

Executive Summary of the Economic Status of the Faculty 2009-2010 Report

Introduction

This Executive Summary is meant to cover the most salient portions of the full Economic Status of the Faculty 2009-2010 Report. This report addresses salary increases in 2009-2010, not in 2010-2011, which will be the subject of the report next year.

The Summary concludes with the Committee's Recommendations and Questions for the Administration for 2009-2010. The complete report can be accessed at: www.upenn.edu/almanac/volumes/v57/n23/contents.html

Comparisons with Growth in the Consumer Price Index (CPI)

FY 2009-2010 was unusual due to the financial crisis and the depressed value of, and returns on, the endowment. The Central Administration decided that more modest salary increases than usual were in order overall. The all-ranks median salary increase was 0.6% and the all-ranks mean increase was 2.1%. These are indeed significantly more modest figures than usual. The following table shows more disaggregated detail.

Average academic base salary percentage increases of continuing Penn standing faculty members by rank in comparison with the Consumer Price Index (CPI) and Penn Budget Guidelines

Group/Condition	Metric	FYs 2009-2010
Professor	Mean	2.2%
	Median	0.0%
Associate Professor	Mean	2.4%
	Median	0.8%
Assistant Professor	Mean	1.6%
	Median	1.1%
All Three Ranks	Mean	2.1%
	Median	0.6%
U.S. City Average CPI Growth	Mean	1.1%
Philadelphia CPI Growth	Mean	1.9%
Budget Guidelines	Mean	2.0%

Notes: Academic base salary increases pertain to all Penn standing faculty members who were faculty at the fall census of both years (or three years for cumulative increases) for which percentage increases are calculated. All salaries are converted to a nine-month base.

Excluded were all members of the Faculty of Medicine except basic scientists, all Clinician Educators, faculty members who were on unpaid leave of absence, faculty who had chosen phased retirement, and Deans of all Schools.

FYs 2009-2010 CPI growth for the U.S. and for Philadelphia are based on a change in CPI from June 2009 to June 2010.

Comparisons with Peer Universities Using Data from the AAU Data Exchange

The best currently available salary data from other institutions of higher education are provided by the American Association of Universities (AAU) Data Exchange. The AAU is comprised of 60 public and private research universities in the United States and two in Canada. The AAU includes several Ivy League institutions (e.g., Penn, Brown, Harvard, Princeton, Cornell, and Yale), other private universities (e.g., Brandeis, Rice, Emory, Vanderbilt), public flagship universities (e.g., Berkeley, UCLA, the Universities of Michigan, Virginia, and Wisconsin), and other public universities (e.g., Michigan State, University of California Davis, and University of California Irvine). Please refer to the AAU website for a complete list of member institutions: <http://www.aau.edu/>

Salary Comparisons: Penn's Competitive Standing

The most meaningful comparisons of mean faculty salaries at Penn with those at other universities in the AAU Data Exchange are broken out by academic field and rank.

For almost all the 16 schools/areas, Penn's mean faculty salaries for all ranks in 2009-2010 are in the upper third of the AAU institutions. The only exceptions are Assistant Professors of Veterinary Medicine (who are not far off from the top third, slightly up from last year) and Associate Professors of Veterinary Medicine (who are very far off at the top of the bottom third, a marked decline since last year). Mean faculty salaries are in fact at least in (or at the boundary of) the top quartile of AAU institutions for all three ranks in all schools/areas except Full Professors in the School of Social Policy & Practice (7/23), Associate Professors of Veterinary Medicine (9/13), and Assistant Professors of Veterinary Medicine (5/13). This generally high overall position might be seen as comforting.

A more disturbing pattern emerges, however, when comparing the 2009 salary data with the 2005 data in Table 4. We discussed such a comparison

Rank of mean salaries of Penn faculty by academic fields as compared to 60 selected universities participating in the American Association of Universities Data Exchange (AAUDE) survey.

Academic Field	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009
Professor					
Annenberg	2/35	2/36	1/38	1/38	1/40
Dental Medicine	6/34	8/35	10/38	11/43	2/44
Design	7/51	3/53	9/53	8/51	5/51
Engineering & Applied Science	14/55	14/56	14/56	14/53	11/53
Graduate Education	3/43	4/45	4/48	4/45	4/44
Humanities (A&S)	5/55	5/56	10/56	8/53	9/54
Law	6/36	7/36	10/41	7/39	7/37
Medicine-Basic Science	3/35	3/37	3/37	5/53	6/54
Natural Science (A&S)	12/56	11/57	15/57	13/54	15/54
Nursing	2/24	2/24	2/26	2/25	2/24
Social Policy & Practice	4/22	6/24	6/25	5/23	7/23
Social Science (A&S)	9/55	9/56	9/57	9/54	8/54
Veterinary Medicine	1/14	1/13	4/17	3/14	3/13
Wharton-Business & Management	2/52	3/53	7/53	5/50	4/51
Wharton-Public Policy	3/19	3/18	--	15/50	15/52
Wharton-Statistics	1/34	1/35	1/34	1/34	1/32
Associate Professor					
Annenberg	--	--	--	--	--
Dental Medicine	--	--	8/35	14/41	9/42
Design	7/50	1/51	7/53	6/51	3/51
Engineering & Applied Science	9/55	7/55	10/56	9/53	7/53
Graduate Education	2/46	3/46	4/48	5/44	4/44
Humanities (A&S)	8/55	6/56	10/56	6/53	12/54
Law	n/a	n/a	n/a	n/a	--
Medicine-Basic Science	4/34	2/36	3/37	5/53	7/54
Natural Science (A&S)	11/56	9/57	11/57	11/54	14/54
Nursing	3/26	3/26	5/26	7/24	6/23
Social Policy & Practice	5/22	5/24	--	3/24	--
Social Science (A&S)	11/55	9/56	11/57	11/54	8/54
Veterinary Medicine	2/14	1/13	3/17	8/14	9/13
Wharton-Business & Management	1/52	1/53	2/53	1/50	2/50
Wharton-Public Policy	--	--	--	--	--
Wharton-Statistics	--	--	--	2/27	--
Assistant Professor					
Annenberg	--	--	--	--	--
Dental Medicine	--	4/34	11/36	8/42	8/43
Design	4/49	--	5/52	7/49	4/50
Engineering & Applied Science	11/55	6/56	13/56	10/53	5/53
Graduate Education	7/43	6/45	6/47	6/45	6/43
Humanities (A&S)	13/55	14/56	19/56	17/53	14/54
Law	5/28	--	--	--	6/25
Medicine-Basic Science	5/34	9/38	6/37	7/53	10/54
Natural Science (A&S)	7/56	8/57	18/57	15/54	15/54
Nursing	6/27	4/26	5/26	3/24	3/23
Social Policy & Practice	--	--	--	6/24	6/25
Social Science (A&S)	8/55	15/56	10/57	13/54	11/54
Veterinary Medicine	1/14	1/13	1/17	6/14	5/13
Wharton-Business & Management	7/52	3/53	6/53	10/50	5/50
Wharton-Public Policy	--	--	--	--	1/51
Wharton-Statistics	--	--	1/33	1/33	--

Notes: Median salary data from this particular data source is not complete, and therefore, the more complete average salary data set is used. The AAUDE survey instructions request academic base salaries and this was the metric used for submitting Penn faculty salaries.

Using the federal CIP (Classification of Instructional Programs) codes for 2000, departments at comparable universities were mapped to Penn Schools.

** Between Fall 2007 and Fall 2008, several modifications were made to CIP Code classifications for medical sciences. In Fall 2009, at the school's request, Wharton-Public Policy began being compared to Economics rather than Policy programs. Calculations of rank only include those universities that have relevant departments.

Therefore, the number of universities among which Penn is ranked varies by field.

Rank is suppressed for all cells which contain fewer than five Penn faculty members.

in our Report last year for the years 2008 and 2004.¹ The basic pattern has not changed: while Penn has made some gains in AAU rank comparisons, it continues to fall behind in many more.

A summary comparison captures how often Penn is falling behind versus gaining in percentile rank by more than 5%: for full professors, Penn has fallen in 5 and gained in only 2 out of the 16 areas for which there is data for both 2005 and 2009; for associate professors, Penn has declined in 4 areas and gained in only 2 out of 10, and for assistant professors Penn has fallen in 4 and gained in only 2 out of 11.

Comparisons with Peer Universities Using AAUP Survey Data

Presented below is a comparison of the mean salaries of all Full Professors at Penn with those at a small select group of research universities based on data obtained by the Penn administration, collected annually by the American Association of University Professors (AAUP), and published in *Chronicle of Higher Education*.

The data in this table show that, during the past five-year period, mean salaries for Full Professors at Penn became more competitive with some few institutions in the comparison set (4 in total, though only two by margins much greater than rounding error) but became less competitive with the overwhelming bulk of the panel. Again, we give a more detailed analysis in the longer version of our report.

Percentage differences in mean academic base salary levels of full professors at a sample of comparable research universities for Academic Year 2009-2010

Full Professor Salaries: Percentage Differences*					
	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Harvard	12.5%	13.4%	11.7%	13.7%	12.4%
Columbia	N/A	N/A	-0.4%	3.4%	10.9%
Chicago	3.5%	3.8%	4.4%	6.0%	8.2%
Stanford	4.2%	0.7%	6.0%	7.4%	6.6%
Princeton	4.6%	4.6%	5.2%	6.4%	6.4%
Yale	0.9%	0.7%	1.1%	3.1%	2.4%
NYU	-3.9%	-4.5%	-0.5%	0.8%	0.9%
Penn	\$149.9K	\$156.5K	163.3K	169.4K	170.1K
Northwestern	-6.1%	-5.9%	-6.3%	-4.5%	-2.2%
MIT	-6.4%	-6.8%	-7.7%	-5.4%	-5.3%
Duke	-9.0%	-9.3%	-7.0%	-4.8%	-5.5%
UCLA	-14.3%	-14.9%	N/A	-14.7%	-13.0%
UC Berkeley	-15.8%	-16.1%	N/A	-15.3%	-14.3%
Michigan	-16.2%	-16.7%	-19.1%	-16.1%	-15.3%
N.C. (Chapel Hill)	-23.1%	-19.0%	-17.9%	-15.8%	-15.9%
Carnegie-Mellon	-17.4%	-18.8%	-23.5%	-19.4%	-19.1%
Virginia	-17.9%	-18.2%	-23.1%	-21.3%	-20.8%
Texas (Austin)	-22.8%	-22.6%	-29.6%	-21.9%	-21.6%
MN (Twin Cities)	-26.4%	-25.5%	-34.6%	-24.8%	-26.6%

Notes: Penn academic base mean salaries are based on standing faculty members at the rank of professor. Excluded are all members of the Faculty of Medicine except basic scientists, and all standing faculty members who are appointed as Clinician Educators. Data Source: AAUP Salary Surveys.
*Universities are ordered from highest to lowest mean salaries for full professors as of 2008-2009.

For each year reported, the difference between the Penn mean salary and the mean salary for a comparison university was computed as a percentage of the Penn salary.

Variability in Average Salary Levels by Rank

The table below shows mean and median faculty salaries by rank for all schools combined for each of four years: 2005-2006 through 2009-2010.

Five-year data on mean and median faculty salaries by rank for all schools combined are shown in the following table. The second-to-last column gives raw ratios of these values relative to the values for Assistant Professors. These ratios imply that, in FY 2010, mean salaries were 78% higher for Full Professors than for Assistant Professors and 13% higher for Associate Professors than for Assistant Professors. Median salaries were 95% higher for Full than for Assistant Professors, and 23% higher for Associate than for Assistant Professors. Between 2005-2006 and 2009-2010, the ratio of median salaries has increased somewhat for Full Professors to Assistant Professors (from 1.87 to 1.95) and for Associate Professors to Assistant Pro-

¹ See www.upenn.edu/almanac/volumes/v56/n33/pdf_n33/SCESF-full%205-11-10.pdf, Section III B.

Mean academic base salary levels of Penn standing faculty members who continued in rank by rank

Rank	Academic Year	Average	Amount	Not Weighted	Weighted	
Professor	2005-2006	Mean	\$147,815	1.69	1.82	
		Median	\$137,000	1.87	1.81	
	2006-2007	Mean	\$154,627	1.71	1.82	
		Median	\$143,000	1.90	1.83	
	2007-2008	Mean	\$160,803	1.72	1.85	
		Median	\$147,875	1.94	1.84	
	2008-2009	Mean	\$169,739	1.78	1.85	
		Median	\$155,600	1.94	1.85	
	2009-2010	Mean	\$172,585	1.78	1.85	
		Median	\$158,337	1.95	1.84	
	Associate Professor	2005-2006	Mean	\$98,542	1.13	1.25
			Median	\$87,500	1.20	1.26
2006-2007		Mean	\$103,378	1.14	1.25	
		Median	\$91,900	1.22	1.26	
2007-2008		Mean	\$106,061	1.13	1.26	
		Median	\$94,172	1.23	1.26	
2008-2009		Mean	\$110,913	1.16	1.25	
		Median	\$98,206	1.23	1.23	
2009-2010		Mean	\$110,048	1.13	1.24	
		Median	\$99,550	1.23	1.22	
Assistant Professor		2005-2006	Mean	\$87,268	1.00	1.00
			Median	\$73,132	1.00	1.00
	2006-2007	Mean	\$90,513	1.00	1.00	
		Median	\$75,136	1.00	1.00	
	2007-2008	Mean	\$93,547	1.00	1.00	
		Median	\$76,421	1.00	1.00	
	2008-2009	Mean	\$95,382	1.00	1.00	
		Median	\$80,030	1.00	1.00	
	2009-2010	Mean	\$97,223	1.00	1.00	
		Median	\$81,068	1.00	1.00	

Notes: Mean academic base salary levels are based on all Penn standing faculty members who continued in rank in FY 2010 from their respective prior years. All salaries are converted to a nine-month base.

Excluded were all members of the Faculty of Medicine except basic scientists, all Clinician Educators, faculty members who were on unpaid leave of absence, faculty who had chosen phased retirement, and Deans of all Schools.

The data are weighted by the number of continuing faculty members at each rank in each school.

fessors (from 1.20 to 1.23). The longer version of our report gives a more extensive discussion.

Trends in Variability Over Time

The measure of variability of median salaries across schools/areas of continuing faculty members selected here is the interquartile range (IQR) (i.e., the 75th percentile salary in the distribution less the 25th percentile salary). However, the IQR can be expected to be larger when the general salary level is relatively high (such as for Full Professors) than when the general salary level is much lower (such as for Assistant Professors). To compensate for such differences in the general level of salaries, we have divided the IQR by the median of the distribution (i.e., the 50th percentile salary: Q₂), thereby computing a ratio of the IQR to the median (as reported in the next to last column of Table 10 labeled "IQR to Median"). This ratio provides an index of the amount of variability in relation to the general level of the salary distributions, and has utility when comparing variability across ranks and trends over time.

The most striking feature of this table seems to the Committee to be the rise in the past two years of the 75th percentile, and so the interquartile range and the IQR to Median ratio, for Full Professors and the decline for Assistant Professors. (The figures for Associate Professors are fairly stable.) Perhaps the decline in the Q3 figure for Assistant Professors reflects the recent promotion of a small number of relatively highly-paid Assistant Professors. The changes for Full Professors may reflect more competition for some of their services. The future development of these measures bears watching.

Variability by Gender

In response to recommendations in previous reports, this report includes two tables describing gender differences in faculty salaries.

The first table below provides the percentage increases in salaries for faculty continuing in rank by rank and gender for the first, second, and third

quartiles for FY 2010.² The figures are generally very close. In all but one cell (quartile by rank), any difference favors women. But the difference is likely too small a difference to be meaningful.

The second table reports the observed mean and median salaries for men and women continuing in rank by rank. The most striking information concerning compensation and gender lies here and not in the incremental changes summarized in the preceding table. The data in the second table show that both mean and median salaries were in all cases higher for men than women at all ranks for each year from FY 2006 to FY 2010 when the data are taken as is. The magnitude of the percentage difference in salary was generally smaller for Full Professors than for Associate and Assistant Professors in the unweighted comparisons.

An important limitation of the average salary data shown in the first two columns of this second table is that they do not control for differences in the distribution of faculty by gender or differences in average salaries across schools/areas. The small numbers of men and women at some ranks in some schools/areas limit further disaggregation of the data. To address these issues, the table also provides "weighted" salary data to reflect differences in the distribution of women across schools/areas. Male weights were calculated as the ratio of male faculty in each school/area to the total number of male faculty at Penn. Salaries for women faculty were weighted by male weights.

The table shows that gender differences in salaries are substantially reduced after correcting for gender differences in the distribution of faculty across schools/areas. The difference seems to be declining over time, with the exception of Assistant Professors in the most recent year.

Percentage Salary Increase Distribution of Faculty Who Continued in Rank by Gender and Rank

Rank	Sex	First Quartile (Q1), Median (Md.), and Third Quartile (Q3) Percentage Salary Increases by Year FYs 2009-2010		
		Q1	Md.	Q3
Professor	Men	0.0%	0.0%	0.9%
	Women	0.0%	0.0%	0.8%
Associate Professor	Men	0.0%	0.0%	1.0%
	Women	0.0%	0.9%	1.4%
Assistant Professor	Men	0.8%	1.0%	1.7%
	Women	1.0%	1.1%	1.8%

Notes: Academic base salary increases pertain to all Penn standing faculty members who were faculty at the fall census of both years (or three years for cumulative increases) for which percentage increase are calculated.

Excluded were all members of the Faculty of Medicine except basic scientists, all Clinician Educators, faculty members who were on unpaid leave of absence, faculty who had chosen phased retirement, and Deans of all Schools. All salaries are converted to a nine-month base.

² This information is presented only at the aggregate level because, for a number of school/areas-rank cells, the number of one gender (generally female) is fairly low.

Mean academic base salary levels of Penn standing faculty members who continued in rank by gender and rank

Acad. Year	Metric	Women	Men	% Difference	Women	Men	% Difference
Professor							
2005-	Mean	\$139,706	\$149,558	7.1%	\$140,778	\$149,256	6.0%
2006	Median	\$126,935	\$138,450	9.1%	\$137,379	\$146,120	6.4%
2006-	Mean	\$147,006	\$156,267	6.3%	\$145,892	\$155,924	6.9%
2007	Median	\$132,800	\$144,350	8.7%	\$142,866	\$151,937	6.3%
2007-	Mean	\$150,286	\$163,176	8.6%	\$151,196	\$163,176	7.9%
2008	Median	\$137,013	\$149,623	9.2%	\$148,819	\$159,494	7.2%
2008-	Mean	\$160,576	\$171,779	7.0%	\$161,153	\$171,779	6.6%
2009	Median	\$143,983	\$157,550	9.4%	\$155,980	\$167,245	7.2%
2009-	Mean	\$161,532	\$175,403	8.6%	\$166,672	\$175,403	5.2%
2010	Median	\$148,541	\$160,000	7.7%	\$165,669	\$170,459	2.9%
Associate Professor							
2005-	Mean	\$92,807	\$101,484	9.3%	\$92,395	\$100,972	9.3%
2006	Median	\$82,750	\$93,500	13.0%	\$92,849	\$99,583	7.3%
2006-	Mean	\$94,765	\$107,547	13.5%	\$95,196	\$107,045	12.4%
2007	Median	\$87,263	\$95,000	8.9%	\$97,470	\$103,697	6.4%
2007-	Mean	\$96,729	\$110,812	14.6%	\$106,225	\$110,812	4.3%
2008	Median	\$89,972	\$98,170	9.1%	\$110,306	\$107,276	-2.7%
2008-	Mean	\$104,061	\$114,076	9.6%	\$110,244	\$114,076	3.5%
2009	Median	\$93,636	\$101,900	8.8%	\$110,470	\$107,352	-2.8%
2009-	Mean	\$101,528	\$114,411	12.7%	\$111,560	\$114,411	2.6%
2010	Median	\$92,925	\$102,750	10.6%	\$109,374	\$108,377	-0.9%
Assistant Professor							
2005-	Mean	\$80,757	\$91,374	13.1%	\$90,681	\$91,374	0.8%
2006	Median	\$68,190	\$78,500	15.1%	\$87,917	\$89,163	1.4%
2006-	Mean	\$83,738	\$95,015	13.5%	\$93,783	\$95,015	1.3%
2007	Median	\$70,950	\$84,000	18.4%	\$90,765	\$92,079	1.4%
2007-	Mean	\$88,223	\$97,907	11.0%	\$97,840	\$97,907	0.1%
2008	Median	\$72,641	\$82,900	14.1%	\$95,495	\$94,331	-1.2%
2008-	Mean	\$89,046	\$100,012	12.3%	\$99,900	\$100,012	0.1%
2009	Median	\$76,400	\$84,615	10.8%	\$97,667	\$96,777	-0.9%
2009-	Mean	\$89,601	\$102,559	14.5%	\$99,455	\$102,559	3.1%
2010	Median	\$77,925	\$85,152	9.3%	\$97,554	\$99,938	2.4%

Notes: Mean academic base salary levels are based on all Penn standing faculty members who continued in rank in FY 2010 from their respective prior years.

Excluded were all members of the Faculty of Medicine except basic scientists, all Clinician Educators, faculty members who were on unpaid leave of absence, faculty who had chosen phased retirement, and Deans of all Schools. All salaries are converted to a nine-month base.

All salaries reported on a 12-month basis for the purposes of this analysis, are adjusted to be comparable with the salaries reported on a 9-month basis.

Female faculty members are weighted using male weights. Male weights are calculated as a ratio of male faculty in each school/area to the total number of male faculty at Penn. Percent difference is calculated as the difference between male and female salaries divided by the female salary. Negative percent differences occur when the female salary exceeds the male salary.

SCESF Recommendations and Questions for the Administration for 2009-2010

The complete version of the report, (see www.upenn.edu/almanac/volumes/v57/n23/contents.html) has a "Conclusions" section giving extensive discussion of the current economic status of the faculty and of conditions of concern going forward. This may be of interest to members of the faculty. The report then proceeds to recommendations to and questions for the administration. These, along with the administration's responses are as follows.

1. Salary Competitiveness

To provide high-quality instruction, research, and service, the University must maintain and attain faculty salaries at levels that are highly competitive with salaries provided by peer universities, while simultaneously sustaining other components of university operations.

SCESF Recommendations

a) Mean salaries at Penn have fallen behind the comparison groups in the AAU Data Exchange in a number of areas (e.g., compare first and last columns in Table 4 on either the traditional or the more robust measure we discussed above). The SCESF recommends that priority be placed on increasing mean salaries to competitive levels for the faculty groups that have fallen behind.

The Provost's Office agrees to explore apparent changes in the competitive standing of fields identified by the SCESF report and to explore with deans corrective actions that may be justified and financially feasible. FY 2009-2010 was an atypical year, during which University budgets had to contend not only with sharply decreased returns from endowment funds, combined with rising costs of financial aid to undergraduate and graduate students. The University initiated strong measures to contain costs, which included limitations on hiring, staff reclassifications, and informal salary freezes. Never-

theless, the vast majority of Penn salaries for all ranks and all schools (33 of 41) remain within the top ten institutions of their cohorts and the salary differences measured among institutions for specific ranks and fields is small (See Table 10).

b) We note that there is room for improvement for faculty in many of the rank by school/area comparisons (Table 4). Moreover, the gaps in mean salaries between full Professors at Penn and Full Professors at Stanford, Princeton, Chicago, and Yale increased between 2005-2006 and 2009-2010 (Table 5), other potentially competitive universities in fact overtook Penn, and most of the universities below Penn gained on Penn. The question arises whether the University can retain and attract the highest-quality faculty members unless faculty salaries are in the top group. Our competitors appear to be setting budgetary priorities as if there was an active market for university faculty; and given the quality and professional visibility of the Penn faculty, persistent decay in this regard poses a long-term danger to the University. Aggressive responses to individual retention problems considered in isolation do not represent a viable response to the broader pattern of declining external competitiveness coupled with internal inequity. This is a much larger problem. It has been growing for some time. It warrants a systemic response.

Comparative data on faculty salaries at our peer institutions deserves serious consideration. The President and Provost are committed to the principle that Penn should offer highly competitive faculty salaries and to maintain the University's strong investment in its faculty, recognizing that some of our peer institutions have far greater financial resources than Penn.

c) Even though priority should be placed on regaining Penn's competitive level in the academic fields identified above, the SCESF recommends that equal priority be given to recognizing and rewarding with salary increases distinguished performance of fac-

SCESF Recommendations and Questions for the Administration for 2009-2010, Continued

ulty members who choose not to seek, or use, attractive offers of external appointment to negotiate salary increases. This is in part an issue of equity, in part an issue of morale, and in part an issue of not creating problems for the University in the future. The SCESF recognizes that these are decisions taken at the Dean- and Department Chair levels but observes that decision-makers at those levels are often keenly aware of budget constraint issues. The Committee recognizes that the Guidelines published annually are explicit on this matter but feels that explicit additional guidance from the Provost downwards would be very helpful in this matter.

The yearly review process is designed to identify distinguished performance, and salary increases are assigned according to merit. During FY 2009-2010, the size of the available pool made it more than usually challenging to reward productivity, teaching, and service all at a level that outpaced the CPI.

2. Salary Equity

Inequity among individual faculty salaries by rank within departments (and schools that are organized as single departments) must be identified and eliminated.

SCESF Recommendations

a) The SCESF continues to recommend that the Provost and Deans give consideration to decreasing the number of instances in which faculty members who have performed at least at a satisfactory level are awarded salary increases that are below the annual growth in the CPI (Phil.). In making this recommendation, we realize that the feasibility of awarding increases to faculty members with satisfactory performance at least as great as growth in the CPI depends on the difference between funds available for salary increases and the CPI growth percentage – with the larger the positive difference, the greater the feasibility of providing salary increases of at least the CPI growth percentage. We also recognize that there may be periods of financial stringency as in the 2009-2010 fiscal year. But much important work within the University goes on, on an essentially voluntary basis. We fear that extended declines in real compensation will have marked adverse effects on the University not just through departures but through the consequences of depressed morale.

FY 2009-2010 was a year of great financial stringency, which we hope will not be repeated. Extended declines in real terms of faculty compensation are not in the interest of the University or the schools. As always, the schools determine the size of their overall faculty salary pools in conjunction with their overall budgets, which must cover multiple activities and commitments.

b) Tables 2 and 3 give information about the percentage of faculty members receiving increases less than the rise in the cost of living, but they give data only for a single academic year. The real cost to the faculty member of a series of increases each of which is only slightly below the CPI growth percentages could be significant. In general, it would be useful to supplement Tables 2 and 3 with information cumulating increases and changes in the cost of living over a longer time interval. The Committee does not currently see such data and therefore cannot currently comment on whether or not this is a problem and, if it is, what the extent of the problem might be. The Committee asked last year to see such data in the future. The Committee continues to want to discuss with the Provost's Office what an appropriate measurement frame might be.

The Provost's Office agrees to explore this request with the Office of Institutional Research and Analysis.

c) In previous reports, the SCESF observed considerable variability in median faculty salaries across Penn's 14 schools/areas. The Committee understands that both school/area finances and external conditions will inevitably influence such figures. Information about the extent of this variability and its course over time is nonetheless of ongoing interest. The Committee would like to receive and analyze this data again in the future.

Because salaries are funded almost exclusively from the budgets of individual schools, and because schools operate within a variety of distinctive market pressures, there has been and will continue to be variability in faculty salaries among the schools. The Provost's Office will continue to share data with SCESF on this variability and to discuss its implications with the committee.

3. Gender Equity

Data in Table 12 show that average salaries are lower for women than for men faculty, especially for Full Professors, even after weighting the data to reflect differences in the gender distribution of faculty by school and area. The suggestion of gender inequity in faculty salaries is troubling. This pattern for Full Professors has been unchanging since FY 2005. For assistant professors there is close equality, while for Associate Professors median salaries are similar, but men have an advantage in mean salaries. The results for Assistant Professors this year seem anomalous but likely to be transitory.

SCESF Recommendation

The SCESF last year recommended that the Provost's Office place priority on identifying the causes of observed gender differences in salaries and addressing any inequities that are not attributable to legitimate forces. In response, the Provost's Office noted that the 2009 Gender Equity Report found relatively few significant differences by gender when years of experience, department, and school are considered. It is not entirely apparent that statistical significance should be the criterion for action given the relatively small number of women in the analyses. Various questions suggest themselves. What is happening to the size of the differences? Is there a "sea" of negative (albeit individually insignificant) signs? What happens when you control for the interdependence across the cells? Last year the Provost commented that the issue would require further study. The Committee would like a briefing on such further study as has taken place and concrete plans for whatever more may seem, after discussion with the Committee, to be in order.

The Provost's Office is committed to gender equity in salaries. While we are pleased to see that the differences between men's and women's salaries seems to be relatively

small and declining over time, we will continue to monitor salary equity and we will ask IR&A to do further statistical analyses of salary data in order to clarify the issue.

4. Faculty Benefits

As faculty benefits at Penn compared with peer institutions have not been examined since the 1998-1999 report, the SCESF requests that the Provost's Office provide this information for next year in accordance with what was done in 1998-1999. Furthermore, going forward, we believe that, as recommended in prior reports, benefits should be reviewed to ensure competitiveness and appropriateness, roughly every five years. Although the Provost indicated in previous SCESF reports that this was a timely request, including last year's, we believe that this process has not yet been initiated.

SCESF Recommendation

Undertake the report on faculty benefits in the next SCESF report.

The request for a report on faculty benefits every five years is reasonable, and the Provost agrees to work with SCESF and with the Vice President for Human Resources to undertake such a study, which would parallel that done in 1998-1999, to permit comparability.

5. Further Information for Analysis

The SCESF would like some more information.

The requests listed below for additions to existing tables are reasonable, and we would be happy to discuss with SCESF and with IRA during the spring term their incorporation into the compilation of data for next year's report.

a) Table 4 gives the rank of mean salaries by School (and occasionally sub-School category) relative to comparable units in the AAUDE survey. The Table is grouped by Penn faculty rank i.e. the Full Professors in each of the many groups, then the Associate Professors in each group, then the Assistant Professors. Five columns of annual figures present a history for each row's relative pay. The layout of the Table encourages the reader to compare how well given rank faculty are paid (relative to other universities) across Schools (etc.). Changes in position in this Table may to some extent represent redistribution across ranks within Schools. They may, however, to some extent represent policies or resource constraints within individual Schools. It seems to the Committee very likely the case that whatever causes there are lie within Schools.

SCESF Recommendation

The Committee thinks it might promote discussion of these causes, and more generally greater transparency in the resource allocation process, by reorganizing Table 4. Instead of grouping the lines by rank, they could be grouped by administrative units: first the Annenberg Full, Associate, and Assistant Professors, then the Dental Medicine Full, Associate, and Assistant Professors, then all the ranks for the Design School, and so forth. The Committee would like to discuss with the Administration its views on the pros and cons of doing this going forward.

The Committee is also concerned that the shifts in comparison set sizes over time in the individual lines of Table 4 may obscure larger patterns. The Committee is contemplating creating an additional table giving explicitly percentiles, deciles, or some other such aggregation as another way of making the trends in this Table more transparent.

b) Table 5 presents percentage differences in mean academic base salary levels for Full Professors at a sample of major research universities over a five-year history. Each column is calculated relative to the Penn absolute figure that year. Trends in these figures are not as easy to pick out as they might be.

SCESF Recommendation

The Committee would like to explore possible forms for a supplementary Table or graph, to be routinely published going forward, highlighting changes in these positions over time.

c) Tables 6, 7, and 8 give first, second, and third quartile increase in percentages for Full Professors continuing in rank, Associate Professors continuing in rank, and Assistant Professors continuing in rank, by School and sub-school unit. These figures would be much more meaningful compared to something.

SCESF Recommendation

The Committee requests that going forward, a column be routinely added to each of these three Tables giving the inter-quartile range for each row as a percentage of the median. The Committee would also like to publish the means for in these Tables (for purposes of convenient comparison to the guidelines).

d) Table 12 gives unweighted and weighted academic base salaries for Penn faculty members who have continued in rank broken down by rank and gender. It would be easier to interpret this table if a column could be added to the right of the current right-hand column of the table giving percentage of faculty at each rank who are female.

SCESF Recommendation

The Committee requests that going forward, a column be routinely added to Table 12 as described above.

2010-2011 Senate Committee on the Economic Status of the Faculty

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Sarah Kagan, Nursing
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