Final Report Internal Faculty Pay Equity Analysis January, 2011

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### **Background and Timeline**

The Faculty Salary Differential Committee was formed by Provost H. Thomas Williams in the fall term of 2005. The charge of the committee was to work with a salary consultant to identify an appropriate methodology for studying gender equity in faculty salaries at Washington and Lee University and to recommend appropriate University responses to inequities that might be found. Segal Sibson, a consulting firm that had experience analyzing salary and human resource issues, worked with the committee to develop a methodology and administer the salary study.

The full report from their analysis was presented to the faculty in February 2007. Necessary salary equity adjustments were made in July 2007. The full report was based on findings from a gender perception survey, an external competitiveness analysis, and an internal pay-equity analysis. The committee recommended regular replications of the study's internal pay-equity analysis spreadsheet so that each dean could use it to evaluate the salary levels of faculty within the departments and the University, while also providing a comparison to outside salaries in the discipline.

During the summer of 2010, Steve McAllister, vice president for finance/treasurer, and Jodi Walberg, manager for compensation programs, reviewed Segal Sibson's analysis methodology and replicated the internal pay-equity spreadsheet based upon fall 2009 salary data. The objective of this analysis was not to re-create in whole the original report, but instead to focus on internal faculty salary variance.

W&L's salary data was run against data obtained from the College and University Professional Association for Human Resources (CUPA-HR) National Faculty Survey for Four Year Institutions on salaries at comparable schools. Unlike the AAUP survey, which provides data by rank only, the CUPA-HR survey provides data by discipline. CUPA-HR data is not available for all schools, since not all schools participate. The 2009 comparison school groupings were consistent with those used in 2005, updated for W&L's position within the appropriate *U.S. News & World Reports* (USNWR) ranking as of November 2009. We used the *USN WR's* list of top 25 liberal arts colleges to compare salaries within the college and the fields of economics and politics, and obtained salary data for 12 of these schools. For the Law School, we used the 10 schools above and below us in the *USNWR* rankings. Law comparison data was harder to obtain, since many law programs do not report salary data, thus the small participant number of 5 reporting institutions. The Williams School comparison data was based upon a group of 12 similar business schools identified by the dean, of which data was available for 9 institutions. Appendix A contains lists of the comparison schools.

For the purpose of the internal pay-equity analysis, library and athletics faculty were excluded, as obtaining valid comparison data is complicated due to the differences in faculty status at comparable institutions. Visiting faculty and selected administrators who also hold faculty status were also excluded from the analysis.

The analysis enables the provost and the academic deans to look at each individual's salary in comparison to others in his/her field (at W&L and in the appropriate comparison school group), others in similar disciplines at W&L, and others who have worked here for a similar length of time. One limitation of the study relates to the merit review process at Washington and Lee, since the Faculty Activity Report does not provide a performance measure or score that can be

statistically included in this analysis. The spreadsheet permits the deans to see which individuals are below the expected median for their rank, time in rank, and discipline. The deans can use this information to determine whether those differences in salary are driven by merit and/or oversight.

Study results were shared in early October 2010 with Elizabeth Oliver, former chair of the Faculty Salary Differential Committee, and Bob Strong, associate provost, to gain feedback and confirm that this year's process had followed the committee's original expectations. At Prof. Oliver's suggestion, this report was created to provide faculty with information about the findings and use of the spreadsheets.

Academic deans reviewed spreadsheets with HR for each of their areas. Each case where a faculty member's salary fell at least 5% below the expected median was questioned to determine whether or not the individual's salary was appropriate based upon merit considerations. While these differentials were explained by reasons unrelated to gender, a number of individuals have been flagged for adjustments during 2010-11 salary planning. The spreadsheet information was also shared in detail and summary with the provost.

## **Objectives, Methodology, and Results**

In 2010, Washington and Lee University replicated the spreadsheet for 2009 salary data utilizing Segal Sibson's methodology. The spreadsheets and summary analysis were shared with the deans. For this portion of the report, sections of the information reported to the deans has been extracted and summarized. The goal is to provide as much information as possible without disclosing any confidential data.

## **Objectives**

The faculty internal pay-equity analysis objectives for 2009 salary data are different in three central ways from the original analysis in 2005: 1) perception is not a component of this analysis; 2) analysis is focused on determining internal pay equity and does not include an extensive analysis of W&L pay in comparison to the appropriate market; and 3) 2009 results are compared against the 2005 benchmark analysis. Regardless of these differences, the primary objective remains focused on accurately analyzing salary data in order to provide the deans with a tool for determining if and where they need to provide salary equity adjustments. The complete list of objectives:

- Determine whether internal inequity exists between female and male salaries (i.e., are similarly situated female and male faculty members paid similarly?), and if so, identify the areas of inequity for correction
- Compare 2005 internal salary equity analysis results to that of 2009, thus identifying if there has been progress toward greater internal equity
- Provide the deans with salary analysis spreadsheets for their areas so that they have the capacity to look at each individual's salary in comparison to others in their field (at W&L and in the appropriate comparison school group), others in similar disciplines at W&L, and others who have worked here for a similar length of time, so that they may make any necessary adjustments during the 2011 salary planning process

### Methodology

The methodology for the analysis of 2009 internal pay equity data is identical to that used originally in 2005 by Segal Sibson. W&L data and CUPA-HR data was obtained for the schools listed in Appendix A. Since the ratio of females to males at W&L is still fairly low, it would be hard to obtain reliable results using just our data. Utilizing CUPA-HR data, we calculated a compa-ratio (compares an individual's salary to the market median) for each individual within his or her specific field and within the larger discipline. A breakdown of the salary analysis groupings:

Person	Field	Discipline
Professor A	Classics	Humanities
Professor B	Psychology	Social Science
Professor C	Biology	Science
Professor D	Accounting	Business & Accounting
Professor E	Clinical Law	Clinical Law
Professor F	Law School	Law

Each person's rank (professor, associate professor, assistant professor, and instructor) and school (College, Law, and Williams) are also included in the dataset and used in the statistical analysis.

In order to accurately compare internal faculty salaries, it is necessary to control for experience. Generally, it takes a faculty member a number of years of experience at a particular rank to reach and then exceed the median market salary for his or her rank. Because CUPA-HR data is not broken down by years in rank, some assumptions were made about the variance expected for median salaries associated with more experience. To account for the variance in salaries that are affected by time in rank, we used a time-in-rank factor, originally developed by Segal Sibson using faculty input, to adjust the comparison-group market median data point to more appropriately reflect years in rank. The time-in-rank-factor assumptions:

#### TIME IN RANK FACTOR

P	PROFESSOR						
Years in Expected Variance Rank From Median							
0-2	0.875						
3-5	0.925						
6-8	1						
9-11	1.075						
12+	1.125						

Years in	Expected Variance						
Rank	From Median						
0-1	0.875						
2-3	0.95						
4-5	1.025						
6+	1.1						

ASSIST	ASSISTANT PROFESSOR							
Years in	<b>Expected Variance</b>							
Rank	From Median							
0-1	0.875							
2-3	0.95							
4-5	1.025							
6+	1.1							

The time-in-rank factor affects the market median salary information as follows:

• Based upon the factors above, an assistant professor with one year of experience in field X should receive 87.5% of the median market salary (the midpoint of the range)

### (Field X Market Median)\*(Time in Rank Factor) -or-\$55,310 \* 87.5% = \$48,396

While Washington and Lee strives to pay at the median of the market, we are not yet paying at this measure within all disciplines and at all ranks. Thus, the market median calculated above is not yet the appropriate figure on which to base internal comparisons. Another factor needs to account for the discount/premium W&L pays its faculty, depending on their discipline and/or rank. For example, based upon the current makeup of salaries, the University pays at 92% of the top 25 liberal arts market median for assistant professor positions within the humanities. Thus one could expect an assistant professor of English to have a salary that is also at 92% of the market median. By discounting the market median by 8%, we are able to accurately compare a faculty member's salary to his or her internal peers, based upon his or her expected salary at W&L. The discount/premium will change from year to year, just as there was positive progress toward the median between 2005 and 2009.

The disciple + rank factor was determined by calculating the % difference between median CUPA-HR salary data and median W&L salary data within that same discipline and rank (ALL humanities professors, ALL science associate professors, ALL law assistant professors).

#### W&L Humanities Asst Prof Median Salary/CUPA-HR Humanities Asst Prof Median Salary = Disciple + Rank Factor -or-\$62,520/\$67,418=.92

The rank factor was calculated in the same manner as the discipline + rank factor, focusing on rank alone. The factor was determined by generating the % difference between median CUPA-HR salary data and median W&L salary data within the same rank (professor of biology, professor of economics, professor of English), regardless of discipline. Law and undergraduate factors were calculated separately. The rank factor:

#### W&L Asst Prof Median Salary/CUPA-HR Asst Prof Median Salary = Rank Factor -or-\$72,574/\$74,956=.94

Without these factors, the salary analysis results would simply compare W&L salaries to the market. These factors account for differences in pay at the University based upon how competitively we typically pay a particular discipline or rank. Both factors are used side by side throughout the accompanying analysis.

PRO	<b>)FESSOR</b>		ASSOCIA	ASSOCIATE PROFESSOR			ASSISTANT PROFESSOR			
	Discipline + Rank	Rank		Discipline + Rank	Rank		Discipline + Rank	Rank		
Division	Factor	Factor	Division	Factor	Factor	Division	Factor	Factor		
Humanities	0.95	0.96	Humanities	0.90	0.97	Humanities	0.92	0.94		
Science	0.87	0.96	Science	0.98	0.97	Science	0.94	0.94		
Social Science	0.92	0.96	Social Science	0.97	0.97	Social Science	0.98	0.94		
Business &			*Business &			Business &				
Accounting	1.05	0.96	Accounting	1.10	0.97	Accounting	0.92	0.94		
Clinical Law	0.99	1.02	Clinical Law	0.97	1.03	Clinical Law	1.05	1.03		
Law	1.03	1.02	Law	1.03	1.03	Law	1.08	1.03		
Overall	0.97	0.98	Overall	0.99	0.99	Overall	0.98	0.97		

With controls for time in rank and factors for typical pay at W&L by discipline and/or rank, we computed an expected salary for each faculty member:

• An assistant professor with one year of experience in the humanities should receive 87.5% of the median market salary for his/her time in rank and 92% of the median market value based upon typical pay for an assistant professor in the humanities

#### (Market Median)\*(Time in Rank Factor)\*(Discipline + Rank Factor)=Expected Salary by Discipline + Rank -or-

## \$55,310 \* 87.5% \* 92%= \$44,524

• An assistant professor with one year of experience in the humanities should receive 87.5% of the median market salary for his/her time in rank and 94% of the median market value based upon typical pay for an undergraduate assistant professor

#### (Market Median)\*(Time in Rank Factor)\*(Rank Factor)=Expected Salary by Rank -or-\$55,310 \* 87.5% \* 94%= \$45,492

The expected salary, both discipline + rank and rank-based, was compared against a faculty member's actual pay. From the simplest perspective, one can see whether or not the faculty member's actual salary is higher or lower in comparison to their expected salary, and by exactly how much. In order to compare faculty pay across the University, actual salaries were compared against their expected salary in the form of a compa-ratio.

Compa-ratios were developed for each faculty member:

- Using the rank + discipline factor, we can calculate the compa-ratio for a W&L assistant professor in the humanities with one year of experience who is currently being paid \$48,500 and whose expected salary is \$44,524
  - Using this data point, we calculate that this faculty member is being paid at 109% of the expected salary median

### (W&L Salary)/(Expected Salary by Discipline + Rank)=Compa-Ratio by Discipline + Rank -or-\$48,500 / \$44,524 = 109%

- We can also calculate the compa-ratio for the same assistant professor using the rank factor
  - Using this data point, we calculate that this faculty member is being paid at 116% of the expected salary median

#### (W&L Salary)/(Expected Salary by Rank)=Compa-Ratio by Rank -or-\$48,500 / \$45,492 = 107%

Regardless of discipline or rank, the compa-ratios for each faculty member can easily be compared, thus highlighting individual salaries that are significantly different from the median expected salary. During review sessions with the deans, we discussed all cases where a faculty member had a compa-ratio less than 95% of either discipline + rank or rank-specific measure. A number of these cases will be considered for equity adjustments during 2011 salary planning.

## Results

The compa-ratio provides for ease in comparing faculty salary equity regardless of rank, discipline or experience. Summarized compa-ratio information is available by gender and rank in Appendixes B and C and by discipline and rank in Appendixes D and E. Due to the small population size by discipline, summary information is not presented grouped by gender so as to maintain confidentiality.

Based upon a spectrum of performance, it is expected that some faculty members will be paid above the median (+100% compa-ratio), and others will be paid below it (-99.9% compa-ratio). The highest compa-ratios are at the assistant and associate professor ranks. We assume that the ratios are driven by the fact that salaries at these ranks are the ones most affected by market factors, since assistant and associate professors generally have been more recently hired and have the most flexibility to rejoin the market. At the assistant level, only 4% of faculty earn salaries that fall more than 5% below the market median. Conversely, the lowest compa-ratios are at the full professor rank, where roughly 28% of faculty receive salaries falling more than 5% below the market median. The cumulative effect of annual merit increases along with some salary compression likely account for these differences.

There was a significant reduction in the number of individuals with low compa-ratios between the 2005 and 2009 analysis. The number of individuals with compa-ratios falling more than 5% below the market median reduced by almost half, dropping from approximately 38% in 2005 to 19% in 2009. While there was positive movement throughout the faculty ranks, the most significant compa-ratio movement focused at the professor rank, where the percentage of faculty falling more than 5% below the market median decreased from 52% in 2005 to 29% in 2009. Equity adjustments initiated in 2007 stemming from the initial Salary Differential Study, as well as the use of the Lenfest pool for annual merit and equity increases beginning in 2006, are likely responsible for most of this movement. This progression is a positive step toward the University's goal of paying, on average, at the median of the appropriate comparison market. Compa-ratio movement data among all faculty ranks:

COMPA-RATIO LESS THAN 95%							
	2005	2009					
Assistant	9.1%	3.6%					
Associate	35.9%	18.2%					
Professor	52.0%	28.6%					
Total	38.0%	18.9%					

#### **COMPA-RATIO GREATER THAN 105%**

		2005	2009
	Assistant	61.4%	63.6%
	Associate	37.7%	60.0%
	Professor	22.5%	39.6%
	Total	35.4%	51.7%

The 2009 compa-ratios portray an equitable distribution of female and male salaries clustered around the median. Additionally, the total percentage of male and female compa-ratios above and below the median is also roughly equivalent. However, differences in pay are noticeable in the actual spread of pay. Female compa-ratios trend close to the median, with fewer salaries falling either really far above or below one's expected salary. Male compa-ratios, on the other hand, exhibit a greater spread, thus more male faculty appear to be paid both higher and lower than one would expect based upon their discipline, rank, and years of service. For both men and women, the greatest spreads are found at the professor rank. The difference in range spread between men and women may be explained by the fact that women did not join the faculty until more recently, and longer service provides greater opportunities in which to differentiate one's pay both positively and negatively in regards to merit.

As in the 2005 analysis, we tested the compa-ratio variables using a statistical procedure called Factorial Analysis of Variance. This parametric analysis provides a greater likelihood that significant differences will be found (if they are there). The analysis looks at salary by school and discipline – for example, the College was analyzed as a group, the social sciences were analyzed as a group, etc. Professor Krzysztof Jasiewicz assisted in determining the statistical method used originally by Sibson Segal and then performed the same tests using coded, unidentifiable data.

As an example, when we examined the database and tested for compa-ratio differences in years in rank and gender, we obtained these results:

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.935 <sup>ª</sup>	43	.045	2.744	.000
Intercept	62.362	1	62.362	3801.504	.000
Gender#	.030	1	.030	1.820	.179
YearsinRank	1.702	29	.059	3.578	.000
Gender# * YearsinRank	.109	13	.008	.513	.914
Error	2.576	157	.016		
Total	225.639	201			
Corrected Total	4.511	200			

#### Tests of Between-Subjects Effects

Dependent Variable:Compa-Ratio Rank + Disc

a. R Squared = .429 (Adjusted R Squared = .273)

This analysis shows that when testing compa-ratio differences by years in rank and gender, years in rank is determined to be a statistically significant factor in affecting compa-ratios, while gender is not. (Sig. = .000. A value of .05 or lower in this column indicates statistical significance.) Note that years in rank is a significant variable but that neither gender nor the interaction between years in rank and gender are statistically significant, because the value for each is greater than 0.05.

In performing the analysis of variance, we used a number of different variables to examine the data: gender, rank, discipline, school, and time in rank. Controlling for all other variables, gender is not significant. While gender is not a significant variable in explaining compa-ratio differences, both years in rank and rank, when controlling for gender, are significant. Both of these variables are driven by the hiring history of W&L. Women did not join the faculty until more recently, and more women, 74% (51 out of 69) versus 57% (77 out of 133) of men, have been at their rank for fewer than six years. In addition, more men than women hold the rank of full professor, 51% versus 33%. The lowest compa-ratios are at the full professor rank, where generally individuals have taught at W&L the longest period of time and have had the greatest opportunity in which to differentiate one's pay. The significance of gender in the rank and time in rank factors is probably being driven by the disproportion of males to females at different points in their employment.

When testing for rank and time in rank without controlling for gender, only time in rank proves significant. Thus, difference in compa-ratios is not explained by the fact that one is at the rank of professor, but may be influenced by how many years one has been at that rank.

The chart below, comparing the 2005 factorial analysis of variance results with those of 2009, gives an overview of all tests run. As is indicated by the consistency between 2005 and 2009 results, there are no changes present in the factors accounting for statistically significant differences in compa-ratios. Time in rank and rank continue to be the only tested factors accounting for a statistically significant percentage of variance in compa-ratios. Figure 1 presents the results of the compa-ratio analysis for the Rank + Discipline and Rank datasets:

Compa-Ratio Comparison Variables	Compa-Ratio Difference <sup>1</sup> 2005	Compa-Ratio Difference 2009	Description of Compa-Ratio ANOVA Result				
1. Gender	No	No	No statistically significant differences in compa-ratios between male and female faculty				
2. Rank	Yes	Yes	Statistically significant differences in compa-ratios between faculty of different rank				
3. Rank by Gender	Yes <sup>2</sup> - Rank No - Gender	Yes - Rank No - Gender	Gender does not affect compa-ratios after adjusting for the effects of rank				
4. Discipline	No <sup>2</sup>	No	No statistically significant differences in compa-ratios between faculty of different disciplines				
5. Discipline by Gender	No <sup>2</sup> - Discipline No - Gender	No- Discipline No - Gender	Gender does not affect compa-ratios after adjusting for the effects of discipline				

Figure 1: Compa-Ratio Analysis Results

6. Time in Rank	Yes	Yes	Statistically significant differences in compa-ratios between faculty with different years of time in rank
7. Time in Rank by Gender	Yes – Time in Rank No <sup>2</sup> - Gender	Yes – Time in Rank No - Gender	Gender does not affect compa-ratios after adjusting for the effects of time in rank
8. School <sup>3</sup>	No	No	No statistically significant differences in compa-ratios between schools
9. School <sup>3</sup> by Gender	No – School No - Gender	No – School No - Gender	Gender does not affect compa-ratios after adjusting for the effects of school
10. School <sup>3</sup> by Rank by Gender	No – School Yes <sup>2</sup> - Rank No - Gender	No – School Yes <sup>2</sup> - Rank No - Gender	Gender does not affect compa-ratios after adjusting for the effects of school and rank

<sup>1</sup> "Yes" indicates that the variable accounts for a statistically significant percentage of variance.

<sup>2</sup> Value corrected from 2007 reported value.

<sup>3</sup> Broken out by The College, Law, Williams.

#### **Next Steps**

This study will be replicated internally every 4 to 5 years, allowing the University to effectively monitor salary equity. The next analysis is scheduled to be undertaken in 2015 as a joint effort between the offices of Human Resources and Finance/Administration.

This year, the deans will utilize the faculty internal equity pay analysis spreadsheet as a reference for determining equity usage of Lenfest funds. Lenfest funds will continue to be utilized for merit determinations as well. Any equity adjustments made for the 2011-12 academic year will be effective July 1, 2011, and individuals receiving such increases will be notified.

# **Appendix A: List of Comparable Schools Used for Data Analysis Purposes**

#### **College Comparison Group-**

12 Institutions Participated in 2009-10

Amherst College (Amherst, MA) Bates College (Lewiston, ME) Bowdoin College (Brunswick, ME) Bryn Mawr College (Bryn Mawr, PA) Carleton College (Northfield, MN) Claremont McKenna College (Claremont, CA) Colby College (Waterville, ME) Colgate University (Hamilton, NY) Colorado College (Colorado Springs, CO) Davidson College (Davidson, NC) Grinnell College (Grinnell, IA) Hamilton College (Clinton, NY) Harvey Mudd College (Claremont, CA) Haverford College (Haverford, PA) Middlebury College (Middlebury, VT) Oberlin College (Oberlin, OH) Pomona College (Claremont, CA) Smith College (Northampton, MA) Swarthmore College (Swarthmore, PA) Vassar College (Poughkeepsie, NY) Wellesley College (Wellesley, MA) Wesleyan University (Middletown, CT) Williams College (Williamstown, MA)

# Law Comparison Group-

## 5 Institutions Participated in 2009-10

University of California-Berkeley (Berkeley, CA) University of California-Davis (Davis, CA) University of California-Los Angeles (Los Angeles, CA) University of Southern California (Los Angeles, CA) George Washington University (Washington, DC) Georgetown University (Washington, DC) Emory University (Atlanta, GA) University of Illinois at Urbana-Champaign (Champaign, IL) University of Notre Dame (Notre Dame, IN) University of Iowa (Iowa City, IA) Boston College (Chestnut Hill, MA) Boston University (Boston, MA) Washington University in St. Louis (Saint Louis, MO) Fordham University (Bronx, NY) University of North Carolina at Chapel Hill (Chapel Hill, NC) Vanderbilt University (Nashville, TN) University of Texas at Austin (Austin, TX) College of William & Mary (Williamsburg, VA) University of Washington (Seattle, WA) University of Minnesota-Twin Cities (Minneapolis, MN)

#### **Business Comparison Group-**

9 Institutions Participated in 2009-10

Babson College (Babson Park, MA) Baylor University (Waco, TX) Boston College (Chestnut Hill, MA) College of William and Mary (Williamsburg, VA) Emory University (Atlanta, GA) Georgetown University (Washington, DC) Miami University (Oxford, OH) Trinity University (San Antonio, TX) University of Richmond (University of Richmond, VA) University of Virginia (Charlottesville, VA) Villanova University (Villanova, PA) Wake Forest University (Winston-Salem, NC)

# **Appendix B: Compa-Ratios by Gender and Rank (Discipline + Rank)**

Â	U U	<b>FEMALES</b> MALES						
Compa-Ratio	Assistant	Associate	Professor	Total	Assistant	Associate	Professor	Total
Greater than								
115.1%	10.7%	11.1%	13.0%	11.6%	22.2%	32.4%	14.7%	21.2%
Count	3	2	3	8	6	12	10	28
105.1%-115%	50.0%	55.6%	21.7%	42.0%	44.4%	24.3%	26.5%	29.5%
Count	14	10	5	29	12	9	18	39
95%-105%	32.1%	11.1%	43.5%	30.4%	33.3%	27.0%	27.9%	28.8%
Count	9	2	10	21	9	10	19	38
85%-94.9%	7.1%	22.2%	8.7%	11.6%	0.0%	13.5%	13.2%	10.6%
Count	2	4	2	8	0	5	9	14
Less than 84.9%	0.0%	0.0%	13.0%	4.3%	0.0%	2.7%	17.6%	9.8%
Count	0	0	3	3	0	1	12	13

## 2009 Compa-Ratios by Gender and Rank

### 2005 Compa-Ratios by Gender and Rank

2005 Compa Rad	5	FEMA			MALES			
Compa-Ratio	Assistant	Associate	Professor	Total	Assistant	Associate	Professor	Total
Greater than								
115.1%	20.0%	0.0%	5.9%	10.3%	26.3%	21.6%	3.7%	11.7%
Count	5	0	1	6	5	8	3	16
105.1%-115%	44.0%	18.8%	11.8%	27.6%	31.6%	24.3%	19.8%	22.6%
Count	11	3	2	16	6	9	16	31
95%-105%	28.0%	31.3%	35.3%	31.0%	31.6%	24.3%	23.5%	24.8%
Count	7	5	6	18	6	9	19	34
85%-94.9%	8.0%	43.8%	29.4%	24.1%	10.5%	18.9%	25.9%	21.9%
Count	2	7	5	14	2	7	21	30
Less than 84.9%	0.0%	6.3%	17.6%	6.9%	0.0%	10.8%	27.2%	19.0%
Count	0	1	3	4	0	4	22	26

# Appendix C: Compa-Ratios by Gender and Rank (Rank)

	FEMALES				MALES			
Compa-Ratio	Assistant	Associate	Professor	Total	Assistant	Associate	Professor	Total
Greater than								
115.1%	10.7%	5.6%	17.4%	11.6%	25.9%	21.6%	14.7%	18.9%
Count	3	1	4	8	7	8	10	25
105.1%-115%	42.9%	44.4%	4.3%	30.4%	48.1%	24.3%	17.6%	25.8%
Count	12	8	1	21	13	9	12	34
95%-105%	42.9%	27.8%	39.1%	37.7%	25.9%	32.4%	26.5%	28.0%
Count	12	5	9	26	7	12	18	37
85%-94.9%	3.6%	5.6%	26.1%	11.6%	0.0%	13.5%	22.1%	15.2%
Count	1	1	6	8	0	5	15	20
Less than 84.9%	0.0%	16.7%	13.0%	8.7%	0.0%	8.1%	19.1%	12.1%
Count	0	3	3	6	0	3	13	16

# 2009 Compa-Ratios by Gender and Rank

2005 Compa-Ratios by Gender and Rank

2005 Compa-Rati	05 85 001					D.4.A.L	FC	
	FEMALES			MALES				
Compa-Ratio	Assistant	Associate	Professor	Total	Assistant	Associate	Professor	Total
Greater than								
115.1%	28.0%	0.0%	11.8%	15.5%	26.3%	24.3%	2.5%	11.7%
Count	7	0	2	9	5	9	2	16
105.1%-115%	40.0%	12.5%	11.8%	24.1%	31.6%	21.6%	19.8%	21.9%
Count	10	2	2	14	6	8	16	30
95%-105%	28.0%	37.5%	17.6%	27.6%	31.6%	18.9%	25.9%	24.8%
Count	7	6	3	16	6	7	21	34
85%-94.9%	4.0%	43.8%	35.3%	24.1%	10.5%	24.3%	27.2%	24.1%
Count	1	7	6	14	2	9	22	33
Less than 84.9%	0.0%	6.3%	23.5%	8.6%	0.0%	10.8%	24.7%	17.5%
Count	0	1	4	5	0	4	20	24

# **Appendix D: Compa-Ratios by Discipline (Discipline + Rank)**

## **Humanities 2009**

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	9.5%	29.2%	24.2%	21.8%
Count	2	7	8	17
105.1%-115%	61.9%	37.5%	21.2%	37.2%
Count	13	9	7	29
95%-105%	23.8%	12.5%	24.2%	20.5%
Count	5	3	8	16
85%-94.9%	4.8%	20.8%	21.2%	16.7%
Count	1	5	7	13
Less than 84.9%	0.0%	0.0%	9.1%	3.8%
Count	0	0	3	3

## **Social Science 2009**

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	8.3%	33.3%	0.0%	6.9%
Count	1	1	0	2
105.1%-115%	41.7%	0.0%	35.7%	34.5%
Count	5	0	5	10
95%-105%	41.7%	66.7%	28.6%	37.9%
Count	5	2	4	11
85%-94.9%	8.3%	0.0%	21.4%	13.8%
Count	1	0	3	4
Less than 84.9%	0.0%	0.0%	14.3%	6.9%
Count	0	0	2	2

## Science 2009

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	40.0%	7.1%	11.8%	19.6%
Count	6	1	2	9
105.1%-115%	13.3%	28.6%	35.3%	26.1%
Count	2	4	6	12
95%-105%	46.7%	42.9%	41.2%	43.5%
Count	7	6	7	20
85%-94.9%	0.0%	21.4%	5.9%	8.7%
Count	0	3	1	4
Less than 84.9%	0.0%	0.0%	5.9%	2.2%
Count	0	0	1	1

# **Humanities 2005**

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	27.8%	12.0%	0.0%	10.5%
Count	5	3	0	8
105.1%-115%	44.4%	12.0%	24.2%	25.0%
Count	8	3	8	19
95%-105%	27.8%	20.0%	21.2%	22.4%
Count	5	5	7	17
85%-94.9%	0.0%	40.0%	33.3%	27.6%
Count	0	10	11	21
Less than 84.9%	0.0%	16.0%	21.2%	14.5%
Count	0	4	7	11

# Social Science 2005

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	14.3%	40.0%	0.0%	11.5%
Count	1	2	0	3
105.1%-115%	71.4%	20.0%	28.6%	38.5%
Count	5	1	4	10
95%-105%	14.3%	20.0%	35.7%	26.9%
Count	1	1	5	7
85%-94.9%	0.0%	20.0%	21.4%	15.4%
Count	0	1	3	4
Less than 84.9%	0.0%	0.0%	14.3%	7.7%
Count	0	0	2	2

# Science 2005

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	9.1%	6.3%	5.9%	6.8%
Count	1	1	1	3
105.1%-115%	27.3%	37.5%	5.9%	22.7%
Count	3	6	1	10
95%-105%	36.4%	37.5%	29.4%	34.1%
Count	4	6	5	15
85%-94.9%	27.3%	18.8%	41.2%	29.5%
Count	3	3	7	13
Less than 84.9%	0.0%	0.0%	17.6%	6.8%
Count	0	0	3	3

# **Business and Accounting 2009**

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than				
115.1%	0.0%	40.0%	14.3%	18.8%
Count	0	2	1	3
105.1%-115%	75.0%	20.0%	28.6%	37.5%
Count	3	1	2	6
95%-105%	25.0%	20.0%	14.3%	18.8%
Count	1	1	1	3
85%-94.9%	0.0%	20.0%	0.0%	6.3%
Count	0	1	0	1
Less than 84.9%	0.0%	0.0%	42.9%	18.8%
Count	0	0	3	3

# **Business and Accounting 2005**

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	33.3%	25.0%	11.1%	18.8%
Count	1	1	1	3
105.1%-115%	0.0%	50.0%	0.0%	12.5%
Count	0	2	0	2
95%-105%	66.7%	25.0%	0.0%	18.8%
Count	2	1	0	3
85%-94.9%	0.0%	0.0%	11.1%	6.3%
Count	0	0	1	1
Less than 84.9%	0.0%	0.0%	77.8%	43.8%
Count	0	0	7	7

# Law 2009

<b>Compa-Ratios</b>	Assistant	Associate	Professor	Total
Greater than				
115.1%	NA	33.3%	10.0%	17.2%
Count	NA	3	2	5
105.1%-115%	NA	55.6%	15.0%	27.6%
Count	NA	5	3	8
95%-105%	NA	0.0%	45.0%	31.0%
Count	NA	0	9	9
85%-94.9%	NA	0.0%	0.0%	0.0%
Count	NA	0	0	0
Less than 84.9%	NA	11.1%	30.0%	24.1%
Count	NA	1	6	7

# Law 2005

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	50.0%	33.3%	8.7%	16.7%
Count	2	1	2	5
105.1%-115%	25.0%	0.0%	21.7%	20.0%
Count	1	0	5	6
95%-105%	25.0%	33.3%	30.4%	30.0%
Count	1	1	7	9
85%-94.9%	0.0%	0.0%	13.0%	10.0%
Count	0	0	3	3
Less than 84.9%	0.0%	33.3%	26.1%	23.3%
Count	0	1	6	7

# Appendix E: Compa-Ratios by Discipline (Rank)

## **Humanities 2009**

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	4.8%	4.2%	24.2%	12.8%
Count	1	1	8	10
105.1%-115%	47.6%	29.2%	21.2%	30.8%
Count	10	7	7	24
95%-105%	42.9%	33.3%	21.2%	30.8%
Count	9	8	7	24
85%-94.9%	4.8%	12.5%	24.2%	15.4%
Count	1	3	8	12
Less than 84.9%	0.0%	20.8%	9.1%	10.3%
Count	0	5	3	8

## **Humanities 2005**

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	16.7%	4.0%	6.1%	7.9%
Count	3	1	2	6
105.1%-115%	44.4%	20.0%	24.2%	27.6%
Count	8	5	8	21
95%-105%	38.9%	16.0%	18.2%	22.4%
Count	7	4	6	17
85%-94.9%	0.0%	44.0%	33.3%	28.9%
Count	0	11	11	22
Less than 84.9%	0.0%	16.0%	18.2%	13.2%
Count	0	4	6	10

# Social Science 2009

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	16.7%	33.3%	0.0%	10.3%
Count	2	1	0	3
105.1%-115%	66.7%	0.0%	7.1%	31.0%
Count	8	0	1	9
95%-105%	16.7%	66.7%	50.0%	37.9%
Count	2	2	7	11
85%-94.9%	0.0%	0.0%	28.6%	13.8%
Count	0	0	4	4
Less than 84.9%	0.0%	0.0%	14.3%	6.9%
Count	0	0	2	2

# Social Science 2005

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	28.6%	40.0%	7.1%	19.2%
Count	2	2	1	5
105.1%-115%	57.1%	40.0%	21.4%	34.6%
Count	4	2	3	9
95%-105%	14.3%	20.0%	42.9%	30.8%
Count	1	1	6	8
85%-94.9%	0.0%	0.0%	21.4%	11.5%
Count	0	0	3	3
Less than 84.9%	0.0%	0.0%	7.1%	3.8%
Count	0	0	1	1

## Science 2009

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	40.0%	7.1%	5.9%	17.4%
Count	6	1	1	8
105.1%-115%	13.3%	28.6%	5.9%	15.2%
Count	2	4	1	7
95%-105%	46.7%	42.9%	35.3%	41.3%
Count	7	6	6	19
85%-94.9%	0.0%	21.4%	41.2%	21.7%
Count	0	3	7	10
Less than 84.9%	0.0%	0.0%	11.8%	4.3%
Count	0	0	2	2

# Science 2005

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	18.2%	6.3%	0.0%	6.8%
Count	2	1	0	3
105.1%-115%	27.3%	18.8%	11.8%	18.2%
Count	3	3	2	8
95%-105%	36.4%	50.0%	29.4%	38.6%
Count	4	8	5	17
85%-94.9%	18.2%	25.0%	41.2%	29.5%
Count	2	4	7	13
Less than 84.9%	0.0%	0.0%	17.6%	6.8%
Count	0	0	3	3

# **Business and Accounting 2009**

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	0.0%	60.0%	42.9%	37.5%
Count	0	3	3	6
105.1%-115%	75.0%	40.0%	0.0%	31.3%
Count	3	2	0	5
95%-105%	25.0%	0.0%	14.3%	12.5%
Count	1	0	1	2
85%-94.9%	0.0%	0.0%	0.0%	0.0%
Count	0	0	0	0
Less than 84.9%	0.0%	0.0%	42.9%	18.8%
Count	0	0	3	3

# **Business and Accounting 2005**

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	33.3%	100.0%	11.1%	37.5%
Count	1	4	1	6
105.1%-115%	33.3%	0.0%	0.0%	6.3%
Count	1	0	0	1
95%-105%	33.3%	0.0%	0.0%	6.3%
Count	1	0	0	1
85%-94.9%	0.0%	0.0%	11.1%	6.3%
Count	0	0	1	1
Less than 84.9%	0.0%	0.0%	77.8%	43.8%
Count	0	0	7	7

# Law 2005

			- 4	
Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%	80.0%	33.3%	0.0%	16.1%
Count	4	1	0	5
105.1%-115%	0.0%	0.0%	21.7%	16.1%
Count	0	0	5	5
95%-105%	0.0%	0.0%	26.1%	19.4%
Count	0	0	6	6
85%-94.9%	20.0%	33.3%	21.7%	22.6%
Count	1	1	5	7
Less than 84.9%	0.0%	33.3%	30.4%	25.8%
Count	0	1	7	8

Compa-Ratios	Assistant	Associate	Professor	Total
Greater than 115.1%		11.1%	10.0%	10.3%
Count	NA	1	2	3
105.1%-115%	NA	66.7%	20.0%	34.5%
Count	NA	6	4	10
95%-105%	NA	11.1%	35.0%	27.6%
Count	NA	1	7	8
85%-94.9%	NA	0.0%	5.0%	3.4%
Count	NA	0	1	1
Less than 84.9%	NA	11.1%	30.0%	24.1%
Count	NA	1	6	7