

The glass ceiling patterns: gap evidence

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ECONOMY OF EASTERN CROATIA – VISION AND GROWTH

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THE GLASS CEILING PATTERNS: GAP EVIDENCE

ABSTRACT

The business case for gender diversity in senior and executive management positions still seems compelling all over the world, despite the fact how numerous studies have shown that companies that have the best practices for promoting women, outstrip their competition on the scale of profitability and performance in general. Nevertheless, women disproportionately are still failing to obtain and attain high-level management positions throughout different societies, sectors and professions.

This paper is focused primarily on the glass ceiling theory issues aiming to explore if there are empirical evidences proving objective reasons for its influence on women careers development and advancement in the EU 28 Countries in a period from 2002-2014. Therefore, a correlation and regression analysis are used to revealing insights into gender inequality present at top managerial positions through different business sectors, levels and professions using different independent variables in order to test the non-market work in relation the glass ceiling effect.

For the analysis in this paper extensive, globally consistent, open-source data were used. Predictor variable (independent variable) is population by tertiary education. The control variables (independent variable) are: Percentage of employed women without children (EWWC), Percentage of tertiary educated employed women with 1 child (EW1C), Percentage of tertiary educated employed women with 2 children (EW2C), Percentage of tertiary educated employed women with 3 or more children (EW3C).

Research results given reveal ratio tertiary educated woman/men does not affect gender pay gap but increase of tertiary educated employed women without children and decrease of EW1C significantly does.

Finally, conclusion, limitations and further research development in the topic frame are stated.

Key words: *glass ceiling, gender pay gap, women career development, gender diversity*

1. Introduction

The dispute over glass ceiling theory, on whether it is a workplace reality or a myth, still provokes controversies in academia, even though it made its first appearance as a concept more than forty years ago, in 1978, by Marilyn Loden (Vargas, 2018) and as it seems is about to outlive its author.

Approaching an issue of defining the term glass ceiling goes to the complexity of influences on a woman's career developments in different societies on a macro as well as micro level that extends further beyond labour market itself. In accordance to the 1995. U.S. Glass Ceiling Commission "glass ceiling is the unseen, yet unbreachable barrier that keeps minorities and women from rising to the upper rungs of the corporate ladder, regardless of their qualifications or achievements (U.S. Glass Ceiling Commission, 1995, 4).

Although there is undoubted scientific evidence on that it would on average have been better to have invested in corporations with women on their management boards than in those without (Curtis, M., et.al., 2012, 3), why do we still cannot find enough gender workplace equality anywhere across the globe showing how science conquers in a battle of cracking the glass ceiling.

2. Literature Review

Though predominant in proving the glass ceiling existence, evidence on its causes and effects do not reveal the same patterns across the literature investigation. The debate on the glass ceiling theory started very alive in the academia during 1990-ies focused on a cause of the phenomenon reposed in an authority (Wright, Baxter & Birkelund, 1995.), positions in hierarchy of the corporation (Frankforter, 1996.), earnings (Duleep & Sandres, 1992.), occupation (Fernandez, 1998.). The debate continues equally fierce till nowadays proving how women face a glass ceiling at the very top of the career ladder (Weinberger, C.J., 2011), lag in income levels cross nationally (Gang, I.N., et.al. 2003.) and confront gender discrimination (Cotter, 2001, 671).

The interdisciplinary approach developed through an effort in combining socio-economic factors influencing glass ceiling persistence. Traditional patterns are ingrained into societies values and norms through the processes of socialization and internalization in a form of gender roles and stereotypes (as stated by sociological approach to gender roles understanding). They also reflect social and hierarchical status in a traditional employment frame expecting men are to have higher work-related competence and effectiveness/performance than women (Foschi, 1996) consequently followed by devaluation hypothesis for women assuring the Gender Pay Gap (England et al. 1988; England et al. 2000). Evidence on devaluation are extensively shown throughout leadership positions proving societal and cultural sources of Gender Pay Gap (Busch, A.; Holst, E. 2009.).

Family-work considerations have proved to still remain highly relevant to today's glass ceiling despite reduced time spent in non-market work and a trend toward a more equal division of non-market work between the genders (Bertrand, M. 2018, 2).

In order to find evidence of other socio-economic factors to influence the glass ceiling, other than discrimination we lean on the work of Arulampalam, A., et.al. (2007) testing the glass

ceiling existence across EU-28 countries from 2002-20014. using a family-work independent variables as a predictor to support a glass ceiling theory in order to test the hypotheses of Gender Pay Gap in correlation and regression analysis.

3. The socio-economic problem of Gender Pay Gap across EU

According to Eurostat (2018) data showing mean hourly wages by professions in 2016 women earned 16,2% less than men in EU-28. In Croatia 2016 the difference sums up to 8,7% placing the country into a group of EU-28 countries with a lowest gender pay gap altogether with Romania (5,2%), Italy (5,2%), Luxembourg (5,5%), Belgium (6,1%), Poland (7,2%) i Slovenia (7,8%). The largest differences observed was found in Estonia (25,3%), The Czech Republic (21,8%), Germany (21,5%), The United Kingdom (21,0%), Austria (20,1%). An average high countries are Finland (17,4%), Latvia (17%), non EU Switzerland (17%), Netherlands (15,6%) and France (15,2%).

In 2017. across EU-28 countries women occupy 34%, and men 66% manager's positions.

The greatest share of women manager's positions is evident in ex-socialist countries: Latvia (46%), Poland (41%), Slovenia (41%); Hungary (39%), Lithuania (39%) with unfortunate exception of Croatia. In Croatia woman take 29% managerial positions. Closest to EU average are United Kingdom and Ireland with 36% and Portugal and Belgium with 34% women managers. The smallest shares were found in Luxembourg (19%), Cyprus (21%), the Czech Republic (25%), the Netherlands, Denmark and Italy (all 27%).

In accordance to Eurostat (2018) data from 2014 a comparison is provided on hourly earnings men and women for different professions in nine groups of professions shown in u Table 1.

Table 1: Hourly earnings men and women in EU-28 and Croatia, average in EUR

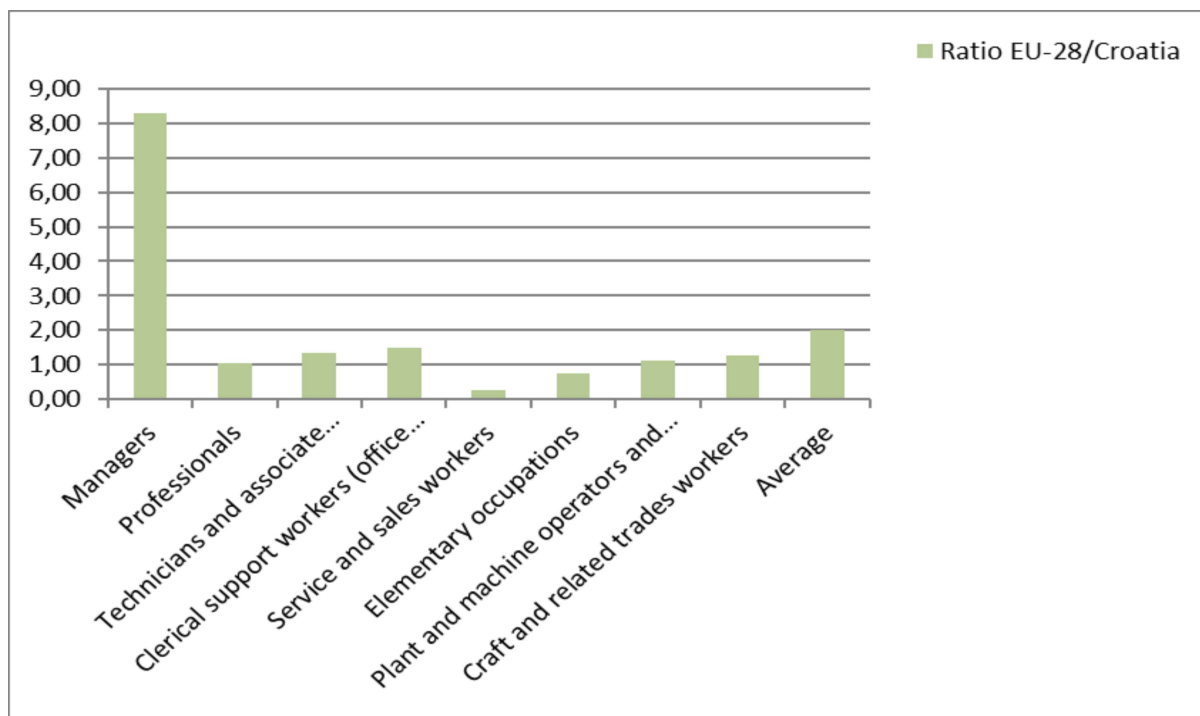
	EU				Croatia			
	Women	Men	Diff. EUR.	Diff. %	Women	Men	Diff. EUR	Diff. %
Managers	22,82	31,96	-9,14	-28,60	12,88	13,34	-0,46	-3,45
Professionals	18,95	24,28	-5,33	-21,95	7,19	9,11	-1,92	-21,08
Technicians and associate professionals	15,1	18,67	-3,57	-19,12	6,1	7,12	-1,02	-14,33
Clerical support workers (office clerks, secretaries etc.)	13,08	14,46	-1,38	-9,54	5,34	5,71	-0,37	-6,48
Service and sales workers	10,49	11,04	-0,55	-4,98	3,88	4,71	-0,83	-17,62
Elementary occupations	8,59	9,8	-1,21	-12,35	3,12	3,75	-0,63	-16,80
Plant and machine operators and assemblers	8,46	11,49	-3,03	-26,37	3,39	4,43	-1,04	-23,48
Craft and related trades workers	7,87	12,71	-4,84	-38,08	3,13	4,49	-1,36	-30,29
Average	13,72	16,64	-2,92	-17,55	5,46	5,98	-0,52	-8,70

Source: Authors according to Eurostat (2018)

The profession with the largest differences in hourly earnings were managers, in EU lower earnings for women than for men was 28,6%. Small differences were observed in professions with the lowest salaries in absolute numbers, but in percentage the smallest differences were for clerical support workers; office clerks, secretaries etc. (9,54%) as well as service and sales workers (4,98%). In Croatia gender pay gap in manager's professions is evidently lower (3,45%), but noticeable within the group of Professionals (21,08%), Technicians and Associate professionals (14,33%) as within the occupations with lower earnings in general Craft and related trades workers (30,29%) and Plant and machine operators and assemblers (23,48).

Besides the overall Gender Pay Gap present, as shown in Table 1., it is evident how in-between EU-28 and Croatian female managers positions extremely high with ratio EU/Croatia 8,29 (other occupations ratio EU/Croatia varies from 1 up to 2). The analysis is given in Chart 1.

Chart 1: Different hourly earnings between men and women ratio % EU-28 / % Croatia



Source: Authors according to Eurostat (2018)

The Gender Pay Gap difference in managerial positions especially (as shown in Chart 1.) is not so emphasised in Croatia as in EU-28, especially in managerial positions where it reaches 8,29 times higher scale for the EU-28 countries when compared to Croatia, representing a step back for the EU-28 female workers at managerial positions.

4. Methodology

4.1. Data

For the analysis in this paper, extensive, globally consistent, open-source data were used. Dependent variable is *Gender Pay Gap*. In Eurostat data the unadjusted gender pay gap (GPG) represents the difference between average gross hourly earnings of male paid

employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees. In this paper the GPG is calculated on the basis of the four-yearly Structure of Earnings Survey (SES) 2002, 2006, 2010 and 2014, and with the scope as required by the SES regulation, national estimates based on national sources for the years between the SES years, from reference year 2007 onwards, with the same coverage as the SES.

Predictor variable (independent variable) is population by tertiary education calculated as percentage tertiary educated female/percentage tertiary educated male, Ratio TE F/M =

$$\frac{\text{percentage of female}}{\text{percentage of male}}$$

The educational attainment level of an individual is the highest ISCED (International Standard Classification of Education) level successfully completed, the successful completion of an education programme being validated by a recognised qualification, i.e. a qualification officially recognised by the relevant national education authorities or recognised as equivalent to another qualification of formal education. The classification of educational activities is based on the International Standard Classification of Education (ISCED). Data until 2013 are classified according to ISCED 1997 and data as from 2014 according to ISCED 2011 (coding of educational attainment). Tertiary education: this aggregate covers ISCED 2011 levels 5, 6, 7 and 8 (short-cycle tertiary education, bachelor's or equivalent level, master's or equivalent level, doctoral or equivalent level, online code ED5-8 'tertiary education').

The control variables (independent variable) are: Percentage of employed women without children (EWWC), Percentage of tertiary educated employed women with 1 child (EW1C), Percentage of tertiary educated employed women with 2 children (EW2C), Percentage of tertiary educated employed women with 3 or more children (EW3C). The definitions of employment and unemployment, as well as other survey characteristics follow the definitions and recommendations of the International Labour Organisation. The definition of unemployment is further précised in Commission Regulation (EC) No 1897/2000.

The analysis comprises 224 observations. According to descriptive statistics of the total number of tertiary educated female without children on average it is 79% employed. The average of 82% tertiary educated female with 1 child are employed in average, 84% tertiary educated employed women with 2 children are employed out of the total and 78% tertiary educated employed women with 3 or more children. Standard deviations in-between different EU-28 countries are very low, 7% on average, aside the percentage of tertiary educated employed women with 3 children (11%). The average gender pay gap in-between female and male is 14,6% with a very high range 29% (min. 0,9; max 29,9% in some countries) and average tertiary educated ratio percentage female and male is 1,26 (Std. Deviation 0,23).

4.2. Experimental design

This research attempts to answer the following question: do more tertiary education women, measured by ratio percentage tertiary education of female/percentage tertiary education male, (Ratio TE W/M) lead to less Gender Pay Gap (GPG). A correlation analysis (Pearson's Correlation Coefficient) is employed to examine the relationship between GPG as dependent variable and Ratio TE W/M as Predictor variable (independent variables). In second step Partial correlation is used. Partial correlation measure association between GPG and Ratio TE

W/M, while controlling the effect of additional - control variables. Control variables were included in model and a connection of the whole group of variables was tested. The intention in use of control variables was to determine does female employment (especially their decision on the choice of being employed or not) to less GPG. In third step Hierarchical Multiple Regression was used. In the analysis start is from linear regression model for n values. Estimates of the parameters α , β_1 to β_k is performed by using method of the least squares

$$y_{ij} = \alpha + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_j x_{ij} + \dots + \beta_K x_{iK} + e_i, \quad (1)$$

$$i = 1, 2, \dots, n$$

$$j = 1, 2, \dots, K$$

Whereby n denotes the number of observation, y_i denotes the value of the dependent variable Y , x_{ij} of the independent variables X_j . The value of the dependent variable y_i je linear combination K independent variables x_{ij} , the unknown values of the random variable e_i and the values of unknown parameters α , β_j . Random variable e_i is a mistake of relation and its presence is a result of statistical error in relation between phenomenon.

$$y_{ij} = GPG \quad x_1 = ratioTEW / M \quad x_2 = EWWC \quad x_3 = EW1C \quad x_4 = EW2C \quad x_5 = EW3C$$

$$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5 = \text{betacoefficients}$$

$$\alpha = \text{const.}$$

$$e = \text{st.error}$$

5. Results and discussion

The analysis has shown no statistically relevant correlation (Pearson r) in-between Ratio TE W/M and GPG. Respectively the assumption on tertiary educated woman accomplish lower pay has not been proved with this test ($r = -0,051$, $n=224$, $p>0,01$). A method of partial correlation the analysis included control variables (EWWC, EW1C, EW2C, EW3C) to test whether there is an influence of a decision of tertiary educated woman on their employment to less GPG. The Partial correlation analysis has shown how there is not a statistically relevant connection in-between Ratio TE W/M and GPG ($r = 0,060$, $df = 199$, $p>0,01$).

Furthermore, simple correlation has shown statistically positive correlation in-between GPG and EWWC, ($r = 0,378$, $p<0,01$) meaning that the increase in the number of employed tertiary educated woman without children increases a gender pay gap on behalf of men. These result are mathematically founded in fact that higher frequency of lower female pays increases the difference in-between lower female pays in comparison to more paid man. The correlation GPG and EW1C is negative ($r = -0,283$) and statistically relevant ($p<0,01$) showing how increase in percentage of employment in EW1C decreases gender pay gap. The same result was found in relation GPG and EW3C, the connection is negative and moderate strong ($r = -0,374$) and statistically relevant ($p<0,01$), following by the percentage of EW3C and more the decrease in wages has shown. No statistically relevant relationship has been determined in-between GPG and EW2C. However, statistically relevant positive correlation has been detected (although not strong) in-between Ratio TE W/M and EW2C ($r = 0,226$, $p\leq 0,01$), and

EW3C ($r = 0,307$, $p < 0,01$), apropos employment increase in tertiary educated woman is in relation to a higher employment of tertiary educated woman with two, three or more children. This result is explained with a higher financial need of a household with more members.

Correlation coefficient does not consider and not took into account complicated relationships between predictors themselves and predictors and criterion (Thompson, 2006) and Hierarchical Multiple Regression was used, and this role was taken by β weight (Pedhazur, 1997). Hierarchical Multiple Regression result was employed to test the imperativeness of independent variables on Gender Pay Gap. According to Kraha, et all. (2012) in model 1 R^2 implies that just 14,5% of the variation in GPG is explained by variations in Ratio TE W/M and EWWC (adjusted R^2 0,137), in model 2 to by variations in Ratio TE W/M, EWWC and EW1C 29% (adjusted R^2 0,28), in model 3 to by variations in Ratio TE W/M, EWWC, EW1C and EW2C 29,6% (adjusted R^2 0,282), in model 4 to by variations in Ratio TE W/M, EWWC, EW1C, EW2C and EW3C 30,8% (adjusted R^2 0,290). The F-statistics values with statistics probability of 0.0005 shows that the independent variables have significant relationship with the dependent variable. Preliminary analysis has shown how assumptions normality, linearity and multi-collinearity are not disrupted. Collinearity Tolerance $> 0,20$ and VIF < 10 also indicate that there isn't multi-collinearity between variables.

As already shown by Pearson r , Hierarchical Multiple Regression confirms Ratio TE W/M does not affect GPG (model 1 to model 4). By adding each new independent variable, the employment of tertiary educated woman without children, with one and two children show how increase in Gender Pay Gap statistically significantly contributes to an increase in tertiary educated employed women without children and decrease in a number of tertiary educated female with 1 child (model 1 do 3).

By adding an independent variable employment of tertiary educated woman with three or more children model 4 shows a significant contribution to a Gender Pay Gap increase solely thorough an increase in employment of tertiary educated women without children (beta = 0.430, $p < 0,0005$). Unstandardized coefficients B (B =0.549) shows that increase in woman without children employment in 1% raises Gender Pay Gap in average 0,55%. Pearson r hs also shown statistically relevant positive correlation in-between GPG and EWWC, or a higher number of lower female wages increases a difference in-between already lower payed female and higher payed men.

6. Conclusion

The typical mistake in an attempt to explain a socio-economic phenomenon of glass ceiling is a single sided, narrowed perspective. Recent research has successfully avoided the trap and adopted socio-economic approach into the study of a glass ceiling phenomenon explaining a multi-lair cause and effect perspective in glass ceiling theory.

The goal of this paper is to give a perspective based on the empirical evidence showing an effect of Gender Pay Gap in correlation to tertiary educated employed woman and influence of number of children to a change in Gender Pay Gap in EU-28 countries.

The analysis of official Eurostat data show how woman in EU-28 have a higher share of tertiary level education when compared to men, but their wages are significantly lower when compared to their male colleges with the same educational level. This difference is especially

present in managerial positions and evidently even higher in developed countries than in less developed, especially in post socialist societies.

The EU-28 Gross Gender Pay Gap is twice as high when compared to Croatian. The potential cause could be a fact how in post-socialist countries wages are lower in general when compared to EU higher standard countries throughout sectors.

Data analysis on education, employment and Gender Pay Gap in EU-28 has shown how an increase in a number of employed women without children increases the difference in Gender Pay Gap on behalf of men. Higher level of tertiary educated employed woman without children increases Gender Pay Gap already present. However, increase in tertiary educated woman with one child and three or more children percentage employment decreases Gender Pay Gap in-between man and woman.

The results show how an increase in employment of tertiary educated woman is connected to higher employment of tertiary educated woman with two, three or more children to be interconnected with increase in financial needs of a household with more members. This evidence also shows how, besides increased demands in family labour woman choose to contribute through employment as well.

The legacy of the case of traditional female-male roles in labour division, often taught to be prevailed in our contemporary societies, seem to be so very well hidden under the society's surface. The stepping stone elements inherited from our ancestors in family-work as opposed to female-male terms seemingly still continue to replay the maxim on gender-poled labour division. The demands for child care, housework and other life chores outside of work still fall more heavily on women than on men. Higher paying occupations are more inflexible and require more time commitment. But it seems service development and support are decomposing managerial positions allowing woman a privilege not to be forced in-between choices of family-work, but to have the best of both worlds and live successful and balanced lives.

Further research development in the topic frame are needed through additional statistical analysis and the use of other statistical tools and methods in order to answer a set of causes persistently provoking a Gender Pay Gap as an obvious evidence of glass ceiling persistence in contemporary societies.

Data appendix

Correlations

Correlations							
		Percentage of women employed with tertiary education without children	Percentage of women employed with tertiary education with 1 child	Percentage of women employed with tertiary education with 2 children	Percentage of women employed with tertiary education with 3 or more children	Gender Pay Gap	Ratio TE female/male
Percentage of women employed with tertiary education without children	Pearson Correlation	1	.374**	.093	-.036	.378**	.045
	Sig. (2-tailed)		.000	.167	.602	.000	.506
	N	224	224	224	217	212	224
Percentage of women employed with tertiary education with 1 child	Pearson Correlation	.374**	1	.110	.658**	-.283**	.142*
	Sig. (2-tailed)	.000		.100	.000	.000	.033
	N	224	224	224	217	212	224
Percentage of women employed with tertiary education with 2 children	Pearson Correlation	.093	.110	1	.045	-.092	.226**
	Sig. (2-tailed)	.167	.100		.507	.180	.001
	N	224	224	224	217	212	224
Percentage of women employed with tertiary education with 3 or more children	Pearson Correlation	-.036	.658**	.045	1	-.374**	.307**
	Sig. (2-tailed)	.602	.000	.507		.000	.000
	N	217	217	217	217	205	217
Pay Gap	Pearson Correlation	.378**	-.283**	-.092	-.374**	1	-.051
	Sig. (2-tailed)	.000	.000	.180	.000		.463
	N	212	212	212	205	212	212
Ratio TE female/male	Pearson Correlation	.045	.142*	.226**	.307**	-.051	1
	Sig. (2-tailed)	.506	.033	.001	.000	.463	
	N	224	224	224	217	212	224

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Partial Corr

Correlations				
Control Variables			Ratio TE female/male	Gender Pay Gap
Percentage of women employed with tertiary education without children & Percentage of women employed with tertiary education with 1 child & Percentage of women employed with tertiary education with 2 children & Percentage of women employed with tertiary education with 3 or more children	Ratio TE female/male	Correlation	1.000	.060
		Significance (2-tailed)	.	.396
		df	0	199
	Pay Gap	Correlation	.060	1.000
		Significance (2-tailed)	.396	.
		df	199	0

Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.381 ^a	.145	.137	5.6413
2	.539 ^b	.290	.280	5.1530
3	.544 ^c	.296	.282	5.1453
4	.555 ^d	.308	.290	5.1149
a. Predictors: (Constant), Ratio TE female/male, Percentage of women employed with tertiary education without children				
b. Predictors: (Constant), Ratio TE female/male, Percentage of women employed with tertiary education without children, Percentage of women employed with tertiary education with 1 child				
c. Predictors: (Constant), Ratio TE female/male, Percentage of women employed with tertiary education without children, Percentage of women employed with tertiary education with 1 child, Percentage of women employed with tertiary education with 2 children				
d. Predictors: (Constant), Ratio TE female/male, Percentage of women employed with tertiary education without children, Percentage of women employed with tertiary education with 1 child, Percentage of women employed with tertiary education with 2 children, Percentage of women employed with tertiary education with 3 or more children				

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1089.984	2	544.992	17.125	.000 ^b
	Residual	6428.432	202	31.824		
	Total	7518.416	204			
2	Regression	2181.161	3	727.054	27.381	.000 ^c
	Residual	5337.255	201	26.554		
	Total	7518.416	204			
3	Regression	2223.649	4	555.912	20.999	.000 ^d
	Residual	5294.767	200	26.474		
	Total	7518.416	204			
4	Regression	2312.142	5	462.428	17.675	.000 ^e
	Residual	5206.275	199	26.162		
	Total	7518.416	204			
a. Dependent Variable: Pay Gap						
b. Predictors: (Constant), Ratio TE female/male, Percentage of women employed with tertiary education without children						
c. Predictors: (Constant), Ratio TE female/male, Percentage of women employed with tertiary education without children, Percentage of women employed with tertiary education with 1 child						
d. Predictors: (Constant), Ratio TE female/male, Percentage of women employed with tertiary education without children, Percentage of women employed with tertiary education with 1 child, Percentage of women employed with tertiary education with 2 children						
e. Predictors: (Constant), Ratio TE female/male, Percentage of women employed with tertiary education without children, Percentage of women employed with tertiary education with 1 child, Percentage of women employed with tertiary education with 2 children, Percentage of women employed with tertiary education with 3 or more children						

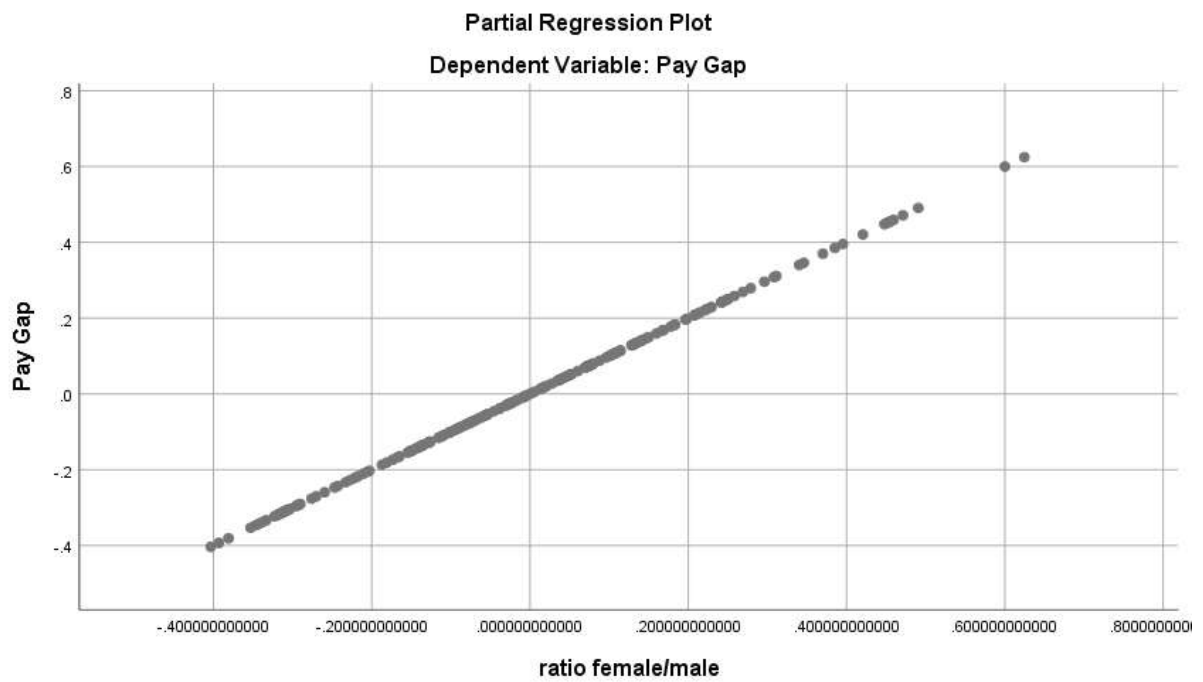
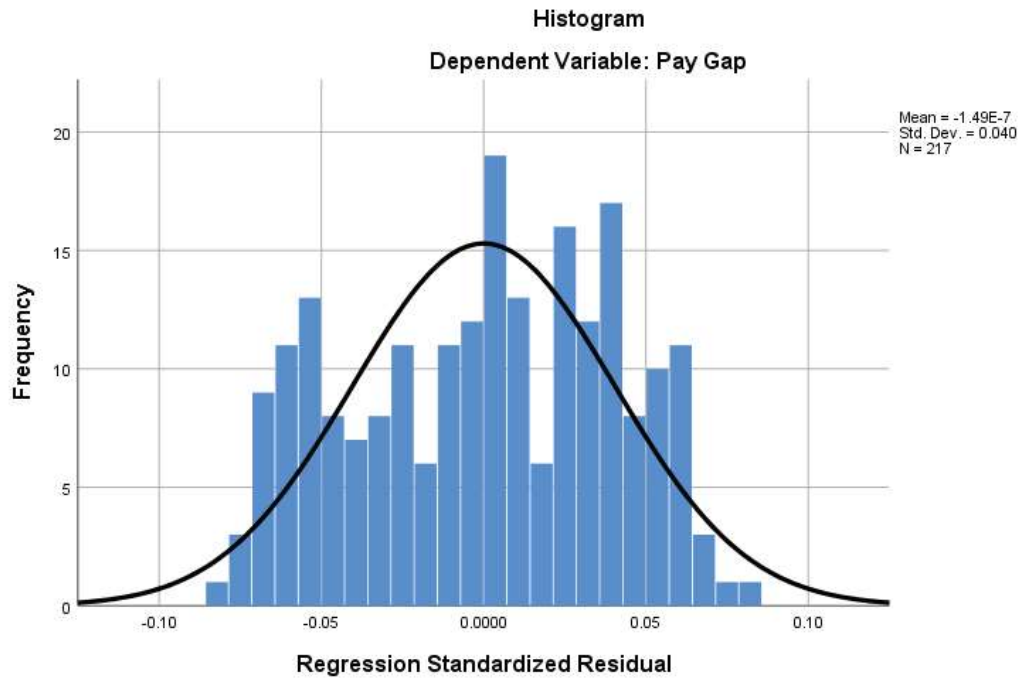
Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-22.536	7.027		-3.207	.002		
	Percentage of women employed with tertiary education without children	.482	.083	.378	5.804	.000	.999	1.001
	Ratio TE female/male	-1.037	1.709	-.039	-.607	.545	.999	1.001
2	(Constant)	-1.923	7.179		-.268	.789		
	Percentage of women employed with tertiary education without children	.603	.078	.472	7.706	.000	.942	1.062
	Ratio TE female/male	-.032	1.569	-.001	-.020	.984	.989	1.011
	Percentage of women employed with tertiary education with 1 child	-.384	.060	-.394	-6.410	.000	.935	1.070

Coefficients ^a								
3	(Constant)	3.775	8.463		.446	.656		
	Percentage of women employed with tertiary education without children	.602	.078	.471	7.706	.000	.942	1.062
	Ratio TE female/male	.376	1.600	.014	.235	.814	.949	1.053
	Percentage of women employed with tertiary education with 1 child	-.383	.060	-.393	-6.398	.000	.934	1.070
	Percentage of women employed with tertiary education with 2 children	-.075	.059	-.077	-1.267	.207	.958	1.044
4	(Constant)	6.574	8.549		.769	.443		
	Percentage of women employed with tertiary education without children	.549	.083	.430	6.630	.000	.828	1.208
	Ratio TE female/male	1.438	1.692	.055	.850	.396	.839	1.192
	Percentage of women employed with tertiary education with 1 child	-.265	.087	-.272	-3.027	.003	.432	2.315
	Percentage of women employed with tertiary education with 2 children	-.083	.059	-.085	-1.407	.161	.953	1.049
	Percentage of women employed with tertiary education with 3 or more children	-.114	.062	-.168	-1.839	.067	.417	2.399

a. Dependent Variable: Pay Gap

Frequencies

Statistics							
		Percentage of women employed with tertiary education without children	Percentage of women employed with tertiary education with 1 child	Percentage of women employed with tertiary education with 2 children	Percentage of women employed with tertiary education with 3 or more children	Pay Gap	Ratio TE female/male
N	Valid	224	224	224	217	212	224
	Missing	0	0	0	7	12	0
Mean		79.123	81.659	83.542	77.971	14.601	1.2608391355
Std. Deviation		5.5872	6.4038	6.1992	8.7439	5.9716	.23033745202
Minimum		57.7	65.2	68.4	57.5	.9	.79761904761
Maximum		90.2	93.5	95.4	94.5	29.9	1.8564102564



References

Arulampalam, A., et.al.(2007): *Is there a Glass Ceiling over Europe? Exploring a Gender Pay Gap Across the Wage Distribution*, Industrial and Labour Relations Review, Vol. 60., No. 2 pp. 163-186.

Baxter, J. and Wright, E.O. (2000): *The Glass Ceiling Hypothesis: A Comparative Study of the United States, Sweden, and Australia*. Gender and Society, Vol. 14, No. 2, pp. 275-294.

Bertrand, M. (2018): *The Glass Ceiling*. University of Chicago Working Paper, No. 2018-38.
Cotter, D.A., et.al. (2001): *The Glass Ceiling Effect*
https://www.researchgate.net/publication/236778636_The_Glass_Ceiling_Effect (accessed 1 October 2018)

Curtis, M., et.al. (2012): **Gender diversity and corporate performance**, Credit Suisse Research Institute, Zurich

Duleep, H. O., & Sanders, S. (1992): **Discrimination at the top: American-born Asian and White men**. Industrial Relations, 31, pp. 416-432.

Eurostat (2018) **The life of women and men in Europe** — A statistical portrait,
<https://ec.europa.eu/eurostat/cache/infographs/womenmen/>

Fernandez, M. (1998): *Asian Indian Americans in the Bay area and the glass ceiling*. Sociological Perspectives, 41(1), pp. 119-149.

Frankforter S.A. (1996): *The progression of women beyond the glass ceiling*. Journal of social behaviour and personality 11(5): pp. 121-132.

Gang, I.N, et.al. (2003): *Does the Glass Ceiling Exist? A Cross-National Perspective on Gender Income Mobility*, Institute for the study of Labour, IZA Discussion Paper No. 713

U.S. Glass Ceiling Commission (1995): *A Solid Investment: Making Full Use of the Nation's Human Capital (Final Report of the Commission)*. Washington, DC: U.S. Government Printing Office. http://digitalcommons.ilr.cornell.edu/key_workplace/120/ (accessed 1 October 2018)

Vargas, T. (2018): *She coined the term “glass ceiling”. She fears it will outlive her*. in The Washington Post, March 1st 2018,
https://www.washingtonpost.com/news/retropolis/wp/2018/03/01/she-coined-the-phrase-glass-ceiling-she-didnt-expect-it-to-outlive-her/?noredirect=on&utm_term=.5c200e8ff1b8 (accessed 16 October 2018)

Weinberger, C.J. (2011): *In Search of the Glass Ceiling: Gender and Earnings Growth among U.S. College Graduates in the 1990S*, <https://doi.org/10.1177/001979391106400506> (accessed 7 October 2018)

Wright, E. O., et al. (1995): *The Gender Gap in Workplace Authority: A Cross-National Study*. American Sociological Review, vol. 60, no. 3, 1995, pp. 407–435. JSTOR, www.jstor.org/stable/2096422 (accessed 7 October 2018)

- Foschi, M. (1996). *Double standards in the evaluation of men and women*. *Social Psychology Quarterly*, 59(3), 237-254.
- England, P., Farkas, G., Stanek Kilbourne, B., Dou, T. (1988): *Explaining occupational sex segregation and wages: Findings from a model with fixed effects*. In: *American Sociological Review*, Vol. 53, pp. 544 - 558.
- England, P., Hermsen, J. M., Cotter, D. A. (2000): *The Devaluation of Women's Work: A Comment on Tam*. In: *American Journal of Sociology*, Vol. 105, No. 6, pp. 1741-1751.
- Busch, A.; Holst, E. (2009): *Glass Ceiling Effect and Earnings – The Gender Pay Gap in Managerial Positions in Germany*, Deutsches Institut für Wirtschaftsforschung, Berlin
- Thompson B. (2006). *Foundations of Behavioral Statistics: An Insight-Based Approach*. New York: Guilford Publications.
- Pedhazur E. J. (1997). *Multiple Regression in Behavioral Research: Explanation and Prediction*, 3rd edition, Fort Worth, Tex.; London: Harcourt Brace
- Kraha, A. Turner, H, Nimon, K., Rechwein Zientek, L. abd Hensen, R.K (2012), Tools to Support Interpreting Multiple Regression in the Face of Multicollinearity, *Frontiers in Psychology*, Vol. 3 No. 44, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3303138/>