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Gender discrimination in the business school's C-suite? Evidence from aggregate decomposition approaches

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Workplace discrimination continues to at least be perceived as a problem by faculty and staff in higher education. The current study extends the academic literature in this area by exploring the possibility of gender discrimination in the wages of academic deans. Using data on deans' salaries from more than 200 colleges and schools of business in the U.S., we focus our analysis on aggregate decompositions from both the usual Oaxaca-Blinder decomposition approach and the newer inverse probability weighting technique. Aggregate decomposition results from both the usual Oaxaca-Blinder decomposition approach and inverse probability weighting fail to support the existence of gender discrimination in administrative wages in academia. They do, however, support new theoretical research asserting that the publicness of academic administrators' salaries works to circumvent any wage discrimination based on gender or race.

KEYWORDS

academic labor markets, wage discrimination, aggregate decomposition, inverse probability weighting, Oaxaca-Blinder decomposition

Introduction

A recent search of the phrase, "discrimination academic salaries," using the Google News search engine produced more than 250,000 hits. Results from the first five pages included stories of alleged workplace discrimination of some sort at more than 10 U.S. universities.[1] Among this group of universities are both public and private institutions, as well as a mix of regional universities and national, research-centered universities. As these data make clear, workplace discrimination is at least perceived to be a problem

1 This list includes UCLA, Marquette University, Colorado Mesa University, Western Kentucky University, Michigan State University, University of Florida, University of Illinois–Chicago, California State University–Humboldt, University of Miami, Indiana University and Texas A&M University–San Antonio.

by faculty and staff in higher education. At the same time, academic literature on the subject mostly concentrates on discrimination at the faculty level and in doing so provides mixed results.

The current study extends this literature by exploring the possibility of gender discrimination in the wages of academic deans. Using data on deans' salaries from more than 200 colleges and schools of business in the U.S., we focus our analysis on aggregate decompositions from both the usual Oaxaca-Blinder decomposition approach (Blinder, 1973; Oaxaca, 1973) and the newer inverse probability weighting technique (Hirano et al., 2003; Firpo, 2007). Results from both approaches fail to support the existence of gender discrimination in administrative wages in academia. They do, however, support new theoretical research (Faria et al., 2022) asserting that the publicness of academic administrators' salaries works to circumvent any wage discrimination based on gender or race.

Before turning to our empirical results, we provide a review of the academic literature on gender discrimination in both private industry and academe. This is followed by a discussion of the empirical methodology employed in the study, as well as a description of the econometric model and the data employed. Finally, the study offers some concluding remarks and directions for future research.

Prior literature

Examination over the past two decades of labor market discrimination has been broad and extensive. Of course, many studies focus on gender- and/or race-based wage discrimination in the private industrial and service sectors of the economy. Others focus on discrimination in academic labor markets. Our review of prior literature on gender discrimination in wages covers both of these streams of literature.

Gender discrimination in private sector wages

A study by Muñoz-Bullón (2010) adds to a large body of work on unexplained differences in compensation by gender across high-level executives in the United States–which has been estimated to be almost 50%–by showing that most of this difference is due to gender differences in the portion of compensation represented by cash payouts from stock option exercises. In a new study employing panel data on the compensation of top management and company boards from the S&P 500, Cook et al. (2019) extend the results in Muñoz-Bullón (2010) by showing that greater female integration on the board of directors (and on the compensation committee) does not reduce the compensation gap across high-level executives of a company. However, when women serve as the chairs of compensation committees, the compensation gap is diminished (Cook et al., 2019). In related work, Flabbi et al. (2019) investigate the impact of female executives on gender-specific wage distributions in firms and find that female leadership has a positive effect at the top of the female wage distribution and a negative effect at the bottom. They assert that this finding supports the notion that female executives are better at interpreting signals of productivity from female workers.

Using a sample of Dutch employees, Nyhus and Pons (2012) investigate whether personality factors related to self-efficacy and time preference contribute to the gender wage gap. They find that 11.5% of the observed gender wage gap among Dutch workers is attributed to differences in the personality trait scores relating to agreeableness and intellect. A new and related study by Sin et al. (2022) finds that a portion of the gender wage gap in New Zealand stems from differences in sorting across occupations, thus suggesting that a form of taste discrimination exists.[2] A similar portion of the existing gap stems from gender differences in bargaining skills and the willingness to bargain (Sin et al., 2022). Hirsch et al. (2014) employ a linked employer-employee panel dataset for West Germany that includes direct information on product market competition faced by companies. Controlling for match fixed effects, they find that increased competition significantly lowers the unexplained gap in compensation by gender in non-unionized firm settings.

Mussida and Picchio (2014) examine gender discrimination using a large national panel of employment data in Italy. After decomposing the gender wage gap, they conclude that women are penalized, especially if low educated, and that when sample selection that is induced by un-observables is controlled, this penalty becomes even larger. Lastly, Artz and Taengnoi (2019) study pay raises, both with and without promotions, using survey data that identifies the current and most recent wages of hourly workers. They identify a gender gap in promotion raises favoring men, but the result vanishes in fixed-effects estimates. No gender gaps emerge in any other instance, including for salaried workers and raises absent promotion (Artz and Taengnoi, 2019).

Gender discrimination in academic wages

Studies on gender discrimination in the academy dating back to the 1970s have focused on college and university faculty salaries (e.g., see Katz, 1973; Gordon et al., 1974; Hoffman, 1976; Koch and Chizmar, 1976). Interest in the topic remained strong into the 1980s (e.g., see Hirsch and Leppel, 1982;

2 Zhang et al. (2021) also find evidence of taste-based discrimination in the lower likelihood that female applicants in China are extended a post-interview callback.

Barbezat, 1987; Raymond et al., 1988), 1990s (e.g., see Lindley et al., 1992; Lillydahl and Singell, 1993; Ashraf, 1996; McNabb and Wass, 1997; Toutkoushian, 1998), and even the current century (e.g., see Ward, 2001; Blackaby et al., 2005; Toumanoff, 2005; Takahashi and Takahashi, 2011). In recent years, interest has turned to analyses of possible gender discrimination in hiring and the awarding of tenure, promotion and named professorships (e.g., see Ginther and Hayes, 2003; Mixon and Treviño, 2005; Sabatier, 2010; Faria et al., 2013, 2016; Cooray et al., 2014; Treviño et al., 2017; Treviño et al., 2018; Gold et al., 2020; Chen et al., 2022).

Despite the continued interest in the impact of gender discrimination on the pay, promotion and recognition of university faculty, there is, as Hebner et al. (2018) point out, a relative dearth of investigation into possible gender discrimination in the earnings of university administrators. Most of what does constitute this particular literature focuses on the earnings of college and university presidents (e.g., see Sorokina, 2003; Monks and McGoldrick, 2004; Hebner et al., 2018). An early study in this series by Sorokina (2003) examines data from 97 colleges and universities in the top three tiers of U.S. institutions according to *U.S. News & World Report*. The study finds that compensation in this case favors female presidents, who earn 8% more than their male counterparts. Admittedly, however, the study indicates that some labor market characteristics that may be correlated with gender are not controlled, and, importantly, that wage gap decomposition is beyond the scope of the study (Sorokina, 2003, p. 12).

In a key study in this literature, Monks and McGoldrick (2004) explore the role of gender discrimination in shaping the earnings of top officials at private colleges and universities in the U.S. They analyze a 3-year panel of earnings data taken from *The Chronicle of Higher Education*. Although the data indicate a 13% pay gap between top male university officials and top female university officials, favoring males, their analysis suggests that only 2.6 percentage points of this difference can be attributed to gender discrimination (Monks and McGoldrick, 2004). The remaining 10.4 percentage points is owed to institutional and occupational differences between the male and female executives in the sample (Monks and McGoldrick, 2004).

In an update and extension of Monks and McGoldrick (2004), Hebner et al. (2018) compile a 13-year panel of data on the total compensation packages of private college and university presidents in the U.S.[3] Results from ordinary least squares (OLS) and fixed-effects estimations in Hebner et al. (2018) indicate that, when institutional and demographic characteristics are taken into consideration, female presidents earn 7.1–8.7% less than their male counterparts, and that white female presidents, in particular, are paid 6–12.8% less than their white male counterparts. Moreover, when the sample used in Hebner et al. (2018) is split into four consecutive time periods, the male earnings advantage rises over time, from 9.8% in the third period to 17.4% in the fourth period.[4]

Lastly, a new study by Faria et al. (2022) develops a sequential game representing bargaining between a public university and a job applicant over a vacant administrative position, such as an academic deanship. While the formal model predicts that the negotiated administrative salary is an increasing function of the job candidate's salary, the prior dean's salary, the price of undergraduate courses, the elasticity of the wage differential, and faculty productivity, it also asserts that if the applicant is female or minority, and if the previous dean's salary is important, then the applicant is able to circumvent wage discrimination given that the salaries of public university officials are publicly available. As such, findings in Monks and McGoldrick (2004) are much more in line with the game described in Faria et al. (2022) than are the results discussed in Hebner et al. (2018).

Empirical methodology

Our focus is on aggregate decompositions of various features of the wage distributions of salaries of male and female deans of colleges of business in the U.S. We focus our analysis on aggregate decompositions for two reasons. First, the identification conditions are not as stringent as those required for identification in a detailed decomposition, and, second, our sample, although unique, is relatively small. Algebraically, aggregate decompositions can be represented by,

$$\Delta_O = \Delta_S + \Delta_X, \tag{1}$$

where the overall difference, Δ_O, between some feature of the wage distributions of males and females is decomposed into a wage structure effect, Δ_S, and a composition effect, Δ_X. In this study we conduct aggregate decompositions using the usual Oaxaca-Blinder (Blinder, 1973; Oaxaca, 1973) decomposition for the mean difference in wages, along with decompositions for the mean difference and differences at the 20th, 40th, 60th, and 80th percentiles using inverse probability weighting or IPW. We discuss both procedures below.

The usual Oaxaca-Blinder decomposition is based on two regression models, one for the advantaged group (males) and one for the disadvantaged group (females). Thus, the linear regression models estimated are,

$$Y_i = X_i\beta_M + \in_{Mi} \tag{2}$$

for males, and,

$$Y_i = X_i\beta_F + \in_{Fi} \tag{3}$$

3 Hebner et al. (2018) report that their data cover the 1998–2010 time period and come from *The Chronicle of Higher Education*.

4 These four time periods are 1998–2000, 2001–2003, 2004–2006, and 2007–2010 (Hebner et al., 2018).

for females. The raw mean difference is given by,

$$\Delta_O = \overline{Y}_M - \overline{Y}_F = \overline{X}_M\beta_M - \overline{X}_F\beta_F, \quad (4)$$

which, after adding and subtracting $\overline{Y}^C = \overline{X}_F\beta_M$, yields,

$$\Delta_O = \overline{X}_F(\beta_M - \beta_F) + (\overline{X}_M - \overline{X}_F)\beta_M, \quad (5)$$

with

$$\Delta_S = \overline{X}_F(\beta_M - \beta_F), \quad (6)$$

and

$$\Delta_X = (\overline{X}_M - \overline{X}_F)\beta_F, \quad (7)$$

where the first term, Δ_S, is referred to as the unexplained component or the wage structure effect and the second term, Δ_X, is referred to as the explained component or the composition effect. As noted by Sloczynski (2014), based on earlier work by Barsky et al. (2002), Black et al. (2006), Melly (2006), Black et al. (2008), Fortin et al. (2011), and Kline (2011), the unexplained component can be interpreted as the average treatment effect on the untreated in a potential outcomes framework.

However, a counterfactual interpretation of the findings above requires three additional assumptions given by Fortin et al. (2011). The assumptions are as follows:

> *Assumption 1.* A *Simple Counterfactual* meaning that the observed wage structure of males (females) represents a counterfactual wage structure for females (males). This assumption rules out any general equilibrium effects, which perhaps exist in our case due to the small number of participants in the market for business college deans.
>
> *Assumption 2. Overlapping Support* meaning no combination of observed and unobserved characteristics can identify the gender of business school deans. This assumption has come under considerable scrutiny in the gender-wage gap literature given that Noro (2008) finds that many males exhibit a set of characteristics not found in females.
>
> *Assumption 3. Conditional Independence/Ignorability* which, in our context, means that the unobserved characteristics of deans are independent of gender. Unfortunately, there is much empirical research indicating a strong impact of several omitted variables in studies of the gender wage gap. See, for example, Brown and Corcoran (1997), Loury (1997), Machin and Puhani (2003), Blackburn (2004), Fortin (2005), Mueller and Plug (2006), Black et al. (2008), Fortin (2008), Manning and Swaffield (2008), Ichino and Moretti (2009), and Leibbrandt and List (2015).

These assumptions, although not without problems, must be maintained in order to use the causal literature. Given these assumptions, the counterfactual in our case is the salary that a female business school dean would earn if evaluated at the male wage structure, or again,

$$\overline{Y}^C = \overline{X}_F\beta_M. \quad (8)$$

Using this counterfactual the components of the aggregate decomposition above can be identified.

Although the typical Oaxaca-Blinder decomposition is estimated by OLS, a more useful estimator from the treatment literature is based on inverse probability weighting (IPW). IPW is an efficient, nonparametric method of estimating the average treatment effect on the treated (ATET) and quantile treatment effects on the treated (see Hirano et al., 2003, and Firpo, 2007, respectively). Once determined, these counterfactuals are used to partition the wage gap into a wage structure effect and a composition effect.

The idea behind IPW in our context is to reweight the entire female sample based on characteristics in order to construct a female salary pseudo-sample in which those females with characteristics most similar to male deans are weighted more heavily. In this way a complete counterfactual wage distribution for females is constructed, which can then be used to obtain any of the usual descriptive statistics, such as the mean and various percentiles.

Econometric model, data, and summary statistics

The variable of interest in our econometric model, $Female_i$, is a dummy variable equal to 1 if business dean i is a female, and 0 otherwise. Although a negatively signed coefficient attached this variable in a wage equation would be consistent with gender discrimination, it would not provide definitive evidence that such has occurred. The other primary regressors in the earnings equation are $Experience_i$, $Experience_i^2$ and $Tenure_i$. The first of these three regressors is equal to the number of years of business school dean-level experience of each business dean, i, while the second is the squared form of this variable. These two variables are standard fare in earnings equations and they should in this case provide the expected quadratic result, with the former exhibiting a positive relationship to $LogSalary_i$, while the latter exhibits a negative relationship. Next, $Tenure_i$ is equal to the number of years that a business school dean, i, has served in that administrative position at his or her current institution. Prior academic research (e.g., Ransom, 1993; Boal and Ranson, 1997; Bratsberg et al., 2003, 2010; Moore et al., 2007; Ashenfelter et al., 2010; Haeck and Verboven, 2012; Faria et al., 2019) emphasizes the importance of monopsony power held by institutions of higher education. Such power suggests that, in the case under study, a business school dean's tenure will be negatively related to $LogSalary_i$.

$NamedSchool_i$ is a dummy variable equal to 1 if dean i is affiliated with a named business school, and zero otherwise.

Given that naming awards are the result of large donations from a business school's private sector supporters (e.g., alumni, etc.), named schools generally have greater financial resources than their unnamed counterparts. The added prestige of a named business school also attracts a higher quality applicant pool, a determinant of earnings in this academic labor market. As a result, it is expected that $NamedSchool_i$ will be positively related to $LogSalary_i$. Next, research by Faria et al. (2019) indicates that successful job market candidates are able to achieve a marketable level of scholarship over the course of their academic careers. In the context of this study, each dean's scholarship is captured by $BSPPubs_i$, which is equal to the number of publications for each business school dean, *i*, that is indexed in *Business Source Premier*. It is expected that this variable will be positively related to $LogSalary_i$.

Next, a small set of institution variables including $Bachelors_i$, $Masters_i$, and PhD_i, are contained in the model in order to explore the impact of the size and scope of each business school on dean *i*'s earnings. These represent the number of undergraduate, master's, and doctoral students enrolled in each business school. Each is expected to be positively related to $LogSalary_i$, and the variables series should exhibit a monotonic trend, beginning with $Bachelors_i$ and rising to PhD_i. Lastly, given that the model presented in Faria et al. (2019) produces a result that is consistent with the anecdotal evidence that economists are often chosen as deans of business schools because they are relatively more productive and less costly to acquire than scholars from other traditional business school disciplines, the regression specification includes set of dummy variables capturing the academic field of each business school dean, *i*. These include binary indicators for business school deans trained in accounting ($Acct_i$), economics ($Econ_i$), finance ($Finc_i$), management ($Mgmt_i$), management information systems ($MISM_i$), and marketing ($Mktg_i$). Here, the omitted category includes business school deans trained in non-business disciplines (e.g., education, law, etc.).

The data employed in this study consist of a sample of 205 business schools in the U.S.[5] This sample is comprised of 117 observations from national universities as classified by *U.S. News & World Report*'s guide to colleges and universities, and 88 observations from regional institutions, again as classified by *U.S. News & World Report*. In most cases, data on $LogSalary_i$ are collected from a state's public sector salaries webpages. In some cases, these data are collected from news reports. Data on $Experience_i$, $Tenure_i$ and those binary indicators included in the model are typically found in either individual curriculum vitae or on LinkedIn.com. In some cases, news reports are used. Data on $NamedSchool_i$ are found from the individual webpages of colleges and schools of business that are sampled. For the variable $BSPPubs_i$, which accounts for each dean's publication record, the data come from *Business Source Premier*, as noted above. Lastly, data for the final three regressors–$Bachelors_i$, $Masters_i$, and PhD_i–are found on individual webpages of the colleges and schools of business that are sampled.

Summary statistics for each of the variables are found in **Table 1**. As indicated there, the mean value of *Salary* for all business school deans in the sample is about $275,000, while the means for male and female business school deans are about $284,000 and $245,000. This gap represents a 13.7% difference favoring males. There is a 1-year difference in the mean levels of experience, with male and female business school deans reporting mean values of *Experience* of about 7.6 and 6.6 years, respectively. In terms of tenure, the difference in means is slightly smaller, at about 6.1 years for males and about 5.2 years for females. Also, as pointed out in **Table 1**, about 47% of the male business school deans in the pooled sample head named colleges and schools of business. That figure for female business school deans is similar, at just under 49%.

Similar comparisons hold for scholarly productivity, with the mean number of academic publications for male deans being equal to about 16.1, compared to that of about 13.8 for female deans. The typical male dean manages a business school with 2,066 undergraduate majors, 328 master's degree-seeking students, and about 25 doctoral students. These figures compare to 2,264 undergraduate majors, 229 master's degree-seeking students, and about 22 doctoral students in the typical

TABLE 1 Sample statistics.

	Means [SDs]	Means [SDs]	Means [SDs]
Variable	**Pooled**	**Female**	**Male**
Experience	7.395 [5.63]	6.638 [4.68]	7.620 [5.88]
Experience2	86.215 [133.20]	65.489 [92.33]	92.380 [142.79]
Tenure	5.902 [5.13]	5.234 [4.22]	6.101 [5.37]
NamedSchool	0.473 [0.50]	0.489 [0.51]	0.468 [0.50]
BSPPubs	15.541 [17.64]	13.808 [12.94]	16.057 [18.81]
Bachelors (1000s)	2.111 [1.83]	2.264 [2.34]	2.066 [1.65]
Masters (100s)	3.051 [4.45]	2.294 [4.09]	3.277 [4.54]
PhD (10s)	2.409 [3.96]	2.232 [4.59]	2.461 [3.77]
Acct	0.102 [0.30]	0.064 [0.25]	0.114 [0.32]
Econ	0.127 [0.33]	0.043 [0.20]	0.152 [0.36]
Finc	0.137 [0.34]	0.085 [0.28]	0.152 [0.36]
Mgmt	0.322 [0.47]	0.426 [0.50]	0.291 [0.46]
MISM	0.078 [0.27]	0.064 [0.25]	0.082 [0.28]
Mktg	0.166 [0.37]	0.277 [0.45]	0.133 [0.34]
Female	0.229 [0.42]	1 [0]	0 [0]
Salary ($100,000s)	2.749 [1.23]	2.449 [1.08]	2.838 [1.27]
LogSalary	0.918 [0.43]	0.813 [0.40]	0.950 [0.43]
Nobs	205	47	158

5 The sample was chosen on the basis of ability to locate salary information for an institution's business school dean. Thus, this procedure produced a sample with much greater representation of public colleges and universities.

TABLE 2 Aggregate decompositions.

	Oaxaca-Blinder	IPW mean	IPW 20th	IPW 40th	IPW 60th	IPW 80th
Males	0.950*** (0.03)	0.950*** (0.03)	0.512*** (0.02)	0.777*** (0.06)	1.062*** (0.06)	1.386*** (0.04)
Counterfactual	—	1.020*** (0.08)	0.551*** (0.08)	0.847*** (0.11)	1.065*** (0.12)	1.386*** (0.17)
Females	0.813*** (0.06)	0.813*** (0.06)	0.484*** (0.06)	0.649*** (0.06)	0.847*** (0.10)	1.224*** (0.11)
Difference	0.137** (0.07)	0.137** (0.07)	0.028 (0.06)	0.128 (0.09)	0.215* (0.11)	0.163 (0.12)
Wage structure effect	0.004 (0.07)	−0.071 (0.08)	−0.040 (0.08)	−0.070 (0.11)	−0.002 (0.13)	−0.014 (0.17)
Composition effect	0.132*** (0.05)	0.207*** (0.08)	0.067 (0.08)	0.199** (0.11)	0.218 (0.14)	0.176 (0.15)

The figures in parentheses are standard errors obtained from 500 bootstrap samples.
***(**)[*] denotes the 0.01(0.05)[0.10] level of statistical significance.

business school headed by a female dean. Lastly, according to the field indicators series, 11.4% of male deans in the pooled sample are trained in accounting, 15.2% each in economics and finance, 29.1% in management, 8.2% in MIS, and 13.3% in marketing. In terms of their female counterparts, 6.4% are trained in accounting, 4.3% in economics, 8.5% in finance, 42.6% in management, 6.4% in MIS and 27.7% in marketing.

Decomposition results

A standard regression of $LogSalary_i$ on the variables in our econometric model described above would not provide definitive evidence of the presence or absence of gender discrimination in academic deans' wages. Thus, the discussion in this section focuses solely on the aggregate decomposition results, which are given in **Table 2**. Column two of **Table 2** contains the components of the usual Oaxaca-Blinder decomposition. The log mean salary for males is 0.950 and the log mean salary for females is 0.813, leading to a log wage gap of 0.137. Of this amount nearly all is due to the composition effect, which is statistically different from zero. This is an indication that male deans possess highly valued characteristics in abundance relative to female deans. The results offer no indication of a statistically significant wage structure effect. Column three presents a second decomposition at the mean using inverse probability weighting (IPW). Here, the composition effect indicates an even larger disparity of 0.207 log points. The wage structure effect is negative and, again, not statistically significant. These results are supportive of the sequential bargaining game in Faria et al. (2022), which asserts that the publicness of administrators' salaries works to circumvent any wage discrimination based on gender or race.

Next, columns four through seven of **Table 2** contain aggregate decomposition results using IPW to examine salary differences at the 20th, 40th, 60th, and 80th percentiles. Results for the 20th percentile are contained in column four. The log mean for male deans is 0.512 and the log mean for female deans is 0.484, yielding a difference of 0.028 log points, which is not statistically significant. The composition effect is 0.067 and the wage structure effect is −0.040. Neither is statistically different from zero. The decomposition results for the 40th percentile are given in column five of the table. The log mean salary for males is 0.777, the log mean salary for females is 0.649, leading to a difference of 0.128 log points, which again is not significantly different from zero. The composition effect is 0.199, which is statistically significant at the 0.05 level. Next, the wage structure effect is −0.070, which is not statistically significant. Column six gives the decomposition results at the 60th percentile. The mean log wage for males is 1.062, while that for females is 0.847, leading to a gap of 0.215 log points, which in this case is statistically significant at the 0.10 level. The composition effect is 0.218, which just falls short of statistical significance. The wage structure effect is −0.002, which is not statistically significant. Lastly, the results for the decomposition of the 80th percentile are given in column 7 of the table. The log mean wage for males is 1.386, while that for females is 1.224. The difference of 0.163 is not statistically significant. The composition effect is 0.176 log points and the wage structure effect is −0.014 log points. Neither is statistically different from zero.

Although based on a relatively small sample, the percentile decompositions reveal interesting findings. Moving from the 20th to the 80th percentile, the wage gaps in log points are, respectively, 0.028, 0.128, 0.215, and 0.163. The gap increases steadily until the 80th percentile, then falls slightly. Although not always statistically significant, the composition effect across percentiles accounts for, respectively, 239, 155, 101, and 108% of the log wage gaps. These results indicate that male deans have valuable characteristics in abundance relative to female deans. There is no indication of a wage structure effect on salaries, a result that, again, offers support to the assertion in the sequential bargaining game in Faria et al. (2022) that public availability of administrators' salaries works to circumvent any wage discrimination based on gender or race.

Conclusion

Discussion of the "gender wage gap" continues to have a prominent place in news and political discussion in the U.S. However, the approaches to this issue espoused by national media services tend to simply compare the mean wage from the female population to that from the male population, and, thus, fail to account for the many factors inherent in

wage determination in various labor markets. Fortunately, academic studies dating back several decades have addressed this shortcoming in empirical analyses of gender-, and race-based, wage or earnings gaps in various industries, and under various conditions.

One such industry under examination in the past is higher education, with numerous studies examining gender differences in the salaries of university faculty. Even so, there is a dearth of research on such differences among the administrative ranks of the academy, and much of what has been conducted focuses primarily on college and university presidents. This study extends the academic literature in the genre by using data from more than 200 business schools and colleges in the U.S. to examine the salaries of female and male business school deans. After controlling for institution-level effects, as well as demographic characteristics and the academic qualifications of the various business school deans, results from an aggregate Blinder-Oaxaca decomposition and inverse probability weighting to examine salary differences finds no evidence for a statistically significant wage structure effect. This finding, which runs counter to those in recent studies showing a male wage premium in the case of college and university presidents, is consistent with the sequential bargaining game in new research which asserts that the publicness of administrators' salaries works to circumvent any wage discrimination based on gender or race.

Finally, given limitations in the size of our sample, one avenue for future research involves collection of business school dean salary data for additional years, which would allow for the construction of a panel dataset. Given the difficulty in finding such information using a backward-looking approach, this endeavor is arguably best undertaken in a purposeful, future-oriented manner, perhaps starting with current salary information and building forward. Such a process would also allow for other key control variables to be included, such as each dean's salary in the year prior to becoming the dean of a particular business school, a variable that would likely explain a considerable portion of the variation in current salaries. Additionally, given the importance of collocation preference in academe, inclusion of an indicator variable capturing whether the dean's spouse is also a faculty member in the same business school might tease out differences in the approaches taken by males and females in negotiating salaries.

Data availability statement

Authors will make data available upon request. Requests to access these datasets should be directed to FM, mixon_franklin@columbusstate.edu.

Author contributions

SC, FM, and JF contributed to conception and design of the study. FM and JS organized the database. SC and FM performed the statistical analysis and wrote the first draft of the manuscript. All authors contributed to manuscript revision, read, and approved the submitted version.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

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