
CSU Salary Structure: Gender and Racial Based Pay Gaps



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Prepared by the CSUEU

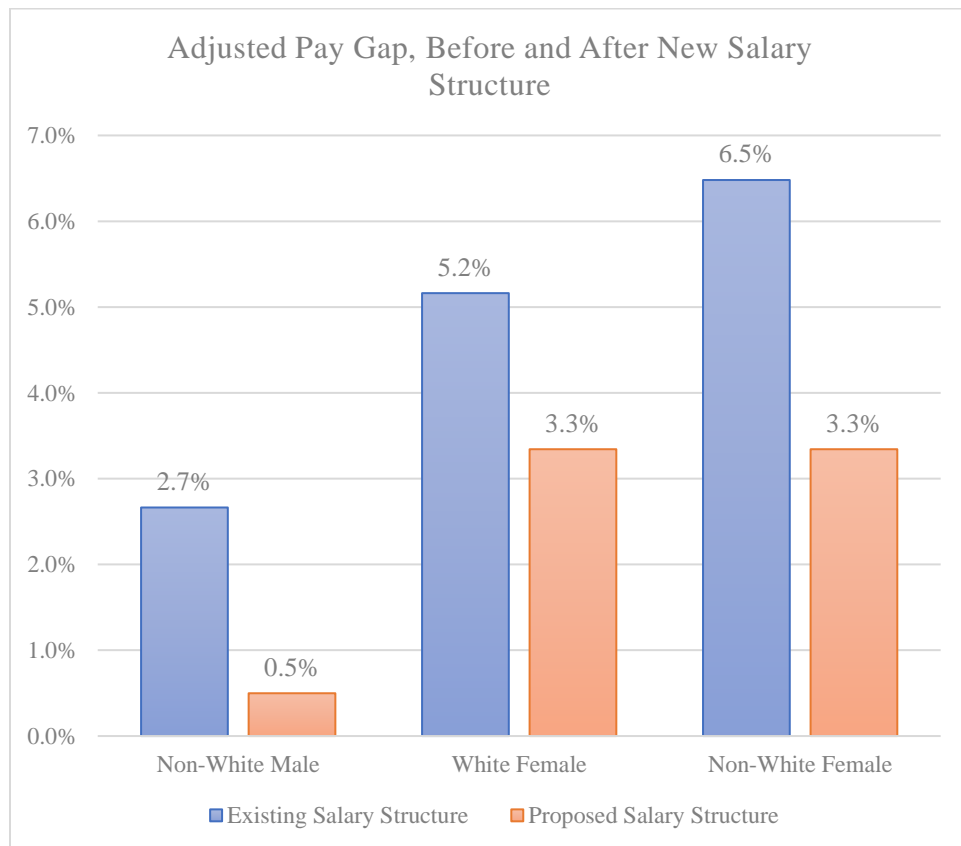
CSU Salary Structure: Gender and Racial Based Pay Gaps - Reduction of pay gaps through movement to STEP system implementation.

Executive Summary

The California State University Employees Union (CSUEU) conducted an analysis of pay for its represented membership (14,000 +) comparing salary across both gender and ethnicity. This analysis was performed for the current pay structure within the California State University (CSU) as well as a model of the proposed STEPS system implementation (based on the recommendations of Mercer salary study).

The results indicate a significant decline in wage gap (compared to White male) for all 3 groups: non-White male, White female, and non-White female after movement to the proposed STEPS system.

Group	Existing Pay Gaps	Projected Pay Gaps under STEPS	Percentage Point Change
Non-White Male	-2.7%	-0.5%	2.2% Decline
White Female	-5.2%	-3.3%	1.8% Decline
Non-White Female	-6.5%	-3.3%	3.1% Decline



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Gender and Racial Pay Gaps

There is well-established literature studying the gender- and racial-pay gaps in the U.S. and abroad. A 2017 study¹ estimated that U.S. women² earned 79% of what men earned in 2010. This unadjusted gender pay gap is larger than the adjusted pay gap, which accounts for factors such as age, education, experience, geography, occupation, industry, and union representation. The 2017 study controlled for several factors and found that the adjusted pay gap was 92% in 2010. According to Pew Research³, the gender wage gap differed significantly by race. In 2015, Black men earned 73% and Hispanic men earned 69% of their White men counterparts. White women earned 82% of White men, while Black and Hispanic women earned 65% and 58%, respectively, of White men. When adjusting for education these proportions were 78% for Black men, 81% for Hispanic men, 78% for White women, 72% for Black women, and 69% for Hispanic women.

The wide range of these estimates is because different studies with different data control for different variables. Controls may give a value that shows what the pay gap is for people doing equal work with equal experience but would ignore structural issues such as discrimination in hiring or promotion, occupational segregation, and barriers to education. Adjusted or controlled pay gap is not necessarily a better measure of pay inequity than unadjusted or uncontrolled – these measures provide different information. For our purposes, we try multiple specifications to estimate both unadjusted and adjusted pay gap with several different controls. The purpose of this analysis is to determine whether the step salary structure proposed by Mercer will improve, worsen, or have no effect on gender- and racial-pay gaps – so our measure of interest is the change in the pay gap projected under the new salary structure.

Study Group, Data and Methods

Many pay gap studies use survey data across large populations with many different job types and employers. Our data has the advantage of being with one employer, in one state, one industry, with variation by city and classification. We have salary data on 13,544 employees in CSUEU bargaining units 2, 5, 7, and 9 in March of 2022. We drop data for 1,136 employees who did not have data on both self-reported gender and ethnicity. We also omit data on 17 individuals identified as non-binary as the sample size was not great enough to allow for adequate comparisons of the other factors. Finally, we drop data on 508 employees who we were not able to determine a new step salary for. We conduct our analysis with a dataset of 11,883 employees.

Our analysis will use White male as a baseline group and assess differences in pay for non-White male, White female, and non-White female. We also estimate pay gaps for a larger set of groups – White female along with Black male and female, Hispanic male and female, Asian male and female, and an aggregate of all other minority groups (two or more, Native American, Pacific Islander), male and female. As the number of control variables increases, precise estimates of the wage gaps for these groups becomes difficult, due to small sample sizes within

¹ Blau, Francine D., and Lawrence M. Kahn. 2017. "[The Gender Wage Gap: Extent, Trends, and Explanations.](#)" *Journal of Economic Literature*, 2017, 55 (3): 789-865.

² We use man/men/male and woman/women/female interchangeably throughout this report.

³ Patten, Eileen. "[Racial, gender wage gaps persist in U.S. despite some progress.](#)" Pew Research, July 2016.

groups. While some coefficients are insignificant, we generally find more severe pay gaps for Black and Hispanic men and women, and an insignificant or positive difference for Asian men and women. Tables 1, 2, and 3 give an overview of baseline wages and the number of employees in our sample belonging to different gender and ethnic groups. Table 1 shows that the average monthly salary for CSUEU employees is \$4,753. Men make about \$436 more than women; White workers make about \$302 less than their Asian counterparts, but \$579, \$901, and \$545 more than their Black, Hispanic, and Other minority counterparts, respectively. In each ethnic grouping, women make less than their male counterparts, with the exception of Black women, who make on average \$33 more than Black men. In the last column of Table 1, we see the breakdown of the 11,883 employees in our sample. They skew significantly female, primarily White and Hispanic, with Asian workers a distant third in numbers. There are 737 Black workers and 374 workers in all other minority categorizations.

Table 1: Mean Salaries by Demographic		
Group	Mean Monthly Pay	Number of Employees
All	\$4,753	11,883
Female	\$4,577	7,099
Male	\$5,013	4,784
White	\$5,045	4,724
White Female	\$4,762	2,747
White Male	\$5,439	1,977
Asian	\$5,347	2,166
Asian Female	\$5,165	1,240
Asian Male	\$5,591	926
Black	\$4,466	737
Black Female	\$4,479	439
Black Male	\$4,446	298
Hispanic	\$4,144	3,882
Hispanic Female	\$4,108	2,440
Hispanic Male	\$4,205	1,442
Other	\$4,500	374
Other Female	\$4,375	233
Other Male	\$4,707	141

These are relatively small populations, especially when conducting analysis across factors such as bargaining unit and campus. To illustrate this, Table 2 and 3 give total numbers and percentage of total campus employees belonging to each ethnic group, as well as the split of men and women.

Table 2: Campus Headcounts of Employees by Ethnicity and Gender

Campus	All	Female	Male	White	Hispanic	Black	Asian	Other
All Campuses	11,883	7,099	4,784	4,724	3,882	737	2,166	374
Bakersfield	256	162	94	107	113	14	15	7
Channel Islands	221	127	94	78	106	11	20	6
Chico	436	242	194	318	58	8	31	21
Chancellor's Office	205	110	95	55	39	18	83	10
Dominguez Hills	352	202	150	56	136	79	69	12
East Bay	395	244	151	114	102	53	108	18
Fresno	491	277	214	193	201	26	61	10
Fullerton	733	438	295	236	242	51	179	25
Humboldt	278	169	109	217	32	2	8	19
Los Angeles	441	275	166	39	256	29	112	5
Long Beach	994	585	409	363	363	75	165	28
Maritime Academy	65	36	29	23	13	11	14	4
Monterey	217	136	81	122	52	9	25	9
Northridge	949	597	352	351	365	69	143	21
Pomona	581	366	215	157	270	28	113	13
Sacramento	697	402	295	319	157	56	131	34
San Bernardino	511	318	193	155	256	48	42	10
San Diego	840	495	345	360	282	53	119	26
San Francisco	758	435	323	210	138	40	352	18
San Jose	727	429	298	220	209	20	256	22
San Marcos	387	258	129	166	166	13	29	13
San Luis Obispo	787	417	370	528	177	9	48	25
Sonoma	273	185	88	178	56	9	19	11
Stanislaus	289	194	95	159	93	6	24	7

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Table 3: Percentage of Employees at each Campus by Ethnicity and Gender

Campus	All	Female	Male	White	Hispanic	Black	Asian	Other
All Campuses	11,883	59.7%	40.3%	39.8%	32.7%	6.2%	18.2%	3.1%
Bakersfield	256	63.3%	36.7%	41.8%	44.1%	5.5%	5.9%	2.7%
Channel Islands	221	57.5%	42.5%	35.3%	48.0%	5.0%	9.0%	2.7%
Chico	436	55.5%	44.5%	72.9%	13.3%	1.8%	7.1%	4.8%
Chancellor's Office	205	53.7%	46.3%	26.8%	19.0%	8.8%	40.5%	4.9%
Dominguez Hills	352	57.4%	42.6%	15.9%	38.6%	22.4%	19.6%	3.4%
East Bay	395	61.8%	38.2%	28.9%	25.8%	13.4%	27.3%	4.6%
Fresno	491	56.4%	43.6%	39.3%	40.9%	5.3%	12.4%	2.0%
Fullerton	733	59.8%	40.2%	32.2%	33.0%	7.0%	24.4%	3.4%
Humboldt	278	60.8%	39.2%	78.1%	11.5%	0.7%	2.9%	6.8%
Los Angeles	441	62.4%	37.6%	8.8%	58.0%	6.6%	25.4%	1.1%
Long Beach	994	58.9%	41.1%	36.5%	36.5%	7.5%	16.6%	2.8%
Maritime Academy	65	55.4%	44.6%	35.4%	20.0%	16.9%	21.5%	6.2%
Monterey	217	62.7%	37.3%	56.2%	24.0%	4.1%	11.5%	4.1%
Northridge	949	62.9%	37.1%	37.0%	38.5%	7.3%	15.1%	2.2%
Pomona	581	63.0%	37.0%	27.0%	46.5%	4.8%	19.4%	2.2%
Sacramento	697	57.7%	42.3%	45.8%	22.5%	8.0%	18.8%	4.9%
San Bernardino	511	62.2%	37.8%	30.3%	50.1%	9.4%	8.2%	2.0%
San Diego	840	58.9%	41.1%	42.9%	33.6%	6.3%	14.2%	3.1%
San Francisco	758	57.4%	42.6%	27.7%	18.2%	5.3%	46.4%	2.4%
San Jose	727	59.0%	41.0%	30.3%	28.7%	2.8%	35.2%	3.0%
San Marcos	387	66.7%	33.3%	42.9%	42.9%	3.4%	7.5%	3.4%
San Luis Obispo	787	53.0%	47.0%	67.1%	22.5%	1.1%	6.1%	3.2%
Sonoma	273	67.8%	32.2%	65.2%	20.5%	3.3%	7.0%	4.0%
Stanislaus	289	67.1%	32.9%	55.0%	32.2%	2.1%	8.3%	2.4%

There are six of campuses with fewer than 10 Black workers out of 23 CSU campuses. For our initial analysis, we will focus simply on the differences from white men for three aggregated groups – White female, non-White male, and non-White female. We will then see if results are meaningful at a disaggregated level.

Regression Results

Using log-linear regression models, we can estimate the percentage salary difference associated with different ethnicity or gender categories with controls such as: time in classification, career level, campus, and bargaining unit. We run these regressions twice – first, with the existing salary as the dependent variable. Next, we use mappings created as part of the salary study to project a new salary for each employee in our sample. We can compare the gender

and racial-based wage gaps under both the current and new proposed salary structure to estimate the impact this structure will have on pay inequity by race and gender.

We start with a simple regression of the logarithm (log) of monthly wages as our dependent variable, and race-gender categories as our independent variables. In all regressions, White male will be our baseline for comparison, and percentages reflect the difference associated with belonging to that group. Percentage differences are calculated by transforming the regression coefficient as is standard in interpreting coefficients in log-linear regressions – an explanation of this calculation as well as regression coefficients and standard errors can be found in our methods appendix.

Table 4 shows the unadjusted percentage differences for non-White men, White women, and non-White women. On average, non-White men make 14.1% less than their White man counterparts; White women make 10.7% less, and non-White women make 17.1% less.

Group	Old Salary Structure	New Salary Structure	Difference
Non-White Male	-14.1%	-10.2%	-3.9%
White Female	-10.7%	-8.8%	-1.9%
Non-White Female	-17.1%	-12.9%	-4.2%

In Table 5, we progressively add controls to our regression to estimate the adjusted pay gap. First, we control for campus specific effects in columns (1) and (4). While these individual campus coefficients are significant, the geographic adjustment has relatively small effects on our pay gap measure, even showing an increase in the pay gaps for non-White workers. In columns (2) and (5), we add controls for Range (a career level indicator used in some CSUEU classifications) and tenure (years spent in classification). These controls for experience and career level have a more noticeable effect. Finally, we account for differences in job type by adding controls for bargaining unit. This also has a significant effect on the pay gaps, and our final adjusted pay gaps are much lower than the unadjusted gaps, which is consistent with existing studies. We again notice that for each group, the corresponding wage gap under the new salary structure is lessened.

Table 5: Adjusted Wage Gaps

Group	Old Salary Structure			New Salary Structure		
	(1)	(2)	(3)	(4)	(5)	(6)
Non-White Male	-16.0%	-9.7%	-2.7%	-13.4%	-7.0%	-0.5%
White Female	-10.2%	-7.3%	-5.2%	-8.2%	-5.3%	-3.3%
Non-White Female	-18.9%	-12.2%	-6.5%	-16.0%	-8.7%	-3.3%
Controls						
Campus	Yes	Yes	Yes	Yes	Yes	Yes
Range	No	Yes	Yes	No	Yes	Yes
Tenure (Years)	No	Yes	Yes	No	Yes	Yes
Bargaining Unit	No	No	Yes	No	No	Yes

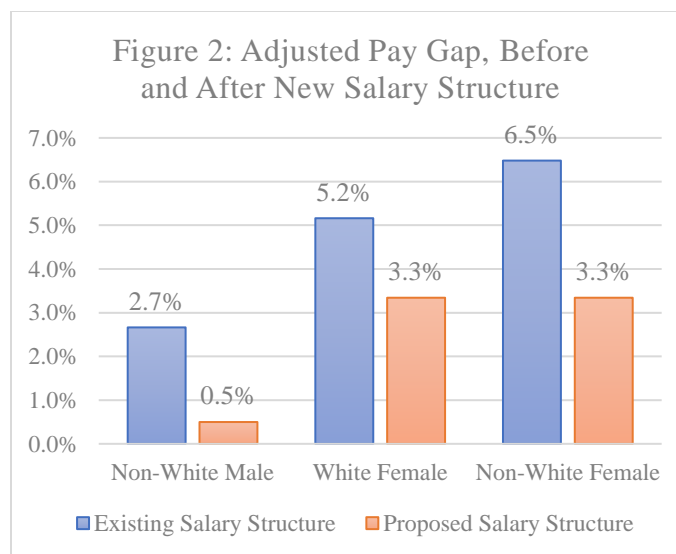
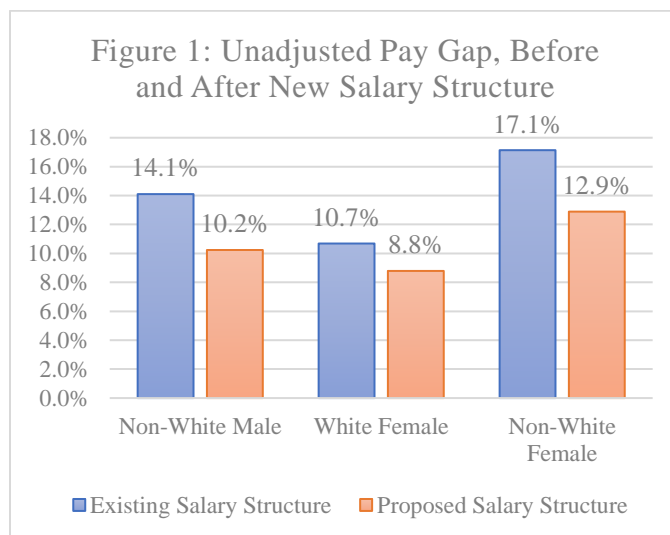
Table 6 shows the estimated difference in pay for non-White men, White women, and non-White women compared to White men. The first three rows present these values in a regression without controls, while the next three are from a regression controlling for years worked, career level, campus, and bargaining unit – our preferred specification from those we tested to develop the adjusted wage gap. The first column presents the pay gaps under the existing salary structure, the second column is an estimate of the pay gap under the new proposed salary structure. The third column shows the percentage point improvement from the existing to new salary structure.

Table 6 - Summary of Wage Gaps, Before and After New Salary Structure

	Category	Existing Salary Structure	New Proposed Salary Structure	Percentage Point Improvement
Unadjusted	Non-White Male	-14.1%	-10.2%	3.9
	White Female	-10.7%	-8.8%	1.9
	Non-White Female	-17.1%	-12.9%	4.2
Controls for Tenure, Range, Campus, and Bargaining Unit	Non-White Male	-2.7%	-0.5%	2.2
	White Female	-5.2%	-3.3%	1.8
	Non-White Female	-6.5%	-3.3%	3.1

These effects are also shown in Figure 1 (Uncontrolled regression) and Figure 2 (Controlled regression). In both specifications, for all three groups, the pay gap decreases with the implementation of the new salary structure. We estimate that for each group, the improvement is between 2 and 4 percentage points. Unadjusted pay gaps are much higher (10.7-17.1 percent) than the adjusted pay gaps (2.7-6.5%), however, these gaps are present and statistically significant for all groups in both specifications. Furthermore, the effects for non-White men were not statistically significant in the regressions using the new salary structure. While the Table indicates the mean estimate for those groups, it is not precise enough to say that these differences are statistically significant from zero. Looking at the adjusted pay gap, the new

salary structure would reduce the existing pay gap for non-White men and women by half or more and reduce the pay gap for White women by more than one-third.



Results by ethnic group

We repeat the unadjusted and adjusted regression specifications for both the old and new salary structure, this time using more detailed ethnic groups – White, Asian, Black, Hispanic, and All Other Non-White. With smaller sample sizes in each group, we see more groups with insignificant coefficients in our models. However, we can notice general trends across these models, namely, a much higher wage gap for Black and Hispanic workers than our estimate of the wage gap for all non-White workers. Table 7 replicates table 6, but with disaggregated ethnic groups. Gray highlighted cells indicate an effect that is not statistically significant. In both

specifications, there are statistically significant pay gaps for both Black and Hispanic men and women. These effects persist with the new salary structure, but decrease between 2.4 and 4.4 percentage points, depending on the specification. Asian males make more than their White male counterparts (although this effect is statistically insignificant in the unadjusted model in the old salary structure), and increase this gap over White men under the new salary structure. Notably, this change is the largest in magnitude in the unadjusted regression, and the lowest in magnitude in the adjusted regression. There are large gaps for the Other Minority category, however, these are often statistically insignificant.

Table 7 - Summary of Wage Gaps, Before and After New Salary Structure

	Category	Existing Salary Structure	New Proposed Salary Structure	Percentage Point Improvement
Unadjusted	Asian Male	0.7%	6.1%	-5.4%
	Black Male	-18.4%	-14.3%	-4.1%
	Hispanic Male	-21.7%	-18.5%	-3.2%
	Other Male	-13.4%	-11.0%	-2.5%
	White Female	-10.7%	-8.8%	-1.9%
	Asian Female	-5.2%	0.1%	-5.3%
	Black Female	-16.1%	-11.8%	-4.4%
	Hispanic Female	-22.8%	-18.9%	-4.0%
	Other Female	-17.6%	-14.3%	-3.3%
Controls for Tenure, Range, Campus, and Bargaining Unit	Asian Male	1.8%	3.3%	-1.4%
	Black Male	-4.9%	-2.5%	-2.4%
	Hispanic Male	-5.2%	-2.8%	-2.4%
	Other Male	-4.8%	-2.2%	-2.6%
	White Female	-5.3%	-3.4%	-1.8%
	Asian Female	-2.8%	-0.8%	-2.0%
	Black Female	-6.7%	-3.7%	-2.9%
	Hispanic Female	-8.4%	-4.9%	-3.5%
	Other Female	-7.4%	-4.2%	-3.2%

Figures 3 and 4 show what each ethnic-gender group in this study makes for every dollar a White man makes, under both the old and new salary structure. For both the unadjusted model (Figure 3) and the adjusted model (Figure 4), we can see that the new salary structure would improve each group's pay relative to their White male counterparts.

Figure 3

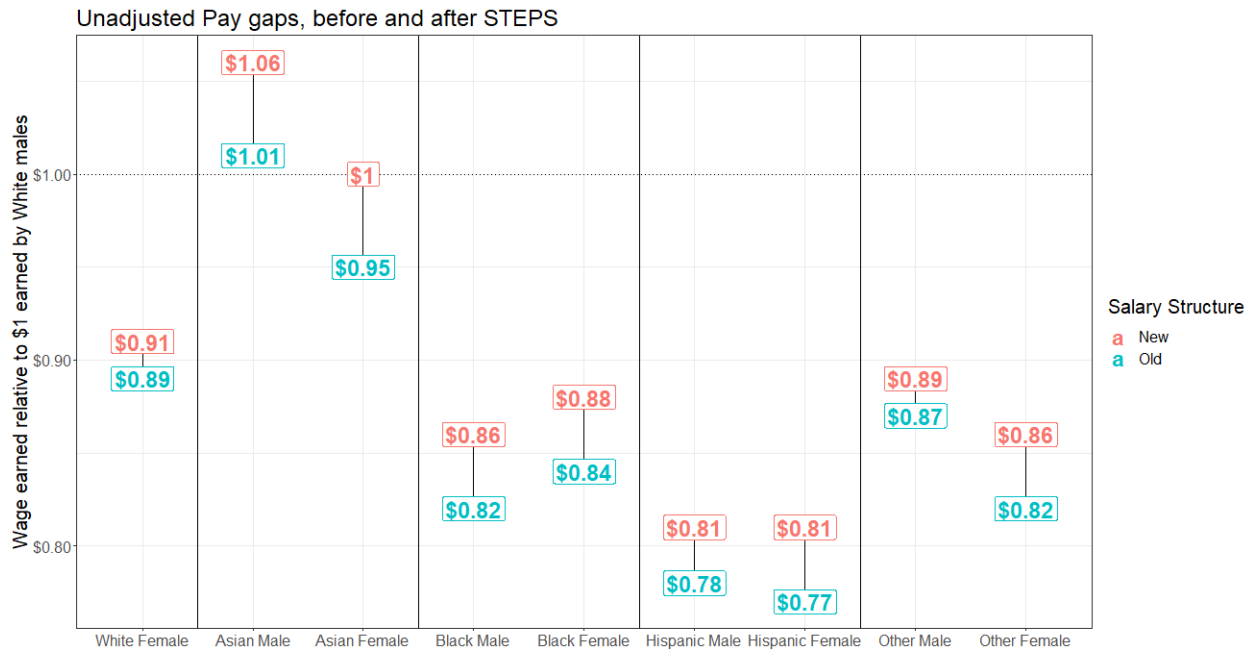
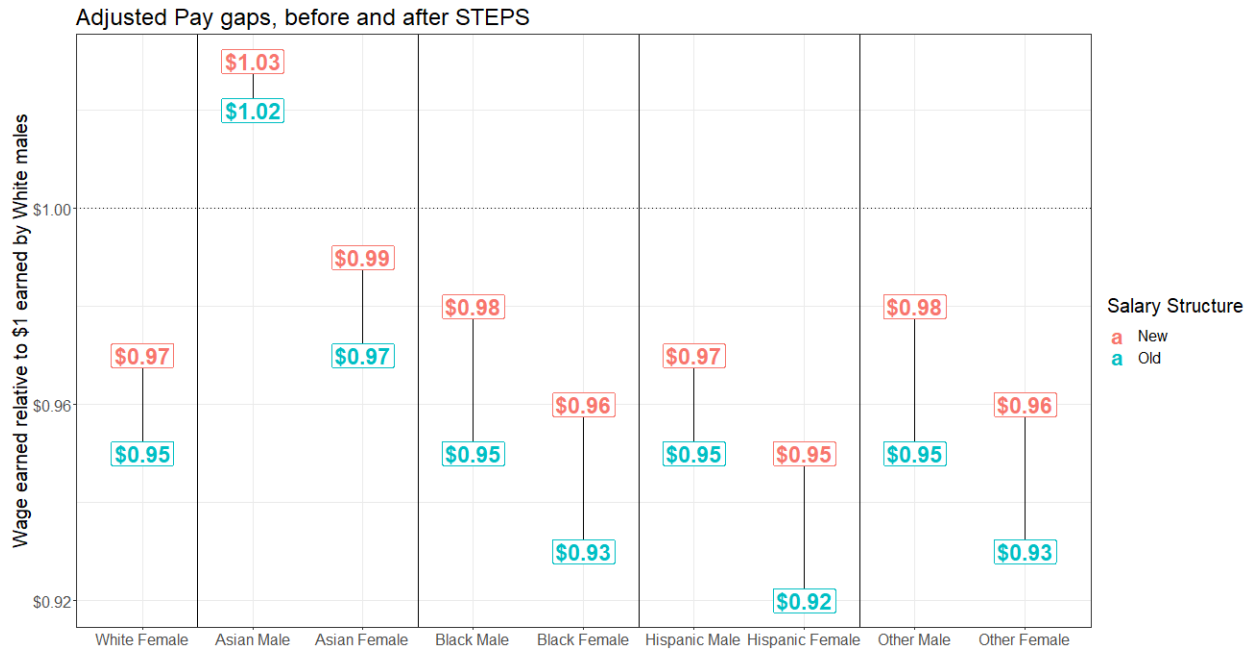


Figure 4



CSU Salary Structure: Gender and Racial Based Pay Gaps - Reduction of pay gaps through movement to STEP system implementation.

Conclusion

In all of our specifications, we find that the pay gap between each of our three groups of interest (non-White male, White female, and non-White female) and their White male counterparts decreases with the implementation of the new salary structure. There are still statistically significant pay gaps for women in all specifications, and statistically significant pay gaps for non-white workers (both men and women) in unadjusted models. These differences are statistically significant and higher in magnitude for Black and Hispanic workers, while Asian workers typically see higher pay than White counterparts, or no statistically significant difference at all.

This study has several limitations. It does not address disparities for Native American, Pacific Islander, and Workers of two or more ethnicities. Individually these groups had too few employees to make meaningful estimates and are represented only in more aggregated groups. Furthermore, we do not analyze differences in Asian workers beyond this broad designation. This deserves further research and attention so that the CSU can address sources of disadvantage or discrimination that may vary across different ethnic groups. Finally, data on education level and more detailed job groupings would be useful for estimating the adjusted wage gap. We are not aware of data on educational attainment for this sample, though we may attempt this analysis in the future if that data is obtainable from the CSU through an information request. For job groupings, there is no grouping less granular than classification and more granular than bargaining unit. We use bargaining unit as a control in this study, we do not use class code because (a) adding more than 150 additional variables would result in model overfitting (b) as detailed in the salary survey conducted by Mercer, the job groupings at the CSU are wildly inconsistent, which makes meaningful interpretation of those models difficult. Despite these limitations, we are able to test a number of specifications and find a consistent pattern of wage gaps for women and non-White workers in the CSU system.

The new proposed salary structure makes a significant improvement in these gaps, especially for a study which was not specifically commissioned to address racial and gender-based inequities. In addition to a myriad of other benefits, adopting the proposed salary structure is an important first step in closing the racial and gender-based pay inequity in the CSU system.

Special Thanks to the Berkeley Labor Center for their helpful feedback on our methodology and analysis.

Methods Appendix

All analysis was conducted in the open source statistical software R¹, version 4.0.5. Regression coefficients were calculated using the `lm()` function from the `stats` package included in base R. Robust standard errors were calculated using the `vcovHC()` function from the `sandwich`² package, version 3.0.1.

Appendix Tables A1, A2, A3, and A4 show regression coefficients and standard errors for 4 regression specifications – the unadjusted regression reported in the report, and the three regressions which progressively add controls. Column 4 is our preferred specification. The tables correspond to the aggregated ethnic groups in tables A1 and A2 and the detailed ethnic groups in tables A3 and A4. Tables A1 and A3 give the results under the old salary structure; tables A2 and A4 are the same results under the new salary structure. Asterisks indicate statistical significance, * corresponds to $p < .10$, ** to $p < .05$, and *** to $p < .01$. Standard errors are directly below their corresponding coefficients.

The percentage differences in the main report were calculated by exponentiating the coefficients and subtracting one, $(\exp(\beta) - 1)$, to obtain the percentage change associated with a one unit change in the independent variable. Controls were added by creating a “dummy variable” for each group. For example, campus controls means there are 24 variables: *factor(CAMPUS)CHANNEL IS*, which takes a value of 1 if an employee works at Channel Islands and a zero otherwise; *factor(CAMPUS)CHICO*, which takes a value of 1 if an employee works at Chico and a zero otherwise; and so on. The only exception is tenure, which is denoted by two variables, *years_in_class* and *I(years_in_class^2)*. The first is the number of years an employee has worked in their classification, the second is this value squared. This quadratic form for years of experience is standard in the literature. Our coefficients on *years_in_class* indicate that an additional year at CSU corresponds to about a 1% increase in wage, which is consistent with the findings of Mercer in their salary study. Additionally, we have *Range* – an indicator of level within classification. Not all classifications use range to differentiate between different career levels. Last, we control for variation across 4 bargaining units – representing employees Health Care Support, Operations and Support Services, Clerical and Administrative, and Technical Occupations, respectively.

All mentions of monthly salary in the report corresponds to the variable “Base Pay +RC” from the PIMS 8621 report. This is an annualized value that accounts for employees who are less than full time.

Not all employees were able to be uniquely matched to a new salary step. Due to the new structure not aligning 1:1 with the old structure, some combinations of class code and range map to multiple potential job families and/or grades. Mercer did not provide us with a full mapping of employees, only the number of FTEs in each new job family-grade combination. In these cases, we used a weighted average of the new job family-grade combinations to determine a mean new salary for an existing class code-range. While an updated list would provide more accurate results, we do not expect a significant effect on our results, given how close the different potential salary levels are to the weighted mean, as well as the fact that we achieved similar results from regressions we conducted on a smaller sample without the weighted average salaries in the exploratory stages of this work.

¹ <https://www.r-project.org/>

² <https://cran.r-project.org/web/packages/sandwich/sandwich.pdf>

Appendix Table A1 Regression Coefficients - Aggregated Ethnic Groups, Old Salary Structure

Variable	Unadjusted	Campus controls	Campus + Tenure + Range controls	Campus + Tenure + Range + BU controls
(Intercept)	8.552***	8.559***	8.651***	8.763***
	-0.007	-0.018	-0.036	-0.038
factor(ETH2)NONWHT	-0.152***	-0.174***	-0.102***	-0.027***
	-0.01	-0.009	-0.007	-0.006
factor(SEX2)FEMALE	-0.113***	-0.108***	-0.076***	-0.053***
	-0.009	-0.009	-0.007	-0.005
factor(ETH2)NONWHT:factor(SEX2)FEMALE	0.077***	0.072***	0.048***	0.013*
	-0.012	-0.011	-0.009	-0.007
factor(CAMPUS)CHANNEL IS	.	-0.012	-0.018	-0.017
		-0.024	-0.019	-0.015
factor(CAMPUS)CHICO	.	-0.161***	-0.150***	-0.093***
		-0.021	-0.017	-0.014
factor(CAMPUS)CHNCLR OFF	.	0.412***	0.222***	0.163***
		-0.031	-0.023	-0.02
factor(CAMPUS)DOMINGUEZ	.	0.043*	-0.005	-0.014
		-0.023	-0.018	-0.015
factor(CAMPUS)EAST BAY	.	0.037*	-0.019	-0.012
		-0.022	-0.019	-0.014
factor(CAMPUS)FRESNO	.	-0.029	-0.067***	-0.055***
		-0.021	-0.017	-0.013
factor(CAMPUS)FULLERTON	.	-0.009	-0.053***	-0.063***
		-0.02	-0.016	-0.013
factor(CAMPUS)HUMBOLDT	.	-0.093***	-0.106***	-0.093***
		-0.024	-0.019	-0.016
factor(CAMPUS)LA	.	-0.046**	-0.071***	-0.078***
		-0.021	-0.018	-0.014
factor(CAMPUS)LONG BEACH	.	-0.025	-0.047***	-0.057***
		-0.019	-0.016	-0.013
factor(CAMPUS)MARITIME	.	0.042	0.022	0.024
		-0.043	-0.036	-0.027
factor(CAMPUS)MONTEREY	.	0.060***	-0.003	-0.027*
		-0.023	-0.019	-0.014
factor(CAMPUS)NORTHRIDGE	.	0.017	-0.031*	-0.040***
		-0.019	-0.016	-0.012
factor(CAMPUS)POMONA	.	0.033	-0.009	-0.02
		-0.02	-0.017	-0.013
factor(CAMPUS)SACRAMENTO	.	-0.034*	-0.078***	-0.063***
		-0.02	-0.016	-0.013
factor(CAMPUS)SAN BERN	.	-0.027	-0.067***	-0.050***
		-0.02	-0.017	-0.013
factor(CAMPUS)SAN DIEGO	.	-0.041**	-0.061***	-0.042***

		-0.019	-0.016	-0.013
factor(CAMPUS)SAN FRAN	.	0.102***	0.029*	-0.015
		-0.02	-0.016	-0.013
factor(CAMPUS)SAN JOSE	.	0.122***	0.056***	0.044***
		-0.02	-0.016	-0.013
factor(CAMPUS)SAN MARCOS	.	0.003	0.01	0.001
		-0.021	-0.018	-0.014
factor(CAMPUS)SLO	.	-0.018	0.002	0.028**
		-0.02	-0.017	-0.013
factor(CAMPUS)SONOMA	.	-0.057**	-0.067***	-0.057***
		-0.022	-0.018	-0.014
factor(CAMPUS)STNISLAUS	.	-0.038	-0.057***	-0.030**
		-0.024	-0.019	-0.015
years_in_class	.	.	0.014***	0.014***
			-0.001	-0.001
I(years_in_class^2)	.	.	0.000***	0.000***
			0	0
factor(Range)1	.	.	-0.307***	-0.165***
			-0.032	-0.031
factor(Range)2	.	.	-0.133***	-0.056*
			-0.032	-0.031
factor(Range)3	.	.	0.174***	0.159***
			-0.032	-0.032
factor(Range)4	.	.	0.275***	0.267***
			-0.035	-0.034
factor(Range)6	.	.	-0.107**	-0.237***
			-0.049	-0.049
factor(Range)8	.	.	-0.174***	-0.257***
			-0.047	-0.046
factor(Range)9	.	.	0.687***	0.655***
			-0.033	-0.032
factor(CBID)R05	.	.	.	-0.509***
				-0.018
factor(CBID)R07	.	.	.	-0.404***
				-0.018
factor(CBID)R09	.	.	.	-0.134***
				-0.018
N	11883	11883	11883	11883
RMSE	0.296	0.285	0.226	0.172
R^2	0.046	0.115	0.446	0.677
adj R^2	0.046	0.113	0.445	0.676
*p <0.1, **p <0.05, ***p <0.01				

Appendix Table A2 Regression Coefficients - Aggregated Ethnic Groups, New Salary Structure

Variable	Unadjusted	Campus controls	Campus + Tenure + Range controls	Campus + Tenure + Range + BU controls
(Intercept)	8.712***	8.627***	8.520***	8.595***
	-0.007	-0.016	-0.033	-0.036
factor(ETH2)NONWHT	-0.108***	-0.144***	-0.073***	-0.005
	-0.009	-0.009	-0.006	-0.004
factor(SEX2)FEMALE	-0.092***	-0.086***	-0.054***	-0.034***
	-0.008	-0.008	-0.005	-0.004
factor(ETH2)NONWHT:factor(SEX2)FEMALE	0.062***	0.056***	0.036***	0.005
	-0.011	-0.01	-0.007	-0.005
factor(CAMPUS)CHANNEL IS	.	0.031	0.033**	0.034***
		-0.022	-0.016	-0.011
factor(CAMPUS)CHICO	.	-0.070***	-0.056***	-0.005
		-0.019	-0.015	-0.011
factor(CAMPUS)CHNCLR OFF	.	0.433***	0.247***	0.194***
		-0.025	-0.017	-0.014
factor(CAMPUS)DOMINGUEZ	.	0.134***	0.085***	0.076***
		-0.02	-0.015	-0.011
factor(CAMPUS)EAST BAY	.	0.157***	0.095***	0.101***
		-0.019	-0.015	-0.011
factor(CAMPUS)FRESNO	.	0.024	-0.016	-0.006
		-0.019	-0.014	-0.01
factor(CAMPUS)FULLERTON	.	0.123***	0.075***	0.066***
		-0.018	-0.014	-0.01
factor(CAMPUS)HUMBOLDT	.	-0.021	-0.033**	-0.022*
		-0.022	-0.016	-0.012
factor(CAMPUS)LA	.	0.111***	0.082***	0.074***
		-0.019	-0.015	-0.01
factor(CAMPUS)LONG BEACH	.	0.081***	0.059***	0.049***
		-0.017	-0.013	-0.009
factor(CAMPUS)MARITIME	.	0.095**	0.076***	0.076***
		-0.038	-0.028	-0.022
factor(CAMPUS)MONTEREY	.	0.170***	0.107***	0.084***
		-0.021	-0.016	-0.011
factor(CAMPUS)NORTHRIDGE	.	0.118***	0.068***	0.059***
		-0.017	-0.013	-0.009
factor(CAMPUS)POMONA	.	0.139***	0.095***	0.085***
		-0.018	-0.014	-0.01
factor(CAMPUS)SACRAMENTO	.	0.051***	0.005	0.018*
		-0.017	-0.013	-0.01
factor(CAMPUS)SAN BERN	.	0.062***	0.019	0.032***
		-0.018	-0.014	-0.01
factor(CAMPUS)SAN DIEGO	.	0.084***	0.063***	0.081***
		-0.017	-0.013	-0.01

factor(CAMPUS)SAN FRAN	.	0.303***	0.227***	0.188***
		-0.017	-0.013	-0.009
factor(CAMPUS)SAN JOSE	.	0.269***	0.204***	0.193***
		-0.018	-0.013	-0.009
factor(CAMPUS)SAN MARCOS	.	0.073***	0.087***	0.079***
		-0.019	-0.014	-0.01
factor(CAMPUS)SLO	.	0.01	0.023*	0.046***
		-0.017	-0.014	-0.01
factor(CAMPUS)SONOMA	.	0.070***	0.062***	0.072***
		-0.021	-0.015	-0.011
factor(CAMPUS)STNISLAUS	.	-0.006	-0.021	0.003
		-0.021	-0.016	-0.011
years_in_class	.	.	0.030***	0.030***
			-0.001	-0.001
I(years_in_class^2)	.	.	-0.001***	-0.001***
			0	0
factor(Range)1	.	.	-0.165***	-0.037
			-0.03	-0.03
factor(Range)2	.	.	0.021	0.088***
			-0.03	-0.03
factor(Range)3	.	.	0.246***	0.232***
			-0.03	-0.03
factor(Range)4	.	.	0.326***	0.319***
			-0.031	-0.031
factor(Range)6	.	.	0.031	-0.066
			-0.05	-0.05
factor(Range)8	.	.	0.025	-0.033
			-0.045	-0.044
factor(Range)9	.	.	0.672***	0.645***
			-0.031	-0.031
factor(CBID)R05	.	.	.	-0.434***
				-0.018
factor(CBID)R07	.	.	.	-0.332***
				-0.018
factor(CBID)R09	.	.	.	-0.094***
				-0.018
N	11883	11883	11883	11883
RMSE	0.275	0.258	0.185	0.133
R^2	0.028	0.148	0.562	0.773
adj R^2	0.028	0.146	0.561	0.772
*p <0.1, **p <0.05, ***p <0.01				

Appendix Table A3: Regression Coefficients and Standard Errors - Detailed Ethnic Groups, Old Salary Structure

Variable	Unadjusted	Campus controls	Campus + Tenure + Range controls	Campus + Tenure + Range + BU controls
(Intercept)	8.552***	8.582***	8.676***	8.775***
factor(ETHNIC GROUP)ASN	-0.007	-0.017	-0.036	-0.039
	0.007	-0.025*	-0.011	0.018**
	-0.014	-0.014	-0.01	-0.008
factor(ETHNIC GROUP)BLK	-0.203***	-0.221***	-0.147***	-0.050***
	-0.019	-0.019	-0.014	-0.011
factor(ETHNIC GROUP)HSP	-0.245***	-0.257***	-0.155***	-0.053***
	-0.01	-0.01	-0.008	-0.006
factor(ETHNIC GROUP)OTH	-0.144***	-0.163***	-0.091***	-0.049***
	-0.027	-0.026	-0.018	-0.014
factor(SEX2)FEMALE	-0.113***	-0.110***	-0.078***	-0.054***
	-0.009	-0.009	-0.007	-0.005
factor(ETHNIC GROUP)ASN:factor(SEX2)FEMALE	0.053***	0.044***	0.039***	0.008
	-0.018	-0.017	-0.013	-0.01
factor(ETHNIC GROUP)BLK:factor(SEX2)FEMALE	0.140***	0.132***	0.088***	0.035***
	-0.023	-0.023	-0.018	-0.014
factor(ETHNIC GROUP)HSP:factor(SEX2)FEMALE	0.099***	0.095***	0.060***	0.019***
	-0.012	-0.012	-0.009	-0.007
factor(ETHNIC GROUP)OTH:factor(SEX2)FEMALE	0.064**	0.079***	0.046**	0.026
	-0.032	-0.031	-0.023	-0.018
factor(CAMPUS)CHANNEL IS	.	-0.011	-0.019	-0.017
		-0.024	-0.019	-0.015
factor(CAMPUS)CHICO	.	-0.183***	-0.165***	-0.101***
		-0.021	-0.017	-0.014
factor(CAMPUS)CHNCLR OFF	.	0.350***	0.188***	0.148***
		-0.029	-0.022	-0.02
factor(CAMPUS)DOMINGUEZ	.	0.024	-0.014	-0.018
		-0.022	-0.018	-0.015
factor(CAMPUS)EAST BAY	.	-0.002	-0.042**	-0.023
		-0.022	-0.018	-0.014
factor(CAMPUS)FRESNO	.	-0.039*	-0.072***	-0.058***
		-0.02	-0.017	-0.013
factor(CAMPUS)FULLERTON	.	-0.041**	-0.071***	-0.072***
		-0.019	-0.016	-0.013
factor(CAMPUS)HUMBOLDT	.	-0.111***	-0.118***	-0.098***
		-0.024	-0.019	-0.016
factor(CAMPUS)LA	.	-0.061***	-0.079***	-0.082***
		-0.021	-0.017	-0.014
factor(CAMPUS)LONG BEACH	.	-0.043**	-0.058***	-0.062***
		-0.018	-0.015	-0.013
factor(CAMPUS)MARITIME	.	0.009	0.004	0.015
		-0.041	-0.034	-0.027
factor(CAMPUS)MONTEREY	.	0.038*	-0.015	-0.032**
		-0.023	-0.019	-0.014
factor(CAMPUS)NORTHRIDGE	.	0.003	-0.039**	-0.044***
		-0.019	-0.015	-0.012
factor(CAMPUS)POMONA	.	0.017	-0.018	-0.025*

		-0.02	-0.016	-0.013
factor(CAMPUS)SACRAMENTO	.	-0.066***	-0.096***	-0.072***
		-0.02	-0.016	-0.013
factor(CAMPUS)SAN BERN	.	-0.025	-0.063***	-0.049***
		-0.02	-0.017	-0.013
factor(CAMPUS)SAN DIEGO	.	-0.058***	-0.071***	-0.047***
		-0.019	-0.016	-0.013
factor(CAMPUS)SAN FRAN	.	0.032	-0.015	-0.036***
		-0.02	-0.016	-0.013
factor(CAMPUS)SAN JOSE	.	0.075***	0.027	0.030**
		-0.02	-0.016	-0.013
factor(CAMPUS)SAN MARCOS	.	0.001	0.007	0
		-0.02	-0.017	-0.014
factor(CAMPUS)SLO	.	-0.032*	-0.008	0.022*
		-0.019	-0.016	-0.013
factor(CAMPUS)SONOMA	.	-0.073***	-0.078***	-0.062***
		-0.022	-0.018	-0.014
factor(CAMPUS)STNISLAUS	.	-0.048**	-0.063***	-0.034**
		-0.024	-0.019	-0.015
years_in_class	.	.	0.013***	0.014***
			-0.001	-0.001
I(years_in_class^2)	.	.	0.000***	0.000***
			0	0
factor(Range)1	.	.	-0.307***	-0.171***
			-0.033	-0.032
factor(Range)2	.	.	-0.141***	-0.062**
			-0.033	-0.032
factor(Range)3	.	.	0.160***	0.150***
			-0.033	-0.032
factor(Range)4	.	.	0.266***	0.261***
			-0.035	-0.034
factor(Range)6	.	.	-0.112**	-0.239***
			-0.049	-0.049
factor(Range)8	.	.	-0.187***	-0.264***
			-0.047	-0.046
factor(Range)9	.	.	0.717***	0.668***
			-0.034	-0.033
factor(CBID)R05	.	.	.	-0.497***
				-0.018
factor(CBID)R07	.	.	.	-0.397***
				-0.018
factor(CBID)R09	.	.	.	-0.132***
				-0.018
N	11883	11883	11883	11883
RMSE	0.285	0.277	0.221	0.171
R^2	0.112	0.165	0.467	0.681
adj R^2	0.112	0.162	0.465	0.68
*p <0.1, **p <0.05, ***p <0.01				

Appendix Table A4: Regression Coefficients and Standard Errors - Detailed Ethnic Groups, New Salary Structure

Variable	Unadjusted	Campus controls	Campus + Tenure + Range controls	Campus + Tenure + Range + BU controls
(Intercept)	8.712***	8.648***	8.540***	8.605***
	-0.007	-0.015	-0.033	-0.036
factor(ETHNIC GROUP)ASN	0.059***	0	0.006	0.032***
	-0.013	-0.012	-0.008	-0.006
factor(ETHNIC GROUP)BLK	-0.154***	-0.185***	-0.112***	-0.025***
	-0.018	-0.017	-0.012	-0.007
factor(ETHNIC GROUP)HSP	-0.205***	-0.225***	-0.120***	-0.028***
	-0.009	-0.009	-0.006	-0.005
factor(ETHNIC GROUP)OTH	-0.116***	-0.138***	-0.059***	-0.022*
	-0.025	-0.024	-0.015	-0.011
factor(SEX2)FEMALE	-0.092***	-0.088***	-0.056***	-0.035***
	-0.008	-0.008	-0.005	-0.004
factor(ETHNIC GROUP)ASN:factor(SEX2)FEMALE	0.034**	0.02	0.022**	-0.005
	-0.016	-0.015	-0.01	-0.007
factor(ETHNIC GROUP)BLK:factor(SEX2)FEMALE	0.121***	0.115***	0.070***	0.022**
	-0.022	-0.021	-0.015	-0.01
factor(ETHNIC GROUP)HSP:factor(SEX2)FEMALE	0.088***	0.083***	0.050***	0.013**
	-0.011	-0.011	-0.008	-0.006
factor(ETHNIC GROUP)OTH:factor(SEX2)FEMALE	0.054*	0.064**	0.032*	0.014
	-0.029	-0.028	-0.019	-0.014
factor(CAMPUS)CHANNEL IS	.	0.032	0.033**	0.033***
		-0.021	-0.015	-0.011
factor(CAMPUS)CHICO	.	-0.091***	-0.068***	-0.012
		-0.019	-0.014	-0.011
factor(CAMPUS)CHNCLR OFF	.	0.375***	0.218***	0.182***
		-0.023	-0.017	-0.013
factor(CAMPUS)DOMINGUEZ	.	0.116***	0.077***	0.073***
		-0.02	-0.015	-0.011
factor(CAMPUS)EAST BAY	.	0.121***	0.077***	0.093***
		-0.019	-0.015	-0.011
factor(CAMPUS)FRESNO	.	0.015	-0.02	-0.008
		-0.018	-0.014	-0.01
factor(CAMPUS)FULLERTON	.	0.094***	0.060***	0.059***
		-0.017	-0.013	-0.01
factor(CAMPUS)HUMBOLDT	.	-0.037*	-0.043***	-0.025**
		-0.022	-0.016	-0.012
factor(CAMPUS)LA	.	0.097***	0.074***	0.071***
		-0.018	-0.014	-0.01
factor(CAMPUS)LONG BEACH	.	0.064***	0.050***	0.045***
		-0.016	-0.013	-0.009
factor(CAMPUS)MARITIME	.	0.064*	0.060**	0.070***
		-0.036	-0.027	-0.022
factor(CAMPUS)MONTEREY	.	0.150***	0.097***	0.080***
		-0.021	-0.015	-0.011
factor(CAMPUS)NORTHRIDGE	.	0.104***	0.061***	0.056***
		-0.016	-0.013	-0.009
factor(CAMPUS)POMONA	.	0.125***	0.088***	0.081***

		-0.017	-0.013	-0.01
factor(CAMPUS)SACRAMENTO	.	0.021	-0.01	0.011
		-0.017	-0.013	-0.01
factor(CAMPUS)SAN BERN	.	0.064***	0.021	0.033***
		-0.018	-0.014	-0.01
factor(CAMPUS)SAN DIEGO	.	0.068***	0.055***	0.076***
		-0.017	-0.013	-0.01
factor(CAMPUS)SAN FRAN	.	0.239***	0.191***	0.172***
		-0.017	-0.013	-0.01
factor(CAMPUS)SAN JOSE	.	0.226***	0.180***	0.182***
		-0.017	-0.013	-0.009
factor(CAMPUS)SAN MARCOS	.	0.071***	0.086***	0.078***
		-0.018	-0.014	-0.01
factor(CAMPUS)SLO	.	-0.003	0.014	0.041***
		-0.017	-0.013	-0.01
factor(CAMPUS)SONOMA	.	0.055***	0.054***	0.067***
		-0.02	-0.015	-0.011
factor(CAMPUS)STNISLAUS	.	-0.015	-0.026	0
		-0.021	-0.016	-0.011
years_in_class	.	.	0.029***	0.030***
			-0.001	-0.001
I(years_in_class^2)	.	.	-0.001***	-0.001***
			0	0
factor(Range)1	.	.	-0.164***	-0.041
			-0.03	-0.03
factor(Range)2	.	.	0.015	0.083***
			-0.03	-0.03
factor(Range)3	.	.	0.234***	0.225***
			-0.03	-0.03
factor(Range)4	.	.	0.319***	0.315***
			-0.031	-0.031
factor(Range)6	.	.	0.027	-0.067
			-0.05	-0.05
factor(Range)8	.	.	0.015	-0.038
			-0.045	-0.044
factor(Range)9	.	.	0.696***	0.653***
			-0.031	-0.031
factor(CBID)R05	.	.	.	-0.425***
				-0.018
factor(CBID)R07	.	.	.	-0.327***
				-0.018
factor(CBID)R09	.	.	.	-0.093***
				-0.018
N	11883	11883	11883	11883
RMSE	0.263	0.25	0.181	0.132
R^2	0.111	0.199	0.58	0.776
adj R^2	0.11	0.197	0.578	0.776
*p <0.1, **p <0.05, ***p <0.01				