

Radford University Faculty Salary Study Methodology

Introduction

In 2007, State Council of Higher Education for Virginia (SCHEV) approved a new faculty salary peer group for Radford University which significantly raised the 60th percentile benchmark for Radford University faculty salaries. A list of RU's peer group along with their most recently reported average salaries is included in Appendix A. According to SCHEV's latest calculations (2011), RU is currently at the 22% percentile of our peer group, the second lowest (tied with the College of William and Mary) in the Commonwealth (see Appendix B).

Since the approval of the new peer group in 2007, nearly five years ago, state employees have received only one pay increase (which occurred in November 2007) because of the economic downturn that occurred during fall 2008.

Without state pay increases, RU has made little progress in recognizing the Commonwealth and university's aspirational goal of reaching the 60th percentile of our current peer group.

Despite the obstacles in reaching the 60th percentile, the SCHEV Council and Presidents of the four-year universities in the Commonwealth recently reaffirmed their commitment to this goal.¹ Yet, it remains unclear at this time when, if any time in the near future, state funds will be available to bring faculty salaries to the 60th percentile.

In the interim, RU Office of Institutional Research, Reporting and Assessment was tasked with identifying the most egregious cases of faculty salary inequity. Given that the percentile average for RU faculty was 22%, it seemed reasonable to look at the salaries of the faculty members who earned below the 20th percentile for their discipline and rank. This list proved too large and the dollar figure too staggering so the analysis focused instead on identifying faculty whose salaries fell

¹ See SCHEV Council Meeting Minutes for January 10, 2012, available at: <http://www.schev.edu/schev/AgendaBooks/2011Oct/1011MinutesFINAL.pdf>

below the 10th percentile for their discipline and rank. The 10th was the lowest salary percentile available in the College and University Professional Association for Human Resources (CUPA-HR) data. Like most salary inequity studies, this one also examined gender and ethnicity pay differences between faculty members with similar characteristics. Finally, the study salary examined compression and inversion. The study objectives are discussed below.

Study Objectives

1. Identify faculty who earn below the 10th percentile of their respective disciplines. This type of salary inequity has been referred to as “salary depression”² “Salary depression is a result of a university having lower average salaries than those at peer institutions.”³
2. Identify faculty whose salaries are inverted (i.e., they earn less than the newest, tenure-tracked, assistant professor in their discipline). According to AAUP: “Compression refers to the situation where a more senior faculty member is paid only slightly more than the newly appointed colleague; the extreme case of this is *inversion*, where the more experienced individual is actually paid less than the newcomer.”⁴
3. Determine inequality related to gender and ethnicity.

Study Population

The study population consisted of all 400 Teaching and Research (T&R) tenured, on tenure-track, and non-tenure track faculty members. Full-time temporary faculty (N=6) were not included in the study. However during the study, two faculty members left the university after fall 2011 and one faculty member died during early spring semester so the end study population was 397.

² See “Faculty Salary Equity Study Technical Findings and Recommendations,” Submitted to: Dr. Warren Self, Vice President of Academic Affairs, and Submitted by Dr. Wilbur Stanton, Committee Chair, The Ad Hoc Faculty Salary Equity Study Committee, February 2, 2004.

³ Ibid.

⁴ AAUP. “2010-11 Report on the Economic Status of the Profession” available online at this link: <http://www.aaup.org/AAUP/comm/rep/Z/ecstatreport10-11/>

Creation of Dataset

Institutional Research created a data set containing the following information on each faculty member: rank, CIP code, tenure status, total years of service, total years in rank and base salary. Faculty information was extracted from the database on the employee census date (October, 15, 2011). These same data are used for all mandatory reporting including Integrated Postsecondary Education Data System (IPEDS), College and University Professional Association for Human Resources (CUPA-HR), and American Association of University Professors (AAUP).

It should be mentioned that the data set used for this analysis did include the 5% base pay increase for VRS Plan 1 participants (those hired before July 1, 2010). For 12 month employees, this increase was added to the base pay on June 26, 2011. The 5% increase in base pay was added to contracts in August, 2011 during the contractual renewal period for faculty VRS participants.

CUPA Data

CUPA data for Radford University's faculty salary peer group data were selected for use in the analysis for a number of reasons.

- Eighteen of the university's twenty-five faculty salary peer institutions report data to CUPA.⁵
- The CUPA dataset is arrayed in percentiles (10th, 20th, 25th, 33rd, 40th, and 60th) for most disciplines and faculty ranks.
- The data set makes it possible to determine distance between ranks which is essential for compression and inversion studies.

⁵ Peer Schools who participated in CUPA included: Appalachian State University, University of Northern Colorado, University of Tampa, University of Northern Iowa, Minnesota State University—Mankato, St. Cloud University, Rowan University, Monmouth University, William Paterson University of NJ, Hofstra University, SUNY—Brockport, Indiana University of Pennsylvania, Bloomsburg University of Pennsylvania, Gonzaga University, Seattle University, University of Wisconsin—Eau Claire, University of Wisconsin-Oshkosh, Loyola Marymount University. RU peer institutions not participating include: California State University—Chico, California State University—San Bernardino, Kutztown University of Pennsylvania, Salisbury University, Texas Christian University, Western Carolina University and Winthrop University.

- CUPA provides information on the salaries for newly hired, tenure-tracked, assistant professors which is another essential data element necessary for salary compression and inversion studies.
- Raw data for CUPA data sets is collected annually from the participating institutions so that salary information is current.
- CUPA data are used in benchmarking salaries when the university hires assistant professors.
- CUPA data were used in previous university salary equity studies at the university.

It should be noted that there are some limitations to CUPA data. CUPA data do not take into account factors impacting salary such as time in rank, years of service, or job performance.

In those cases, where data for a particular discipline or rank were unavailable for RU's peer institutions, the AAUP IIA institution (Master's) data were used. In the few instances neither RU's faculty salary peer group nor AAUP IIA data were available for a specific discipline, Institutional Research worked with the respective College Dean and/or Department Chairs to determine an appropriate comparative group.

Steps of Data Analysis

The methodology used to identify salary inequity related to salary depression or inversion is discussed below. Also discussed are the steps used to examine gender and ethnicity pay equity.

Salary Depression

The following steps were used in the analysis of the data related to **salary depression**.

Step 1: Determined faculty base salary (i.e., removed stipends and converted all salaries to 9 month ones)

Step 2: Ran CUPA percentile data for the RU Faculty Salary Peer Group. When CUPA comparative data were not available, identified and used another appropriate comparison group.

Step 3: Conducted a comparison of each faculty salary to CUPA or other appropriate data and identified those salaries which fell below the 10th percentile for the each rank and discipline.

Step 4: Determined the difference between the faculty salary and the dollar amount to reach the 10th percentile.

Step 5: Calculated the dollars required to bring all faculty to the 10th percentile for their respective discipline and rank and then added 22% benefit costs⁶ to determine the dollar amount needed to correct salary depression at the 10th percentile benchmark.

Adjustment Within Ranks

There were several departments identified where a large percentage of the faculty were below the 10th percentile. In order to avoid future inequity, an adjustment of 1% (added to the 10th percentile dollar amount) for the faculty members with 10 to 15 years in rank. For those with 16 or more years in ranks, and adjustment of 2% was added to the 10th percentile dollar amount.

Salary Inversion

The following steps were used in the analysis of the data related to salary inversion.

Step 1: Determined faculty base salary (i.e., removed stipends and converted all salaries to 9 month ones)

Step 2: Selected the newest highest paid, tenure-tracked assistant professor in each discipline and compared that salary to other assistant, associate, and full professors in that discipline.

⁶ This percent was provided to the Institutional, Research, Reporting and Assessment Office by the RU Financial Services Office.

Step 3: Identified those cases, where the salary of the newest highest paid, tenure-tracked assistant professor was higher than that of any other tenured or tenured tracked faculty member in that discipline.

Step 4: Identified a non-inverted faculty member whose salary was closest to that of the inverted faculty member in the same rank and discipline with tenure, when available. There were seven cases where there was no comparator. In those cases, it was necessary to use a member in the rank and discipline but with a different tenure status. For three cases, the dollar amount was established by the using standard deviation below the average of the next highest rank.

Step 5: Determined the difference between the salaries of these two faculty members. The difference is the inverted amount.

Gender and Ethnicity Inequity

Step 1: Identified those disciplines and ranks where there were faculty members with similar characteristics other than gender and/or ethnicity⁷ such as years in service, years in rank, and tenure status.

Step 2: Determined if there were differences in gender and/or ethnicity and when so if there were pay differences.

Step 3: In those cases, where salary differences existed (25 of 46 departments) related to gender and ethnicity benchmarked the salaries to the faculty member with the highest salary and determined the amount of pay inequity.

Comparison of Dollar Amounts

The dollar amount needed to correct salary depression, inversion, or gender and ethnic inequity, was arrayed in a spreadsheet. The highest amounts for each individual faculty member, regardless of category (i.e., depression, inversion, inequity) were summed to derive the total amount of money needed to address these salary issues.

⁷ "Race Unknown" was not considered in this study.

Conclusion:

In conclusion, Institutional Research identified total of 193 individual faculty members who met one or more of the following criteria: 1) earned below the 10th percentile of their respective discipline and faculty rank; 2) earned less the most recently hired, tenure-tracked assistant professor; or 3) earned less than that of other faculty members in their respective disciplines and ranks possibly related to gender or ethnicity. The 193 faculty included 59 Full Professors, 66 Associate Professors, 53 Assistant Professors, and 15 Instructors from 41 of the 46 disciplines reviewed in the study.

The chart below details the number of faculty, by rank, whose salary fell into one of the three areas examined. It also provides percentages of faculty in each category and the total unduplicated percentage of faculty identified for pay adjustments.

Faculty Identified for Salary Adjustments										
Rank	Number	%	Depression	%	Inversion	%	Equity	%	Distinct Total	% of Total
Professor	123	31%	52	40%	1	2%	20	25%	59	48%
Associate Professor	110	28%	48	37%	16	31%	23	29%	66	60%
Assistant Professor	115	29%	30	23%	34	67%	23	29%	53	46%
Instructor	49	12%	1	1%	0	0%	14	18%	15	31%
Total	397	100%	131	100%	51	100%	80	100%	193	49%

Faculty and Total Amount Needed by College			
College	Faculty	Identified Faculty	Amount
College of Business and Economics	44 (11%)	17 (9%)	\$73,850 (6%)
College of Education and Human Development	62 (16%)	27 (14%)	\$128,701 (11%)
College of Humanities and Behavioral Sciences	117 (29%)	74 (38%)	\$523,270 (46%)
College of Science and Technology	74 (19%)	38 (20%)	\$185,867 (16%)
College of Visual and Performing Arts	43 (11%)	16 (8%)	\$81,251 (7%)
Waldron College of Health and Human Services	57 (14%)	21 (11%)	\$153,565 (13%)
Grand Total	397	193	\$1,146,504

APPENDIX A

Radford University Peer Group			
University	City	State	Average Salary ⁸
Appalachian State University	Boone	NC	\$68,640
Bloomsburg University of Pennsylvania	Bloomsburg	PA	\$79,750
California State University-Chico	Chico	CA	\$77,406
California State University-San Bernardino	San Bernardino	CA	\$78,508
Gonzaga University	Spokane	WA	\$75,984
Hofstra University	Hempstead	NY	\$106,588
Indiana University of Pennsylvania-Main Campus	Indiana	PA	\$81,874
Kutztown University of Pennsylvania	Kutztown	PA	\$76,680
Loyola Marymount University	Los Angeles	CA	\$95,116
Minnesota State University-Mankato	Mankato	MN	\$72,006
Monmouth University	West Long Branch	NJ	\$77,858
Rowan University	Glassboro	NJ	\$90,557
Saint Cloud State University	St. Cloud	MN	\$73,327
Salisbury University	Salisbury	MD	\$65,087
Seattle University	Seattle	WA	\$77,132
SUNY College at Brockport	Brockport	NY	\$73,158
Texas Christian University	Fort Worth	TX	\$85,392
The University of Tampa	Tampa	FL	\$71,847
University of Northern Colorado	Greeley	CO	\$60,211
University of Northern Iowa	Cedar Falls	IA	\$65,291
University of Wisconsin-Eau Claire	Eau Claire	WI	\$59,606
University of Wisconsin-Oshkosh	Oshkosh	WI	\$59,771
Western Carolina University	Cullowhee	NC	\$67,745
William Paterson University of New Jersey	Wayne	NJ	\$97,710
Winthrop University	Rock Hill	SC	\$63,365

⁸ 2010-11 Average Salaries reported to IPEDS

APPENDIX B

Virginia Four- Year Public Institutions Percentile to Peers

Institution	Appropriated Salary	Percentile to Peers by FY 12 ⁹
Christopher Newport University	\$69,914	27%
College of William & Mary	\$93,536	22%
George Mason University	\$81,071	3%
James Madison University	\$74,983	38%
Longwood University	\$68,679	40%
Norfolk State University	\$67,051	51%
Old Dominion University	\$75,721	27%
Radford University	\$67,916	22%
University of Mary Washington	\$73,897	24%
University of Virginia	\$96,158	28%
University of Virginia-Wise	\$69,968	72%
Virginia Commonwealth University	\$83,794	27%
Virginia Military Institute	\$73,704	31%
Virginia State University	\$65,671	33%
Virginia Tech	\$90,392	27%
4 yr. Average		32%

⁹ Calculated by SCHEV and published at this link:
<http://www.schev.edu/SCHEV/AgendaBooks/2011Sept/AgendaBook0911.pdf> (page 25).