

Salary Compression and Inversion Within an AACSB Accredited College of Business

Dakota Nicley, Edward J. Lazaros, Allen D. Truell, Christopher Davison

Ball State University

dlnicley@bsu.edu, ejlazaros@bsu.edu, atruell@bsu.edu, cbdavison@bsu.edu

Introduction

This case study focused on identifying instances of salary compression and inversion in faculty salaries at an AACSB accredited College of Business at a Midwestern University. Salary data was collected for the Departments of Accounting, Economics, Information Systems and Operations Management (ISOM), Finance and Insurance, Management, and Marketing. Four guiding questions were proposed to narrow the focus of the study to instances of salary compression and inversion: across the departments in the College of Business, which included the following: 1. Is there evidence of objective, identifiable salary compression and/or inversion amongst Assistant Professors within each of the departments in the College of Business, 2. Is there evidence of objective, identifiable salary compression and/or inversion amongst Associate Professors within each of the departments in the College of Business, 3. Is there evidence of objective, identifiable salary compression and/or inversion amongst Professors within each of the departments in the College of Business, 4. How prevalent is salary compression and inversion between ranks of Assistant, Associate, and Professor within the Departments of Accounting, Economics, ISOM, Finance and Insurance, Management, and Marketing.

Literature Review

When faculty at senior ranks are earning salaries that are near to or lower than faculty at junior ranks within their institution, salary compression exists. Salary compression often occurs when new faculty members are hired at higher starting salaries; yet, experienced faculty members receive no adjustment (AAUP, 2018, p. 6). The new faculty members benefit from what is called inversion. According to Jennings and McLaughlin (1997), “Inversion occurs when salary compression is carried an additional step so that the compensation of some junior faculty exceeds those of faculty members who are more senior in terms of experience and/or qualifications” (p. 345).

There are many problems with salary compression and inversion. According to the AAUP (2018) “Salary compression can lead to ethical and moral dilemmas. It can also cause faculty to leave due to stagnation of their salary” (p. 6). In addition to ethical, moral, and resignation implications, salary compression can influence purchasing power for professors. According to Cosgrove and Frank (2014), “Practical effects of salary compression are that it substantially lowers the purchasing power for professors during their working years and in their retirement funds since their 403b accounts would have less dollar contributions” (p. 102). When salary inversion results in salary compression for experienced faculty, it may also have an effect on morale. Salaries provide faculty with a sense of value, since it translates into purchasing power. Purchasing power can be construed as a status symbol. Faculty determine their own worth when

compared to others with regard to compensation. Salary inversion may affect a faculty member's perceived status along with his/her capacity for satisfying self-actualization, safety, social, physiological, and self-esteem needs (Glassman & McAfee, 2005, p. 331). Glassman and McAfee (2005) stated very clearly how salary inversion is perceived, "Most workers would see salary inversion as unfair based on equity theory and discrepancy theory since a new hire's inputs (credentials, job skills, productivity) are less and the outcomes (salary and perks) are more" (Glassman & McAfee, 2005, pp. 25-26). Salary inversion may also have an effect on the perceived value of rank within an institution. According to Stratham (2000), "Rank serves as an important proxy for performance because it reflects, in part, aspects of a faculty member's work that are very difficult to quantify" (p. 237).

One might ask why salary compression and inversion occurs, one possible answer is external market conditions as described by Snyder, McLaughlin, and Montgomery (1992), "While salary compression is an internal problem to a given campus, it can be driven by external market conditions. Salary compression results from hiring new faculty at salaries in excess of those paid to existing faculty at the same or higher ranks or by administering raises that cause a given faculty member's salary to exceed the salary of faculty at the same and higher ranks" (p.114). Salary inversion may occur when a dean needs to quickly fill a position with little effort. In such an instance, salary inversion can be advantageous (Glassman & McAfee, 2005, p. 328). These same researchers indicate "One could also argue that the costs of pay inversion are small. The dean may believe, perhaps correctly, that despite low morale, current faculty will still make personal sacrifices and work hard out of a sense of responsibility to the students and commitment to the profession" (Glassman & McAfee, 2005, p. 329).

Methodology

Convenience sampling was used in gathering the sample for the study. The salary data collected from the sample of faculty within the College of Business were restricted to only tenure-line Assistant Professors, Associate Professors, and Professors at an AACSB accredited College of Business at a Midwestern university. Data was omitted for individuals serving in administrative roles such as a dean, associate dean, department chairperson, or chief entrepreneurship officer. SPSS was used to separate the salary data by year in order to tally the number of individuals in the study. The sample included a total of 66 faculty in 2018-19, a total of 69 faculty in 2017-18, and a total of 59 faculty in 2016-17. All tenure-line faculty were included in this study.

This case study focuses on identifying and addressing instances of salary compression and inversion in tenure-line faculty salaries at an AACSB accredited College of Business at a Midwestern university within the Departments of Accounting, Economics, Finance and Insurance, ISOM, Management, and Marketing. The University Institutional Review Board approved this study as "Exempt." Salary data was obtained from the Human Resources Office at the University. Once the data was obtained, a model containing all three years of salary information from the 2016-17 academic year to 2018-19 was created for Assistant Professors, Associate Professors, and Professors. This model allowed for juxtaposing annual salary data between these tenure-line faculty in each department. Primarily, the data collected was analyzed using IBM SPSS Statistics 25.0 software as it allowed for enhanced data segregation and statistical analyses required for this case study.

Results

Figure 1 shows the overall combined annual salary means for faculty at the ranks of Assistant, Associate, and Professor from 2016 to 2018. One piece of information consistent across each academic year is that the salary for Assistant Professors is much higher than Associate Professors. The frequency distribution table shown in *Figure 1* was used to compare salary data between all tenure-line faculty in the College of Business from 2016 to 2018. Data collected between the ranks of Assistant, Associate, and Professor predominately show that those at the Associate Professor rank have been earning much less on average than Assistant Professors. Delving into salary data from the 2016-17 academic year, Assistant Professors ($M = \$120,791.37$, $SD = \$29,558.40$) made over \$13,000.00 more on average than Associate Professors ($M = \$107,074.90$, $SD = \$24,888.72$) and around \$18,000.00 less than Professors ($M = \$139,513.47$, $SD = \$22,638.96$). This result coincides with findings reported by AAUP (2018), and would indicate salary inversion is present because Assistant Professors are coming in and earning a much greater salary than Associate Professors, who are assumed to have experience already in their positions to earn the rank.

The trend of Assistant Professors earning higher wages than Associate Professors continued through the 2017-18 academic year. Additionally, there was a decrease in mean annual salary across all ranks. For this year, Assistant Professors ($M = \$109,236.17$, $SD = \$32,110.83$) made \$3,542.23 more than Associate Professors ($M = \$105,693.94$, $SD = \$31,805.47$) and roughly \$20,000.00 less than Professors ($M = 129,391.04$, $SD = \$30,523.26$). Assistant Professors and Professors took a fairly large decrease in annual salary between 2016-17 and 2017-18. The most recent data from 2018-19 shows an increase in annual salary compared to the 2017-18 figures, but Associate Professors ($M = \$109,210.05$, $SD = \$32,178.61$) are still making less when compared to Assistant Professor ($M = 115,937.26$, $SD = \$31,669.04$). The increase in annual wages from the 2017-18 to 2018-19 academic years were also pretty meager for Associate Professors; in comparison they only saw a raise of \$3,516.11, while Assistant Professors received an increase of \$6,701.09 and Professors ($M = \$129,354.85$, $SD = \$32,164.61$) received an increase of \$36.19 in mean salary for the 2018-19 academic year.

It was expected that faculty at the Professor rank would have the highest salaries since the position often comes with many internal salary structures to stimulate pay increases by the University and to maintain equity in pay, but it was surprising to find that Assistant Professors are earning exactly \$6,727.21 more in 2018-19 than Associate Professors. Assuming all things to be equitable, one would expect to find the opposite where Assistant Professors are earning less than Associate Professors, who in turn are earning less than Professors. This difference would be assuming pay determination is influenced by scholarly activities, demand, experience, years at the university, and productivity, meaning Associate Professors and Professors would earn higher salaries in comparison to Assistant Professors. This instance of salary inversion could be due to external influences such as the market environment playing a role. The influences of the external influences are generally a large part issues like salary compression and inversion; salary equity issues arise as a direct result of market conditions affecting market-based pay to new hires, costs of living, years of experience, and research experience (Cosgrove & Frank, 2014; Lamb & Moates, 1999; Snyder, McLaughlin, & Montgomery, 1992; Twigg, Valentine, & Elias, 2002)

Figure 1
Overall Salary for Tenure-Line Faculty in the College of Business, 2016-17 to 2018-19

Academic Year	Rank of Professor		Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
2018-19	Assistant	Annual Salary	29	64989.00	164109.00	115379.2690	31669.04589	-.296	.434
		Valid N (listwise)	29						
	Associate	Annual Salary	18	47684.22	156270.00	109210.0561	32178.61416	-.227	.536
		Valid N (listwise)	18						
	Professor	Annual Salary	19	75000.00	200937.00	129354.8505	32164.61145	.354	.524
		Valid N (listwise)	19						
2017-18	Assistant	Annual Salary	31	63996.00	161015.00	109236.1716	32110.83284	-.046	.421
		Valid N (listwise)	31						
	Associate	Annual Salary	19	46525.09	152886.00	105693.9468	31805.47703	-.176	.524
		Valid N (listwise)	19						
	Professor	Annual Salary	19	67230.19	197897.00	129391.0411	30523.26902	.194	.524
		Valid N (listwise)	19						
2016-17	Assistant	Annual Salary	24	60902.00	157011.00	120791.3750	29558.40356	-.707	.472
		Valid N (listwise)	24						
	Associate	Annual Salary	19	59275.00	147857.00	107074.9053	24888.72139	-.022	.524
		Valid N (listwise)	19						
	Professor	Annual Salary	16	109143.79	194935.00	139513.4731	22638.96587	.835	.564
		Valid N (listwise)	16						

To further accentuate the issue of salary compression and inversion, *Figure 2* breaks down annual salary data by rank and department over the course of the 2016 to 2018 academic years to identify where instances of salary compression and inversion occur. Additionally, a 3-way ANOVA was conducted to compare the estimated mean salary across all departments and ranks for each year, these are presented in *Figures 4 to 6*. Scatterplots are presented in *Figures 7 to 9*; these figures were created for each of the years to further analyze salary compression at each of the ranks.

Figure 2

Salary Distribution in the College of Business, by Department, 2016-17 to 2018-19

Descriptive Statistics								
Department	Rank of Professor	Academic Year		Minimum	Maximum	Mean	Std. Deviation	
Accounting	Assistant	2018-19	Annual Salary Valid N (listwise)	138578.00	164109.00	155708.6000	9881.60297	
		2017-18	Annual Salary Valid N (listwise)	136713.00	161015.00	152584.3333	8257.59826	
		2016-17	Annual Salary Valid N (listwise)	135415.00	157011.00	150975.7143	7162.04579	
	Economics	Assistant	2018-19	Annual Salary Valid N (listwise)	89938.00	91932.00	90935.0000	1409.97092
			2017-18	Annual Salary Valid N (listwise)	88000.00	102214.00	93531.6667	7612.78361
			2016-17	Annual Salary Valid N (listwise)	89386.00	100171.00	94778.5000	7626.14664
		Associate	2018-19	Annual Salary Valid N (listwise)	47684.22	108456.00	78070.1100	42972.13774
			2017-18	Annual Salary Valid N (listwise)	46525.09	106482.00	71072.5733	31419.64551
			2016-17	Annual Salary Valid N (listwise)	59275.00	104225.00	80043.0000	22668.63851
Professor		2018-19	Annual Salary Valid N (listwise)	75000.00	153983.00	120772.8257	23713.78958	
		2017-18	Annual Salary Valid N (listwise)	67230.19	151641.00	118080.9143	25455.46723	
		2016-17	Annual Salary Valid N (listwise)	117721.40	149622.00	129448.1300	14115.98062	
ISOM	Assistant	2018-19	Annual Salary Valid N (listwise)	67513.07	118604.00	82394.9500	24367.72246	
		2017-18	Annual Salary Valid N (listwise)	65562.07	136899.00	93513.0533	30516.02430	
		2016-17	Annual Salary Valid N (listwise)	104147.00	135742.00	118296.3333	16053.35997	
	Associate	2018-19	Annual Salary Valid N (listwise)	74785.52	128681.00	101271.6100	20866.26350	
		2017-18	Annual Salary Valid N (listwise)	83872.00	126182.00	102009.3567	17453.03991	
		2016-17	Annual Salary Valid N (listwise)	82923.00	144634.00	107091.8771	22604.53426	
	Professor	2018-19	Annual Salary Valid N (listwise)	88911.11	118065.00	108877.4575	13435.53868	
		2017-18	Annual Salary Valid N (listwise)	85899.11	115706.00	106392.7075	13779.14470	
		2016-17	Annual Salary Valid N (listwise)	109143.79	113765.00	111454.3950	3267.68893	
Finance & Insurance	Assistant	2018-19	Annual Salary Valid N (listwise)	65227.00	150112.00	126584.7500	40964.93762	
		2017-18	Annual Salary Valid N (listwise)	64361.00	146112.00	105236.5000	57806.68647	
		2016-17	Annual Salary Valid N (listwise)	60902.00	146746.00	103815.5000	47884.71938	
	Associate	2018-19	Annual Salary Valid N (listwise)	142879.00	156270.00	150545.0000	6903.28407	
		2017-18	Annual Salary Valid N (listwise)	140513.00	152886.00	147698.3333	6423.84514	
		2016-17	Annual Salary Valid N (listwise)	78088.00	147857.00	121304.6667	37751.86544	
	Professor	2018-19	Annual Salary Valid N (listwise)	142415.00	156654.00	150448.0000	7293.19731	
		2017-18	Annual Salary Valid N (listwise)	133149.00	152471.00	143891.0000	8937.54027	
		2016-17	Annual Salary Valid N (listwise)	131584.00	150064.00	142065.0000	7518.27474	
Marketing	Assistant	2018-19	Annual Salary Valid N (listwise)	64989.00	126817.00	113283.8333	23906.59134	
		2017-18	Annual Salary Valid N (listwise)	63996.00	125000.00	106572.2500	28606.36284	
		2016-17	Annual Salary Valid N (listwise)	63296.00	119277.00	98883.3333	30929.01098	
	Associate	2018-19	Annual Salary Valid N (listwise)	72095.00	141741.00	107104.6140	31262.43493	
		2017-18	Annual Salary Valid N (listwise)	71220.00	140000.00	100372.0117	29903.94400	
		2016-17	Annual Salary Valid N (listwise)	91078.00	123133.00	108956.7500	13619.49273	
	Professor	2018-19	Annual Salary Valid N (listwise)	83981.00	200937.00	151408.3333	60497.50561	
		2017-18	Annual Salary Valid N (listwise)	166275.00	197897.00	182086.0000	22360.13063	
		2016-17	Annual Salary Valid N (listwise)	163341.00	194935.00	179138.0000	22340.33164	
Management	Assistant	2018-19	Annual Salary Valid N (listwise)	69524.00	124572.00	108745.5000	22220.42580	
		2017-18	Annual Salary Valid N (listwise)	67350.00	121945.00	99238.0000	24644.15281	
		2016-17	Annual Salary Valid N (listwise)	115449.00	120234.00	117161.0000	1837.50075	

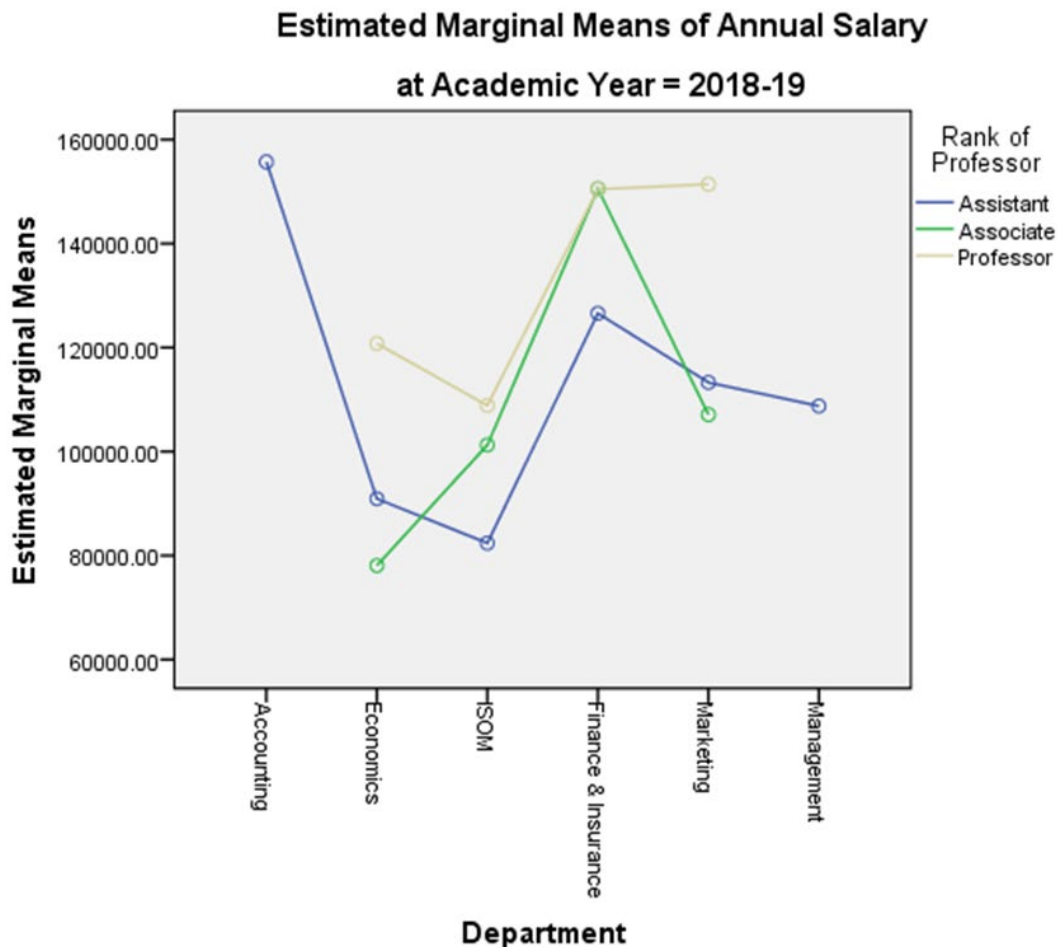
Note. There was only one Associate Professor and one Professor in the Accounting Department and Management Department, therefore their data was not included in Figure 2.

Accounting

The Accounting Department had one faculty member at the rank of Associate Professor and one at the rank of Professors. Looking at the data, 2016-17 and 2017-18 had some vacancies in these positions indicating that the department went some years without anyone filling the rank of Associate Professor or Professor. Due to this situation, most of the data could not provide for comparisons made between mean annual salaries in this department in order to avoid overstating the issue of salary compression and inversion. Comparing Assistant Professors in the Accounting Department across other departments in the College, this group did have the highest mean salary for their rank across all the Departments, as seen in both *Figure 2* and *Figure 3*. The most recent data from 2018-19, shown in *Figure 2*, indicates Assistants ($M = \$155,708.60$, $SD = \$9881.60$) earned on average over \$155,000.00 for this year. The high salary trend for the Accounting Department can also be seen in the 2016-17 academic year, where Assistant Professors ($M = \$150,975.71$, $SD = \$9881.60$) were some of the top earners compared to Assistant Professors in other Departments.

Assistant Professors were the largest group in the Accounting Department since there was only one Associate Professor and only one Professor; inferences on salary compression and inversion between other ranks in the Accounting Department would compromise data integrity and may not be reliable. The Associate Professor is making exactly \$15,855.94 less than Assistant Professor this salary year. What can be said is the lowest salary for an Assistant Professor for the 2018-19 year was \$138,578.00; this condition is within a narrow margin of what the only Associate Professor is earning. The only Professor in the Department has consistently earned the most, as expected, but it is ideal to note the in recent years the gap between the top paid Assistant Professor and Professor has narrowed.

Figure 3
 Tenure-Line Faculty Salary in the College of Business, by Department, 2018-19



Economics

As seen in the estimated means plot in *Figure 4*, the Economics Department has an identifiable case of salary inversion where Assistant Professors are earning more in wages than Associate Professors. The corresponding estimated means plots for 2017-18 and 2016-17 presented in *Figure 4* and *Figure 6* respectively show that salary inversion has occurred between these two ranks for over the last three years. The most recent data for 2018-19 shows Associate Professors ($M = \$78,070.11$, $SD = \$42,972.13$) on average are earning approximately less than \$12,800.00 than Assistant Professors ($M = \$90,935.00$, $SD = \$1409.97$). Further data from the frequency table in *Figure 2* shows the least paid Associate Professor in the Department is earning a salary of \$47,684.22 while the Professor is making \$108,456.00. For the two Assistant Professors in the Department, the lowest is earning \$89,938.00 while the highest paid earns \$91,932.00. One Associate Professor is making more on average than both Assistant Professors, which one would expect to be the case, but the other Associate Professor is making over \$42,000.00 less than the least paid Assistant Professor. The impact of how steep gaps in salary caused by salary inversion

can effectively drag down earnings in a department is revealed, as well as brings into question how a tenured Associate Professor is earning so little in comparison to faculty further down on tenure-track within the Department.

Data suggests that the Economics Department has the highest number of Professors out of any other Department in the College of Business, and they have remained the highest earners on average in the Economics Department throughout each of the academic years that salary data was collected. In comparison to both Assistant Professors and Associate Professors this year, Professors ($M = \$120,772.82$, $SD = \$23,713.78$) retained the most earning power in the Department. One surprising discovery that was seen in the 2018-19 data was that even the lowest wages amongst the Assistant Professor group were higher than the lowest seen in the Professors group. Compared to the least paid Assistant Professor who makes \$89,938.00 yearly, the lowest paid individual in the Professor rank earns \$75,000. As seen in *Figure 2*, data from 2016-17 shows the least paid Professor in the department was earning \$117,721.00 and then after the department hired a new Professor in 2017-18 the salary dropped to \$67,230.19 in 2017-18.

Figure 4
Average Tenure-Line Faculty Salary in the College of Business, 2018-19

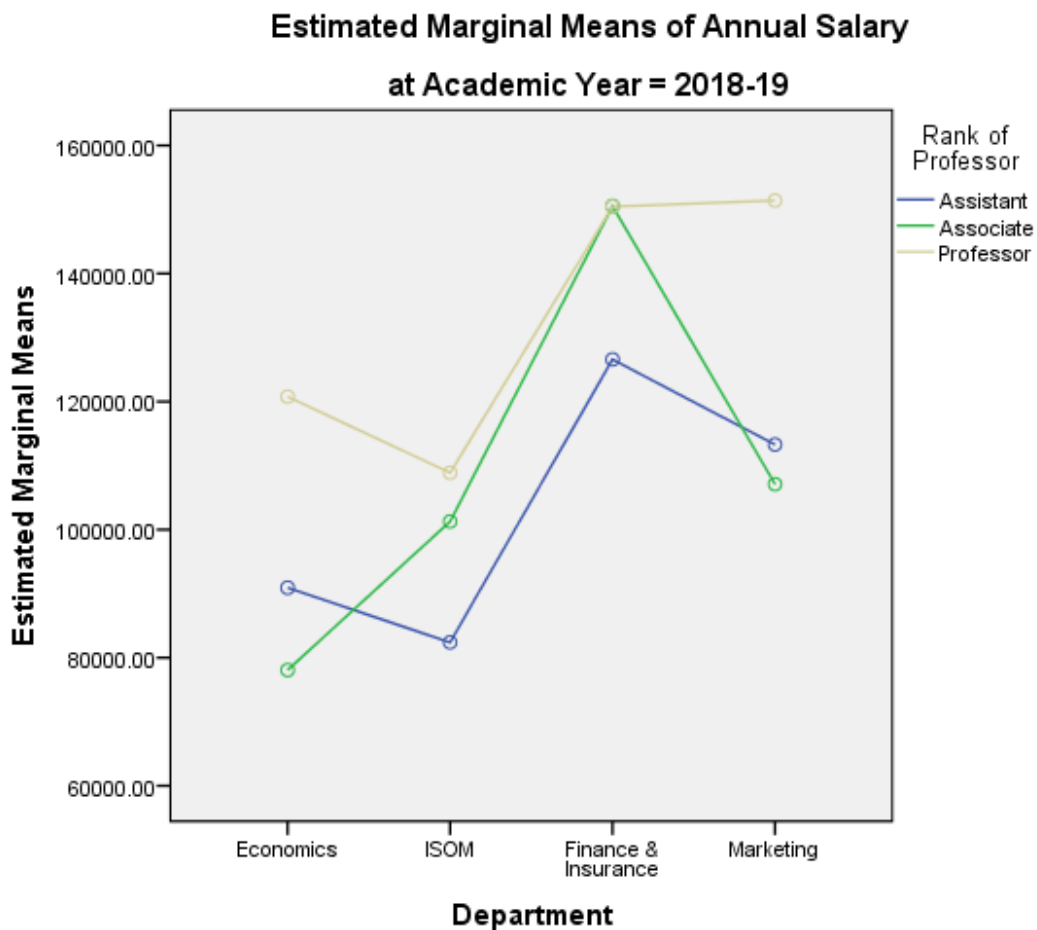


Figure 5
Average Tenure-Line Faculty Salary in the College of Business, 2017-18

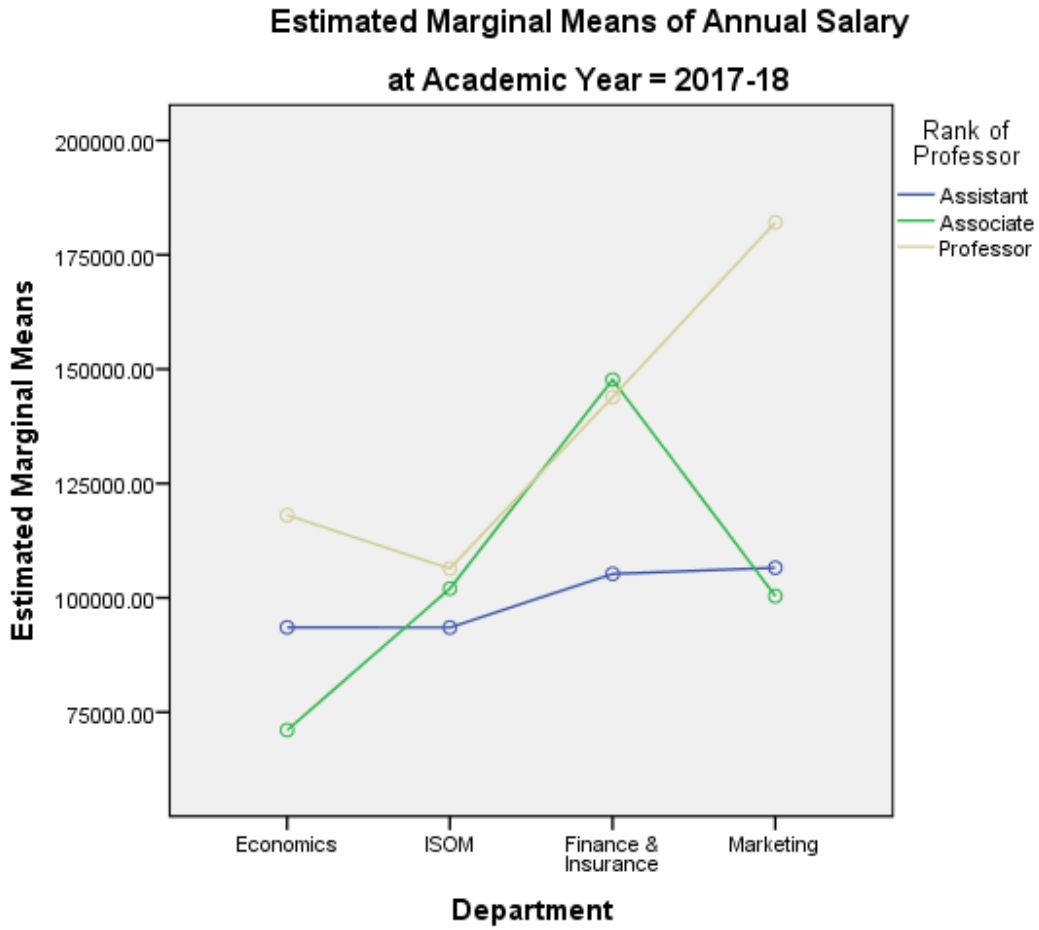
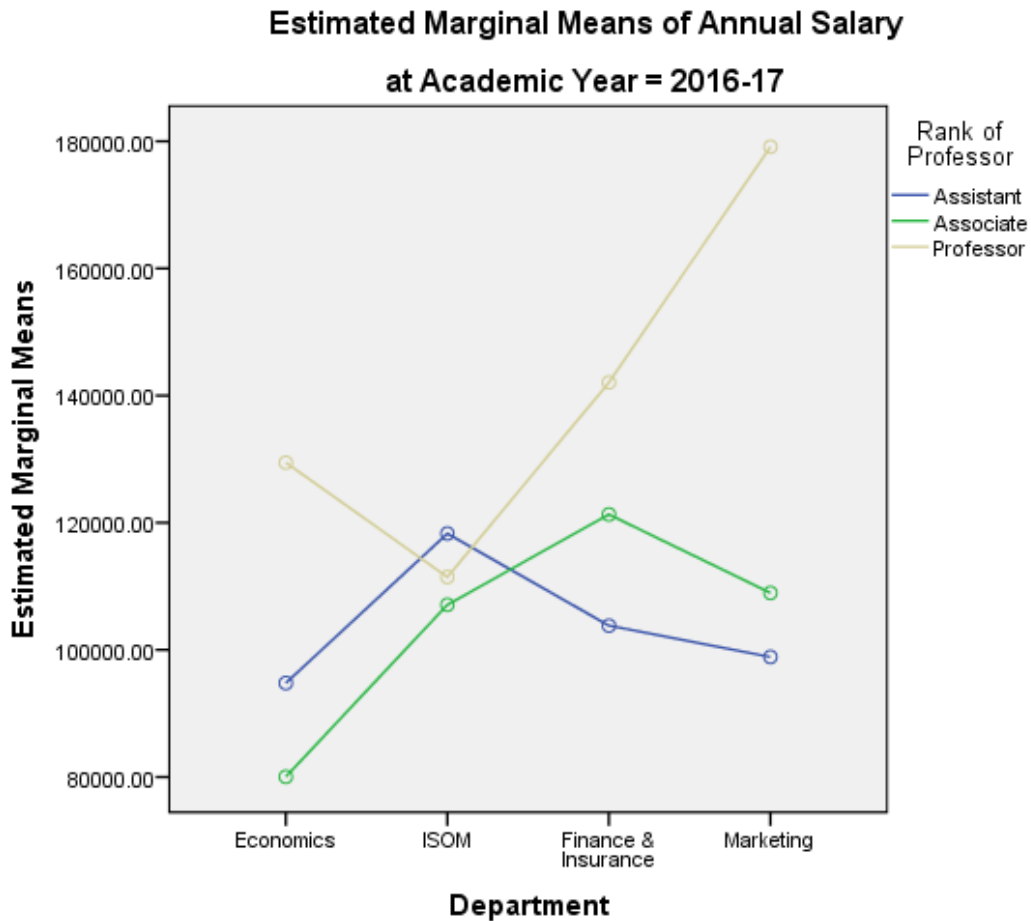


Figure 6
Average Tenure-Line Faculty Salary in the College of Business, 2016-17



ISOM

In 2016-17 the Department that stuck out with the most identifiable case of salary compression and inversion aside from Economics was ISOM. The negative slope for this Department in *Figure 9* is a red-flag indicator of salary inversion in this Department. The negative slope represents that on average Assistant Professors in this Department are receiving much higher pay than both Associate Professors and Professors, who are suffering from salary compression when compared to Assistant Professors who are benefiting from salary inversion. Looking at 2016-17 estimated means plot data in *Figure 6*, Assistant Professors had the highest salaries in the ISOM Department followed by Professors and Associate Professors. As indicated by the salary data presented in the frequency table in *Figure 2*, Assistant Professors ($M = \$118,296.33$, $SD = \$16,053.35$) were earning approximately \$11,204.46 more than Associate Professors ($M = \$107,091.87$, $SD = \$22,604.53$) and \$6841.94 more than Professors ($M = \$111,454.39$, $SD = \$3267.68$) during the 2016-17 academic year. Assuming higher pay is influenced by internal salary structures, scholarly activities, publishing, experience, and productivity, then Assistant Professors would not be expected to make more than tenure-line Associate Professors and Professors. The 2017-18 academic year saw drops in salary across the board for ISOM faculty.

During the 2017-18 academic year there was a shift in earning amongst these ranks, where Assistants ($M = \$93,513$, $SD = \$30,516.02$) began to receive less salary than Associates ($M = \$102,009.35$, $SD = \$17,453.03$) and Professors ($M = \$106,392.75$, $SD = \$13,779.14$). This is most likely due to some newly assigned faculty who have been temporarily classified internally within the College as Non-AACSB to prevent accreditation issues; however, the University Resources Office at the University has no such official designation.

A similar trend was also seen in the most recent 2018-19 salary data, in which Assistant Professors ($M = \$82,394.95$, $SD = \$24,367.72$) continued to see a decrease in annual salary. Associate Professors ($M = \$101,271.61$, $SD = \$20,866.26$) saw a bit of compression in their pay compared to the annual salary they received in the previous year. There was an approximate loss of \$737 in pay for Associate Professors this year. On the other hand, Professors ($M = \$108,877.45$, $SD = \$13,435.53$) realized an increase.

Figure 7
Scatterplot of Average Tenure-Line Faculty Salary in the College of Business, 2018-19

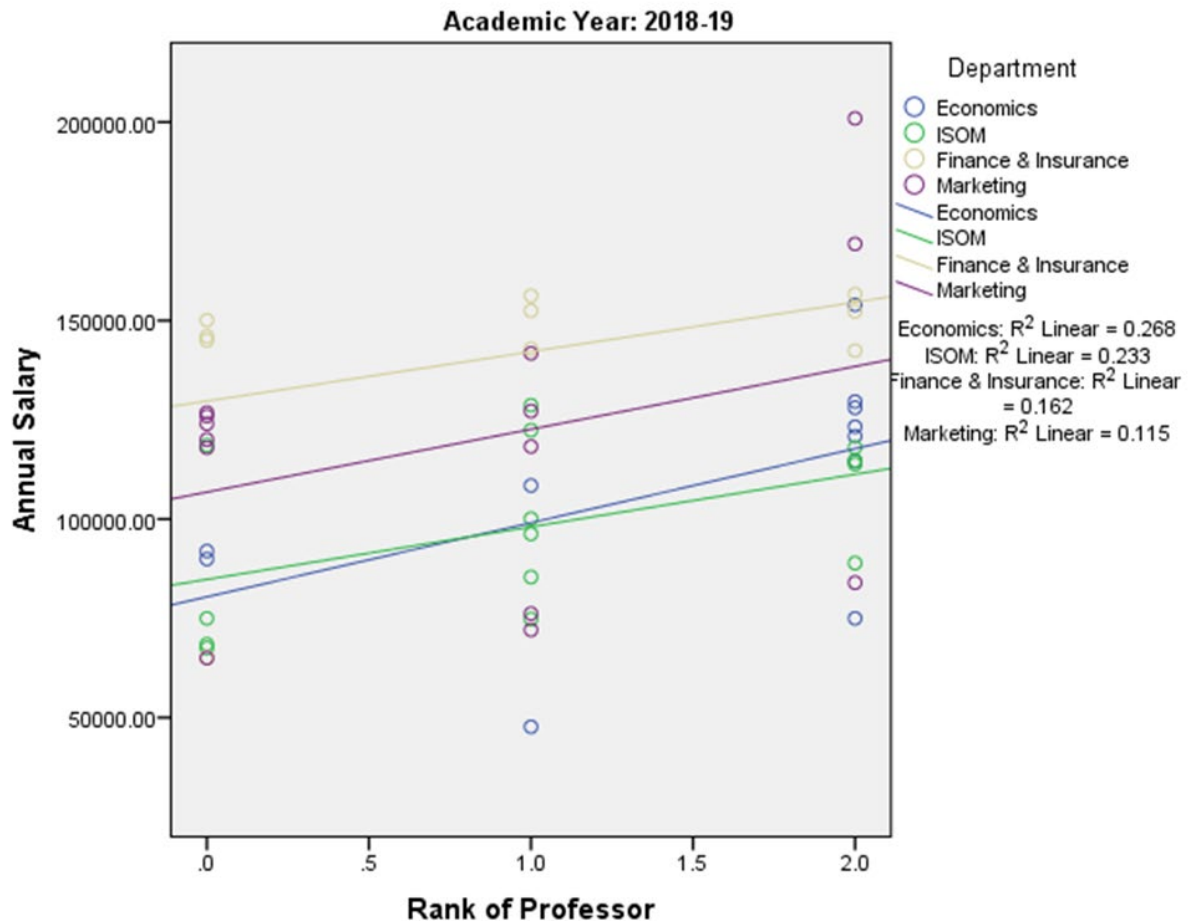


Figure 8
Scatterplot of Average Tenure-Line Faculty Salary in the College of Business, 2017-18

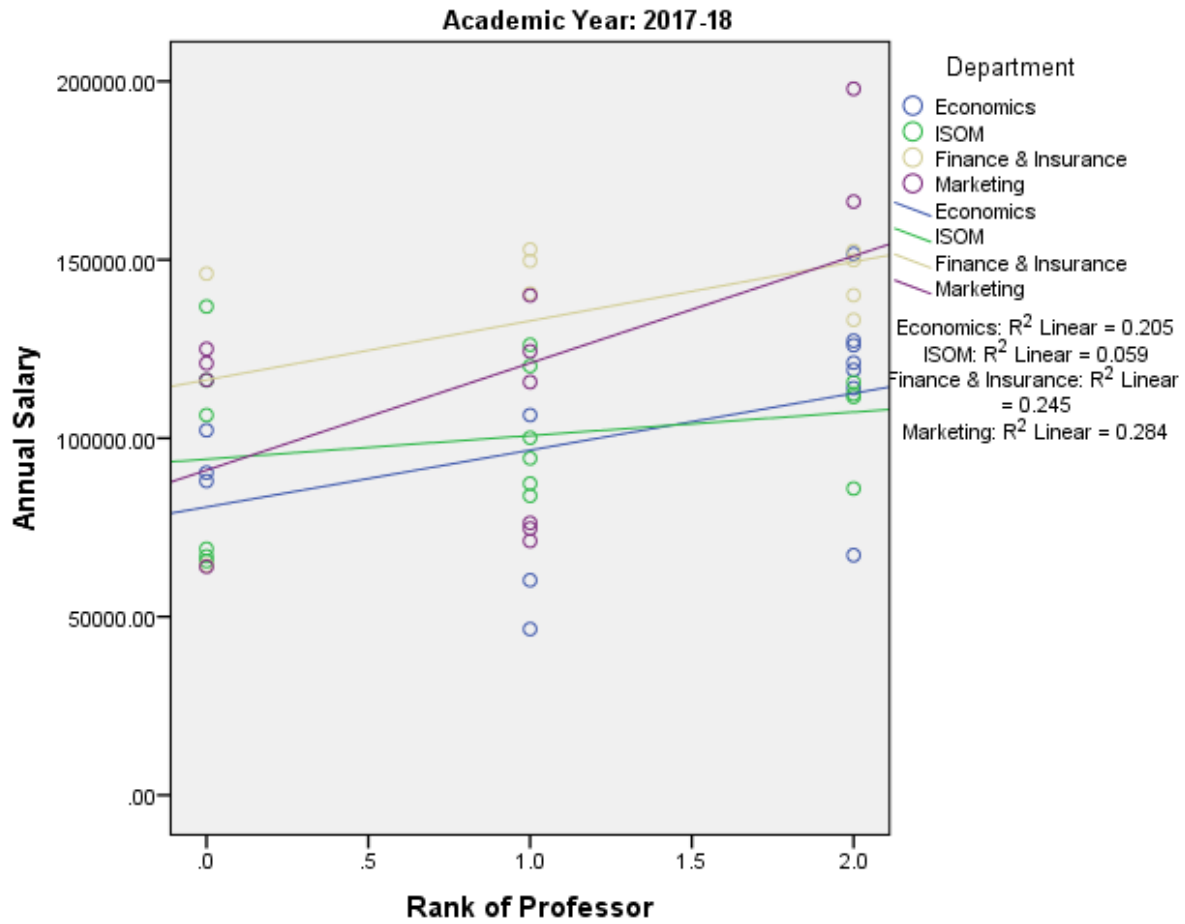
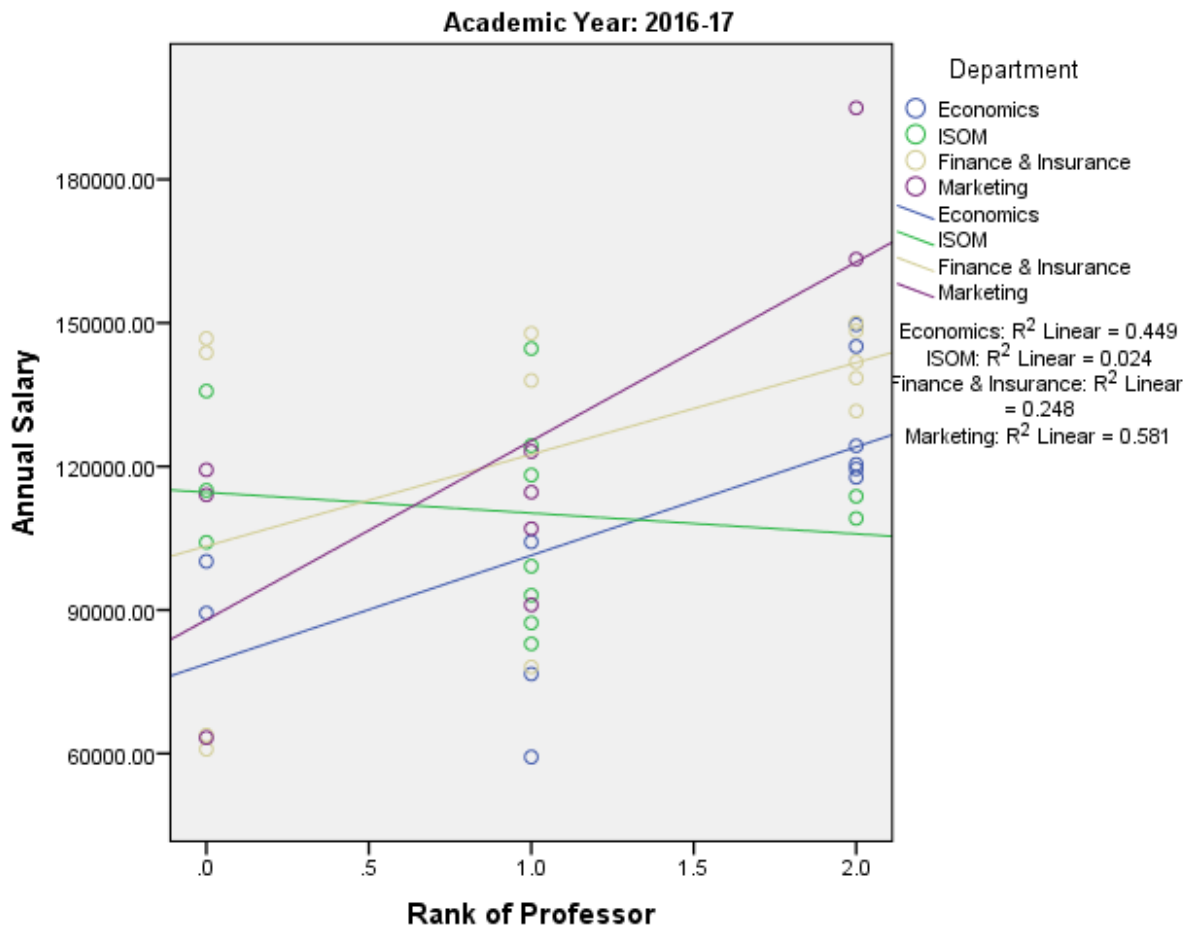


Figure 9
 Scatterplot of Average Tenure-Line Faculty Salary in the College of Business, 2016-17



Finance and Insurance

The data for the Finance and Insurance Department had a unique spread. The scatterplots in Figures 7 to 9 map out salary over the last three years would suggest that the Finance and Insurance Department have one of the more varied linear spread amongst faculty’s annual salary than other departments, but there are a few identifiable instances of salary inversion between Associate Professors and Professors. During the 2016-17 academic year, Assistant Professors made less than Associate Professors who made less than Professors, which is what one might expect after seeing the estimated means plots and scatterplots. Salary information from the frequency table in Figure 2 shows that during the 2017-18 academic year there was a large increase in salary. In 2016-17, Associate Professors were making \$121,304.66 on average, while in 2017-18 the average salary of Associate Professors in the department jumped to \$147,698.33. This increase in salary put them over the annual salary of Professors who in 2016-17 were making \$142,065.00, and in 2017-18 saw a much smaller pay increase in comparison to Associate Professors, putting them at \$143,891.00 annually.

Looking at the estimated means plot for 2017-18 and 2018-19 presented in *Figures 4* and *5*, one can see that the average salary for Associate Professors supersedes the salary for Professors. There was an adjustment sometime between this academic year and 2018-19 that compressed the salaries of Associate Professors so that they are earning roughly the same to Professors, but some may earn more on average. The rise in annual salary for the Department of Finance and Insurance would suggest salary inversion between the Associate Professors and Professors existed during the 2017-18 academic year, as Associate Professors on average earned \$3,807.33 more than Professors. Salary data from 2018-19 show pay increases across the board for all tenure-line faculty, but also suggests that there is still salary compression and inversion between these two ranks; for this year Associate Professors on average earned \$150,545.00 while Professors in the Department earned \$150,448.00, so the gap in pay between the ranks has decreased to about \$97.00.

Marketing

In the Marketing Department, there were identifiable instances of salary compression and inversion primarily between the ranks of Assistant Professor and Associate Professor during the 2017-18 and 2018-19 academic years. Data presented in *Figures 4* and *5* show that during both the 2017-18 and 2018-19 academic years Assistant Professors had a higher mean salary than Associate Professors. In 2016-17 this was different as Associate Professors earned \$108,956.75, which was more than the \$98,883.33 Assistant Professors were making that year. Over the next year, the Department hired a new Assistant Professor and two Associate Professors, which may partially explain the decrease of Associate Professor's salaries during 2017-18. During that year, Associate Professors averaged \$100,372.01, which was a decrease of well over \$8,000.00 from the previous year. Assistant Professors at this time saw a substantial increase in pay and averaged about \$106,572.25, which was way up from the previous year. This trend in earning between the two ranks has continued into the 2018-19 academic year. The department hired two new Assistant Professors for the 2018-19 year, and their average salary for this year increased to around \$113,283.83. In comparison, Associate Professors received \$107,104.61 for this year, which was an increase in mean salary from the previous year, but still less than what Assistant Professors are earning. Both ranks received a boost to their average salaries. As one can see, even with more faculty in the rank of Assistant Professor and the loss of an Associate Professor the Assistant Professors are earning more on average than their Associate Professor colleagues.

Professors have remained the top earners in the Department over the three years of data collected. Interestingly, they had a similar fluctuation in salary to Associate Professors where they made more in one year, but the average salary dropped steeply during another academic year after hiring-on new faculty. Professors were making \$179,138.00 in 2016-17, \$182,086.00 in 2017-18, and then dropped to \$151,408.33. Considering the rise in average salary for Assistant Professors and Associate Professors this may be indicative of salary compression in order to address pre-existing salary compression.

Management

The Management Department mostly is comprised of Assistant Professors. Associate Professors and Professors for this Department were underrepresented, and each had a year where the Department went without somebody filling the rank, so comparisons may not be truly

representative of truly objective salary compression and inversion in the department. Like the Accounting Department, it is difficult to make estimates between ranks in this Department due to the low sample size in Associate Professors and Professor ranks. Looking at the estimated marginal means chart in *Figure 3* it can be inferred that the Assistant Professors are the fourth highest earners out of this ranking group, but it is hard to infer whether salary compression or inversion is occurring between ranks within the Department without a more robust sample of Associate Professors and Professors. What may be said is that Assistant Professors are the largest group in this Department and accordingly have the highest salary on average for this Department.

Discussion

This case study attempted to identify whether there are identifiable instances of salary compression and inversion at an AACSB accredited College of Business. Salary compression and inversion was found in varying degrees between faculty ranks within some of these Departments in the College of Business. There were some limitations on the study that may affect the generalizability of the results. For one, some of the Departments lacked an adequate sample size for comparisons within the Department. While the data was robust, some of the restrictions on it limited some other options for statistical analyses such as repeated measures. Furthermore, the data was collected for the last three years, which limited the scope of possible salary trends in the study. Some faculty have been temporarily classified internally within the College as Non-AACSB to prevent accreditation issues; however, the University Resources Office at the University has no such official designation; therefore, all tenure-line faculty were included in this study. Finally, data analyses only included salary data for these three years and excluded specific data on new-hires. The findings suggest that for some Departments, identifiable cases of salary compression occurred, and corrective measures may have been taken to address issues of salary compression and inversion between the ranks; for other departments, the problem remains prevalent.

Currently, the Departments with identifiable instances of salary compression and inversion are the Economics Department, the Information Systems and Operations Management Department, Finance and Insurance, and the Marketing Department. For the Economics Department, the issue of salary inversion between Assistant Professors and Associate Professors was an identifiable issue that was happening even during the 2016-17 academic year. Both the Finance and Insurance and Marketing Departments have seen identifiable salary compression since the 2017-18 academic year. Associate Professors earn slightly more on average than Professors in the Finance and Insurance Department, which was due to a large increase in average salary between 2016-17 and 2017-18 academic years. Salary compression and inversion were prevalent between Assistant Professors and Associate Professors in the Marketing Department, while Professors remain the top salary earners. In the ISOM Department, salary compression between the ranks of Professor and Associate in this department appears to still be an issue. While steps have been taken to address the severity of the issue of salary compression there are still some Professors who affected by salary compression and inversion. Salary compression is a difficult issue to tackle as universities need to ensure they are maintaining fair and equal compensation that does not compress faculty salary in order to provide a quick solution. Finally, the Accounting and Management Departments did not have enough faculty at the Associate

Professor and Professor ranks to accurately study salary compression and inversion; these Departments are prone to having more variability in salaries resulting from salary compression.

All the aforementioned findings raise an important issue about salary, as compensation is a critical component in hiring that attracts new hires and retention of existing faculty. Salary inversion may be ethical from an employer's view to remain competitive, but it can also manifest unfavorable work conditions among those affected. One must remember that sometimes instances of salary compression are to be expected across Departments because it may be the case that some individuals are overqualified for a position and the executive decision is made to pay them accordingly to match their robust achievements, experience, and skills. Addressing the issue of salary compression is not easy to accomplish. Some researchers like Glassman and McAfee (2005) recommend that it may fall on the university to adopt a system that clearly defines standards of teaching, research, and service that qualify newer faculty for higher pay. Additionally, it must allow older faculty further down the tenure-line to have more flexibility in meeting these requirements while newer hires have more structure in order to pay their dues.

Conclusion

Analyzing three academic years of data shows there have been identifiable instances of salary compression and inversion amongst various ranks across the Departments in this study. This case study brings to light this issue and further implies how it may impact faculty morale, value, purchasing power, and relative worth to their field. Future research should take measures to ensure cases of salary compression and inversion are not being overstated. The importance of explaining this type of discrepancy and take appropriate measures to address the issue to improve the conditions of those who affected. One such measure could include basing starting salaries on the internal market rather than the external market (Glassman & McAfee, 2005). Regardless, combatting the issue takes effort, communication, time, money, and cooperation of all involved. As such, the process should be done in a pragmatic and systematic manner that ensures equity in faculty salaries.

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