Gender Wage Gap

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ABSTRACT. Purpose – The objective of the current study is to examine the issue of gender pay gap i.e. the study explores whether pay levels between men and women executives differ within the UK listed firms. Moreover, the study also evaluates the impact of the constructs of education and experience on executive remuneration. Theoretical Findings - The theory of pay gap can be linked with Mincer earning function that is a remuneration model explaining pay as a function of experience and education. A large number of studies have applied the Mincer's earning function to explore the determinants of wages/pay levels. It also contributes to the problem of the gender wage gap. Methodology - The current research has focused on a quantitative research approach and a correlation design in order to test the causal link between gender and executive pay. Moreover, the study analyses secondary data, which is extracted from multiple data sources: CIPD's records, Bloomberg, and other databases. The sample size of the study is 100 observations (executives' data of FTSE 100 firms). Results - According to the result, male CEOs compensation is significantly higher than female CEO's pay (when the study assumes unequal variances). Moreover, there is a significant negative impact of education on compensation. Implications - The findings of the study suggest a need for FTSE 100 to promote gender diversity in the board and to reduce the pay gap.

KEYWORDS: Executives, Gender wage gap, Gender diversity, Compensation level, Ceos, Management

1. Introduction

Since the past decade, researches on gender pay gap have greatly evolved from a normative to a completely empirical investigation. The public administration research is mainly concerned with the understanding of not only the gender differences but also the race differences found in a workplace environment. It is also known widely, that such studies are generally regarded to be crucial particularly in assessing the disparities in workplace as these tend to have economic, social and physiological implications as it pertains for accessing such opportunities (Huffman & Cohen, 2004; Smith, 2002; Wright, Baxter, & Birkelund, 1995; Jaffee, 1989). In terms of economic rewards, the most frequent measurement with respect to rewards is linked to the opportunities at different workplaces.

Among different practitioners and research studies, it has been found that the female executives are usually paid quite less than their male counterparts (Carter,

Franco and Gine, 2013). However, still substantial evidence for the sources of these gaps is not collectively agreed upon by the researchers. While some of the extracted reasons are usually quite complex such as; systematic segregation of female executives in small and low performing companies, females accepting contracts with low compensation, female being hired at a lower tiered position as compared to male executives, and specifically related to the general gender biases in the workplace.

The main purpose of this study is to identify and summarise the gender pay disparities found in different firms of UK. In this report, the researcher aims to present insight to the findings from the prior studies related to gender pay disparities among higher level of management (Chief executive officers – CEOs) and examine the same in context to trends in the female and male pay gap while exploring not only the overall relationship between the two variables but also discussing the overall problems and biases in the extracted data. The discussion and conclusion are done based on both the theoretical and empirical findings of the report.

Following are the research questions of the study, where education and experience act as control variables.

RQ1: Do Men earn more than Women working within the FTSE 100 listed firms' CEOs in the UK?

RQ2: Do education and experience impact the compensation levels of CEOs in the UK?

2. Literature Review

Gender wage disparities persist substantially and reducing these dissimilarities is a top priority on the political agenda (O'Reilly et al., 2015). It is significant to assess these differences not from the perspective of gender equality, but also how to address the lack of wage progression and low pay more generally. The increasing problem of low wage is not because of lack of employment; rather it is poverty to be blamed (Costa, Joyce and Parodi, 2018). In paid work, the proportion of people has reached new heights, and over the past 25 years, women employment has raised dramatically, and around two-thirds of children live with someone in paid work. As a result of low wages, significant numbers of families are left in poverty. Therefore, it significant to assess and understand the wage gap between genders (Costa et al., 2018).

Bryinin (2017) in his study has specifically emphasised on the gender pay gap, in terms of average hourly pay between men and women. It is reported that compared to elsewhere in the UK, the gender pay gap is comparatively low in London. When considering the average pay gap in different occupations, it is found that this is in support of men (Boyle et al., 2015). It indicates that when working in the same occupation, women are likely to receive a low wage as compared to men. However, this does not always point towards pay discrimination, instead, it could be for instance, due to women being less educated or she is not in a senior position. For older women, the pay gap is considerably higher (Wisniewska, Ehrenberg-Shannon

and Gordon, 2018), particularly for those who are in their forties, primarily because of the following main reasons. Firstly, as compared to younger women, older women have low levels of education. Secondly, the key aspect in lower wages, compared to men's is that women's job tenure is for a shorter period of time. The career progression of women; however, normally does not match with men's and they are less likely to get promotion and advancement in their careers (Bryinin, 2017).

Similar findings have been noted in the report of Office for National Statistics (2018), pointing out that the gender pay gap has remained a significant topic of debate in an attempt to enhance responsiveness and practice pay equality. An obligatory reporting of the gender pay gap was introduced by the UK government in 2018 for organisations having more than 250 employees. It is important to note that the wage gap in the last decade all across the UK has been reduced, but still in the favour of men. For full-time workers, the gender pay gap in all occupations is fully in favour of men. When comparing the age groups with full-time workers, the gap remains low at younger ages; and from forty onwards it widens and reaches the highest level between 50 to 60. In relation to occupation, it is found that men working as a senior official or as a chief executive, are paid four times as compared those men in elementary occupations; however, this is 3.5 times more in the case of women.

McCguinness and Pyper (2018) point out the reasons for differences in average pay between men and women. It is highlighted that differences may arise for several reasons, such as a number of years spent in an organisation and the kind of jobs people do. An insignificant difference is noted in the median hourly wage for full-time employees between men and women in their 20s and 30s, although the gap starts to increases among full-time employees who are aged 40 and above. One such cause for this is that issues affecting women's earning and employment chances turn out to be more evident among those who are in their 30s and 40s. For instance, future earnings of a person particularly women are affected due to spending time out of the workplace to look after elderly relatives and children.

House (2011) argued that, in the UK, nearly 36% of the gap in gender wage was regarded as by employment pattern dissimilarities; including women having a higher frequency of part-time work and taking maternity leaves. Part-time jobs are often viewed as encompassing "the lowest paid jobs, least skilled and lowest grade" in the workforce and these are largely found in the area of female-dominated works. A TUC (2008) report on gender gap highlighted that in 2007, around three-quarters of employees in the UK in part-time jobs were women, and it is not astonishing to consider part-time jobs as occupations of women. Trade and Industry Committee of House of Common (2005) further explained why women are concentrated in part-time jobs. These comprise lack of apprenticeships and vocational courses offered by part-time places, leading to a considerably higher focus of men in jobs like decorating, electrician and plumbing.

According to Shacleton (2008), the gender pay gap is a substantial gap between average hourly pay between men and women in the UK working full time. However,

over the period of time, that gap has declined and is anticipated to reduce further given changes in qualifications of women and demographic trends; even it could go into reverse. In the context of the gender wage gap, Jewell, Razzu and Singleton (2018) discuss further that in 2018, the average hourly pay gap between men and women in the UK stood around 17.5%. It was found that apportionment over occupations of men and women contributed an insignificant amount to gender wage disparity. Hospitality and retail were the only industry groups where, to any disproportionate extent, women were hired by low wage organisations, as compared to men employed in the same industry. The age group between 25-34 between men and women were equally distributed through high and low wage organisations. However, the gender gap for those aged 35 to 44 began to rise in favour of men, which continues until the age of 64 (Jewell et al., 2018).

From the above findings, it can be asserted that gender pay gap persists across the UK, even though it has declined in recent years; but still, it is considered a great topic of debate among decision makers and needed to address to end this disparity.

3. Methodology

3.1 Research Approach

The research approach is the actual framework on which the entire study is founded. There are three different types of research approaches qualitative, quantitative and a mixed research approach. The research approach which has been considered for the current research study is quantitative in order to establish a causal link between the two variables (gender and pay) since the aim of the research is to analyse the influence of gender on the executive pay of large multinational firms. In a quantitative research approach, numerical data is collected and analysed to attain a specific result (Cooper, 2015). Therefore, in this study, a quantitative approach would be more suitable which provides statistical evidence.

3.2 Research Design

A research design shows the strategy or flow of the study which helps the researcher to accomplish various research activities in an appropriate and systematic way (Hakim, 2012). The different type of research designs includes descriptive, experimental and correlational study design. These types differ from one another based on the selected approach and the kind of data analysis and collection technique (Omair, 2015).

In relation to the current research, a correlational study design has been considered. A correlation study defines a relationship between two or more variables (Beauvais, Stewart, DeNisco, & Beauvais, 2014), which would be pursued in this research.

3.3 Research Hypothesis

Following are the suggested hypotheses of the study:

- H1: There is a significant difference in pay levels between male and female executives.
 - H2: Male executives earn significantly higher than female executives.
- H3: There is a significant impact on education and experience on compensation levels of executives.

3.4 Sample of Study

A sample of the study is a group of people that are actually representing the entire study population. Thus, in order to select the best suitable sample, various different techniques are proposed (Wilson, 2016). For the current research study, the researcher relies on a CIPD report to extract the data of 100 chief executives of FTSE 100 firms in the UK. Other data sources include Bloomberg, Osiris, and Fame.

3.5 Data Collection

Collection of data is the method of collecting information and measuring it for the variables of the study, in a systematic and established fashion which enables the researcher to answer the formulated research question, testing of hypothesis and evaluation of the outcomes (Cleary, Horsfall and Hayter, 2014). Furthermore, the data collection can be done from two different sources i.e. the primary source and the secondary source.

In context to the current research, the data has been collected from secondary sources such as from already published and available sources (Cheng and Phillips, 2014). Secondary data can be collected from different sources such as book, journals, records, newspapers, data archives databases, census reports, etc. Hence, for the current research, the major data sources have been CIPD, Bloomberg, Osiris, and Fame.

3.6 Data Analysis

Data analysis is the process of bringing purpose, structure, and order to the collected mass of data (Ott and Longnecker, 2015). Also, data interpretation and analysis can characterise the application of inductive and deductive logic to the study. Furthermore, data analysis is performed differently in different types of

research approaches. For instance, in a qualitative study, the analysis is built on the study of behaviour, facts, and phenomenon in a targeted sample population (Agresti, 2018). However, in quantitative study collection of facts and figures is given a numeric value and analysis is done by running statistical tests and other measuring parameters. The collected data for the current research has been analysed in three divisions; First, the characteristics of the collected data has been presented in the form of descriptive and frequency results. Then the data has been analysed with an aim to identify the issues and problems in this particular secondary data via a test of heteroskedasticity, multicollinearity, and outliers. Lastly, the actual hypothesis has been tested using independent sample t-test, correlation, and regression analysis.

3.7 Ethical Consideration

Ethics enable the people to recognise everyday standards, moral and principle of living thus they are considered to be an essential fragment of the daily routine. Ethics is mainly based on acknowledging the efforts and rights of some other people. Also, it has more emphasis on conducting original and genuine work rather than cheating and copying of already existing stuff (Connelly, 2014). The ethics are implemented during different stages of a study (Graham et al., 2013). For instance, starting from the review of literature, involving the collection of authentic data, and presenting the main findings all the steps must be in accordance with the ethical principles (Harris and Atkinson, 2015). The main ethical factors that are considered in this study include objectivity, truthfulness, originality, truthfulness, and credibility of findings.

Also, fidelity is considered as a significant element of ethics in this study; it must be considered to provide genuineness to the study, i.e. the literature and other content used in the study must be appropriately referenced in order to acknowledge the efforts of the previous study writers (Burkhardt & Nathaniel, 2013).

4. Empirical Findings

In this section, the analysis of the collected data set in relation to each of the research hypothesis of this study has been presented. The data has been collected from various authentic resources/ databases such as Osiris, CIPD, Bloomberg and Fame. The same has then been added on SPSS and STATA to extract the desired output. It must be noted here that the findings of the current research are presented in mainly two parts. The first part discusses the characteristics of the collected information i.e. related to executives using frequencies, percentages and descriptive statistics for the selected variables. This part also sheds light upon the actual problematic features of the data, which needs to be tested prior to hypothesis testing. These tests include Multicollinearity diagnostic, Test for Heteroskedasticity and Boxplot for identification of outliers. The final part of this section discusses the t-test, correlation and regression results.

The model which have been considered as the base model for the current research is ofShin (2011). The study tests the impact of Gender on the compensation level of the chief executives (CEOs). It examines whether the gender wage gap exists in the UK. The current research study uses a similar model with the addition of two control variables of Education and Experience of the executives. The model is effective and has been used by many previous scholars and researchers.

4.1 Characteristics of Data

The sample size of the collected data is 100 (100 CEOs). Out of this, 93% of them are male executive while only 7% are female. It shows that majority of the FTSE100 firms' CEOs are male.

Gender								
		Frequency	Percent	Valid Percent	Cumulative Percent			
	<u>Male</u>	93	93.0	93.0	93.0			
Valid	Female	7	7.0	7.0	100.0			
	Total	100	100.0	100.0				

Table 1 Frequency of Gender

In addition to this, two control variables have been included in the study, the education and experience level of CEOs. The educational background of most of the executives is Masters with around 46% holding a master's degree while 34% have a bachelor's degree. 9 out of 100 reflected that they hold a doctorate degree while only 2 of the total's last qualification is just high school certificate. 9% of the data values remained missing as no information could be found related to those executive educational backgrounds.

Rest of the variables of the data has been analysed using the descriptive statistics. The same has been presented in the table-3 below. The experience of the executive shows a mean level of around 30 years while the standard deviation in the overall data for experience is found to be 8.3 years. The data is further found to be skewed negatively while holding a leptokurtic behaviour, suggesting outliers in data. Similarly, in case of the compensation or wage level of each of 100 executives, the mean wage of the population is recorded to be £ 5,644.75 thousand with a deviation of £ 6,846 thousand. The data is positively skewed and reflects a leptokurtic behaviour as well.

Table 3 Descriptive Statistics for Experience and Wages of Executives

	Descriptive Statistics										
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis			
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error		
Experience	97	12.00	49.00	30.0103	8.30599	198	.245	686	.485		
Wage (£000)	100	395	47087	5644.76	6846.009	4.335	.241	21.983	.478		
Valid N (listwise)	97										

4.2 Problem Identification

In order to test the heteroskedasticity and multicollinearity, the researcher has used STATA. The test for heteroskedasticity is shown in Table-4. The Breusch-Pagan/Cook-Weisberg test for finding out the heteroskedasticity reflects that the problem exists in this aspect of the data since the Chi value is significant and shows a value of 72.43. Since this value is significant at 0.05 level of significance therefore, it can be interpreted that the null hypothesis shall be rejected and that there is no constant variance.

Table 4 Test for Heteroskedasticity

Breusch-Pagan Test							
The Breusch-Pagan/Cook-Weisberg test for heteroskedasticity							
H0:	Constant	Constant Variance					
H1:	Fitted Values of	of Wage (000)					
Chi (1)	=	72.43					
Prob >Chi2	=	0					

Furthermore, in the case of multicollinearity, all of the variables reflect a VIF value less than 2 indicating there is no such collinearity found among the independent variables of the current study. VIF of Gender, experience and education are 0.99623, 0.99623 and 0.99993 respectively.

Table 5 Multicollinearity Testing

Variable	VIF	1/VIF
Experience	1	0.99623
Gender	1	0.99623
Education	1	0.99993
Mean VIF		1

Lastly, the graph below shows the potential and significant outliers in the wages of the executive after splitting it in terms of gender. As indicated earlier, the male gender is higher than the female executives included in the study, this is why we can actually see a lot of potential and significant outliers as indicated with a blank dot and asterisk within male executives. Since the outliers are too many to be removed from the list of 100 executives, that is why we have proceeded further without removing any of them from the sample.

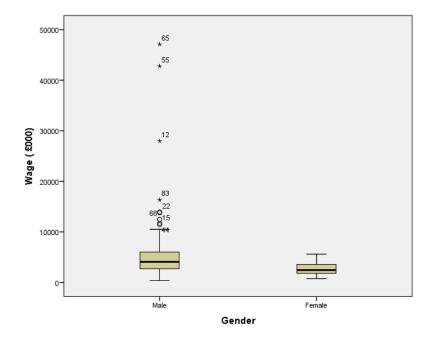


Fig.1 Boxplot

4.3 Actual Findings

4.3.1 Independent Sample t-Test

In order to test for the mean difference between the pay of male and female executives, the independent sample mean has been performed. However, before actually testing for mean, it is important that the data fulfils both of the following requirement:

- The variance of the two groups must be homogeneous.
- The data must be normally distributed.

4.3.1.1 Test for Normality

For the test of normality, the Kolmogorov-Smirnov test has been performed on the wage variable according to gender. The male executive wages are seen to be not normal while the female executive wage data is found to be normally distributed. Though this may be mainly because of the fact that there are many outliers in the data of male executives.

Table 6 Test for Normality

Tests of Normality								
Gender		Kolmogor	Kolmogorov-Smirnova Shapiro-Wilk					
		Statistic	df	Sig.	Statistic	df	Sig.	
Wasa (6000)	Male	.256	93	.000	.534	93	.000	
Wage (£000)	Female	.281	7	.100	.903	7	.349	
a. Lilliefors Significance Correction								

4.3.1.2 Independent Sample Test

The second assumption is of equality of variances among both the gender groups. The Levene Test for equality of variance shows F-test value of 1.217 and since the sig value of the same is above 0.05 level of significance, it can be confirmed that there are equal variances. In addition to this, for testing the equality of mean, assuming equal variances, the t-test results indicate that there lies an insignificant difference between the male and female wages. However, if equal variances are not assumed than significant differences in wage level exists, where male CEOs wages are £3061 thousand higher than female CEOs on average.

Table 7 Independent Sample Test

				Inde	pendent	Samples 7	Гest			
		Levene's for Equa Varian	lity of							
		F	Sig.	t	Df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Con Interva Differ	l of the ence
									Lower	<u>Upper</u>
Wago	Equal variances assumed	1.217	.273	1.143	98	.256	3061.339	2679.028	-2255.105	8377.784
Wage (£000)	Equal variances not assumed			3.136	27.95	.004	3061.339	976.328	1061.274	5061.405

4.3.2 Correlation Analysis

The correlation analysis between two or more variables is performed in order to assess the relationship between all of the variables. The results from the same reflect that there lies a significant negative relationship between the wage and education indicating that there is no such influence of the rise in the educational background of the executives. The test results are found to be significant at 0.05 level of significance. However, in the case of gender and the overall experience of the executives, the association with their relative pay scale is found to be insignificant, while revealing a negative relationship in case of gender. This is because the female's executive (2) are paid less than the male executives (1).

Table 8 Correlation

Correlations									
		Gender	Education	Experience	Wage (£000)				
	Pearson Correlation	1	006	058	115				
Gender	Sig. (2-tailed)		.957	.571	.256				
	<u>N</u>	100	91	97	100				
	Pearson Correlation	006	1	064	218*				
Education	Sig. (2-tailed)	.957		.548	.038				
	<u>N</u>	91	91	91	91				
	Pearson Correlation	058	064	1	.100				
Experience	Sig. (2-tailed)	.571	.548		.331				
	<u>N</u>	97	91	97	97				
	Pearson Correlation	115	218*	.100	1				
Wage (£000)	Sig. (2-tailed)	.256	.038	.331					
	<u>N</u>	100	91	97	100				
	*. Correlation is s	ignificant	at the 0.05 le	vel (2-tailed).					

4.3.3 Regression Analysis

Furthermore, for testing the main research hypothesis, which requires the formulation of the linear model for predicting the wages using gender, education and experience. For this purpose, the variables which have been entered are wages as a dependent variable while the rest of the variables are taken as the independent variables.

Table 9 Variables Entered or Removed

Variables Entered/Removed ^a								
Model	Variables Entered	Variables Removed	Method					
1	Experience, Gender, Education ^b		Enter					
	a. Dependent Variable: Wage (£000)							
	b. All requested variables entered.							

The model summary table below shows that the overall impact of all of the three variables on the wage or pay scale is indicated by the r square value of 0.070 that particularly implies a 7% explained variance by the set of predictors (gender, education and experience).

Table 10 Model Summary

Model Summary								
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate				
1	.265ª	.070	.038	6974.378				
	a. Predictors: (Constant), Experience, Gender, Education							

In addition to this, the fitted regression model is a significant at 0.10 level of significance with F-test value of 2.194.

Table 11 Anova

	ANOVA ^a								
	Model	Sum of Squares	df	Mean Square	F	Sig.			
	Regression	320169085.034	3	106723028.345	2.194	.0946			
1	Residual	4231849505.120	87	48641948.335					
	Total	4552018590.154	90						
	a. Dependent Variable: Wage (£0,00)								
	b. Predictors: (Constant), Experience, Gender, Education								

In order to understand the individual impact of each of these variables, the following table can be referred to. The beta coefficient of gender is insignificant at 0.05 level of significance. However, based on the beta value, it can be interpreted that a change in gender of the executive from male to female decreases the wage value by £2991.685 thousand. Furthermore, the education and experience betas reflect that a unit change in educational level and experience level of the executives will change their wage by £2214.961 and £89.648 respectively. However, it must be noted that beta coefficient of education is found to be negative, while experience has an insignificant effect.

Table 12 Coefficients

	Coefficients ^a									
	Model	Unstandardized Coefficients Standardized Coefficients				6:-				
	Model	<u>B</u>	Std. Error	<u>Beta</u>	ι	Sig.				
	(Constant)	14540.188	6009.542		2.420	.018				
	Gender	-2991.685	2950.387	105	-1.014	.313				
1	Education	-2214.961	1081.526	212	-2.048	.044				
	Experience	89.648	90.227	.103	.994	.323				
	a. Dependent Variable: Wage (£000)									

5. Discussion

Over the years, the focus of academic research towards corporate governance, executive pay and the associated diversity has increased. This study has evaluated the gender wage gap among executives in the context of FTSE 100 firms. With regards to the objectives of the study, which interrelates gender, education, and professional experience and the compensation levels of executives, the methodology used to address the problem is quantitative. In other words, the study determined and analysed statistical relationships between the selected constructs. The research approach inculcates the use of a correlational design that helps to reject or accept the three hypotheses identified by the study. Moreover, results are confirmed through analysing secondary data from sources of Bloomberg, CIPD, Osiris and Fame with the help of descriptive statistics, frequency analysis, Pearson correlation, and OLS regression.

Before running inferential tests, the study performed frequency analysis and descriptive statistics to explore the characteristics of data. According to the results, there is a high majority of male CEOs in the FTSE100 firms. It suggests a very low gender diversity at the top level. According to CIPD (2018), out of the total 932

board members, only 283 are female within the FTSE 100 firms. Moreover, there are only 24 female executive directors, which are significantly lower than male executives' figure of 195. This low gender diversity in the UK is alarming and requires more female participation at the top corporate level. Diversity in the board is also good for better performance and ethical decision-making (Miller and Del Carmen, 2009; Darmadi, 2011). In terms of remuneration, on average, the CEOs earn £ 5,644.75 thousand, which is reflecting a huge gulf between top executives and employees pay due to large basic pays and controversial incentive schemes. The study also finds that the mean experience of the CEOs is 30 years. It suggests that for reaching the top level, the executives need to gain years of experience.

As indicated above, the study tested three hypotheses. According to the first hypothesis, there is a significant difference in pay levels between male and female CEOs. It is also hypothesised that male CEOs earn significantly higher than female CEOs. We can also say that the UK listed firms give out more pay to men executives than female executives. The answer to this has been found with the help of identification of the insignificant mean difference between both male and female pay scale using independent samples t-test. However, the significance of this result may be considered to be biased since a very large percentage of the male were included in the overall sample. The results from the same do indicate that the mean difference is positive (£3061.339) reflecting that male tends to earn more than women, even at the higher management level. This reflects that the pay scale of executives in the UK is dependent on gender. However, when equal variances are assumed the mean difference between male and female is not statistically significant at 0.05 level. Nevertheless, when assuming unequal variances, the findings of the study are aligned with the findings of Wisniewska et al. (2018), Huffman and Cohen (2004), and Smith (2002) who specifically found out the significant mean difference between pay/salaries of male and female employees/executives. This can also be supported by the findings from the Government of UK, which showed that the gap between male and female's hourly pay in UK, which particularly stayed at around 17.1% in 2018 (ONS, 2019). The understanding of the difference between the female and male pay is the subject of debate, not only in the UK but also across the globe (Altonji and Blank, 1999; Blau and Kahn, 2017). Moreover, various studies have reflected upon the importance of the firm in actually explaining and defining the size and persistence of the gender pay disparity across nations. These studies are known to be a significant part of a rather properly renewed focus on the identification of the firms' role in shaping/driving of the overall pattern of wage inequality (Song et al., 2016; Card et al., 2013, 2018; Barth et al., 2016). In addition to this, the overall large scale, longitudinal, employer-employee representative data set for many companies across the world have made research a lot easier. According to the UK gender report by Government of the UK, it is confirmed that women are paid quite less per hour salary than men in case of full-time employment. It means that the issue of the gender wage gap in favour of the male is prevalent in the UK. Based on the results, we may say that the first hypothesis is partially, while the second hypothesis is completely accepted.

The third hypothesis of the research examines the impact of education and experience on compensation levels of executives (CEOs). The results of the regression analysis revealed a significant but negative influence of education, but no significant impact of experience on the compensation level of executive.

According to the results obtained, we can see there is a positive but insignificant relationship between experience and pay, which can be discussed in light of previous studies. Most of the studies prove that there is an impact of employee experience on the pay scale (Wolla and Sullivan, 2017), but there is no significant impact of the experience, measured in a number of years, on the pay scale (Sliter, Sliter, and Jex, 2012). It is also determined that as the experience increase, the pay might also decrease; such as in case of working after retirement, where sometimes pay is less than young employees working at the same level (Breugst et al., 2012). Some of the reasons quoted are that old executives' level of use of new technology is less or confined, while in some cases, due of age factor, their contribution is less especially in sales roles (Engen, & Magnusson, 2018). While in some cases CEOs and directors who are elderly in ages, with immense and diversified experience have huge pays (Khan et al., 2012). Studies also showed that old and rigid bureaucratic organisations had linked experience with pay, while new dynamic and fast-moving IT, marketing and Hi-Tech companies, doesn't link pay with the experience. They see how much a person is willing and able to contribute and is paid or promoted accordingly (Barley, Bechky, and Milliken, 2017).

The results also highlighted that the relationship between pay and education is negative and significant; this can also be supported via literature. Most previous studies support the impact of education for better employment opportunities and pay scale, but this is not always the case. In some cases, people with a graduate degree earn more than the ones holding a Master degree, based on greater experience, skills, capabilities or dynamic and charismatic nature (Porras, Ee, and Gándara, 2014). In some cases, personality traits and luck also matter, education has nothing to do with the success in career and earning more (Lips, 2013). Some studies show a positive and strong relationship between employee education and employee income. Education is supposed to be an investment in human capital, so employers themselves keep training and upgrading the knowledge of their employees, which also increase their experience and pay (Wolla, and Sullivan, 2017). The higher income due to a college degree is referred to be wage premium degree, therefore, it is also experienced that workers with more education have a lower unemployment rate that loss with no or less education (Khan et al, 2012). One of the reasons why education and degrees are not significantly important is due to the digital world, where everything is on the internet. Workers can learn via the web, so formal education became secondary. If a worker is skilled and does his job, he is paid for his work; this has nothing to do with his degree (Buchanan and McCalman, 2018)

On the basis, of the above discussion and literation support, it can be said that there are mixed views on the relationship between experience and pay and the relationship between education and pay levels. As we can say older studies link education and experience with higher pay, while new researches and studies say that if a person is skilled, he is paid for his work, his education and experience become

less significant. However, in the case of top management, such empirical evidence is limited and the current study can be an important contribution of the existing scholarship on executive compensation.

6. Conclusion

The aim of the study was to explore the gender wage gap with a focus on executive compensation. It has been observed that female executives and CEOs are paid significantly less than their male counterparts. For this purpose, this study evaluates the executive compensation data of FTSE 100 firms for the year 2018. The cross-sectional data is tested using both descriptive and inferential statistics and it is observed that male CEOs in the UK (FTSE 100 firms) earn significantly higher than female CEOs. However, the relationship does not hold when we assumed equal variances. Moreover, the study finds a significant impact of education while an insignificant effect of experience on CEO compensation. Despite the significant association between education and pay, there is a negative link between the two constructs in this case. Based on the results, the study recommends FTSE firms to promote and facilitate greater participation of females on the board. Moreover, pay levels should be based on individual skills, knowledge, and capabilities rather than gender.

There are certain limitations related to the study such as the small number of variables used, the presence of outliers in the data, and the violation of assumptions that should be addressed in the future studies. One of the major limitations of the study is that it did not consider firm characteristics as control variables, such as firm size, which may explain the pay difference.

References

- [1] Beauvais, A.M., Stewart, J.G., DeNisco, S. and Beauvais, J.E(2014). Factors related to academic success among nursing students: A descriptive correlational research study. Nurse education today, vol. 34, no. 6, pp. 918-923.
- [2] Boyle, P.J., Smith, L.K., Cooper, N.J., Williams, K.S. and O'Connor, H., (2015). Gender balance: Women are funded more fairly in social science. Nature News, 525(7568), p.181, vol.8, no.1, pp.141-142.
- [3] Breugst, N., Domurath, A., Patzelt, H. and Klaukien, A., (2012). Perceptions of entrepreneurial passion and employees' commitment to entrepreneurial ventures. Entrepreneurship Theory and Practice, 36(1), pp.171-192, vol. 8, no. 1, pp.141-142.
- [4] Cheng, H.G. and Phillips, M.R., (2014). Secondary analysis of existing data: opportunities and implementation. Shanghai archives of psychiatry, vol. 26, no.6, pp.371.
- [5] CIPD(2018). Executive pay: review of FTSE 100 executive pay. Chartered Institute of Personnel and Development.

- [6] Cleary, M., Horsfall, J. and Hayter, M(2014). Data collection and sampling in qualitative research: does size matter?. Journal of advanced nursing, vol. 70, no. 3, pp.473-475.
- [7] Connelly, L.M(2014). Ethical considerations in research studies. Medsurg Nursing, vol.23, no.1, pp.54-56.
- [8] Engen, M, Magnusson, P (2018). Casting for service innovation: The roles of frontline employees. Creativity and Innovation Management, vol. 27, no.3, pp. 255-269.
- [9] Harriss, D.J. and Atkinson, G., (2015). Ethical standards in sport and exercise science research: 2016 update. International journal of sports medicine, vol.36, no. 14, pp.1121-1124.
- [10] Huffman, M.L. and Cohen, P.N (2004). Racial wage inequality: Job segregation and devaluation across US labor markets. American Journal of Sociology, vol.109, no. 4, pp.902-936.
- [11] Jaffee, D (1989). Gender inequality in workplace autonomy and authority. Social Science Quarterly, vol.70, no. 2, pp.375-90.