Illinois Departmental Salaries Compared to Salaries at Public AAUDE Institutions Including Mercer Cost of Living Adjustments

December 1, 2022

Amy Edwards, Associate Provost & Director Ting Lu, Associate Director **Division of Management Information** University of Illinois Urbana-Champaign

Executive Summary

Methodology:

Tenure-system faculty salaries at Illinois were compared to those at public peer institutions using data collected for the 2021-22 academic year by the Data Exchange group of the American Association of Universities (AAUDE). Mercer data was used to apply cost of living (COL) adjustments for 2021-2022.

The data exchange is voluntary. Even though twenty-seven private institutions participate in the data exchange, their identity is masked. All private institutions are excluded from this study due to the fact that their salaries could not be adjusted because the name and location are masked.

Results:

Table 1a shows a comparison of 2020-2021 COL data to 2021-2022 COL data. The number of departments whose COL adjusted salaries are \$500 or more below their peers has dramatically decreased at all ranks; and the number of departments with COL adjusted salaries of '\$500 or more above peer mean' has dramatically increased at all ranks.. The campus-wide deficit decreased from \$15.05 million in the COL adjusted FY2021 data to only \$5.33 million in the COL adjusted FY2022 data.

Table 1a. Summary of Salary Comparisons by Department and Rank Including Cost of Living Adjustments Academic Year 2021-2022 (2020-2021 COL numbers are in parenthesis for comparison)

Number of Illinois departments where mean salary for this rank was:	Full Professors	Associate Professors	Assistant Professors	All Ranks
\$500 or more below peer mean	34 (53)	20 (51)	29 (66)	
Within \$500 of peer mean	3 (5)	8 (4)	9 (1)	
\$500 or more above peer mean	41 (20)	50 (23)	40 (11)	
No peers were found or Illinois dept had no faculty at that rank	1 (1)	1 (1)	1 (1)	
Salary increment needed to adjust to match peer mean	4,038,800 (9,635,327)	670,771 (3,070,236)	618,694 (2,346,521)	5,328,265 (15,052,083)

Runzheimer data was used to apply COL adjustments for 2020-2021

Table 1b shows a comparison of 2021-2022 non-COL data to 2021-2022 COL data. This table displays consistent results across all faculty ranks. The number of departments with COL adjusted salaries of '\$500 or more below peer mean' is much lower than the number of departments with non-COL adjusted salaries of \$500 or more below peer mean' at all ranks. The number of departments with COL adjusted salaries of \$500 or more above peer mean' is much higher than the number of departments with non-COL salaries of \$500 or more above peer mean' at all ranks. As expected, the campus-wide deficit decreased from \$27.65 million in the non-COL FY2022 data to \$5.33 million in the COL adjusted FY2022 data.

Table 1b. Summary of Salary Comparisons by Department and RankIncluding Cost of Living AdjustmentsAcademic Year 2021-2022(2021-2022 non-COL numbers are in parenthesis for comparison)

Number of Illinois departments where mean salary for this rank was:	Full Professors	Associate Professors	Assistant Professors	All Ranks
\$500 or more below peer mean	34 (68)	20 (65)	29 (71)	
Within \$500 of peer mean	3 (1)	8 (1)	9 (1)	
\$500 or more above peer mean	41 (9)	50 (12)	40 (6)	
No peers were found or Illinois dept had no faculty at that rank	1 (1)	1 (1)	1 (1)	
Salary increment needed to adjust to match peer mean	4,038,800 (18,205,628)	670,771 (5,193,867)	618,894 (4,253,843)	5,328,265 (27,653,338)

Salary deficits vary by department and college. While some units appear to be very competitive, with mean salaries at all ranks well above the mean of their peers, other units show serious deficits. Table 2 shows a summary by college of average salaries and the apparent salary deficit compared to the academic salary budget of each unit. Table 3 shows the mean salaries of Illinois and the peer institutions by department.

Comparisons of mean salaries by rank and discipline, of course, ignore many other factors critical in the determination of salary levels. Presumably, careful selection of peer institutions will control for any confounding effect of the overall quality of a faculty. Length of time in the profession is, perhaps, the most glaring omission in this study. If an Illinois department's full professors, for example, were ten years younger on average than the professors at peer institutions, we would expect the Illinois faculty to have lower salaries. Table 4 shows average age by department and rank for Illinois, its peers, and all public departments in the same discipline.

Methodology

Data source:

Annually, the American Association of Universities Data Exchange group (AAUDE) compiles faculty salary statistics from large research universities in the USA. The AAUDE sends its participants an instruction manual to ensure consistency of data across institutions. The University Office of Planning and Budgeting completes the annual AAUDE salary submission for Illinois and provides the Division of Management Information (DMI) a copy of the AAUDE faculty salary data for use in this study.

The database contains the mean, maximum, and minimum annual 100% 9-month and 12-month salary, and full-time equivalents (FTE) for faculty appointments by rank, department and institution. All department records are labeled with the department, college, and institution name, as well as a CIP (Classification of Instructional Programs) code. As of 2006-07, private institution identities are masked and we cannot select peers from these institutions.

Definition of faculty:

All individuals with appointments active in the final budget file with class of regular, research or cooperative extension faculty and rank of full, associate or assistant professor for FY22 were identified. The following were excluded from the study:

- Anyone whose total university appointment is less than 100%.
- Anyone who had less than 50% appointment in the selected faculty ranks.
- Administrators at the assistant dean or higher level rank

Note that Library faculty members are excluded. Department head and chair salaries are included, as are salaries of persons on sabbatical or leave provided the full annual salary is included in the budget file.

Assignment of faculty FTE & salary to departments:

When a faculty member's appointments are split among several departments, the FTE and salary are reported in each appointing department. Illinois data from multiple departments was combined into one where appropriate. For example, all faculty in the College of Veterinary Medicine were reported together.

Definition of salary:

Salary is defined as regular contract salary for appointments lasting at least 9 months; administrative stipends are included. Salaries are reported for faculty with 9-month appointments, and for those with 12-month appointments, salaries are rescaled to be comparable to 9-month salaries.

Matching of Illinois departments with peers:

Peer schools were selected by Illinois departments from the list of public AAUDE participants (Appendix B). Every few years, colleges and departments are invited to update their departmental peers by sending DMI new lists. This year, all colleges and departments were invited to review, and 33 departments have made changes to their peers based on many factors, such as those with similar comparability and competency.

All participating AAUDE institutions have agreed that any reports or summaries produced for general distribution should be aggregated, with no individually-identified details for an institution. Because of this restriction, we cannot display any peer data unless at least three peers are selected for a department.

Each department in the AAUDE database is also assigned a 6-digit CIP code to identify the discipline of the department. This CIP code was used to identify "All Other Schools" as described below.

Computations:

For each Illinois department, we computed total FTE and salary means for:

- All other schools: All departments in the sample with the same CIP code as the Illinois department, plus the peers selected. Excludes Illinois.
- All peers: All public peer departments chosen by the Illinois college or department. Excludes Illinois.
- Illinois: The Illinois department.

The following statistics were produced for each department and are shown in Table 3:

- Total **FTE** (full-time equivalents) faculty by rank
- **Mean 9-month salary** by rank. Salary means are weighted by the FTE. In addition, all 12-month salaries in the database were multiplied by 9/11 to obtain comparable nine-month salaries.
- **Illinois minus Peer:** The difference between the Illinois salary and the peer mean salary. If no peers were found for a department, we did not compute a salary difference for that Illinois department.
- **Department deficit:** The salary deficit for the department was computed from the FTE times the deficit at each rank where there was a deficit. Ranks where the Illinois faculty salary was higher than the peers were not included in the deficit calculation, since reallocation of salary dollars away from tenured faculty members is generally not an option.
- **Deficit as a percent of academic salary base:** The total academic salary budget for the year for the department was obtained from the Illinois *Campus Profile* and the department deficit is shown as a percent of the academic salary budget.

Acknowledgement

We are grateful for the provision of this data from the University Office of Planning and Budgeting.