# The impact of CEO gender on the gender pay gap: Evidence from UK companies

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## ABSTRACT

This thesis paper analyzes the relationship between CEO gender and the gender pay gap in UK companies, using publicly available data from the UK Government's Gender Pay Gap Reporting Service. Utilizing a sample of over 1,200 firms, this study investigates whether the companies with a female CEO report a narrower gender pay gap compared to male-led counterparts, while controlling for company size. Using a quantitative methodology, including regression analyses and CEO gender identification via API data integration (Companies House and NamSor), the research finds no statistically significant relationship between CEO gender and pay gap outcomes. While some descriptive patterns indicate a slightly smaller gap in firms with a female CEO, these effects are not robust under statistical testing. These findings challenge simplified assumptions about top leadership influence and highlight the complexity of structural inequalities in corporate pay systems. This research contributes to leadership and gender equality literature by clarifying the relationship of individual leader genders impact and emphasizing the need for broader organizational and systemic interventions.

During the preparation of this work, the author used ChatGPT in order to generate synonyms and advanced vocabulary words. After using this tool, the author reviewed and edited the content as needed and takes full responsibility for the content of the work.

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#### Keywords

Pay gap, female leadership, consequences, female-led companies, comparison.

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# INTRODUCTION Situation and complication

The gender pay gap is a multifaceted and complex issue with many negative effects that is continuously affecting individuals, industries, and the working culture (Bishu & Alkadry, 2016). Currently, the average gender pay gap is reported to be at 11.9% - which indicates that a full-time working woman earns 88 cents to every euro earned by median full-time working man (OECD & Frey, 2023). While the percentages vary from country to country, some countries are reported to be failing at managing gender pay gap tremendously, for instance Korea with a 31.1% (OECD & Frey, 2023). Numerous studies have highlighted the negative impacts of the gender pay gap, such as feelings of lowered self-esteem, dissatisfaction. oppression, resentment, distress, poorer well-being and many more (Major et al., 2002), yet the causes of it are still insufficiently explained. Moreover, it may have a more detrimental impact on the company than it has on an individual, by majorly contributing to retention, satisfaction and motivation (Coron, 2021).

By analyzing publicly published UK companies data on pay gap, this research will aim to explain whether the gender of the CEO has a significant effect on the pay gap data while controlling for the company size. The findings of this paper will further contribute to research on variables influencing pay gap and support policies reducing the existing pay gap. Additionally, this paper will be offering valuable insights on the theoretical understanding of the gender pay gap by understanding how leadership gender (gender of CEO) may influence disparities in the workplace.

#### **1.2** Research objective and question

This thesis aims to determine whether CEO gender in UK companies has a significant effect on gender pay gap data and if it varies from industry to industry. It also examines how this relationship is subject to change when controlling for companies size and build on theoretical frameworks of leadership and inequality by contributing to the existing research of how gender of organizational leaders may influence pay disparities.

To determine the CEO gender's and gender pay gap relationship a research question was formulated :

*Is there a statistically significant relationship between CEO gender and gender pay gap data?* 

#### **1.3** Academic and practical relevance

This thesis paper contributes to the understanding of the extent of CEO's genders contribution to gender pay gap, consequences, and the impact it has on the women's working culture. This topic is particularly relevant, as there are multiple researches done on gender pay gap in different industries (Gannon et al., 2007; OECD & Frey, 2023), and controlling of the different factors and measurements while calculating it (Coron, 2021). However, there are no significant findings on CEO's genders influence on pay gap specifically. By focusing on UK's publicly published companies data on 1252 companies, reported by UK Government Gender Pay Gap Reporting Service, this paper will attempt to find conclusive evidence and try to support it with existing pay gap theories.

### 2. LITERATURE REVIEW

Economic incentives remain as the most prevalent and widely applied reward systems in workplaces globally. These economic rewards (bonuses) are often used as indicators of workplace performance or extrinsic motivators. When a company unintentionally implements a reward system that is based on sexism or internal biases, it creates a lack of access to opportunities for marginalized groups and deprives them of equal treatment (Bishu & Alkadry, 2016). One such phenomenon is the gender pay gap, described as "the difference between the earnings of women and men in the workforce, expressed as a percentage of men's earnings" by Workforce Gender Equality Agency (WGEA) (Workplace Gender Equality Agency, 2018). The gender pay gap has been persistent for a very long time and is still a significant issue, which has multiple major consequences for today's working culture, such as unequal opportunities and support when applying for leadership positions (Heilman & Okimoto, 2007), poor performance, lowered profitability as well as productivity (Khoreva, 2011), distress, lowered self-esteem and dissatisfaction of women facing this discrimination (Major et al., 2002) and many more.

Moreover, the consequences of the gender pay gap are not the only issue companies face. It is a very far-reaching and multifaceted issue with many underlying causes and has numerous different problems stemming from it. Because of the complexity and far-reaching effects it has in the workplace, it is crucial to track and measure it properly (Coron, 2021). Coron (2021) conducted a case study on a large French company focusing on the HR metrics of the gender pay gap and the complexity in measuring it. In his research's findings Coron (2021) states that gender pay gaps measurement is a very subjective matter that is often negotiated, and politically charged rather than a universal method of calculation. The author voices that a proper and consistent measuring technique is vital for proving the existing inequalities. When one is not present, and the pay gap data is ignored, it causes a decrease in motivation, satisfaction, performance, and negatively affects the intent of staying (Coron, 2021). This research is utilizing the UK's companies publicly published data, a proper and universal measurement tool, to analyze and make inference about CEO genders relationship with pay gap data.

Albeit the fact that pay gap is a very complex and hard to conceptualize phenomenon, there are multiple researches providing findings of pay gap's negative influences on psychological wellbeing, confidence, trust and motivation of underpaid women (Bishu & Alkadry, 2016). The psychological impacts of prejudice or/and discrimination, particularly their effects on well-being and performance, are well-documented in the literature (e.g., Major et al., 2002). The study emphasizes the far-reaching consequences of the perceived inability to obtain equal resources, which results in threats or compromises to physical well-being of the individuals. If this form of discrimination is continued, the affected individuals develop interpersonal traits such as feelings of exclusion, being belittled, and ignored. This perception of unequal compensation may lead underpaid women to experience diminished self-esteem and a sense of being undervalued because the work they do is not equally rewarder (Major et al., 2002). A research by Major et al. (2002) unravels how these discriminatory practices such as pay gap can eventually manifest broader and more complex workplace inequalities, that would inflict an even greater

amount of stress and oppose an interpersonal threat on women experiencing pay gap.

The complexity of the gender pay gap lies in the roots of the patriarchal systems, and the biggest underlying cause of gender pay gap stems from preference for men in high-level positions, as discussed in Baker's (2014) analysis. The study discusses many reasons why women have difficulties in "climbing the corporate ladder" and what cultural beliefs and invisible barriers are playing a part. One of the key factors indicated by the author is gender stereotyping, described as a socially prompted stereotypes of femininity and masculinity that potentially undermine the credibility of women as leaders. Additionally, the author presents the Role Congruity Theory as a major factor actively influencing the gender pay gap, as according to this theory, individuals are penalized when their behavior deviates from the socially prescribed norms. In this case, women who are successful leaders are 'violating' societal standards of their gender by manifesting male-like attributes, and failing to perform the attributes associated with female gender. This leads to unfavorable evaluation of successful women leaders compared to men. Baker (2014) suggests that the evaluation tools used so widely to assess leadership qualities and traits are often not gender neutral and contains biases towards what men consider as positive leadership qualities.

Furthermore, the role of perceived communality in the penalties women face for achieving success in male domains has been examined through three experimental studies involving 217 participants in the United States (Heilman & Okimoto, 2007). The findings indicate that women are facing multiple barriers to leadership that men do not, because they are perceived as selfish, deceitful, manipulative, and lacking the qualities needed to lead. Furthermore, women who are trying to model male-like characteristics are more often perceived as unsuitable for top positions (Doherty, 2014). Furthermore, the importance of present, same-gender role model is considered essential for motivating women and providing tangible examples of success (Doherty, 2014).

Contrary to claims of women not having required qualities to lead, research by Changzheng & Zhenghao (2022) and their longitudinal study of 2783 non-financial listed Chinese companies over 10 years (2008-2018) women are more efficient at performing consulting and supervision functions in boardrooms. Their findings conclude that it is achieved by women being more effective and efficient at strengthening the governance of the board. This greater efficiency achieved by women is supported by findings suggesting that women are more likely to combine both masculine and feminine leadership traits, allowing them to adopt a significantly more democratic and participative style than men (Chaluvadi, 2015). The author explains that women leaders acquire a transformational leadership style -("Transformational leaders are described as being inspirational role models, nurturing relationships, cultivating member skills, and motivating creativity and innovation. ") - to a greater extent and more naturally than men, because of the feminine character traits that they posses. Additionally, the study reveals that women's leadership style is greater than men in many ways, such as : they are more focused on social values (benevolence and universalism), place a greater emphasis on the welfare of the people and nature, support marriage, family and religion greater than men, and are able to consider a wider range of stakeholders (employees and their families). The research is finalized with a statement that women may be greater leaders than men because of the qualities and values they carry, such as : supporting the social welfare, caring deeply about the public and a wide range of stakeholders, having stronger ethical practices and leading the company not only toward better financial but also organizational performance.

Another study supports this claim by stating that women in female-led companies not only have fairer wages but also more support, greater opportunities of promotion and finer chances in leadership because of the support they receive from women in senior positions (Cardoso & Winter-Ebmer, 2007). This study based on the population of private firms with wage-earners in manufacturing and services in Portugal, have found that women in female-led companies are receiving significantly more support, help and encouragement to "climb the career ladder" compared to male-led Portugal companies (Cardoso & Winter-Ebmer, 2007). Authors accentuate that female managers are the key for this support system as they "…actively mentor and protect female co-workers, increasing their promotion chances and thus their expected wages ".

Additionally, research conducted by Kritikos et al. (2024) suggests that women as leaders in industries like ICT or business services exhibit no or non-significant pay gaps, whereas men-led companies in the same industry have maintained a significant 10 percent pay gap.

However, for some studies (Kritikos et al., 2024) the pay gap difference between female and male-led companies decreases when the firm's size increases. While there are countless studies on different countries (Portugal, United States, China), industries, and sizes of the company (Kritikos et al., 2024) there are still no clear relationship established on whether female-led companies have lower pay gap than male-led ones. That's why this research paper will be dedicated to measuring the relationship between the CEO's gender and gender pay gap data.

Hypothesis  $(H_1)$ : There is a difference in the gender pay gap between male-CEO and female-CEO companies.

# 3. METHODOLOGY

## 3.1 Research design

This research investigates the extent to which CEO gender affect the gender pay gap within UK firms while controlling for size. The comparison will be made by conducting a quantitative research on UK government's Gender Pay Gap service data (gender-pay-gap.service.gov.uk) by using Python and RStudio programming languages.

The comparison will be made by taking the median gender pay gap data from female-led companies and median gender pay gap of male-led companies. To maintain objectivity, a regression will be conducted to check for any potential significant differences between the two genders.

Additionally, this paper will aim to examine if this CEO genders relationship with gender pay gap differs depending on the industry the company is in. It will determine in which industries CEO gender has a relationship with gender pay gap. This regression will be conducted in RStudio.

The quantitative design utilizes Python and RStudio to analyze the relationship between CEO gender of the UK companies and the pay gap from the publicly published UK Government's Gender Pay Gap Service data. This data contains information of industry type, median hourly pay differences of men and women working in these companies.

#### **3.2 Data collection and research variables**

The UK companies dataset had median hourly pay differences, companies names, industry types and many other variables, but did not contain CEO genders which were necessary for this research. CEO name and gender were manually retrieved by acquiring an API key from a UK government registry "Companies House". API key is a 'one time' unique code made up from many letters and numbers, used for authenticating a user when accessing Application Programming Interface (API). UK government registry "Companies house" site is an official authority responsible for maintaining, keeping and updating official records. This official authority registers all new companies and stores their legal and financial information (including officers : CEO's). After registering and successfully acquiring the API key, requests were sent to look up information that is not widely published, including the names of the required CEO's. Subsequently, I queried the Officers API to call the most recent officer (CEO) name by using get ceo name(company name) code in Phyton programming language. That resulted in a dataset with the names of the CEO's, but gender was not predicted. For the acquiring of the gender, an API key was requested from NamSor for the most accurate gender prediction (NamSor and Gender API identified as the best and most accurate gender prediction tools available to the public by Sebo (2021)).

NamSor a very well known and successful name analysis tool that uses incorporated AI and data science to infer specific demographic attributes from personal names. This tool uses large datasets and complex machine learning algorithms to detect patterns in names and identify genders, ethnicity, country of origin, and language. NamSor was selected for this research based on Sebo (2021) comparative study on gender recognition tools, where NamSor had only a 0.2% error. Finally, any missing gender values (Na's) were filled in manually by checking CEO names online. Research variables : independent variable : CEO's gender (male = 0, female = 1), dependent variables: median gender pay gap, and control variable : company size.

Additionally, for the second regression of CEO gender and Industry type on median gender pay gap the NACE4Code was used, which was indicated in the UK's government registry provided dataset. NACE4Code is a 4-digit industry classification code, which indicates the industry the selected company is in. To be able to make this regression all the companies were categorized into 8 main industries : 1 – Manufacturing; 2 – Finance and Real Estate; 3 – Transportation and Storage; 4 – Construction; 5 – Hospitality; 6 – Information and Communication; 7 – Utilities; 8 – Wholesale and Retail Trade. Eight separate OLS regressions were conducted to predict median gender pay gap in each industry. Each regression had a dependent variable : Median Gender Pay Gap, and an independent variable : CEO gender (0=male, 1=female).

The first regression uses an independent samples t-test to test the difference in median pay gap data between male-CEO and female-CEO companies. When controlling for size, a multiple linear regression analysis is used to estimate the relationship between the CEO gender and gender pay gap while holding the company's size constant.

The second regression model examines whether the relationship between CEO gender and gender pay gap differs across industries. To test this, an interaction is introduced between the CEO gender and an industry group. Industry type is derived from the first digit of each firm's NACE4Code. This is a multiple linear regression that estimates the effect a female CEO has on the median gender pay gap within 8 different sectors, while at the same time controlling for company size. The model identifies whether female-led firms in specific industries report significantly different gender pay gaps compared to male-led firms in the same sectors.

Variable Type	Variable Name	Measurement / Operationalization	Data Source
Independent	CEO Gender	Binary variable: Male CEO = 0, Female CEO = 1	Companies House API; NamSor API; manual search
Dependent	Gender Pay Gap (Median)	Median GPG (%) = (Median male pay – Median female pay) / Median male pay × 100	UK Gender Pay Gap Service
Control	Company Size	Categorical variable: 250–499, 500–999, 1000–4999, 5000–19999, 20000+	UK Gender Pay Gap Service
Moderator	Industry Group	Categorical variable derived from the first digit of NACE4Code indicating sector	UK Government NACE Classification
Interaction	CEO Gender × Industry	Interaction term: tests whether CEO gender effect differs across industry sectors	Constructed within regression in R
Intermediate	CEO Name	Retrieved via Companies House Officers API (Python function get ceo name(company name))	Companies House API

Table 1. Operationalization of research variables

Intermediate	CEO Gender	Gender predicted based on CEO name	NamSor API
	(Predicted)	using name-based classification model	

#### 3.2 Data and measurement

Gender pay gap is a difficult phenomenon to measure due to many different perspectives and ways to look at pay inequalities between females and males (Coron, 2021). The issue involves many "complex issues of measurement" and that these complex inequalities can be segregated into two different spheres : 1) women with the same profile as men get paid less, and 2) different genders possess different characteristics and they partly explain the global wage gap (Coron, 2021). Therefore, clearly defining and ensuring that gender pay gap is measured correctly is very important for companies (Coron, 2021).

This research focuses on secondary data from the UK Government's Gender Pay Gap Service, an official database supported by the Government Equalities Office. This data includes yearly, self-reported gender pay gap figures from UK companies and public sector employers with 250 or more employees. These reports are required by law under the Equality Act 2010 (Gender Pay Gap Information) Regulations 2017. Companies must submit specific required information about their gender pay gap, and all the data is published publicly on the government's website. To analyze the CEO genders relationship with gender pay gap, I manually collected and included 2 variables into the dataset : CEO name and gender. All of this was collected and encrypted by using Python 3 programming language and API to access information from all the companies.

Dependent variable – gender pay gap. Described as "the difference between the earnings of women and men in the workforce, expressed as a percentage of men's earnings". Calculation : (Average male earnings – Average female earnings) / Average male earning \* 100.

Independent variable – female CEO. Described as a company with a female CEO. This variable will be coded as binary and have a 0 value if it will be a male-led company, and a value of 1 if it is a female-led company.

Control variable – size. Company size is measured by the number of employees. It is categorized as small, medium, or large company. For consistency, the pre-existing measurement of size of the UK Government's Gender Pay Gap Service data (small = <50, medium = 50-249, large = 250+) will be utilized.

In addition to the main regression, this paper examines whether the relationship between CEO gender and the gender pay gap varies by industry. Furthermore, the NACE4Code from the UK Government's Gender Pay Gap Service was used to classify the industry type which resulted in eight main sectors : Manufacturing, Finance and Real Estate, Transportation and Storage, Construction, Hospitality, Information and Communication, Utilities, and Wholesale and Retail Trade. Each sector was analyzed using a separate regression for a concise conclusion of whether the CEO gender had a significant effect on the gender pay gap within specific sectors.

#### 4. RESULTS

The complete dataset with CEO names, genders, industry types and median hourly pay in percentages was uploaded into Python and RStudio and used for 3 different types of regressions : median pay gap, multiple linear regression, and multiple linear regression that estimates the effect of a female CEO on the median gender pay gap in different industries (8 separate regressions).

#### 4.1 Regression on median pay gap

This regression was conducted to analyze the relationship between CEO gender and the median hourly gender pay gap. The results of the model were not significant (F =0.0001,  $p \approx 0.992$ ) with an R<sup>2</sup> of 0.000, which strongly indicates that CEO gender does not account for the variance in the gender pay gap at all. The regression coefficient of this models female CEOs was equal to  $\beta = -0.01$ , which confirms that the CEO gender has no significant influence on gender pay gap data.

Table 2. OL	S Regression:	Median	Pay Gap	~ CEO
	Gen	der		

	Dependent variable:
	Median Pay Gap (%)
Female CEO	-0.01
	(0.95)
Constant	10.60***
	(0.49)
Observations	1,251
R <sup>2</sup>	0.0000
Adjusted R <sup>2</sup>	-0.001
Residual Std. Error	14.78 (df = 1249)
F Statistic	0.0001 (df = 1; 1249)
Note:	*p**p***p<0.01
	Note: *p

#### 4.2 Multiple linear regression

 Table 3. OLS Regression: Median Pay Gap ~ CEO
 Gender + Company Size

Dependent variable:

Median Pay Gap (%)

Female CEO	0.10
	(0.95)
250–499	-2.84**
	(1.42)
500–999	-1.24
	(1.47)
1000–4999	-3.05**
	(1.49)
5000–19999	-4.79*
	(2.59)
20000+	-7.34
	(4.62)
Constant	12.78***
	(1.24)
Observations	1,243
R <sup>2</sup>	0.01
Adjusted R <sup>2</sup>	0.002
Residual Std. Error	14.76 (df = 1236)
F Statistic	1.50 (df = 6; 1236)
Note:	*p**p***p<0.01
	Note: *p

To control for the potential confounding effects of organizational scale, this regression was conducted with both CEO gender and company size (measured in the number of employees) as predictors of the median gender pay gap. This model was not significant (F = 1.50, p =0.136) with only 1 % of explained variance of the gender pay gap ( $R^2 = 0.01$ ). Neither CEO gender ( $\beta = 0.10$  with a standard error of 0.95) was a significant predictor. However, some company size categories had significant negative coefficients (firms with 250-499 employees ( $\beta = -2.84$ , p < 0.05), and 1000–4999 employees ( $\beta = -3.05$ , p < 0.05)). These findings suggest that firms of smaller scale have a slightly lower gender pay gap compared to larger firms. Nonetheless, the results of this regression were mixed and limited. To conclude, CEO gender does not significantly predict the median gender pay gap, even when controlling for the size.

# 4.3 Multiple OLS Regression: CEO Gender and Company Size Predicting Gender Pay Gap

This regression was conducted to see industry-dependent effects of CEO gender on pay gap (see Appendix, table A1).

With a dependent variable : Median Gender Pay Gap (%) and an independent variable CEO gender (0=male; 1=female), each regression isolated a single industry for inter-industry comparisons. Industries 1,2,3,5,6, and 7 revealed no statistically significant effect of CEO gender on gender pay gap. All of these sectors have large standard errors and very low R<sup>2</sup> values, indicating that CEO gender alone explains almost no variation in these industries pay gaps. However, industry 4 (Construction) shows a positive and significant effect of  $\beta = 4.30$ , p < 0.05. This finding indicates a higher pay gap in female-led firms in this industry compared to male-led ones. Additionally, industry 8 (Retail and Trade) indicates a significant negative effect of  $\beta = -4.57$ , p < 0.05, which means that female-led firms in this industry show a lower pay gap than male-led ones. These results are limited because the model is bivariate (does not consider other potentially confounding variables, such as board composition). The lack of consistent significance throughout all of the models suggests that CEO gender is not a strong gender pay gap predictor.

#### Figure 1. Interaction Between CEO Gender, Industry Group, and Company Size



#### 5. DISSCUSION

This study was conducted to examine the relationship between CEO gender and the gender pay gap in UK companies. While there was no significant relationship between these two variables (even while controlling for the company size), this paper developed the theoretical background of gender pay gap, its consequences, and leadership issues stemming from it. Additionally, it considered the urgency and reality of the gender pay gap phenomena and how persistent it has been globally.

It has also conducted regression analyses of CEO's genders influence on pay gap across industries and with no consistent significance in most models, it can be concluded that CEO gender is not a good predictor of gender pay gap. The results underscore the need to consider industry context and potential confounding variables when further analyzing gender disparities.

Therefore, this research provides crucial evidence that the gender of the main decision maker in the company (CEO) does not have an influence on gender pay gap data (in most cases).

#### 6. CONCLUSION

The publicly available dataset from the UK Government's Gender Pay Gap Service, an official database supported by the Government Equalities Office, was analyzed using Python and RStudio programming languages for three different types of regressions. The first model, an independent sample's t-test was comparing median gender pay gaps between male and female-led firms, resulted in no significant results (F = 0.0001,  $p \approx 0.992$ ; R<sup>2</sup> = 0.000), and no measurable influence on gender pay gap with the female CEO's coefficient of ( $\beta = -0.01$ ). Second model was improving the first model by employing multiple linear regression and incorporating company size as a control variable. This model also failed to achieve statistical significance (F = 1.50, p = 0.136; R<sup>2</sup> = 0.01), although two company size categories had significant negative coefficients (specifically firms with 250-499 employees and 1000-4999 employees). These findings conclude that middle sized firms report a smaller pay gap compared to larger companies. Finally, the third model introduced industry type by conducting eight separate regressions based on the NACE4Code from the UK Government's Gender Pay Gap Service's industry classifications. This model was assessing whether the effect of the CEO gender varies in different sectors. Majority of industries : Manufacturing, Finance and Real Estate, Transportation and Storage, Hospitality, Information and Communication, and Utilities did not yield statistically significant relationship between CEO gender and the gender pay gap. However, the Construction sector (Industry 4) demonstrated a significant positive effect ( $\beta = 4.30$ , p < 0.05), resulting in wider pay gaps in firms with a female CEO, whereas Retail and Trade sector (Industry 8) had a significant negative effect ( $\beta = -4.57$ , p < 0.05), implying that women CEO's in this sector had narrower pay gaps. However, these regressions did not control for any other confounding factors such as compensation policies or composition of the board, which makes their interpretive value very constrained. To conclude, the CEO gender itself is not a good predictor of the gender pay gap.

# 6.1 LIMITATIONS AND FUTURE RESEARCH

One of the limitations of this research is the exclusion of the board and other senior decision makers that make up the majority of values and decisions in companies. Not including them in this research might limit understanding of complex compensation strategies and how they are made. Inclusion of a broader group of senior decision makers might change the results completely, taking into account how a broader composition can influence the attitudes and policies accepted by CEO. This limitation is explored by an exploratory follow-up study of 55 strategic decisions, from which 14 was of UK's companies, which found that CEO is majorly influenced while taking strategic decisions (Miller et al., 2008). Author systematically analyzes public, private, manufacturing and service industries and states that the decision making process in these companies stem from core heavyweights : CEO, suppliers, marketing, P/SD and finance. Therefore, this research might be inaccurate, because it does not consider all of the companies decision makers.

Furthermore, it is a very important research field and must be continued to further investigate the causes and persistence of the gender pay gap. The gender pay gap is well established and has been supported by multiple studies for decades, however, the urgency to fix the causes of the problem has been gradually declining (Stanberry, 2018).The data collected by the author shows the gap modestly narrowing from 45% in 1960 to 20% in 2017, and is projected to consistently fall to 14% in 2030.

Other authors like Bennedsen et al. (2023) have found that increased transparency causally diminishes the gender pay gap. International studies from UK, Canada, Denmark, and Switzerland support these claims, showing that new transparency reforms have a negative relationship with gender pay gap.

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#### 9. APPENDIX

#### 9.1 Table A1. Multiple OLS Regression: CEO Gender and Company Size Predicting Gender Pay

	Dependent variable:							
	Median Pay Gap (%) OLS							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female CEO	0.09	2.42	-4.64	4.30**	-4.21	3.27	0.25	-4.57**
	(3.27)	(4.25)	(3.17)	(1.91)	(2.63)	(2.31)	(2.73)	(2.16)
Constant	11.64***	7.41***	18.88***	10.50***	12.25***	8.44***	11.24***	7.26***
	(1.37)	(1.94)	(1.62)	(1.01)	(1.40)	(1.21)	(1.47)	(1.12)
Observations	120	67	123	229	155	298	66	118
R <sup>2</sup>	0.0000	0.005	0.02	0.02	0.02	0.01	0.0001	0.04
Adjusted R <sup>2</sup>	-0.01	-0.01	0.01	0.02	0.01	0.003	-0.02	0.03
Residual Std. Error	13.60 (df = 118)	14.13 (df = 65)	15.41 (df = 121)	12.99 (df = 227)	14.77 (df = 153)	17.84 (df = 296)	10.05 (df = 64)	10.42 (df = 116)
F Statistic	0.001 (df = 1; 118)	0.32 (df = 1; 65)	2.15 (df = 1; 121)	5.06** (df = 1; 227)	2.56 (df = 1; 153)	1.99 (df = 1; 296)	0.01 (df = 1; 64)	4.48 <sup>**</sup> (df = 1; 116)

OLS Regressions: Median Pay Gap ~ CEO Gender (by Industry)

Note:  $p^{<0.1; >**}p^{<0.05; >***}p^{<0.01}$ 

Each model is industry-specific. \*p<0.1; \*\*p><0.05; \*\*\*p><0.01