Race and Gender Disparities in Academic Pay

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Introduction

► Extract race & gender from pictures to examine inequality in faculty pay

Academia

Forefront of Race and Gender Issues

- Critical Race theories (Cineas, 2020)
- Cancelling anti-feminist speakers (Wong, 2017)
- ▶ Monitoring racial language (Shimshock, 2019)

Literature

- Within Job discrimination (Peterson and Morgan, 1995)
- ► Racial wage inequality (Huffman and Cohen, 2004)
- ► Gender income gap (Blau and Kahn, 2017)

The Gender Pay Gap in Academia: Evidence from the Ohio State University ®

Joyce J Chen ™, <u>Daniel Crown</u>

 $\label{lem:merican_Journal} American Journal of Agricultural Economics, Volume 101, Issue 5, October 2019, Pages 1337–1352, https://doi.org/10.1093/ajae/aaz017$

Published: 15 July 2019

Gap

- Data acccess (Personnel data)
- Scope of data
 - ▶ race or gender
 - ► single institution
 - ▶ short period

Our Research

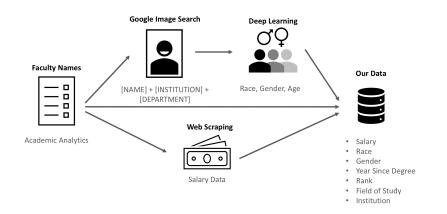
Are there disparities in academic pay?

- race and gender
- all US universities
- ▶ 8 years of data (2012-2018)

This Study

- ▶ UC (University of California) Schools
- ▶ 2018 Salary

Data



Data

Categorical Variables	\mathbf{N}	%	UC Faculty
Race	5252	100.00%	100.00%
White	3242	61.73%	67.3%
Asian	870	16.57%	17.1%
Other	605	11.52%	5.8%
Latino/Hispanic	375	7.14%	6.9%
Black	160	3.05%	2.9%
Gender	5252	100.00%	100.00%
Male	3444	65.58%	65.9%
Female	1808	34.42%	34.1%

Method

- Linear Mixed-Effects Model
- Random Intercepts
 - ► Field of Study
 - ▶ Institution

	Model 1	Model 2	Model 3	Model 4	Model 5
Race (White)					
Asian	-14,017***	-12,288***	-1,197	-3,094	-827
	(3,176)	(3,155)	(2,855)	(2,779)	(2,753)
Black	-22,628***	-21,936***	$-12,\!697^*$	-6,415	-6,807
	(6,712)	(6,655)	(5,992)	(5,855)	(5,786)
Latino/Hispanic	-8,840	-9,085*	-3,465	-4,716	-3,469
	(4,513)	(4,475)	(4,028)	(3,929)	(3,884)
Other	-2,813	-7,117	571	976	2,033
	(3,665)	(3,662)	(3,301)	(3,221)	(3,184)
Gender (Male)					
Female		-23,676***	$-12,577^{***}$	$-11,131^{***}$	$-9,\!842^{***}$
		(2,482)	(2,254)	(2,201)	(2,178)
Year since Degree			2,986***		$1,327^{***}$
			(85)		(118)
Rank (Professor)					
Associate Professor				$-67,\!051^{***}$	$-49,\!825^{***}$
				(2,650)	(3,033)
Assistant Professor				-92,944***	$-64,\!893^{***}$
				(2,557)	(3,547)
Constant	182,394***	191,763***	126,972***	223,098***	185,377***
	(14,955)	(14,597)	(14,423)	(13,730)	(14,288)
N	5,252	5,252	5,252	5,252	5,252
Log Likelihood	-66,892	-66,838	$-66,\!277$	-66,135	-66,067

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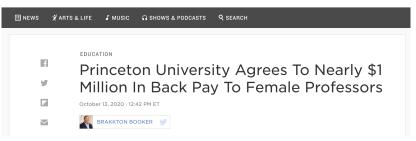












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Conclusion

- ▶ there is a significant gender gap (~ 10 k) in salary even when accounting for rank and year since degree
- For black professors, while there is no significant differences in salary when accounting for rank and year since degree, our results suggest that it may take longer for black professors to advance to the higher ranks compared to white professors

Next Steps

- All public universities in the US
- ► Longitudinal (2012 2018)
- Add productivity measures (Publications, Grants, Citations, H-index)
- Oaxaca-Blinder decomposition analysis