



The Pink Wave Across Parliaments

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Abstract

This quantitative research paper examines the factors that explain the percentage of women in national parliaments. The seven independent variables used in this study are freedom scores, literacy rates, democracy levels, corruption perception index, gender quotas, population density and gross domestic product (GDP per capita). The dependent variable is the percentage of women in national parliaments. To analyze the relationship between the independent variables and dependent variable, a correlation analysis, two scatterplots, an analysis of variance (ANOVA) and multiple regression were generated. The correlation analysis revealed that five out of seven independent variables were statistically significant: freedom scores, literacy rates, democracy levels, corruption perception index, and gender quotas. Ultimately, gender quotas proved to be the most statistically significant out of the five showcasing the influence and positive feedback that this variable if implemented would have on the percentage of women in parliaments.

Research Question

What Factors Explain the Percentage of Women in National Parliaments?

Literature Review

Freedom:	Democracy regarding female representation is present if freedom is part of a nation's structure (Tremblay, 2007)
Literacy Rates	An increment of educated women fill gaps of governance (Bauhr, Charron and Wängnerud, 2018)
Democracy Levels	The degree of a nation's democracy affects the chances of women winning positions in parliament (Kenworthy and Malami, 1999)
Corruption Levels	If there was more women in politics there will be a shift in focus and strategy of how a nation is governed and issues are addressed ergo, less corruption. (Bauhr, Charron & Wängnerud, 2018)
Gender Quotas	In order to bestow a variance of perspectives, and promote gender equality, Brazil and other countries have adopted gender quotas that increase the representation of women in politics. These quotas should show an increase in female representation (Schwindt-Bayer, 2009)
GDP Per Capita	Female political representation is positively correlated with a nation's ability to incorporate women and therefore see a boost in its GDP (Hughes and Lagon, 2016)

Hypotheses

- H1: The more **freedom** there is in a country, the higher the % of women in national parliaments.
- H2: The higher the **literacy rates** in a country, the higher the % of women in national parliaments.
- H3: As **democracy** in a country increases, so does the % of women in national parliaments.
- H4: As levels of transparency (less **corruption**) increase, the % of women in national parliaments will also increase.
- H5: As the number of **gender quotas** increase in a country, the % of women in national parliaments will also increase
- H6: As **population density** increases in a country, the % of women in national parliaments will rise.
- H7: As per capita **GDP** increases, the % of women in national parliaments will rise.
- H8: Advanced **industrial democracies** have a higher percentage of women in their national parliaments.

Data & Methods

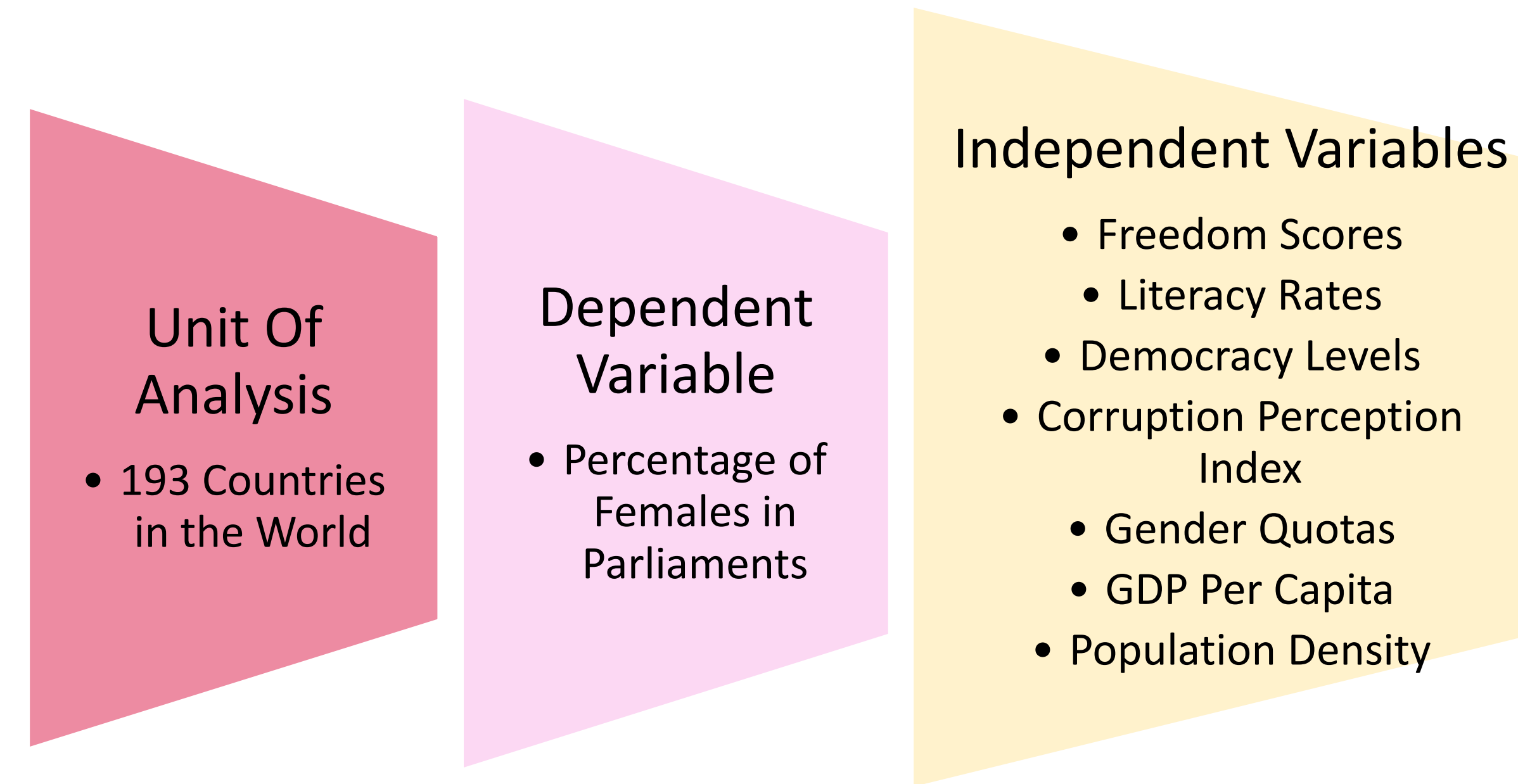


Table 1: Variables, Characteristics and Sources

Variable	Min	Max	Mean	S.D	Source
% of Women in National Parliaments	0.00	61.30	22.27	11.94	International Parliamentary Union
Freedom Scores (aggregate)	2	100	59.88	29.78	Freedom House (Freedom in the World 2019)
Literacy Rates	19.10	100	94.700	18.49	World Population Review
Democracy Levels	1.08	9.87	6.06	6.95	The Economist Intelligence Unit
Corruption Perception Index	10	88	43.13	19.10	Transparency International
Gender Quotas	1	5	2.42	1.23	International Institute for Democracy and Electoral Assistance
Population Density	2.04	7962.03	202.24	624.87	The World Bank
GDP per capita	712	130711	2.2e+04	2.2e+04	The World Bank

Findings

Table 2: Correlation Analysis of % of Women in Parliaments

Independent Variables	% of Women in Parliament
Freedom Scores	0.141*
Literacy Rates	0.122*
Democracy Levels	0.310**
Corruption Perception Index	0.263**
Gender Quotas	0.417**
Population Density	-0.052
GDP per Capita	0.123

N=193 *p<.05 **p<.01

Figure 1: Scatterplot Analysis of Corruption Perception Index

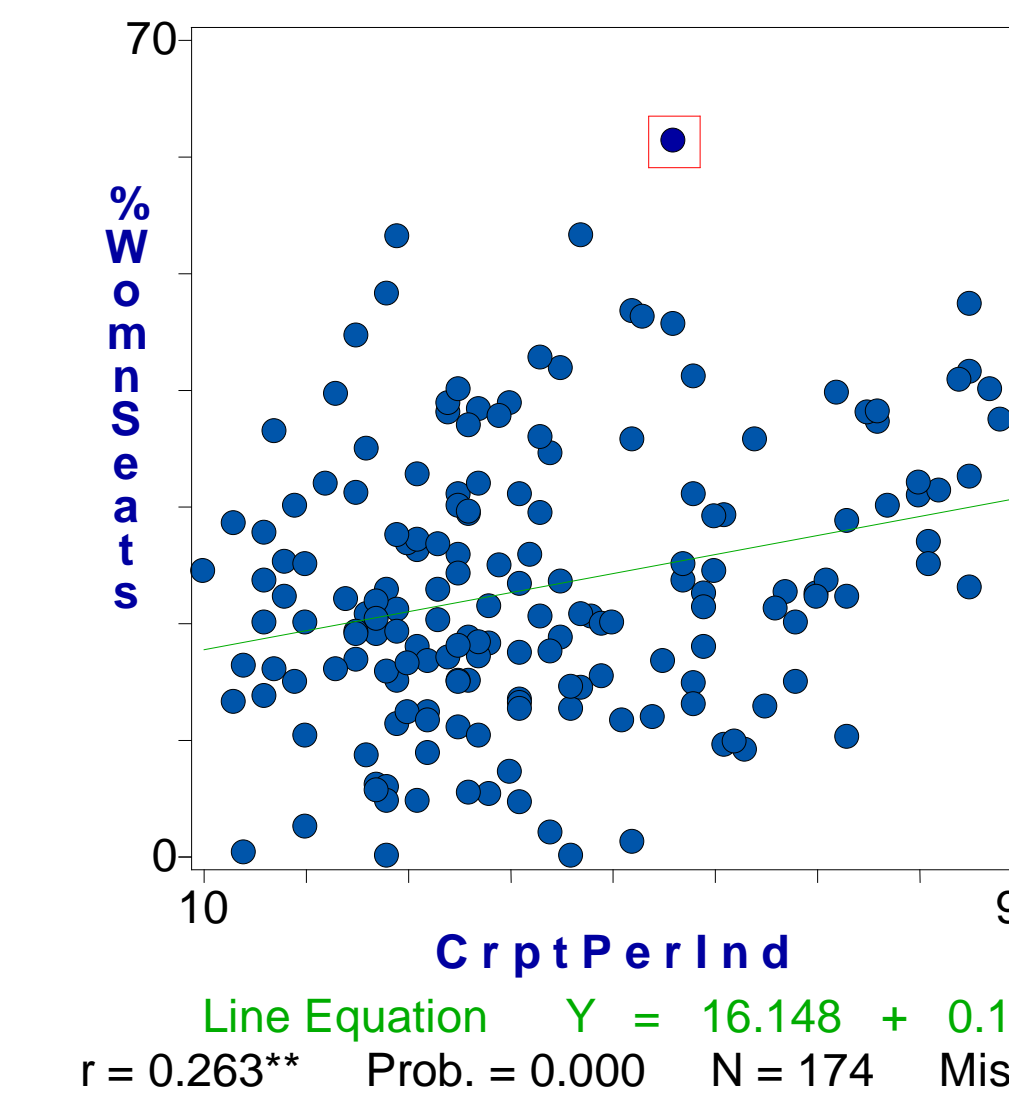


Figure 2: Scatterplot Analysis of Gender Quotas

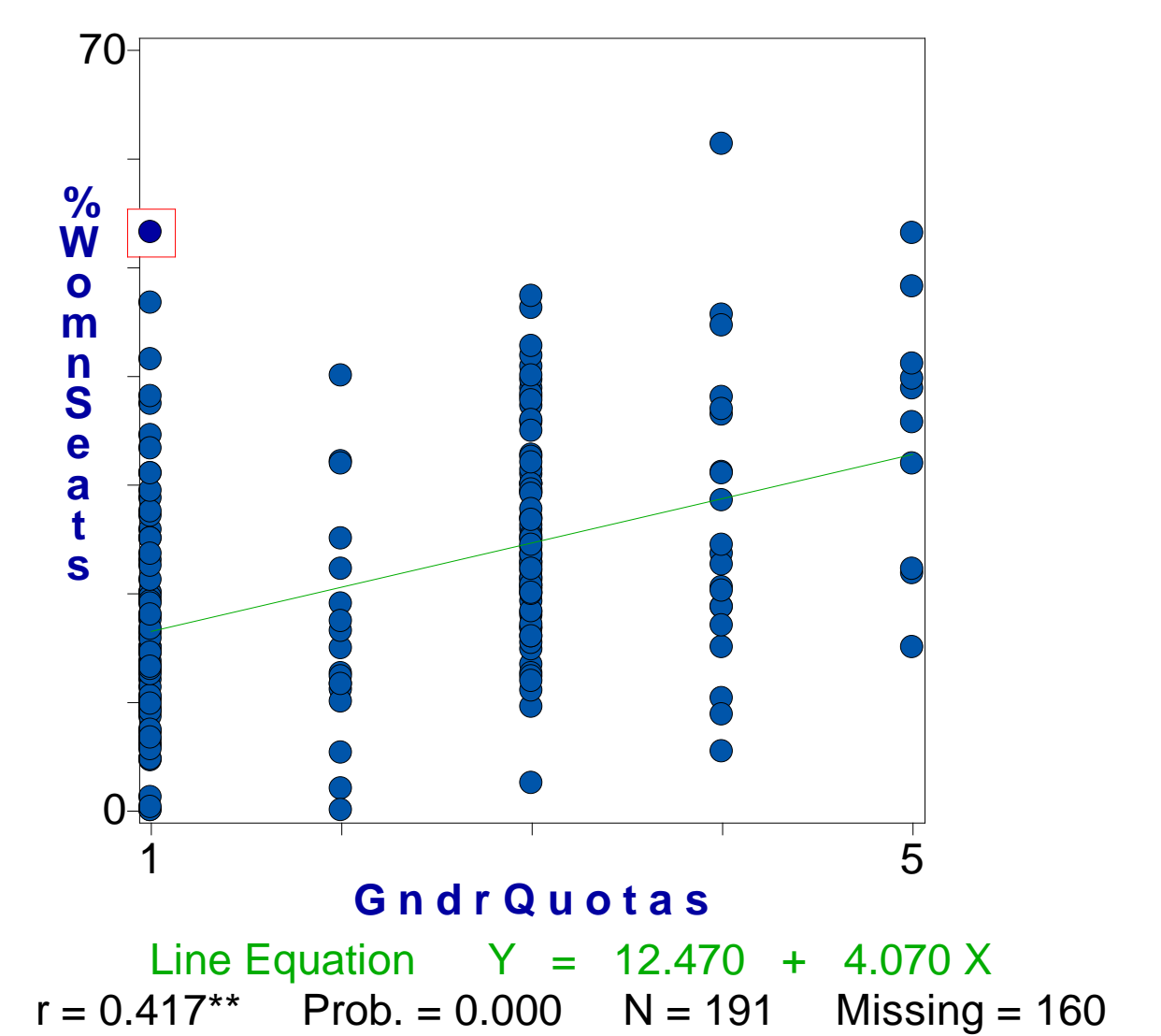
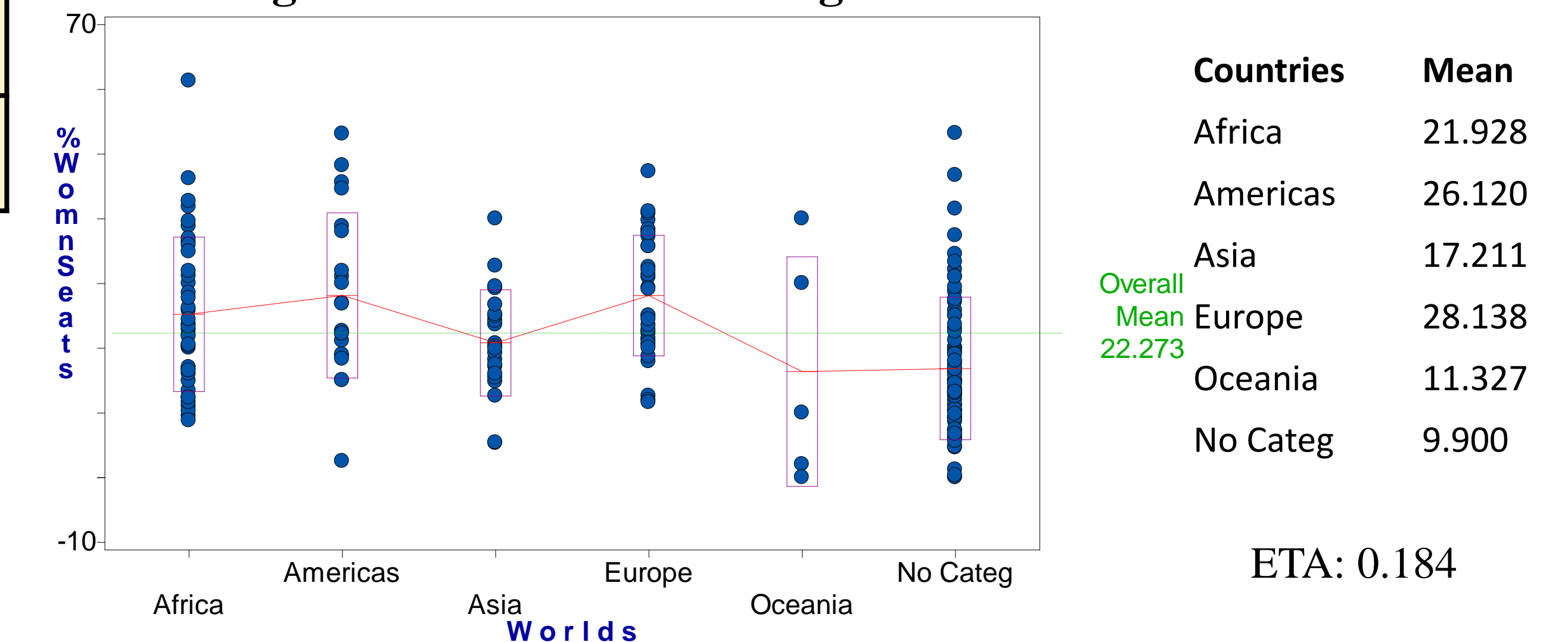


Table 3: Multiple Regression Analysis of % of Women in Parliaments

Independent Variables	Unstandardized Regression Coefficients	Standardized Regression Coefficients	t
Freedom Scores	-0.109	-0.269	-1.198
Literacy Rates	0.074	0.118	1.401
Population Density	-0.001	-0.034	-0.449
GDP per Capita	-0.000	-0.216	-1.777
Corruption Perception Index	0.280	0.465	3.065 **
Gender Quotas	3.719	0.389	5.182 **
Democracy Levels	1.133	0.213	0.885

Figure 3: ANOVA across Regions



Conclusion:

- In the bivariate analysis, the following variables were the strongest predictors of the dependent variable: **Gender Quotas, Democracy Levels, Corruption Perception Index, Freedom Scores, Literacy Rates.**
- In the multivariate analysis, **Gender Quotas and the Corruption Perception Index** proved to be the strongest predictors of the dependent variable, which supports H4 and H5.
- The ANOVA reveals that the percentage of women in national parliaments is above the global mean in the Americas, Europe and Africa (mixed support for H8)