the highest of all the departments in a university (Altbach, Reisberg, & Pacheco, 2013; Becoming, 2015; What, 2007; Doctorate, 2015; June, 2014; Jaschik, 2013; The average, 2012). For example, McDaniel (2013) points out that the highest paid nine month employee at LSU is in the College of Business, while at The University of Texas at Austin, only the College of Law had a higher average salary than the College of Business (Average, 2013).

For some period of time the United States has been experiencing a decline in doctoral degree production (What, 2007). For business schools, the current supply of new doctorates is smaller than the number of available positions. This combined with the increase in students seeking business degrees has resulted in a continued faculty shortage. (Finch, Allen & Weeks, 2010; Becoming, 2015). This imbalance alone could drive up faculty salaries, however Ikenberry (2015) also notes that job advertisements are up but employment is down, which could be an indication that universities are experiencing increased employee turnover or retirements. Both issues support the shortfall of faculty and the intense competition for business Ph.Ds. This has resulted in increased salaries and in some cases universities are offering reduced teaching loads for those scarce human resources. (Alsop, 2007)

While differences in salaries from one department to the next are quite common (The average, 2012; Yeh, Suwanakul and Lim, 1998) large differences can cause resentment within a university. If the shortage of business professors continues and faculty salaries continue to rise along with the concurrent necessity of offering smaller workloads, this salary gap problem will only be exacerbated. But if there are also a significant increase in business students (Becoming, 2015) then who will be teaching these students? This paper looks at a potential answer to that question. Although business faculty may be teaching fewer classes (teaching load) they may also be producing more student semester credit hours (more students per class offering) than their peers.

METHODOLOGY

This study is a comparison to a recent study by Weber, Weber and Breaker (2014), analyzing the perceptions of business professoriates concerning overpayment, underemployment, and under qualification and compared to other professoriates at a union represented university.

Data were also collected from a mid-sized public university that is not represented by a union. The salary data were then compared and contrasted. The two universities were comparable; both universities having similar faculty sizes and similar student body sizes. Both Colleges of Business were accredited by the Association to Advance Collegiate Schools of Business (AACSB), and offered similar degree programs.

The assembled data were publicly available via statutory disclosure requirements or a Freedom of Information request. Only the data of full time faculty were considered. Where questions arose as to which department the faculty taught, the primary teaching department was used. The data used were for two semesters (fall and spring) of one academic year. The comparison data for the union represented university came from 2009-2010. For the non-union represented university the most recent data available was used (2013-2014).

First the data were analyzed using descriptive statistics and exploratory data analysis. Then a General Linear Model (GLM) was developed using SPSS to address three research questions:

1. Are salaries for business professors greater than salaries for other professors?
2. Are student semester credit hours for business professors greater than credit hours for other professors?
3. Is the salary per student semester credit hour for business professors greater than the salary per student semester credit hour for other professors?

For the union-represented university the authors believe that business professors' salaries and credit hours taught will be higher than that for other professors, but the salary per student semester credit hour

will not be higher. For the non-union university it is conjectured that for business professors all three would be greater than for other professors.

RESULTS

The results from each university type (union vs non-union) is presented in its own section. Within these sections each of the data elements are presented in order (salary, student semester credit hours, and then salary per student semester credit hours). First a review of the exploratory data analysis is presented followed by a review of the GLM results.

Exploratory Data Analysis

Union Represented University

With respect to the average salary of faculty by department, an examination of the union data found that the average ranking of the six departments in the business college was in the top 13 percent. The highest ranked department was in the top 5 percent and the lowest in the top 26 percent.

This relatively high ranking did not hold true when looking at student semester credit hours. The six business departments average ranking was only 41 percent from the top with the highest ranked in the top 18 percent and lowest in the top 60 percent.

When considering both of these criteria to evaluate salary per student semester credit hour, the business departments again were only moderately high in the rankings. The average was 42 percent from the top with the highest ranking being in the top 12 percent and the lowest in the top 62 percent.

Non-Union Represented University

There was a distinct difference when looking at the ranking for the non-union business departments. For this university, in the College of Business there were only 4 departments. Marketing and Management were included in one department and not separate as was the case in the union university. Also, Information Systems and Business Statistics were separate in the union university and were included in the same department in the non-union university. These distinctions aside, the differences from the union represented university were still quite striking.

With respect to salary of faculty by department, the average salary for the four business departments were the top four in the university.

There was a little more variation when it came to the student semester credit hours produced by the business departments with the average being 28 percent from the top. The highest producing student semester credit hour business department was in the top 7 percent and lowest in the 29 percent. So, while the business professors lead the salary chart, they are also pushing the top of the student semester credit hours produced.

When combining these criteria to consider salary per student semester credit hours produced, the average of the business departments was in the 29 percent. The highest ranking business department was in the 25 percent and the lowest in the 33 percent.

Generalized Linear Model (GLM)

SPSS' GLM was used to produce a Multivariate Analysis of Variance (MANOVA) with the three dependent variables used in our research questions (salary, student semester credit hours, and salary per student semester credit hours). The criteria used to analyze these variables were whether or not the faculty taught primarily in the college of business or in some other college.

Union Represented University

As noted in Table 1, the union university had a sample size of 543. A general level of acceptance of significance is when alpha is less than or equal to 0.05. Although these significance levels should be adjusted depending on the circumstances of the data, the levels this analysis found for credit hours and

salary per student semester credit hour exceed generally accepted standards. It can be concluded that salaries are higher for business professors, but there are no significant differences in levels of credit hours or salary per semester credit hour.

**TABLE 2
UNION GLM**

DV	College	Mean	Std. Dev.	N	F	Sig.
Salary	Business	107,997.76	26,839.39	67	42.56	0
	Other	83,375.62	29,202.71	476		
	Total	86,413.71	30,013.20	543		
Credit Hours	Business	663.69	242.49	67	0.28	0.595
	Other	636.11	414.23	476		
	Total	639.51	397.01	543		
Salary per Credit Hour	Business	186.95	97.05	67	0.01	0.925
	Other	185.34	135.55	476		
	Total	185.54	131.34	543		

These results were used to answer our three research questions for the union university.

1. Salaries for business professors ARE greater than salaries for other professors.
2. Student semester credit hours for business professors ARE NOT greater than credit hours for other professors.
3. The salary per student semester credit hour for business professors ARE NOT greater than salary per student semester credit hour for other professors.

Non-Union Represented University

As noted in Table 2, the non-union university had a sample size of 458. In this case not only were there significant differences noted for salaries, but also for student semester credit hours produced. However, this was not true when looking at the salary per student semester credit hours. In this instance the lower levels of salary per semester credit hours taught by business professors failed to reach significant levels.

**TABLE 3
NON-UNION GLM**

DV	College	Mean	Std. Dev.	N	F	Sig.
Salary	Business	91,491.41	23,880.11	44	176.456	0
	Other	57,684.70	15,001.81	414		
	Total	60,932.50	18,881.45	458		
Credit Hours	Business	554.14	224.85	44	13.977	0
	Other	403.77	256.46	414		
	Total	418.22	257.23	458		
Salary per Credit Hour	Business	201.48	116.66	44	0.878	0.349
	Other	242.86	290.23	414		
	Total	238.89	278.49	458		

These results were used to answer our three questions for the non-union university.

1. Salaries for business professors ARE greater than salaries for other professors.
2. Student semester credit hours for business professors ARE greater than credit hours for other professors.

3. The salary per student semester credit hour for business professors ARE NOT greater than salary per student semester credit hour for other professors.

DISCUSSION

Conclusions

In both of the cases presented here, business professor salaries were statistically significantly higher than other professors in each of the universities. Even though the second research question's conclusions were different for each university type, the final research question concluded in both cases that business professors are not statistically significantly higher than other professors when comparing salary per student semester credit hours. Although salary per credit hour was virtually identical for the union sample, the lower average salary per credit hour for business professors in the non-union sample did not reach significant levels. Taken together, these results demonstrate that although business faculty do command a higher salary, they also contribute significantly to university revenues.

It should be noted that these data are population data for the two universities studied. In the unionized university, business professors were paid almost .8% (\$1.41) higher than the average salary per credit hour at that institution, while at the non-unionized university, business professors were paid almost 16% (\$37.41) *lower*. From a pragmatic perspective, the union difference seems small enough to be of little concern, but the non-unionized difference seems large enough to constitute an important difference that could be used in making compensation decisions at that university.

Although descriptive statistics constitute valid results for these two universities, the results of the inferential statistical analysis generated might also be applicable to similar universities. If so, then the current discussions comparing the course loads of faculty may in fact be arguing the wrong measurement. If public universities' funding is becoming increasingly based on tuition and tuition is heavily weighted based on the student semester credit hours, then a measurement of comparison among faculty might better be the student semester credit hours produced and not the course load. Moreover, the faculty pay should not only rely on market factors such as those presented in CUPA data, but also on what the faculty bring back to the university in terms of student tuition dollars.

Limitations

Since both of these universities had AACSB accredited business colleges, these data might not be applicable to non AACSB accredited schools. In addition, both these institutions are mid-sized public four year universities located in the United States. The results might not be applicable to private universities, large or small universities, or to universities outside of the US. The current discussion has focused on quantifiable, monetary and teaching hour workload data. One aspect not studied would be the differential impact on actual faculty workload of additional course preparations. Although difficult to quantify, additional preparations contribute to faculty workload and might be usefully studied in the future. Regardless, preps (additional different courses taught) have no impact on the revenue generation side of the issue, of how much money faculty are bringing in with their teaching load.

Future Research Work

Comparing these results with similar sized universities in the US that are private universities and with universities whose business colleges are non AACSB accredited would allow further understanding of these relationships. It would also add to the knowledge base to compare to schools of different sizes as well as schools not in the US. Additionally, rather than comparing the college of business against other colleges, a comparison of each of the departments might also be beneficial. Future research might also seek to find way of further quantifying workload, so the impact of additional preparations might be more fully considered. Finally a comparison from a pooled set of data and directly comparing the union and non-union salaries could provide further insights.

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