Broad Investigation of Raises & Compensation Increases

Administrators, Staff, and A&P versus The Faculty

Notes

We have two main data sets:

1.) The budgeted salaries of employees as of November 1st for calendar years 2012 through 2023. This data set is from Matthew Campbell in OIR.

2.) Total compensation of the employees, including salaries and other sources of earnings (summer, overload, supplemental, etc.) for each *fiscal year* between 2013 and 2023. This data set is from Bryan Elmore in Budget Services. Note that "fiscal year t" starts on October 1st of calendar year "t-1" and ends on September 30th of calendar year t. For example, we are currently in fiscal year 2024, which began on October 1st, 2023, and will end on September 30th, 2024. Hence, the most recent round of raises is not yet reflected in this data set.

There are 13,078 unique individuals in the budgeted salary file (Salary file). 11,425 of them have been full-time employees (FTE=1) between 2012 and 2023 at least once. For some employees, the salary increases cannot be computed. For example, there is no salary increase for newly hired employees from the previous year (NEW). Also, some employees' previous year information is not in the data set even though they are not newly hired (DOESN'T EXIST LAST YEAR). The number of employees in these categories over time is shown in Table 1:

Table 1
The Number of Employees

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Calendar Year	All FTE=1 Employees	New Employees	Doesn't Exist Last Year	Employees For Whom Salary Increases Can Be Computed	Title Change	No Title Change
2012	4,682	NA	NA	NA	NA	NA
2013	4,742	516	0	4,226	480	3,746
2014	4,830	503	5	4,322	577	3,745
2015	4,877	491	20	4,366	503	3,863
2016	4,609	514	14	4,081	562	3,519
2017	5,108	660	273	4,175	522	3,653
2018	5,183	606	18	4,559	690	3,869
2019	5,338	626	46	4,666	765	3,901
2020	5,398	546	18	4,834	520	4,314
2021	5,497	653	22	4,822	615	4,207
2022	5,570	747	36	4,787	888	3,899
2023	5,933	881	39	5,013	849	4,164
Total	61,767	11,425	491	49,851	6,971	42,880

There are approximately 3,600 unique job titles associated with employees in the Salary file. To focus on salary increases that are free from promotions, we initially study employees whose titles this year are the same as their titles in the prior year. For example, if an employee was an Assistant Professor in both

2014 and 2015, then this employee was categorized in the NO TITLE CHANGE group in 2015. However, if this employee's title in 2015 was Associate Professor, then this employee would be grouped within the TITLE CHANGE category. The numbers of employees in each of these groups are in columns six and seven in Table 1. Columns 3, 4, and 5 sum up to column 2. Columns 6 and 7 add up to the figures in column 5.

No Title Change Analysis

In this section, we will study the salary increases of the employees in column seven of Table 1, i.e., full-time employees whose titles did not change from the past year.

We classified each employee into one of six groups based on their job titles:

1. *Administrators* (e.g., Presidents, Vice Presidents, Provosts, Deans, Associate Provosts, Associate Deans, etc.);
2. *Staff and A&P* (e.g., A wide array of Staff and A&P employees);
3. *Department Chairs*;
4. *TT Faculty* (e.g., Assistant, Associate, Full, and Titled Professors);
5. *Lecturers* (e.g., Lecturers and Senior Lecturers);
6. *Other Academics* (e.g., Visiting, clinical, extension, and research professors, instructors, postdocs, and so on).

The number of employees in each of these categories over time is displayed in Table 2. Columns 2 through 7 add up to the column 7 of Table 1.

Table 2
The Distribution of Employees by Appointment Type

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Administrators	Staff and A&P	Dept. Chairs	TT Faculty	Lecturers	Other Academics
2013	64	2,516	41	836	34	255
2014	56	2,536	46	829	35	243
2015	68	2,613	47	828	56	251
2016	71	2,385	38	779	59	187
2017	70	2,417	37	832	73	224
2018	67	2,528	40	865	99	270
2019	72	2,518	39	878	103	291
2020	82	2,856	33	896	130	317
2021	78	2,743	41	879	144	322
2022	73	2,474	36	879	125	312
2023	67	2,726	37	866	152	316
Total	768	28,312	435	9,367	1,010	2,988

To compute percentage increases in salary (RAISE) in a particular year t, we used the equation depicted below:

$$Raise_t = 100 \times \frac{Salary_t - Salary_{t-1}}{Salary_{t-1}},$$

where $Salary_t$ and $Salary_{t-1}$ denote an employee's budgeted salary in the current year t and previous year t-1 in the Salary file. In order to aggregate and summarize the raises, we take the simple average within each title category. Extreme raise outliers are excluded, and these averages are shown below in Table 3.

Table 3
Percent Annual Salary Increase by Job Title Category
(Not Adjusted for Inflation, No Title Changes)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	All Employees	Administrators	Staff and A&P	Dept. Chairs	TT Faculty	Lecturers	Other Academics
2013	2.81	4.01	2.77	3.68	2.78	3.59	2.84
2014	3.05	3.01	3.25	2.72	2.61	2.29	2.67
2015	4.14	4.70	4.35	3.90	3.61	3.35	3.70
2016	4.85	5.30	5.11	4.11	4.15	3.92	4.70
2017	3.82	3.96	3.79	4.34	4.03	3.24	3.41
2018	3.95	4.38	3.95	3.37	4.05	2.93	4.06
2019	4.00	4.81	4.03	3.53	4.00	3.98	3.57
2020	0.26	0.17	0.28	0.05	0.15	0.00	0.59
2021	3.56	4.05	3.50	3.61	3.71	3.27	3.62
2022	7.29	7.09	8.16	7.64	5.26	5.94	6.70
2023	6.06	6.40	7.23	3.66	3.32	3.24	5.10

For example, the statistic 3.05 in the 2014 row of column 2 indicates that an AU employee's salary in 2014 was, on average, 3.05 percent greater than her/his salary in 2013. An administrator experienced a 6.40 percent increase in her/his budgeted salary in 2023, while a TT faculty member's increase was only 3.32 percent in 2023.

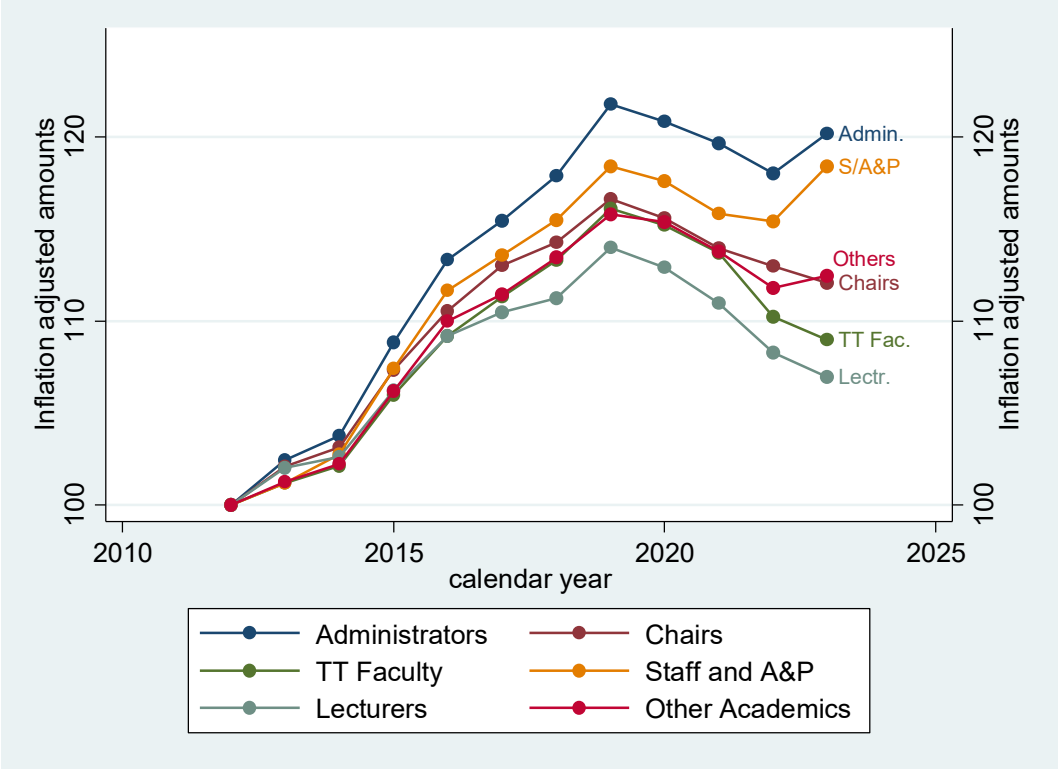
The raises in Table 3 are not adjusted for inflation, i.e., overall increases in prices throughout the economy. Because the prices of goods and services are rising over time, the purchasing power of dollar salaries is decreasing over time. For example, one dollar 10 years ago cannot buy the same amount of goods and services today. Accordingly, we must convert these nominal figures to real figures to study the purchasing power of employees' earnings. To do this, we employ the following formula:

$$Real\ Salary_t = 100 \times \frac{Salary_t}{CPI_t},$$

where $Salary$ is the nominal figure, and $Real\ Salary$ is the inflation-adjusted value. CPI stands for the Consumer Price Index, and it measures the changes in the purchasing power of dollars over time. The value of CPI shows the change in overall prices in an economy relative to the base year. These data are obtained from the Bureau of Labor Statistics. The annual CPI series is for all items for urban consumers in the South. We made adjustments to this series such that the base year is 2012. That is, the 2012 CPI value is normalized to 100. Put differently, all real values are in terms of 2012 dollars.

To illustrate the effects of the differentials in salary increases between title categories (summarized in Table 3), we implemented the following thought exercise using real salaries. Suppose there are six full-time AU employees, each in one of the title categories: Administrator, Staff and A&P, TT Faculty, and so on. Assume that these full-time employees' salaries were $100 in 2012. Also, assume that they have not received any promotions or changes in their job title. How would their base salary have changed over the years if they had received the average percent salary increase in their broad title category after adjusting for inflation? The results of this salary growth indexing exercise are shown in Figure 1.

Figure 1
The Evolution of a $100 Salary in 2012 Over Time by Job Title Category
(Adjusted for Inflation, No Title Changes)



We also analyzed the total compensation of employees using the data set provided by Bryan Elmore (Compensation file). We merged the information in the Compensation file with the Salary file. Occasionally, an employee's earnings in a fiscal year appear smaller than their budgeted salary for that fiscal year. This is most likely because these employees left the university in the middle of the fiscal year or perhaps took unpaid leave during some portion of the year. We exclude such employees from the total compensation analysis to avoid convoluting the analysis. We repeated the analysis performed in Figure 1 using total compensation rather than merely base salary. Note that the most recent round of raises in 2023 will not be reflected in this analysis. The results are displayed in Figure 2:

Figure 2
The Evolution of $100 Compensation in 2012 Over Time by Job Title Category
(Adjusted for Inflation, No Title Changes)

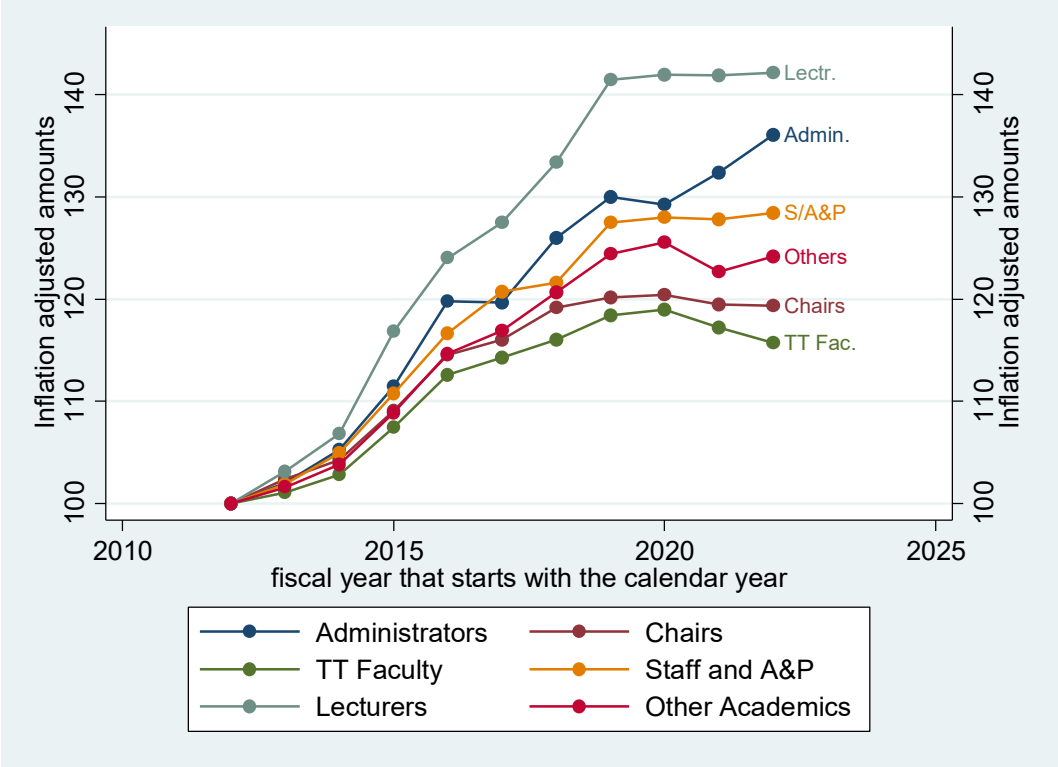


Figure 1 shows that the real base salaries of some title categories have decreased in recent years, but the inflation-adjusted total compensations of the same categories are not necessarily decreasing, as illustrated in Figure 2. A notable example of this is the Lecturers group. Average compensation in areas outside of the base salary, such as summer and overload compensation may be increasing at faster rates than base salary during certain periods. Note that this can be due to both the increase in the quantity of summer and overload courses as well as the increase in the pay rate for such additional courses.

The Compensation file also contains information on the sources of total compensation. Using these data, we studied the make-up of each title category's total compensation over the years. Tables 4A-4D below show the major components of total compensation within a fiscal year for selected title categories. Note that the year column in these tables indicates the calendar year when the fiscal year started. For example, the 2013 row shows the information about the 2014 fiscal year.

Table 4A
Major Sources of Earnings of Lecturers (% total earnings)

year	Regular	Summer Term	Faculty Overload	Salary Supplement	ADL
2013	79.4	14.5	0.9	3.1	2.0
2014	80.3	12.5	1.5	3.3	2.5
2015	78.8	13.7	0.9	2.9	3.8
2016	78.1	14.1	1.0	3.4	3.4
2017	78.9	12.6	1.7	2.5	3.9
2018	77.2	14.6	2.0	2.5	3.0
2019	75.5	16.5	3.6	1.9	2.2
2020	76.6	14.1	4.9	1.9	1.4
2021	75.4	16.3	5.8	0.0	1.9
2022	76.7	15.0	4.7	0.0	2.6

Table 4B
Major Sources of Earnings of TT Faculty (% total earnings)

year	Regular	Summer Term	Faculty Overload	Salary Supplement	ADL	Supplemental	PIL
2013	82.8	11.5	0.2	2.5	0.8	1.1	0.3
2014	82.3	11.1	0.3	2.9	0.9	1.2	0.5
2015	81.4	11.6	0.4	2.7	1.0	1.4	0.6
2016	81.2	11.3	0.4	3.4	1.0	1.4	0.9
2017	80.7	12.4	0.6	2.5	1.1	1.3	0.8
2018	80.8	12.8	0.6	2.4	0.6	1.5	0.5
2019	81.3	13.2	0.7	1.1	0.8	1.6	0.7
2020	81.2	13.0	0.9	1.1	0.8	1.9	0.5
2021	79.7	14.1	1.0	0.0	1.1	2.1	1.1
2022	79.9	14.7	0.9	0.0	0.9	1.9	0.8

Table 4C
Major Sources of Earnings of Staff and A&P (% total earnings)

year	Regular	Over Time	Summer Term	Salary Supplement	GAF	Supplemental	ADL
2013	93.1	1.2	0.2	3.4	0.4	0.4	0.4
2014	89.8	1.0	0.1	3.7	2.8	0.8	0.3
2015	89.8	1.3	0.2	3.5	3.2	0.8	0.3
2016	89.2	1.2	0.1	3.7	3.2	1.0	0.4
2017	84.4	1.2	0.1	2.3	6.6	3.9	0.5
2018	85.4	1.1	0.1	2.4	8.3	1.4	0.4
2019	86.6	0.9	0.1	1.9	8.4	0.9	0.4
2020	86.0	0.8	0.1	1.9	3.9	6.0	0.6
2021	91.7	1.4	0.3	0.0	3.9	1.0	0.8
2022	84.2	1.3	0.1	0.0	5.7	6.8	0.8

Table 4D
Major Sources of Earnings of Administrators (% total earnings)

year	Regular	Salary Supplement	Supplemental	Misc.
2013	92.3	4.7	1.2	0.0
2014	90.6	4.4	1.4	0.0
2015	89.4	5.2	2.3	0.0
2016	81.5	4.5	2.3	8.0
2017	90.4	3.1	3.1	0.0
2018	84.9	2.9	10.4	0.8
2019	92.8	0.6	1.5	4.6
2020	97.2	0.6	1.6	0.0
2021	93.5	0.0	2.8	2.6
2022	91.9	0.0	6.2	0.0

Analysis with Title Changes

The exercises and analysis in Figures 1 and 2 included the sample of employees whose titles did not change from the prior year. However, promotions and job changes are major reasons for salary increases. These changes are typically reflected by changes in the employees' job titles. To incorporate this, we repeated the analysis in Figures 1 and 2 using all employees, regardless of whether their titles changed from the past year. The results are presented in Figures 3 and 4. Note that the only restriction we imposed on this sample is that the employee stayed within the same broad appointment category. For example, an employee who was an associate dean last year and a dean this year is included in the analysis. Within the Chair bin, there is no promotion opportunity. For most chairs, the typical promotional path is to step into an administrator role. To compare apples to apples, we included information from employees who were chairs last year and became administrators this year in the analysis of Figures 3 and 4.

Figure 3
The Evolution of a $100 Salary in 2012 Over Time by Job Title Category
(Adjusted for Inflation, Including Title Changes)

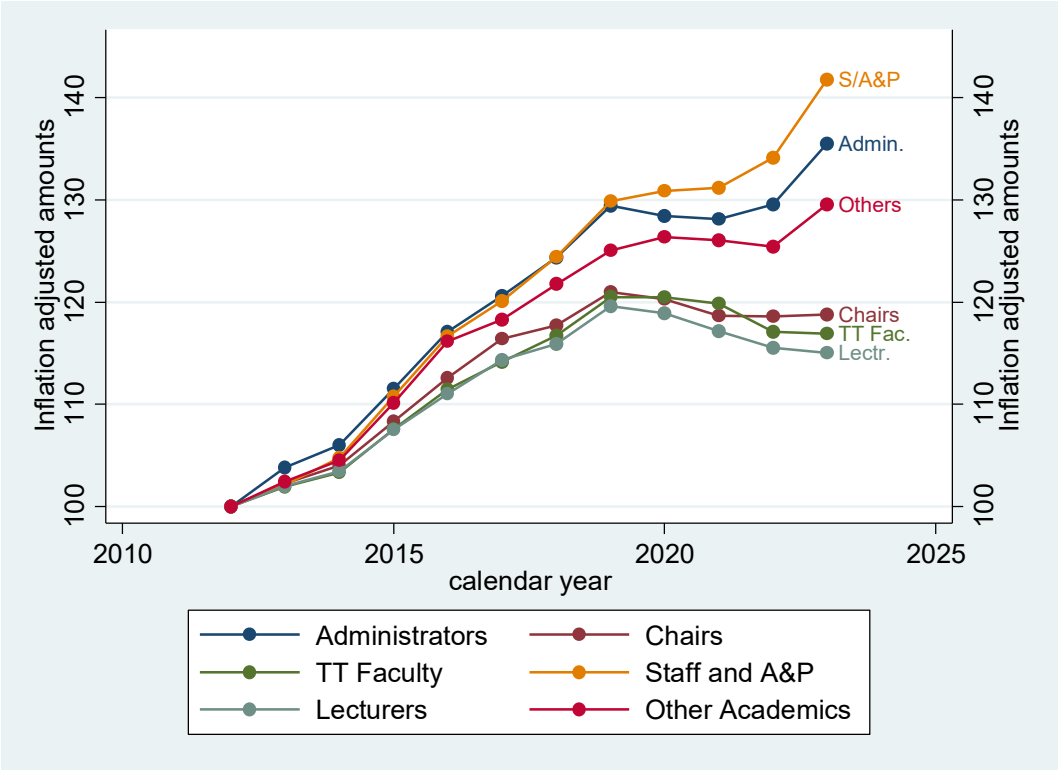
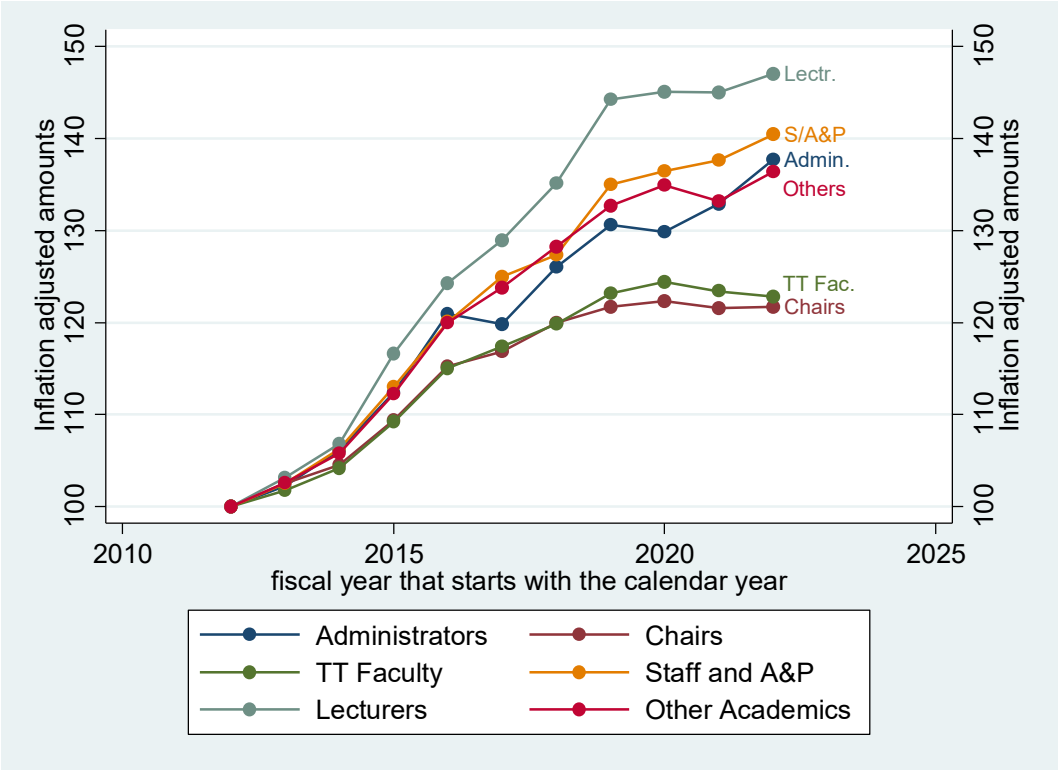
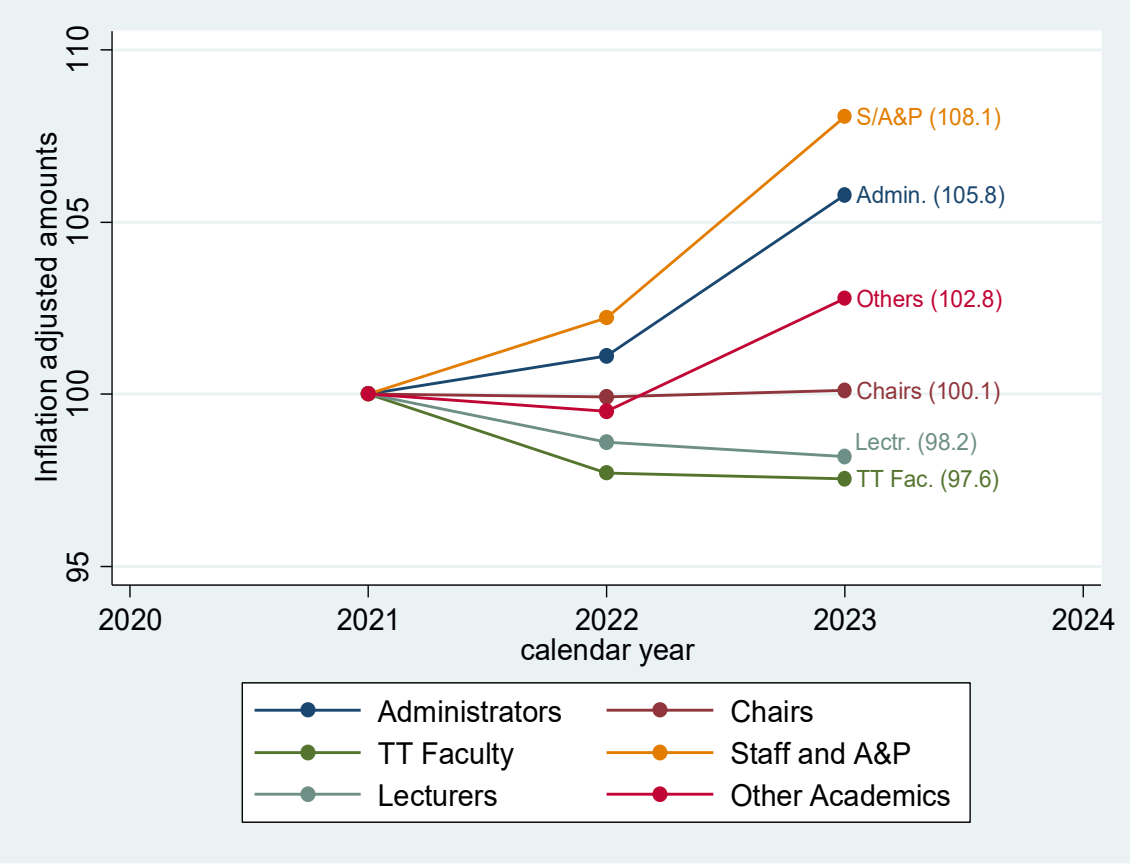


Figure 4
The Evolution of $100 Compensation in 2012 Over Time by Job Title Category
(Adjusted for Inflation, Including Title Changes)



The changes in salaries between the job title categories is particularly pronounced during the final two years of the time series in figure 3. In order to zoom in on these two years, we repeat the $100 salary experiment starting in 2021 rather than 2012. These results are shown in Figure 5:

Figure 5
The Evolution of a $100 Salary in 2021 Over Time by Job Title Category
(Adjusted for Inflation, Including Title Changes)



Nominal Salary Increases and Expenditures

All of the preceding analysis uses percentage increases and corrections for inflation. In order to gain a feel for the type of nominal ($) changes we are observing, we include the tables below regarding the initial average salaries by category (full-time employees) as well as the average nominal increases in salary over time. Given that the categories are of differing sizes, we also include a table showing the total nominal salary increases in each category over time. Notice that nearly $25 million is spent on the Administrators and Staff and A&P categories combined during 2023 (last line of Table 6B). Only a modest fraction of that amount (20% or $5 million) would have been needed to approximately double the raises measured in the TT Faculty and Lecturer categories in 2023.

Table 5
Average Nominal Salaries by Job Title Category

Appointment	Average Salary in 2012
Administrators	184,989
Staff and A&P	50,058
Dept. Chairs	151,932
TT Faculty	89,667
Lecturers	47,126
Other Academics	58,518

Table 6A
Average Increases in Salary by Year by Job Title Category
(Not Adjusted for Inflation, Including Title Changes)

Year	Administrators	Staff and A&P	Dept. Chairs	TT Faculty	Lecturers	Other Academics
2013	9,458	1,704	5,619	2,758	1,560	2,362
2014	7,214	2,382	5,004	2,692	1,586	2,274
2015	10,100	2,743	6,149	3,526	1,792	3,082
2016	12,155	3,287	8,541	4,401	2,348	4,123
2017	9,737	2,651	9,036	4,118	2,530	2,781
2018	11,088	3,209	5,743	4,493	1,876	3,423
2019	13,933	3,205	7,005	4,886	2,718	3,014
2020	306	937	485	849	176	1,261
2021	10,590	3,073	7,023	4,738	2,147	3,481
2022	24,260	6,239	15,922	6,532	4,449	5,662
2023	23,923	6,882	10,732	4,741	2,664	5,171

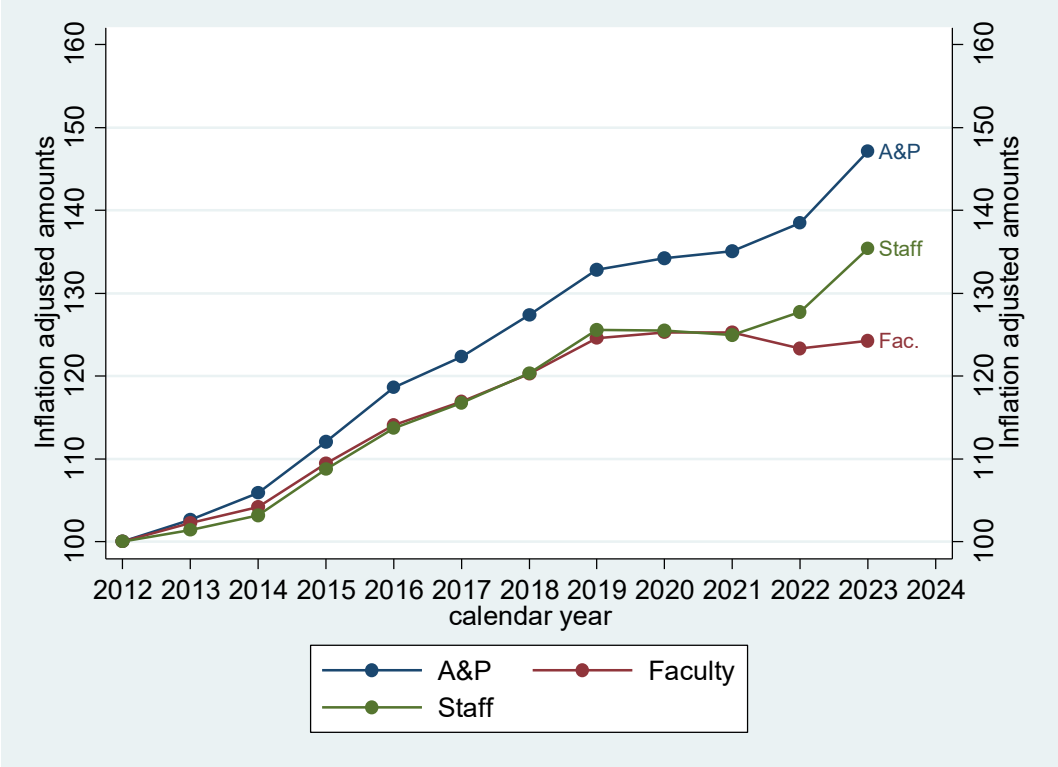
Table 6B
Total Amount of Increases in Salary by Year
(Not Adjusted for Inflation, Including Title Changes)

Year	Administrators	Staff and A&P	Dept. Chairs	TT Faculty	Lecturers	Other Academics
2013	633,660	4,846,039	258,457	2,531,924	53,046	670,897
2014	490,575	7,017,566	240,207	2,428,383	60,250	627,489
2015	727,219	8,188,261	295,133	3,085,216	103,927	853,814
2016	935,913	9,105,056	350,162	3,802,388	145,570	841,077
2017	730,247	7,389,042	370,487	3,730,819	217,620	639,701
2018	798,371	9,785,220	235,450	4,192,099	195,080	1,067,931
2019	1,072,839	9,954,879	301,224	4,627,360	298,990	940,370
2020	25,359	3,009,717	16,500	813,820	23,904	448,778
2021	900,157	9,767,395	301,989	4,557,575	317,796	1,225,433
2022	1,989,340	19,678,910	620,947	6,225,251	631,719	1,930,806
2023	2,057,400	22,887,919	418,533	4,565,145	442,198	1,913,187

Categorical Robustness and the Separation of Staff from A&P:

There is always a degree of arbitrary judgment exercised when grouping employees or job titles into various categories. In order to examine the qualitative robustness of our results, we also repeated the exercise performed in Figure 3 using three generic categories contained in Elmore's compensation data set (Staff, A&P, and Faculty). Using only these three categories, both TT and NTTF faculty are lumped into the Faculty category together with chairs and a portion of our prior "Administrator" category. A portion of our "Administrator" category would also be contained in A&P (such as VPs). The Staff and A&P category is now split off by itself and is distinct from A&P. The results are shown below in Figure 6:

Figure 6
The Evolution of a $100 Salary in 2012 Over Time by Elmore Category
(Adjusted for Inflation, Including Title Changes)



The general properties of a dominant A&P series that accelerates further away from the Faculty series over the past two years remain unchanged. When separated from A&P, the isolated Staff category stays tightly correlated with the generic Faculty category up through 2021. However, over the past two years, the Staff series has mimicked the A&P series and has rapidly increased compared to the Faculty.