

## Gender Equality in Spain and Portugal 2006–2022; Economy and Competitiveness

AREA: 4  
TYPE: Application

117

AUTHOR

**Juan Rivera-Mata<sup>1</sup>**  
University of Maryland Global campus (UMGC), USA  
jrivera@leadingamerica.us

1. Corresponding author:  
American Leadership Strategies; Georgetown Business Center Suite 500; 1101 30th Street NW; Washington DC 20007; usa

*Igualdad de Género en España y Portugal 2006–2022; Economía y Competitividad*  
*Igualdade de Género na Espanha e Portugal 2006–2022; Economia e Competitividade*

*Economic gender differences persist. Patriarchy theory assumes political power for women will bring economic equality. We evaluated Global Gender Gap for Spain and Portugal (2006–2022). We found women Ministers or in Parliament do not correlate with economic equality, women participation in workforce, same salary for men and women nor same income. Patriarchy theory does not seem useful to reduce gender economic inequality. We found no significant differences between PSOE and PP Governments nor positive correlation of economic equality with country GDP nor competitiveness. We recommend measuring power, not parity, fiscal redistribution policies and promoting providing-caring social role gender interchange.*

*Persisten diferencias económicas de género. La teoría del patriarcado asume el poder político de mujeres traerá igualdad económica. Evaluamos Global Gender Gap de España y Portugal (2006–2022). Encontramos que ministras o parlamentarias no correlaciona con igualdad económica, participación en fuerza laboral, mismo salario para hombres y mujeres ni mismos ingresos. La teoría del patriarcado no parece útil para reducir la desigualdad económica. No encontramos diferencias significativas entre gobiernos PSOE y PP ni correlación positiva de igualdad económica con PIB ni competitividad. Recomendamos medir poder, no paridad, políticas de redistribución fiscal y promover intercambio entre géneros de roles sociales proveer-cuidar.*

*Diferenças econômicas de gênero persistem. A teoria do patriarcado assume poder político para as mulheres trará igualdade econômica. Avaliamos a Global Gender Gap para Espanha e Portugal (2006–2022). Descobrimos que ministras ou parlamentarias não correlacionam com igualdade econômica, participação das mulheres na força de trabalho, mesmo salário para homens e mulheres nem mesma renda. Teoria patriarcado não parece útil para reduzir desigualdade econômica. Não encontramos diferenças entre os governos PSOE e PP nem correlação positiva de igualdade econômica no PIB nem competitividade. Recomendamos medir poder, não paridade, políticas de redistribuição fiscal e, promover intercâmbios papel social do cuidado y proveer.*

DOI  
10.58416/GCG.2023.V17.N1.06

RECEIVED  
04.08.2022

ACCEPTED  
28.09.2022

## 1. The Problem: Political and Economic Inequality Between Men and Women

Since 2006 (Hausmann et col, 2006, 2021, 2022) we observe (Table 1) significant health and education gender equality in the world, as reported by the Global Gender Gap (GGG) of the World Economic Forum (WEF), but also a decrease in economic participation for women since 2009, in spite an improvement in political empowerment.

Table 1. - Global Gender Gap Evolution 2006-22 (Hausmann et col., 2006, 2022)

GLOBAL GENDER GAP 2022						GLOBAL GENDER GAP 2006					
( 146 countries)						( 115 countries)					
Overall	Economic Part.Opport.	Educational Attainmnett	Health & Survival	Political Empowerm.		Overall	Economic Part.Opport.	Educational Attainmnett	Health & Survival	Political Empowerm.	
Europe	76.6%	70.2%	99.5%	97.0%	39.8%	Western Europe	70%	69%	99%	97%	25%
North America	76.9%	77.4%	99.7%	96.9%	33.7%	North America	70%	78%	98%	97%	10%
Latin America Caribbean	72.6%	64.5%	97.6%	97.6%	28.7%	Latin America Caribbean	64%	57%	98%	97%	14%
Central Asia	69.0%	68.2%	98.8%	97.4%	11.8%	E. Europe & Central Asia	65%	62%	97%	97%	8%
East Asia and Pacific	69.0%	72.2%	95.4%	95.2%	13.3%	East Asia and Pacific	62%	55%	90%	96%	16%
Sub-Sahara Africa	67.8%	67.7%	85.3%	97.2%	21.3%	Sub-Sahara Africa	62%	61%	88%	97%	10%
South Asia	62.4%	35.7%	93.2%	94.2%	26.2%	South Asia	72%	77%	100%	95%	18%
Middle East-North Africa	63.4%	46%	96.2%	96.4	15.1	Middle East-North Africa	57%	39%	88%	97%	7%
<b>GLOBAL</b>	<b>68.1%</b>	<b>60.3%</b>	<b>94.4%</b>	<b>95.8%</b>	<b>22.0%</b>	<b>GLOBAL</b>	<b>58%</b>	<b>58%</b>	<b>93%</b>	<b>96%</b>	<b>17%</b>

In Table 1 above we see political gender equality is low but increasing during the last 15 years (Global 17% in 2006 to 22% in 2022). Economic gender equality is still far away, with 2021 value of 60.3%, similar to the 58% in 2006. Europe is in good position; North America, with lower political gender empowerment than Europe (33.7% vs 39.8% in 2022) but better economic equality between men and women (77.4% vs. 70.2%, 2022).

The present is devastating. GGG 2022 states: "A time-series analysis of gender parity in labour-force participation for a constant sample of 102 countries included in the Global Gender Gap Index shows that global gender parity for labour-force participation had been slowly declining since 2009. However, the trend was exacerbated in 2020, when gender parity scores decreased precipitously over two consecutive editions. As a result, in 2022, gender parity in the labour force stands at 62.9%, the lowest level registered since the index was first compiled. Among workers who remained in the labor force, unemployment rates increased and has remained consistently higher for women" (Hausmann, 2022, pag. 6). The same GGG 2022 in political equality states: "The global average share of women in ministerial positions nearly doubled between 2006 and 2022, increasing from 9.9% to 16.1%. Similarly, the global average share of women in parliament rose from 14.9% to 22.9%." (Hausman et col, 2022, pag. 7). There was an increase of political power in 2006-2022 and at the same time a decrease of women participation in workforce and decreased employment levels. More political power did not improve economic empowerment for women. This is the problem to be studied.

KEYWORDS  
gender, equality,  
sex, Spain,  
Portugal.

PALABRAS CLAVE  
género, igualdad,  
sexo, España,  
Portugal.

PALAVRAS-CHAVE  
género, igualdade,  
sexo, Espanha,  
Portugal.

JEL CODES  
J16; P51; H11

## 2. Theoretical Framework: Economic Inequalities Between Men and Women

Many theories studied gender differences in power; biological, adaptive biology and psycho-biology approaches (Hines, 2004; Hampon and Moffatt, 2004), evolutive and psychoanalytical (Pinker, 2002; Chodorow, 1989; Hrды, 1999; Wood and Eagly, 2002), social-cognitive (Kohlber, 1966; Eagly et al., 2000), gender socialization (Collins et al., 2000). But gender economical differences still exist. Marxism (Marx and Engels, 1846) was based on the struggle to control means of production as source of power; patriarchy ideology shares this power struggle for the men-women relationship. Engels (1940) believed that class divisions and women subordination evolved with the development of private property. Power and economy were the focus; class (and women) struggle the solution. Marxism and patriarchy are popular again (Nahuel 2019, Del Aguila, 2020). Covid-19 increased this economic gap (Busson and Messina 2020). We conclude the economic gender differences are due to structural issues and we will use the patriarchy approach to understand the problem, assuming the economy is in men hands and access to political power is the way to achieve economic equality.

Assuming the theoretical framework of patriarchy, defending there is a struggle between men and women for political power that limits the ability for women to achieve same economical achievement than men, we built the following hypotheses:

*H1: More women in Parliament increase women economic participation and opportunities in Spain.*

*H2: More women ministers improve women economic participation and opportunities in Spain.*

*H3: More women in Parliament increase women economic participation and opportunities in Portugal.*

*H4: More women ministers improve women economic participation and opportunities in Portugal.*

## 3. Research Methodology and Study

We could use many analysis and indicators from multiple organizations monitoring the evolution of gender equality in the world (UN Women, World Bank, Catalyst, European Union, Women on Boards, IDEA, IADB, others). We will use Global Gender Gap (GGG) yearly analysis of the World Economic Forum (WEF). The GGG evaluates 4 key areas of gender equality (Health, Education, Political and Economic Decision Making), each with several sub-indexes. We will study changes in 2006-2022 in general, in Spain, Portugal and selected countries. GGG reports is used by Governments, it is reliable and consistent, although 2006 included 115 countries and 2022 (with 2021 data) 146.

We will conduct correlation analyses among several sets of data to evaluate the interaction among the different variables that we will be evaluating, with 0,85 value as a strong correlation between two

variables. Correlation coefficient is determined by dividing the covariance by the product of the two variables' standard deviations and the formula is:  $r = \frac{\sum(x-mx)(y-my)}{\sqrt{\sum(x-mx)^2\sum(y-my)^2}}$

## 4. Results

### 4.1. Gender equality in Spain. Evolution 2006-2022.

In **Table 2** below we can see the evolution 2006-2022 (2022 with 2021 data) of the GGG Index, the sub-indexes (economy, education, health and political) and rankings, some specific and some GGG indicators (workforce participation of women, equal salary between men and women, equal income, women in Parliament and women ministers). The relative position (ranking) of each indicator is reflected (out of 115 countries in 2006 and of 146 countries in 2022). Additionally, we included some other indicators that could be relevant for gender equality; Gross Domestic Product (in purchasing power parity US\$), Human Development Index, unemployment rate and Country Competitiveness Index (WEF).

**Table 2. - GGG 2006-2022 Evolution in Spain (Hausmann et col, 2006, 2022)**

	PSOE	PSOE	PSOE	PSOE	PSOE	PSOE	PP/PSOE	PP	PP	PP	PP	PP	PP	PSOE	PSOE	PSOE	
GGG SPAIN	(N=115)															(N=146)	
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2022	22/06
<b>Global Index</b>	<b>11</b>	<b>10</b>	<b>17</b>	<b>17</b>	<b>11</b>	<b>12</b>	<b>26</b>	<b>30</b>	<b>29</b>	<b>25</b>	<b>29</b>	<b>24</b>	<b>29</b>	<b>8</b>	<b>14</b>	<b>17</b>	<b>-6</b>
Value	0,73	0,74	0,73	0,73	0,76	0,76	0,73	0,73	0,74	0,74	0,74	0,74	0,75	0,80	0,79	0,79	8%
<b>Economic</b>	<b>85</b>	<b>84</b>	<b>89</b>	<b>90</b>	<b>78</b>	<b>74</b>	<b>75</b>	<b>76</b>	<b>84</b>	<b>67</b>	<b>72</b>	<b>81</b>	<b>80</b>	<b>72</b>	<b>71</b>	<b>64</b>	<b>21</b>
Value	0,54	0,59	0,58	0,60	0,62	0,63	0,65	0,65	0,65	0,67	0,67	0,66	0,66	0,68	0,70	0,71	32%
<b>Education</b>	<b>38</b>	<b>39</b>	<b>58</b>	<b>56</b>	<b>40</b>	<b>37</b>	<b>38</b>	<b>40</b>	<b>44</b>	<b>47</b>	<b>43</b>	<b>45</b>	<b>47</b>	<b>43</b>	<b>44</b>	<b>36</b>	<b>2</b>
Value	0,99	0,99	0,99	0,99	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0%
<b>Health</b>	<b>71</b>	<b>74</b>	<b>76</b>	<b>80</b>	<b>63</b>	<b>56</b>	<b>34</b>	<b>75</b>	<b>87</b>	<b>93</b>	<b>91</b>	<b>81</b>	<b>93</b>	<b>93</b>	<b>114</b>	<b>107</b>	<b>-36</b>
Value	0,97	0,97	0,97	0,97	0,98	0,98	0,98	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	-1%
<b>Political</b>	<b>5</b>	<b>5</b>	<b>7</b>	<b>9</b>	<b>5</b>	<b>5</b>	<b>27</b>	<b>27</b>	<b>23</b>	<b>26</b>	<b>26</b>	<b>22</b>	<b>24</b>	<b>8</b>	<b>15</b>	<b>17</b>	<b>-12</b>
Value	0,42	0,42	0,37	0,37	0,43	0,28	0,28	0,28	0,31	0,33	0,32	0,35	0,35	0,53	0,49	0,48	14%
<b>Workforce</b>	<b>72</b>	<b>75</b>	<b>75</b>	<b>79</b>	<b>69</b>	<b>70</b>	<b>68</b>	<b>58</b>	<b>53</b>	<b>52</b>	<b>54</b>	<b>54</b>	<b>52</b>	<b>54</b>	<b>59</b>	<b>49</b>	<b>23</b>
Value	0,66	0,71	0,72	0,74	0,77	0,77	0,77	0,82	0,85	0,85	0,86	0,86	0,87	0,87	0,88	0,84	28%
<b>Equal Salary</b>	<b>110</b>	<b>117</b>	<b>124</b>	<b>120</b>	<b>117</b>	<b>122</b>	<b>116</b>	<b>116</b>	<b>117</b>	<b>106</b>	<b>118</b>	<b>122</b>	<b>129</b>	<b>115</b>	<b>102</b>	<b>89</b>	<b>21</b>
Value	0,45	0,51	0,46	0,49	0,52	0,53	0,55	0,54	0,54	0,57	0,55	0,51	0,50	0,56	0,60	0,62	37%
<b>Equal Income</b>	<b>81</b>	<b>76</b>	<b>80</b>	<b>82</b>	<b>81</b>	<b>64</b>	<b>66</b>	<b>69</b>	<b>72</b>	<b>59</b>	<b>55</b>	<b>60</b>	<b>50</b>	<b>55</b>	<b>61</b>	<b>58</b>	<b>23</b>
Value	0,44	0,5	0,5	0,53	0,55	0,57	0,6	0,59	0,6	0,65	0,63	0,63	0,66	0,66	0,65	0,67	53%
<b>Parlament</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>11</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>17</b>	<b>10</b>	<b>13</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>5</b>	<b>14</b>	<b>15</b>	<b>-8</b>
Value	0,56	0,56	0,57	0,57	0,58	0,58	0,56	0,56	0,66	0,7	0,67	0,64	0,64	0,90	0,79	0,75	35%
<b>Ministers</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>22</b>	<b>21</b>	<b>29</b>	<b>24</b>	<b>24</b>	<b>13</b>	<b>13</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
Value	1	1	0,78	0,78	1	1	0,44	0,44	0,44	0,44	0,44	0,63	0,63	1	1	1	0%
<b>GDP \$ pp</b>	<b>\$26.320</b>	<b>\$24.171</b>	<b>\$27.765</b>	<b>\$28.536</b>	<b>\$27.066</b>	<b>\$26.855</b>	<b>\$26.941</b>	<b>\$26.952</b>	<b>\$31.198</b>	<b>\$32.270</b>	<b>\$32.814</b>	<b>\$33.261</b>	<b>\$34.272</b>	<b>\$35.700</b>	<b>\$36.090</b>	<b>\$36.220</b>	<b>38%</b>
Human Index	0,86	0,86	0,86	0,87	0,87	0,88	0,88	0,88	0,89	0,90	0,90	0,90	0,91	0,90	0,905	0,905	5,7%
Unemploy.	8,5%	8,2%	11,3%	17,9%	19,9%	21,4%	24,8%	26,1%	24,4%	22,1%	19,6%	17,2%	15,3%	14,1%	15,7%	13,3%	85,4%
Competitivity	68,2	69,2	69,1	70,1	69,6	70,2	69,1	68	67,2	67,6	68,5	63,6	65,1	65,7	66,9	66,9	-1,9%

In **Table 2** above we see an 8% improvement of Spain in the Global Index (0,79 vs. 0,73) but decrease of 8 positions in the global ranking (31 more countries in 2022 versus 2006). In health and education there are no relevant differences, being almost equal (value 1) in 2006 and 2022. We can see Spain is

historically among the first countries in the world in political gender equality (5 in 2006, 17 in 2022) but in a much lower position in the economic indicator (85 in 2006, 63 in 2022). In the specific sub-indexes, we can see Spain leads the world in women ministers (2 in 2006, 1 in 2022) and, in a similar way, in women in Parliament (7 in 2006, 15 in 2022). On the other hand, when we review the economic specific sub-indexes, we can see a mid-low global position of Spain in participation of women in the workforce (72 in 2006, 49 in 2021), in equal income (81 in 2006, 58 in 2022) and very low position in the ranking of equal salary for same job (nr. 110 -of 116 countries- in 2006 and 89 in 2022). Also, we can see in **Table 2** that Spain gained a 38% in GDP (2% annualized) in 2006-2022 but lost (1.9%) in country competitiveness, suffering an 56.5% increase in unemployment (from 8.5% in 2006 to 13,3% in 2022)

Initial data above suggests that a good relative position in political gender equality, especially increasing women ministers, does not help bringing gender economic equality. Spain seems to be focusing in political, gender equality, having more women in Parliament and ministers, but not effectively dealing economic gender differences, especially equality on salaries for the same job.

#### 4.2. Hypotheses 1 and 2. Correlation of gender indicators (Spain 2006-2021).

We will try to validate H1 (More women in Parliament increase women economic participation and opportunities in Spain) and H2; same for women ministers. We saw Spain improved political empowerment, being both well positioned globally, but a poor (or negative) improvement in equality in the economy, especially in equal salary, in absolute and relative terms, being in mid-low rankings in the set of 146 countries. To understand better the interaction of the indicators above studied in both countries, we conducted a correlation analysis. Correlation among variables are shown in **Table 4**.

**Table 4. - GGG 2006-2021 Spain. Correlations**

Correlations	GGG	Econom.	Educac.	Politic	Ministers	Parlam.	Workforce	Salaries	Income	GDP	Hum. Ind.	Compet.	Unemp.
GGG Index	1	0,5222	0,4279	0,7395	0,5847	0,8149	0,4489	0,5193	0,3644	0,5947	0,4125	-0,3268	-0,2133
Economic	0,5222	1	<b>0,9280</b>	0,0012	-0,3546	0,6882	<b>0,9444</b>	<b>0,8786</b>	<b>0,9713</b>	0,765	-0,6161	-0,491	0,533
Education	0,4279	<b>0,9280</b>	1	-0,1206	-0,4064	0,6142	<b>0,9233</b>	0,7512	<b>0,9454</b>	0,7435	<b>0,9446</b>	-0,5985	0,5326
Politics	0,7395	0,0012	-0,1206	1	0,7309	0,5886	0,0016	0,0448	-0,0324	0,3353	-0,1022	-0,2353	-0,6613
Ministers	0,5847	-0,3546	-0,4064	0,7309	1	0,1227	-0,4167	-0,2306	-0,4168	-0,1519	-0,4876	0,1952	-0,6680
Parliament	0,8149	0,6882	0,6142	0,5886	0,1227	1	0,7003	0,6110	0,6888	0,8191	0,6968	-0,5575	-0,0572
Work Force	0,4489	<b>0,9444</b>	<b>0,9233</b>	0,0016	-0,4167	0,7003	1	0,7126	<b>0,9664</b>	<b>0,8614</b>	<b>0,9685</b>	-0,673	0,443
Salaries	0,5193	<b>0,8786</b>	0,7512	0,0448	-0,2306	0,6110	0,7126	1	0,765	0,513	0,6254	-0,162	0,539
Income	0,3644	<b>0,9713</b>	<b>0,9454</b>	-0,0324	-0,4168	0,6888	<b>0,9664</b>	0,765	1	0,822	<b>0,9651</b>	-0,6054	0,4766
GDP (ppp)	0,5947	0,765	0,7435	0,3353	-0,1519	0,8522	<b>0,8614</b>	0,513	0,822	1	<b>0,8927</b>	-0,738	0,055
Human Index	0,4125	-0,6161	<b>0,9446</b>	-0,1022	-0,4876	0,6968	<b>0,9685</b>	0,6254	<b>0,9651</b>	<b>0,8927</b>	1	-0,7404	0,3889
Competitivity	-0,3268	-0,491	-0,5985	-0,2353	0,1952	-0,5575	-0,673	-0,162	-0,6054	-0,738	-0,7404	1	0,0865
Unemploy.	-0,2133	0,533	0,5326	-0,6613	-0,6680	-0,0572	0,443	0,539	0,4766	0,055	0,3889	0,0865	1

H1: "More women in Parliament increase women economic participation and opportunities in Spain". In **Table 4** Women in Parliament does not correlate with any economic gender equality variables, with correlation only with GDP (0,852). Therefore, we can not validate H1.

H2: "More women ministers increase women economic participation and opportunities in Spain". Also, we find Women Ministers not only does not correlates with any economic participation and opportunities for women, but negative (weak) with all women economic indicators. Therefore, we can not validate H2.

Also, in **Table 4** above we see in economic equality (Column 2), strong correlations, as they are key elements of GGG economic equality, with participation in workforce (0,9444), same salaries for same job (0,8766) and same income between men and women (0,9713). In education we find strong correlations with economic gender equality (0,9280), women participation in workforce (0,9233), same income for men and women (0,9454) and Global Human Index (0,9446). But we find negative, but not strong, correlation with country competitiveness (0,5985) and positive (worse) with unemployment. In Politics, both in Women Ministers and in Parliament we do not find any strong correlation with any of the variables, although many negative (not strong) correlations of women Ministers with many of the gender equality indicators.

Workforce: strong correlation with economic equality (0,944) as being part of the index, but also with education (0,9233), same income (0,9664), GDP (0,8614) and Global Human Index (0,9685); negative, but not strong correlation with Country competitiveness (-0,673) and positive, but not strong (0,443) with unemployment (The more women in workforce, the higher the unemployment rate). For same salary for men and women we only find strong (0,876) correlation with the main economic index.

Same income for men and women. Strong correlation with its own main index (0,9713), with education (0,9454) and women participation in workforce (0,9664). Also, strong correlation (0,9651) with Global Human Index of Spain, but negative and not strong (-0,6054) with Spain competitiveness.

GDP only correlates with women participation in workforce (0,86) and Global Human Index (0,89) and negative with competitiveness (-0,738). Global Human Index shows a strong correlation with education (0,94), women in the workforce (0,97), same income for men and women (0,97) and GDP (0,90) and negative, but not strong (-0,738) with Spain competitiveness.

Spain Competitiveness. Although we did not find strong correlations, we found negative correlations with most of the gender equality indicators (Economic -0,49; education, -0,60; women in Parliament, -0,56; women ministers, -0,673; same income for men and women, -0,60; GDP, -0,74 and Global Human Index, -0,74).

Spain unemployment. No strong correlations with gender equality indicators, but negative (positive in unemployment) with women in politics (women ministers (-0,66) and ministers (-0,67) but, interestingly, very poor with women in Parliament (-0,06) and positive (the higher gender equality, the more unemployment), but not strong, correlations with economic equality (0,53), education (0,53), with women in the workforce (0,443), same salaries (0,536) and same income for men and women (0,476).

### 4.3. Gender equality in Portugal. Evolution 2006-2022.

In **Table 3** below we see Portugal GGG 2006-2022 same indexes, sub-indexes and indicators. We see a 11% improvement in Global Index (0,77 vs. 0,69) and an improvement from rank 33 in 2006 to rank 29 in 2022. In the political sub-index, we see an evolution from rank 40 to rank 33 in 2022, with low values (0,14 in 2006 and 0,36 in 2022). We observe a significant (116%) improvement in women in Parliament (0,27 in 2006 to 0,58 in 2022) but going from rank 31 to 35 in 2022 and even more (+264%) in women ministers (0,2 in 2006 to 0,727 in 2022, going from rank nr. 39 to 20 in 2022).

Table 3. - GGG 2006-2020 Evolution in Portugal (Hausmann et col, 2006, 2021)

GGG PORTUGA (N=115)															(N=146)		
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2022	22/06
<b>Global Index</b>	33	37	39	46	32	35	47	51	39	39	31	33	37	35	22	29	4
Value	0,69	0,70	0,71	0,70	0,72	0,71	0,71	0,71	0,72	0,73	0,74	0,73	0,73	0,74	0,78	0,77	11%
<b>Economic</b>	33	38	39	53	56	59	55	66	44	46	46	35	44	46	38	41	-8
Value	0,67	0,68	0,70	0,68	0,67	0,66	0,68	0,67	0,72	0,71	0,71	0,73	0,72	0,73	0,75	0,74	10%
<b>Education</b>	57	58	71	76	69	55	57	56	68	60	63	70	82	73	76	75	-18
Value	0,98	0,99	0,99	0,99	0,99	0,99	0,99	0,99	0,99	1,00	0,99	0,99	0,99	0,99	0,99	0,99	1%
<b>Health</b>	71	74	76	80	71	71	83	83	85	79	76	55	54	50	73	67	4
Value	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	0,97	1,00	0,98	0,98	0,97	0,97	0%
<b>Political</b>	40	47	45	47	32	34	43	46	44	41	36	43	46	39	26	33	7
Value	0,14	0,14	0,16	0,16	0,23	0,23	0,18	0,18	0,21	0,24	0,27	0,24	0,24	0,28	0,39	0,36	164%
<b>Workforce</b>	32	32	31	36	35	36	36	28	31	26	26	27	29	28	24	34	-2
Value	0,79	0,85	0,86	0,86	0,87	0,87	0,87	0,89	0,9	0,91	0,91	0,911	0,915	0,919	0,928	0,868	10%
<b>Equal Salary</b>	50	87	73	95	103	108	107	109	97	107	97	93	103	100	99	84	-34
Value	0,65	0,62	0,65	0,6	0,58	0,56	0,57	0,57	0,59	0,57	0,59	0,594	0,582	0,598	0,614	0,623	-4%
<b>Equal Income</b>	54	47	51	50	62	69	52	73	36	44	28	23	25	30	27	24	30
Value	0,54	0,59	0,59	0,61	0,45	0,57	0,64	0,58	0,71	0,54	0,706	0,723	0,723	0,725	0,732	0,758	40%
<b>Parliament</b>	31	41	24	24	28	29	28	32	32	35	27	28	28	31	20	35	-4
Value	0,27	0,27	0,39	0,39	0,38	0,36	0,4	0,4	0,46	0,46	0,533	0,533	0,533	0,554	0,667	0,582	116%
<b>Women Minister</b>	39	39	78	80	21	21	54	53	51	31	30	56	56	38	20	20	19
Value	0,2	0,2	0,14	0,14	0,45	0,45	0,22	0,22	0,27	0,4	0,4	0,286	0,286	0,416	0,727	0,727	264%
<b>GDP \$ pp</b>	\$19.335	\$ 18.158	\$20.142	\$21.169	\$20.617	\$ 21.661	\$21.660	\$21.466	\$25.095	\$26.055	\$26.690	\$27.007	\$ 27.937	\$28.800	31.340 €	31.940 €	65%
Human Index	0,811	0,814	0,817	0,823	0,829	0,833	0,836	0,84	0,847	0,854	0,855	0,858	0,86	0,864	0,866		6,8%
Unemployment	7,7%	8,0%	7,6%	9,4%	10,8%	12,7%	15,5%	16,2%	13,9%	12,4%	11,1%	8,9%	7,0%	6,5%	7,2%		5,8%
Competitivity	62,9	64	63,9	64,9	64,4	64	63	63,1	63,5	65,3	65,1	62,6	63,4	65,3	67		6,5%

The situation is very different in the economy. We see an improvement (+10%) in women participation in workforce (0,79 in 2006 and 0,87 in 2022 but decreasing from nr. 32 to nr. 34 in 2022) and a 40% improvement in total income equality (0,54 in 2006 to 0,76 in 2022, from nr. 54 to 24 in 2022) but a decrease (-4%) in wage similar for same job (0,65 in 2006 to 0,62 in 2022, from nr. 60 to 99 in 2022) Also we see a 65% increase in GDP (3,06% annualized) and improvements in competitiveness (+6.5%), Human Global Index (+6,5%) and decrease in unemployment (from 7.7% to 5,8% in 2022).

In general, we observe in Portugal a significant improvement in gender equality, at least in GGG indicators, in politics in the 2006-2022 period -having more women in Parliament and ministers- but a decrease in equal salary for same job between men and women, in spite of an improvement in workforce participation and similar income. As in the case of Spain, it seems both countries prioritize having a few more women in Parliament and ministers versus same salary for same job between men and women, in spite almost equality in workforce (0,87 in 2022 in Portugal and 0,84 in Spain).

#### 4.4. Hypotheses 3 and 4. Correlation of gender indicators (Portugal 2006-2021).

We saw Portugal improved political empowerment (0,14 in 2006 to 0,36 in 2022), being well positioned globally (rank 40 in 2006, 33 in 2022), but with poor (or negative) improvement in economy, especially in equal salary (rank 84 in 2022), in absolute and relative terms, among 146 countries. We will try to validate now H3 and H4 for Portugal, using the same correlation methodology and >0.85 value as reference.

Table 5. - GGG 2006-2020 Portugal. Gender Correlations

Correlations	GGG	Econom.	Educac.	Politic	Ministers	Parlam.	Workforce	Salaries	Income	GDP	Hum.Ind.	Compet.	Unempl.
GGG Index	1	<b>0,8552</b>	0,4514	<b>0,9767</b>	0,8321	<b>0,9493</b>	0,8409	-0,1869	0,6293	<b>0,9494</b>	<b>0,9417</b>	0,6524	-0,2538
Economic	<b>0,8552</b>	1	0,3513	0,7260	0,4643	<b>0,8854</b>	0,5857	0,0688	0,7958	<b>0,9001</b>	0,7826	0,4374	-0,4004
Education	0,4514	0,3513	1	0,4354	0,2979	0,5098	0,5535	-0,7251	0,3416	0,4530	0,6424	0,2168	0,5197
Politics	<b>0,9767</b>	0,7260	0,4354	1	<b>0,9193</b>	<b>0,8932</b>	0,4153	-0,2550	0,5046	<b>0,8852</b>	<b>0,8854</b>	0,694	-0,187
Ministers	0,8321	0,4643	0,2979	<b>0,9193</b>	1	0,6444	0,1841	-0,2591	0,2011	0,6628	0,5427	0,7174	-0,1295
Parliament	<b>0,9493</b>	<b>0,8854</b>	0,5098	<b>0,8932</b>	0,6444	1	0,5946	-0,2045	0,7499	<b>0,9664</b>	<b>0,9380</b>	0,5281	-0,2098
Work Force	0,8409	0,5857	0,5535	0,4153	0,1841	0,5946	1	0,0379	0,4040	0,4725	0,4156	0,296	-0,158
Salaries	-0,1869	0,0688	-0,7251	-0,2550	-0,2591	-0,2045	0,0379	1	-0,001	-0,2237	-0,5685	0,0273	-0,671
Income	0,6293	0,7958	0,3416	0,5046	0,2011	0,7499	0,4040	-0,001	1	0,7536	0,6607	0,1520	-0,2488
GDP (ppp)	<b>0,9494</b>	<b>0,9001</b>	0,4530	<b>0,8852</b>	0,6628	<b>0,9664</b>	0,4725	-0,2237	0,7536	1	<b>0,9648</b>	0,506	-0,242
Human Index	<b>0,9417</b>	0,7826	0,6424	<b>0,8854</b>	0,5427	<b>0,9380</b>	0,4156	-0,5685	0,6607	<b>0,9648</b>	1	0,1968	0,0794
Competitiveness	0,6524	0,4374	0,2168	0,694	0,7174	0,5281	0,296	0,0273	0,1520	0,506	0,1968	1	-0,3077
Unemploy.	-0,2538	-0,4004	0,5197	-0,187	-0,1295	-0,2098	-0,158	-0,671	-0,2488	-0,242	0,0794	-0,3077	1

H3: "More women in Parliament increase women economic participation and opportunities in Portugal". We see Women in Parliament correlates well ( $>0,85$ ) with the general GGG (0,95) and with the general economic indicator (0,8854) but not with the sub-indexes of women in the workforce (0,59), same income (0,75) and negative -weak- with same salaries for men and women (-0,2045). We can not validate H3.

H4: "More women ministers increase women economic participation and opportunities in Portugal". Table 5 above shows Women Ministers does not correlates with GGG economic indicator (0,46), participation in workforce (0,18) nor same income (0,42) and negative -weak- correlation with same salaries for men and women (-0,26). We can not validate H4.

Also, in Table 5 above we can see GGG index has a strong correlation with economic gender equality (0,8552), women in politics (0,9767), mainly due to women in Parliament (0,9493) and also with GDP (0,9494) and Global Human Index (0,9417). We did not find any strong correlation of education with main gender equality indicators, but negative and not strong, correlation with same salaries for men and women (-0,725).

Political empowerment shows strong correlation with GGG index (0,98) and as expected, with women ministers (0,92), women in Parliament (0,89), and also with GDP (0,89) and Human Index (0,89). Women ministers only shows, obviously, strong correlation with women in politics (0,92) but women in Parliament has strong correlation with GGG index (0,95), economic equality (0,8854), political empowerment (0,89), and also with GDP (0,97) and Human Index (0,94).

Women in the workforce does not show strong correlation with any of the indicators. Same salaries for men and women also do not show any strong correlation with gender equality indicators, but negative with education (-0,76), Human Index (-0,57) and unemployment (-0,67). Similarly, we could not find any strong correlation between same income for men and women with any of the gender equality indicators. GDP has a good strong correlation with general GGG index (0,95), economic equality (0,90), political empowerment (0,99), women in Parliament (0,97) and Global Human Index (0,96). Human Index correlates with GGG (0,94), women in politics (0,89), women in Parliament (0,94) and GDP (0,96). Competitiveness does not show any strong correlation with any of the gender equality indicators, and the same for unemployment, but moderate and positive with education (0,52) and negative with salaries (-0,67).



## 5. Conclusions

Based upon the above data regarding the for Spain and Portugal and the fact that we could not validate any of the 4 hypotheses we could conclude:

- a) Theoretical framework: the assumption from the (Marxist) patriarchy model that the solution for the struggle between men and women for economic power is resolved with women achieving more political power is not valid in this case. The overall GGG 2006-2022 and the specific Spain and Portugal cases here studied do not support that theoretical assumption.
- b) Differences matter: we found differences between Spain and Portugal, regarding the interaction of gender equality variables. Just because more women in Parliament correlates well in Portugal does not mean that would happen in other countries, like the case of Spain. In gender equality a formula does not fit all.
- c) Unemployment: Portugal had average 9,7% unemployment in 2006-2021, where Spain had 16.6%, 72,2% higher. Although we did not find strong correlation in these countries between gender equality and unemployment, most of them were negative in Portugal -reflecting a positive effect- and positive in Spain -negative effect- in unemployment. We believe this could an underlying reason why, in both countries, equality variables in workforce, salaries and income interact differently.
- d) Competitiveness: in similar way, Portugal competitiveness. (+6,5% in 2006-2020) shows positive, but not strong, correlation with equality indicators but in Spain (-1.9% in 2006-2020) those correlations are negative, where in both countries there was a significant improvement in economic equality (Spain +30% and Portugal +12%) in the 15 years studied. We are inclined to believe gender equality does not improve country competitiveness but underlying economic factors (salary and unemployment levels) may have a significant impact in country competitiveness and this in women equal participation in workforce, equal salary and income than men; a better economy -with women well educated and prepared- improve equality between men and women and not the opposite.

### 5.1. Political empowerment and economic equality between men and women.

It is difficult to support the patriarchy construct believing that more women in power increases economic gender equality. More women ministers and in Parliament may have some other social benefits for gender equality (visibility, role models, women approaches in legislation etc.), this empirical analysis of a 15 years evolution in Spain and Portugal, and previous studies, indicate there is not any substantive improvement in economic gender equality and having more women ministers could even be an indicator of economic inequality.

In a previous study (Rivera-Mata, 2022) evaluating in Latin America similar GGG equality indicators for the same 15 years period, we found a negative, and statistically significant, regional correlation between women in power and economic participation and opportunities for women, being this associated to economic growth, democracy index and wage equality. A better economy is good for gender equality between, but having more women ministers is bad for economic gender equality.

Table 6. - GGC 2006-2022 Several key countries (Hausmann et col, 2006, 2021)

	USA			France			UK			Germany			Argentina			India			Spain			Portugal		
	2006	2022	16y	2006	2022	16y	2006	2022	16y	2006	2022	16y	2006	2022	16y	2006	2022	16y	2006	2022	16y	2006	2022	16y
GGG Index	23	27	-4	70	15	55	9	22	-13	58	10	48	41	33	8	98	135	-37	11	17	-6	33	29	4
Value	0,704	0,769	9%	0,52	0,791	52%	0,74	0,78	6%	0,752	0,901	20%	0,683	0,756	11%	0,601	0,629	5%	0,732	0,788	8%	0,692	0,78	12%
Economic	3	22	-19	88	40	48	37	44	-7	32	75	-43	82	102	-20	110	143	-33	85	64	21	33	41	-8
Value	0,759	0,778	3%	0,525	0,737	40%	0,66	0,733	10%	0,669	0,695	4%	0,551	0,635	15%	0,397	0,35	-12%	0,539	0,709	32%	0,669	0,74	10%
Politic	66	38	28	60	20	40	12	24	-12	6	8	-2	23	28	-5	20	48	-28	5	17	-12	26	33	-7
Value	0,097	0,332	242%	0,104	0,407	291%	0,31	0,423	38%	0,366	0,55	50%	0,204	0,413	102%	0,227	0,267	18%	0,421	0,481	14%	0,39	0,36	-7%
Work Force	20	53	-33	34	32	2	31	37	-6	40	42	-2	63	96	-33	110	140	-30	72	49	23	24	34	-10
Value	0,82	0,831	1%	0,79	0,87	10%	0,8	0,865	8%	0,77	0,861	12%	0,7	0,698	0%	0,397	0,274	-31%	0,66	0,844	28%	0,928	0,87	-6%
Salaries	37	11	26	109	82	27	58	42	16	66	105	-39	96	110	-14	104	122	-18	110	89	21	99	84	15
Value	0,68	0,772	14%	0,47	0,628	34%	0,63	0,71	13%	0,62	0,586	-5%	0,51	0,575	13%	0,41	0,506	23%	0,45	0,616	37%	0,614	0,62	1%
Income	31	61	-30	41	26	15	31	91	-60	54	29	25	95	103	-8	62	140	-78	81	58	23	27	24	3
Value	0,62	0,67	8%	0,59	0,752	27%	0,62	0,607	-2%	0,54	0,734	36%	0,37	0,558	51%	0,62	0,215	-65%	0,44	0,674	53%	0,732	0,76	4%
Parlament	55	61	-6	67	30	37	39	42	-3	77	41	36	8	13	-5	93	118	-25	7	15	-8	20	35	-15
Value	0,18	0,39	115%	0,14	0,65	364%	0,25	0,527	111%	0,12	0,536	347%	0,54	0,812	50%	0,09	0,175	94%	0,56	0,754	35%	0,667	0,58	-13%
Ministers	49	14	35	36	1	35	12	67	-55	62	23	39	80	83	-3	107	126	-19	2	1	1	20	20	0
Value	0,17	0,859	405%	0,21	1	376%	0,4	0,313	-22%	0,13	0,667	413%	0,09	0,222	147%	0,04	0,1	150%	1	1	0%	0,667	0,73	9%
GDP ppp \$	41399	60290	46%	29316	42310	44%	30470	42680	40%	30579	51370	68%	14109	19690	40%	3344	6170	85%	26320	36220	38%	19335	31940	65%

It is hard to justify a causation of this negative correlation, but we could argue that gender policies by Governments prioritize the easy and quick measures of increasing few women Ministers versus the complex issues related of improving economic equality for all women in their countries. The patriarchy narrative defends the struggle for political power will reach economic equality between sexes. Upon the above data, we could defend that countries with lower democratic quality, to advance in the gender rankings, move women to Parliament and Ministers to be reported as equal, although the reality is the opposite.

In **Table 6** above we see the evolution (2006-2022; 2022 report with 2021 data) of main GGG indexes for selected countries chosen to highlight differences in political and economic equality between men and women.

Countries who were pioneers introducing political gender (sex) quotas (Argentina 1991, India 1996) have a very bad global ranking in participation of women in the workforce (Argentina 96, India 140), same salary for same job (Argentina 110, India 122) and equal income for men and women (Argentina 103, India 140). On the other hand, USA, a country with no political gender quotas and very limited gender policies, is better positioned in workforce (nr. 53) same salary (nr.11) and same income (nr.61). Also, France, being first among 146 countries in 2022 in women Ministers, is in rank 82 in same salary for same job, although a better ranking (nr 32) in women participation in the workforce and same income for men and women (nr. 26).

UK has a long tradition of improving women in the political and business world since Thatcher times (1979-1990). The evolution 2016-2020 of women on boards in FTSE 250 shows an increase from 406 to 620 holding directorships position, but only an increase from 29 to 47 in executive positions and 371 to 573 in non-executive positions (Vinnicombe et col, 2020). More women on boards, but no more power for women.

Also, in a study evaluating the increase of women ministers in Latin America in the period 1950-2007 it was concluded that the majority were in "women ministries" (social, culture, health, environment) with relatively low actual power (Rivera-Mata, 2012). More women ministers, but not a significant increase in power. And if we evaluate 21 years of women Presidents in LAC (Chile, Argentina, Brazil) we found that no significant improvement in GGG gender equality indicators happened versus 18 years of male Presidents (Rivera-Mata, 2018). More women, no more power.

Recently Dhalun et col (2022) in their “Women’s political empowerment and economic growth”, evaluating 182 countries and 221 years, defend that women’s political empowerment is positively related with economic growth, specifically with technological change. Valls-Martinez et col (2022) conclude, with regression models in 2020-2019, that companies with more diverse and more women in their boards reduce more CO2 emissions. Diachkova and Kontoboitseva (2022) using regression models in demonstrated that gender equality has a positive effect on the economic development of EU and BRICS countries. Also, recently Giron and Kazomikhasragh (2022), using a panel vector auto-regression analysis for data from 2010-2018 demonstrated a negative and significant relationship between the Gender Inequality Index and economic growth

Many -if not most- papers related with the economic impact of women (on boards, business results, economic growth, etc.) shows, most of the times, positive correlations but not clear cause- effect. A better economy brings more economic gender equality, or more gender equality brings a better economy? We do not have a clear answer.

If we define equality in terms of power and economic capacity, equality indicators should be adapted to compare real shares of power in Government and economy income and wealth, not % of men and women (parity). Traditional marriage is 50%/50 men and women, were “parity”, but unequal; one female Culture minister has same power than a Defense (or Economy) minister? Parity does not necessary indicates equality; we should change gender equality indicators to measure actual political power of men and women and not just number of women ministers, in Parliament or Boards.

## 5.2. Conservative vs progressive gender equality policies.

In **Table 7** below we separated previous Table 1 in periods of time of progressive (PSOE) and conservative (PP) governments. PSOE increased 2% GDP (0,39% annually) in 2006-2011 but also increased unemployment by 153%, from 8,5% to 21,4%. PSOE was nr. 1 in the world in women ministers and improved women in Parliament by 4%, women in the workforce by 17%, equal salary by 18% and equal income by 30%. On the other hand, with PP, the GDP grew in the 2012-2018 period a 27% (3.5% annually), unemployment was reduced by 38%, women minister ranking was much lower, but women in Parliament was increased by 15%. At the end of the PP period, women participation in workforce was better than in the last year of the progressive (PSOE) government (0,87 vs 0,77), also equal gender income (0,64 vs. 0,58) and only a small decrease in equal salary for same job (0,50 vs. 0, 53).

Table 7. - PSOE vs PP (Spain) impact in equality and economic indicators

GGG SPAIN		PSOE	PSOE	PSOE	PSOE	PSOE	PSOE		PP	PP	PP	PP	PP	PP	PP	PP		PSOE	PSOE
PSOE vs PP		2006	2007	2008	2009	2010	2011	11/06	2012	2013	2014	2015	2016	2017	2018	18/12	2019	2020	
<b>Global Index</b>		<b>11</b>	<b>10</b>	<b>17</b>	<b>17</b>	<b>11</b>	<b>12</b>	<b>-1</b>	<b>26</b>	<b>30</b>	<b>29</b>	<b>25</b>	<b>29</b>	<b>24</b>	<b>29</b>	<b>-3</b>	<b>8</b>	<b>14</b>	
Value		0,73	0,74	0,73	0,73	0,76	0,76	4%	0,73	0,73	0,73	0,74	0,74	0,75	0,75	3%	0,80	0,79	
<b>Economic</b>		<b>85</b>	<b>84</b>	<b>89</b>	<b>90</b>	<b>78</b>	<b>74</b>	<b>11</b>	<b>75</b>	<b>76</b>	<b>84</b>	<b>67</b>	<b>72</b>	<b>81</b>	<b>80</b>	<b>-5</b>	<b>72</b>	<b>71</b>	
Value		0,54	0,59	0,58	0,60	0,62	0,63	17%	0,65	0,65	0,65	0,67	0,67	0,66	0,66	2%	0,68	0,70	
<b>Education</b>		<b>38</b>	<b>39</b>	<b>58</b>	<b>56</b>	<b>40</b>	<b>37</b>	<b>1</b>	<b>38</b>	<b>40</b>	<b>44</b>	<b>47</b>	<b>43</b>	<b>45</b>	<b>47</b>	<b>-9</b>	<b>43</b>	<b>44</b>	
Value		0,99	0,99	0,99	0,99	1,00	1,00	0%	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0%	1,00	1,00	
<b>Health</b>		<b>71</b>	<b>74</b>	<b>76</b>	<b>80</b>	<b>63</b>	<b>56</b>	<b>15</b>	<b>34</b>	<b>75</b>	<b>87</b>	<b>93</b>	<b>91</b>	<b>81</b>	<b>93</b>	<b>-59</b>	<b>93</b>	<b>114</b>	
Value		0,97	0,97	0,97	0,97	0,98	0,98	0%	0,98	0,97	0,97	0,97	0,97	0,97	0,97	-1%	0,97	0,97	
<b>Political</b>		<b>5</b>	<b>5</b>	<b>7</b>	<b>9</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>27</b>	<b>27</b>	<b>23</b>	<b>26</b>	<b>26</b>	<b>22</b>	<b>24</b>	<b>3</b>	<b>8</b>	<b>15</b>	
Value		0,42	0,42	0,37	0,37	0,43	0,28	-33%	0,28	0,28	0,31	0,33	0,32	0,35	0,35	25%	0,53	0,49	
<b>Workforce</b>		<b>72</b>	<b>75</b>	<b>75</b>	<b>79</b>	<b>69</b>	<b>70</b>	<b>2</b>	<b>68</b>	<b>58</b>	<b>53</b>	<b>52</b>	<b>54</b>	<b>54</b>	<b>52</b>	<b>16</b>	<b>54</b>	<b>59</b>	
Value		0,66	0,71	0,72	0,74	0,77	0,77	17%	0,77	0,82	0,85	0,85	0,86	0,86	0,87	14%	0,87	0,88	
<b>Equal Salary</b>		<b>110</b>	<b>117</b>	<b>124</b>	<b>120</b>	<b>117</b>	<b>122</b>	<b>-12</b>	<b>116</b>	<b>116</b>	<b>117</b>	<b>106</b>	<b>118</b>	<b>122</b>	<b>129</b>	<b>-13</b>	<b>115</b>	<b>102</b>	
Value		0,45	0,51	0,46	0,49	0,52	0,53	18%	0,55	0,54	0,54	0,57	0,55	0,51	0,50	-9%	0,56	0,60	
<b>Equal Income</b>		<b>81</b>	<b>76</b>	<b>80</b>	<b>82</b>	<b>81</b>	<b>64</b>	<b>17</b>	<b>66</b>	<b>69</b>	<b>72</b>	<b>59</b>	<b>55</b>	<b>60</b>	<b>50</b>	<b>16</b>	<b>55</b>	<b>61</b>	
Value		0,44	0,5	0,5	0,53	0,55	0,57	30%	0,6	0,59	0,6	0,65	0,63	0,63	0,66	10%	0,66	0,65	
<b>Parliament</b>		<b>7</b>	<b>7</b>	<b>8</b>	<b>11</b>	<b>14</b>	<b>14</b>	<b>-7</b>	<b>14</b>	<b>17</b>	<b>10</b>	<b>13</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>-1</b>	<b>5</b>	<b>14</b>	
Value		0,56	0,56	0,57	0,57	0,58	0,58	4%	0,56	0,56	0,66	0,7	0,67	0,64	0,64	15%	0,90	0,79	
<b>Women Ministers</b>		<b>2</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>22</b>	<b>21</b>	<b>29</b>	<b>24</b>	<b>24</b>	<b>13</b>	<b>13</b>	<b>9</b>	<b>1</b>	<b>1</b>	
Value		1	1	0,78	0,78	1	1	0%	0,44	0,44	0,44	0,44	0,44	0,63	0,63	42%	1	1	
<b>GDP \$ pp</b>		<b>26.320</b>	<b>24.171</b>	<b>27.765</b>	<b>28.536</b>	<b>27.066</b>	<b>26.855</b>	<b>2%</b>	<b>26.941</b>	<b>26.952</b>	<b>31.198</b>	<b>32.270</b>	<b>32.814</b>	<b>33.261</b>	<b>34.272</b>	<b>27%</b>	<b>35.700</b>	<b>36.090</b>	
<b>Human Index</b>		<b>0,86</b>	<b>0,86</b>	<b>0,86</b>	<b>0,87</b>	<b>0,87</b>	<b>0,88</b>	<b>3%</b>	<b>0,88</b>	<b>0,88</b>	<b>0,89</b>	<b>0,90</b>	<b>0,90</b>	<b>0,90</b>	<b>0,91</b>	<b>3%</b>	<b>0,90</b>		
<b>Unemployment</b>		<b>8,5%</b>	<b>8,2%</b>	<b>11,3%</b>	<b>17,9%</b>	<b>19,9%</b>	<b>21,4%</b>	<b>153%</b>	<b>24,8%</b>	<b>26,1%</b>	<b>24,4%</b>	<b>22,1%</b>	<b>19,6%</b>	<b>17,2%</b>	<b>15,3%</b>	<b>-38%</b>	<b>14,1%</b>	<b>15,7%</b>	
<b>Competitivity</b>		<b>68,2</b>	<b>69,2</b>	<b>69,1</b>	<b>70,1</b>	<b>69,6</b>	<b>70,2</b>	<b>3%</b>	<b>69,1</b>	<b>68</b>	<b>67,2</b>	<b>67,6</b>	<b>68,5</b>	<b>63,6</b>	<b>65,1</b>	<b>-6%</b>	<b>65,7</b>	<b>66,9</b>	

This above data suggests PSOE focus more on women ministers, but with a very negative impact in the economy, where the PP government focus in improving the economy, not in parity, but improving equality not only in the economy but also women in Parliament.

In 2018 Spain had a new Government; the PM broke a ministry held before by a man in several ones with women and, in one day, Spain became the country with highest number (64,7%) of women ministers improving significantly in the GGG index (Aguilar and Sanchez, 2018). But in GGG-2022 was 15 in political empowerment, 64 in economic equality and 89 in wage equality. Economic equality is difficult; short-term political parity gains seem to be the priority.

These results may indicate the patriarchy construct may not be useful to diagnose and specially resolve the economic gender inequalities. We could defend the opposite; the problem is not that access of women to power does not bring economic opportunities for women, but that we do not measure it well. We are measuring parity, not same power.

### 5.3 Limitations

There are confusing concepts. Gender is used as sex (men and women) or just refers to women. Few studies evaluate the social relevance (gender) of being man or woman, key to achieve a real equality. Parity is used for equality, leaders for elites and leadership por power. Better leadership theorizing is required (Asford and Sitkin, 2019:458). It seems we are just going back to a "Great Woman" theory instead of the "Great Man" to make it equal, but probably equally wrong with the concept of women leadership advantage (Eagly & Carli, 2003).

GGG is broadly used by Governments, reliable and consistent, but other indicators could be used. The relative weight of the different sub-indexes in the GGG could have changed since 2006, and the number of countries, to reflect the importance of them to reduce inequality, although limiting the ability to compare data with previous years.

We could have done more and different statistical analysis; data available, from different countries, areas, indexes and sub-indexes does not make clear how to make a relevant statistical analysis. Correlation of other variables could be done. There is a lack of studies relating to causation; more women generate a better economy and more profitable companies or is the opposite? The first is the dominant belief; in this study we present some indications that perhaps is the opposite. More studies are needed.

Another limitation in the dominant belief that any policy for some women is good and effective for all women and any discussion is an attack to all women and not a fact-finding research interest to resolve the problem. Critical thinking and discussion with alternative possible solutions has to be facilitated and encouraged.

#### 5.4 Strategic Recommendations.

Men and women do not have real equal power in the world. Many countries (GGG 2022) have improved political women representation, but gender economic inequalities increased. With the above study and review, we present some recommendations to improve economic gender equality:

Strategic Plan: gender equality strategy has to be designed for each country, agreed between Government and opposition to be long-lasting, with priorities, resources and a "path" for equality, supported by studies and data. It seems present focus is keep doing same -not effective- actions and plans; actions without strategy will not bring results.

Better diagnosis: we need more studies to understand economic inequalities. Simple approaches and correlations should be substituted with systemic and transversal analysis of public policies effectiveness. We recommend facilitating critical thinking and approaches and views differing from the dominant categorical narratives.

Economic inequality: political representation is not bringing economic equality to women. Governments seem to use political representation as a tool to achieve short-term goals in equality indicators without a real commitment for sex or gender equality. Woetzel (2015) measured the number of women affected by inequalities globally; 15.000 in political under-representation but 551 million in wage gap for similar work; in wage gap the target is larger, but also the impact. Economic gender equality for all women should be the first priority in gender policies, not political parity.

Women elites: The idea of changing the top to trickle down equality for all women, seems not working. Women are diversity but they are diverse. We could argue that women in the political and economic elites ("leaders") behave like men in same elites (Coller, 2008). In one study of 2.150 male and female managers in Spain, 38,4% of males had a "masculine" personality (action oriented, rational, planned, organized) but 43% of females had that same personality (Rivera-Mata, 2011); in that sense, women managers in Spain are less diverse than men. That makes sense when we conceptualize the access of women -or anybody- to upper management – the glass ceiling- as a movement of a group to enter the dominant elite and not as fight among two sexes. In a similar way, when evaluating 429 young leaders

from Latin America in Georgetown University we found male high gender similarity in personality and needs, but very different from Latin America general population (Rivera Mata, 2019). Leaders, elites, are different than general population (Putman, 1976) and similar among themselves, regardless of their sex. It is easier stereotyping: as women (general population) are empathic, caring and inclusive, all women, even from the elite, are like that, and any woman is more so than any man. Reality is more complicated,

India introduced political gender quotas in 1994, but gender equality is still far away, being ranked 135 in general GGG-2022 and 143 in economic equality (of 146 countries). Karekurve and Lee (2020) suggest political quotas in India Parliament increase inequality, as only women from selected castes -the elite- get included and men and women of lower castes are rejected. Many policies try to improve gender equality increasing women ministers, in Parliaments or Boards, to reach 50% parity. But, if we achieve parity, do we achieve equality? Most indexes are indicators of elite parity (women at the top), impacting a limited number of women (Woetzel et al., 2015).

We recommend gender policies should focus on gender inputs (social categorization of people based upon sex, specially the provide-caring social role), not outputs (parity/women in the elite); otherwise, we could not achieve sustainable economic gender equality, nor equality in general. We need to intervene in early stages of education in students, parents and teachers to avoid this perverse voluntary sex educational segregation in accordance with gender roles. This is more relevant and will take longer to achieve, but if we do not work on the inputs, we will not achieve actual the output of same economic level of men and women even if we achieve same salary for same jobs. We cannot work only with one sex, women; we might achieve sex parity, but not gender equality.

Economic Inequality: we recommend traditional economic equality policies, tax progression and progressive fiscal policies. Avram and Popova (2022) showed taxes and transfers significantly reduce gender income inequality but cannot compensate for high gender earnings gaps, suggesting gender income equality is more likely to be achieved by promoting the universal/dual breadwinner model, whereby women's labor force participation and wages are equal with men and men working less and caring more. Promoting progressive fiscal policies and provide-care social role interchange should be a priority to achieve economic equality between men and women.

The goal of economic sex equality policies should be to be equally affluent, not equally poor (as Marxists systems achieved). COVID has increased economic inequalities globally. We have to improve general economic equality with better governance, tax collection and democratic processes, to have additional public income to spend in family and social care programs that free women from their traditional caring roles to be more equal in the labor force and improve wage equality. We should be cautious with the trend to give economic value to the care economy (previously called domestic work) (Esquivel, 2011). To recognize the importance of women in this activity, develop public programs to increase co-responsibility among sexes and to free women from family duties to be more equal in the workforce is recommendable, but to compensate present caring activities at home could perpetuate gender roles and limit access to equal workforce and wages. As we have seen (Rivera-Mata, 2018b) with voluntary education gender segregation, we consider this could perpetuate, even increase, gender roles (man acting/providing, women caring). Spain in 2007 increased maternity paid leave, allowing sharing it with the male partner. This increased the difficulty of women to be equally competitive in the workplace and reaching leadership positions, as they took the maternity leave given to men. In 2019 it was regulated that both leaves eventually should have same period and not sharable among them to reduce inequalities in the workplace. Some laws that are good for some women are finally bad for equality.

Consultancy firms, selling equality and gender programs, advocate that bringing more women to the workforce in Spain during the 1990s had a net positive impact of +18% in the GDP Spain (McKinsey, 2017). They are correlations; if all women in Spain had same level of participation in the workforce, same salary and same income than men, the economy would be better. But how do we do achieve that? Should we intervene with more gender policies or should we improve the economy to increase the need of more women paying them more equitable salaries as they are needed more? We believe gender policies should be really gender (not focus in one sex) and really transversal and facilitating systemic and structural changes that reduce gender differences and increase equality among sexes. We recommend improving competitiveness, governance and democratic processes to facilitate that women, with better educational achievement, would be more and better demanded by the economy. Better governance, democratic quality and competitiveness will improve economic gender equality and not the opposite. We hope this study could help to understand economy and gender equality relationships, discuss causation and finally reduce gender inequality.

## References

- Aguilar, A and Sanchez, R. (2018) *España se convierte en el país con más ministras del mundo, por encima de Suecia o Islandia. El diario.* [https://www.eldiario.es/politica/gabinete-sanchez-convierte-espana-ministras\\_1\\_2092391.html](https://www.eldiario.es/politica/gabinete-sanchez-convierte-espana-ministras_1_2092391.html)
- Avram, S. and Popova, D. (2022) *Do taxes and transfers reduce gender income inequality? Evidence from eight European welfare states. Social Science Research Vol. 102.* <https://doi.org/10.1016/j.ssresearch.2021.102644>
- Chodorow, N. (1989) *Feminism and psychoanalytic theory.* New Haven, Connecticut: Yale University Press.
- Coller, X. (2008), *El sesgo social de las élites políticas. El caso de la España de las autonomías (1980–2005).* *Revista de Estudios Políticos*, 141: 135–149. <https://recyt.fecyt.es/index.php/RevEsPol/article/download/45124/26655/0>
- Dahlum, S., Knutsen, C.H. and Mechkova, V. (2022) *Women's political empowerment and economic growth, World Development* 156. <https://doi.org/10.1016/j.worlddev.2022.105822>
- Del Aguila, L. (2020) *Crítica marxiana de la igualdad en la ciudadanía moderna. Estudios de Filosofía*, nr. 62, pp. 11–32 Instituto de Filosofía, Universidad Antioquia. <https://doi.org/10.17533/udea.ef.n62a02>
- Diachkova, A., & Kontoboitseva, A. (2022). *Economic Benefits of gender equality: comparing EU and BRICS countries. Economic consultant*, 37 (5), 4–15. <https://doi.org/10.46224/ecoc.2022.1.1>
- Eagly, A. and Carli, L. (2003) *The female leadership advantage: An evaluation of the evidence. The Leadership Quarterly* 14 (2003) 807–834 <https://www.sciencedirect.com/science/article/pii/S1048984303000584>
- Eagly, A., Wood, W. and Diekmann, A. (2000) *Social role theory of sex differences and similarities: A current appraisal. In The developmental social psychology of gender, Edited by Eckes, T. and H. M. Trautner, 123–174. New Jersey: Erlbaum.* <https://psycnet.apa.org/record/2000-03764-005>
- Engels, F. (1940) *The Origin of the Family, Private Property and the State. Lawrence and Wishart. London* [https://www.marxists.org/archive/marx/works/download/pdf/origin\\_family.pdf](https://www.marxists.org/archive/marx/works/download/pdf/origin_family.pdf)

- Esquivel, V. (2011) *The Care Economy in Latin America: Putting Care at the Centre of the Agenda*. United Nations Development Programme, El Salvador.
- Giron, A. and Kazomikhasragh A. (2022) *Gender Equality and Economic Growth in Asia and Africa: Empirical Analysis of Developing and Least Developed Countries*, *Journal of the Knowledge Economy* (2022) 13:1433–1443 <https://doi.org/10.1007/s13132-021-00782-1>
- Hampson, E. and Moffatt, S. (2004) *The psychobiology of gender: Cognitive effects of reproductive hormones in the adult nervous system*. In: *The Psychology of Gender*. Edited by Eagly, A., A. Beall and R. Stenberg. Guilford Press. New York.
- Hausmann, R. et col. (2006). *The Global Gender Gap 2006*. World Economic Forum, Geneva. [https://www.weforum.org/docs/WEF\\_GenderGap\\_Report\\_2006.pdf](https://www.weforum.org/docs/WEF_GenderGap_Report_2006.pdf)
- Hausmann, R. et col. (2017). *The Global Gender Gap 2017*. World Economic Forum, Geneva. <https://www.weforum.org/reports/the-global-gender-gap-report-2017>
- Hausmann, R. et col. (2021). *The Global Gender Gap 2021*. World Economic Forum, Geneva. <https://www.weforum.org/reports/global-gender-gap-report-2021>
- Hausmann, R. et col. (2022). *The Global Gender Gap 2022*. World Economic Forum, Geneva. [https://www3.weforum.org/docs/WEF\\_GGGR\\_2022.pdf](https://www3.weforum.org/docs/WEF_GGGR_2022.pdf)
- Hines, M. (2004) *Androgen, Estrogen and gender: contributions of the early hormone environment to gender-related behavior*. In: *The Psychology of Gender*. Edited by:
- Hrdy, S. (2000) *The optimal number of fathers; evolution, demography and history in the shaping of female male preferences*. *Annals of the New York Academy of Sciences* 907: 75–96. New York.
- Karekurve, V. and Lee, A. (2020) *Do gender quota hurt less privileged groups? Evidence from India*. *American Journal of Political Science* Vol 64, nr 4 pp. 757–772 <https://doi.org/10.1111/ajps.12511>
- Kohlberg, L. (1966) *A cognitive-developmental analysis of children's sex role concepts and attitudes*. In: *The development of sex differences*. Edited by: Maccoby, E., Stanford, California.
- Marx, K. and Engels, F. (1846) *The German ideology*. Intern. Publishers, New York.
- McKinsey (217) *Women matters 2017. A way forward for Spain*. [www.mckinsey.com](http://www.mckinsey.com)
- Nabuel, F. (2019) *Capitalismo y relaciones de género. Elementos para una lectura categorial*. *Theomai Journal*. Num. 39, pp. 59–77,
- Pinker, S. (2002) *The blank slate; the modern denial of human nature*. Viking. New York.
- Putman, R. (1976) *The Comparative Study of Political Elites*. Prentice-Hall, Englewood Cliffs, NJ.
- Rivera-Mata, J. (2011) *Liderazgo, sexo y género: comportamientos y relaciones de directivos y directivas españolas*. Doctoral dissertation. Universidad Pablo de Olavide, Sevilla.
- Rivera-Mata, J. (2013) *Mujer, liderazgo y sociedad en America Latina*. Universidad del Pacifico, Lima.
- Rivera-Mata, J. (2015) *Women in Spanish Businesses. What is more Important for Leadership: Sex, Age or Company?* Presentation Congress of the International Leadership Association (ILA), Barcelona.
- Rivera-Mata, J. (2016) *The More Political Power, The Less Women in Latin America. Gender Quotas to Reduce the Leadership Gap*. International Leadership Association (ILA) Conference, Lima, Peru.
- Rivera-Mata, J. (2016b) *Latin America Behind Africa in Business Leadership Gender Gap. Alternatives: EU and World Bank*



---

*Programs. International Leadership Association (ILA) Conference, Lima, Peru.*

*Rivera-Mata, J. (2018) Women Political Leaders Improve Women's Leadership? The Cases of Presidents Kirchner, Rousseff, and Bachelet. International Leadership Association (ILA) Conference, Lima, Peru.*

*Rivera-Mata, J. (2018b) Women and Science Strategies: Advance or change? II Seminar Women and Science. Universidad Pablo de Olavide, Sevilla, Spain.*

*Rivera-Mata, J. (2020) How is the leadership of the Latin-American youth? Leadership, sex and country of 427 students from Georgetown University. The Journal of Globalization, Competitiveness, and Governability. Vol.14 Nr.1. DOI 10.3232/GCG.2020.V14.N1.01*

*Rivera-Mata, J. (2022) Gender and equality in Latin America-Caribbean; Evolution 2006-2021. Strategic Recommendations. The Journal of Globalization, Competitiveness, and Governability. Vol. 16, Nr.1. DOI 10.3232/GCG.2022.V16.N1.02*

*Vinnicombe, S., Doldor, E., Battista, V. and Tessaro, M. (2020) The Female FTSE Board Report 2020. Ernst and Young, UK.*

*Woetzel, J. et al (2015) The Power o parity; how advancing women's equality can add \$12 Trillion to Global Growth. McKinsey Global Institute, McKinsey. [www.mckinsey.com/mgi](http://www.mckinsey.com/mgi)*

*World Bank (2020). Free access data from the World Bank. Retrieved from: <https://datos.bancomundial.org>*

---