Parity Without Socialism:
Economic Freedom and Opportunity for Women

Abstract

In dealing with past illiberal practices, liberal societies can face a dilemma. On the one hand, members of groups that have faced past discrimination are at a disadvantage. On the other hand, active state intervention (in the form of quotas, for example) is illiberal, as it treats individuals as members of groups. How, then, does a liberal society rectify past injustices without losing itself? We examine one aspect of this question, by studying public and private female leadership across countries, as a proxy for female opportunity, regressed against economic freedom. The literature on economic freedom shows that greater economic freedom means more opportunity – for all, but especially for previously disfavored groups; it thus predicts that higher levels of economic freedom will be correlated with greater female leadership, without the unintended consequences of state interventionism.

Introduction

Classical liberalism – the philosophy of individual liberty and limited government – can find

itself in a deep conundrum. A liberal society aspires to maximize opportunity and give voice to

all – based on ability, work, and merit (economic considerations), rather than birth, gender, or

"reverse discrimination" – which is ultimately just discrimination – lies at the heart of today's identity politics and has no place in a free society (see, e.g. Whaples *et al*. 2023).

This paper studies the status of women and the lingering effects of past discrimination. We

Generally, the literature simply assumes (a) that greater representation of women *is ipso facto* good, without explaining why (although *some* of the literature explains why (*e.g.* better returns or better governance);[1] and (b) that because greater representation of women is good, then quotas must be good. A representative example is this, from the OECD: "In the political world, quotas ensure that parliament truly reflects the population it represents." Or "Quotas help rectify women's under-representation in prominent positions, and make it entirely normal for women to take up managerial roles in the political, economic and academic systems."[2] However, the literature also expresses some concerns about quotas. Caleo and Heilman (2019), while generally pro-quota, also point to some unintended consequences, such as undeserved advancement and tokenism; see also Post *et al*. 2021. Ahern and Dittmar (2012) find that quotas

to stick, in the way that emergent rules (which match the underlying culture) do (see Boettke *et al.* 2008).

All this, of course, in addition to the inherently illiberal nature of quotas, which treat individuals, not as individuals, but as members of groups.

We now dig deeper by looking at the number of women in legislatures and within firms across countries, controlling for gender quotas, to assess whether economic freedom gives voice to women without the need for illiberal legislation.

1. Hypotheses

From the above literature, we conclude that liberal institutions perform at least three functions: (1) they create more opportunities generally, and more equivalent opportunities for all; (2) they offer rewards based on merit, rather than non-economic factors; and (3) they tend to generate moral systems in support of (1) and (2) (McCloskey 2006; Teague *et al*. 2020; Hirschman 2013). As such, we posit two hypotheses:

> *(1) Increases in measures of economic freedom are associated with increases in female membership in government institutions.*
> *(2) Increases in measures of economic freedom are associated with increases in female leadership in private markets.*

2. Model and Data

To find the association between opportunities for women and economic freedom, we test hypotheses (1) and (2) using a panel fixed effects regression model sequence.

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Our main explanatory variables used as proxies for market openness include the EFW summary index measure, as well as four of its area[3] measures (Gwartney *et al*. 2022 – Area 2: Legal Systems; Area 3: Sound Money; Area 4: Freedom to Trade Internationally; and Area 5: Regulation. The summary measure is an equally weighted composite variable; the areas are its subcomponents.

Predicted impacts for our subcomponents are listed in Table 1.

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Table 1: Summary of predicted signs for the Areas of economic freedom.

The five dependent variables we include in our analysis are: (1) percentage of women in ministerial positions; (2) percentage of women in parliament; (3) percentage of firm female managers; (4) percentage of firm female ownership; and (5) percentage of female sole proprietors. The measures come from the World Bank's Gender Data database.[4]

Finally, in regressions (2) and (4), we include several controls. When we regress women in government leadership postions on EFW, we include (1) female labor force participation rates, to

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3. Results

The results presented in Tables 3-7 show findings for five regressions, using various independent measures. As the regressions progress, we add more information and constraints, which test the causal strength of hypotheses (1) and (2). The first regression is a random-effects GLS regression that shows us our initial correlation. The second regression adds controls to our original correlation. The third regression is our fixed-effects regression; the fourth regression includes fixed effects and controls. The final regression includes our strongest constraints, and adds time effects to our fixed-effects regression.

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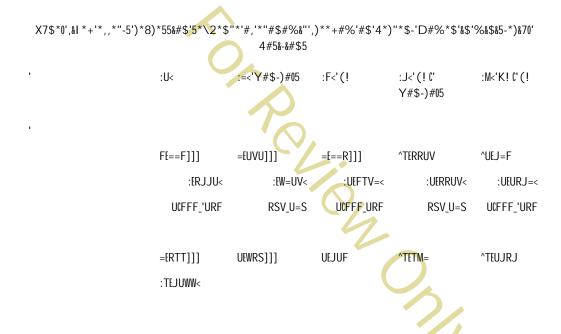|---|---|---|---|---|---|
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Table 3 presents the results of our panel fixed-effects regression sequence for EFW on the percentage of women in ministerial positions. The regressions contain information over ten years (2008-2019), for 127 to 163 countries (based on available data). Results from our summary measure indicate that a one-unit increase in EFW increases the percentage of women in ministerial positions by a range of 2.1% to 3.2%, with a 2.2% increase in our fixed-effects regression. *Area 4* (Freedom to Trade Internationally) maintains statistical significance in our fixed-effects regression, with impacts ranging from 1.4% to 1.9%. *Area 2* (Legal Systems) passes the correlation regression hurdles; the results suggest that increasing *Area 2* increases the percentage of women in ministerial positions by 1.9% to 2.6%.

Area 3 (Sound Money) has unexpected results. As expected, our GLS regression is strong and *positive* (a one-unit increase in *Area 3* increases women in ministerial positions by 0.945%). But when we add fixed effects and time effects, our result becomes *negative* (a one-unit increase in Area 3 decreases women in ministerial positions by -.759%). It could be that women in areas of high monetary stability have more freedom to choose between various opportunities. For example, women may decide to opt out of government leadership positions and instead work in the private market where they can earn higher returns. They may also have enough financial freedom or confidence in the economy to devote more time and effort to domestic chores or responsibilities. We leave this unexpected result to future research.

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Table 4: The symbol "***" indicates a high level of significance with a p-value < 1%, "**" indicates a p-value <5%, "*" indicates a p-value < 10% and "†" indicates a p-value < 15%.

Table 4 shows the results of our panel fixed-effects regression sequence for EFW on the percentage of women in parliament; this regression contains our largest sample size of comparable data, covering 2001 to 2019 and up to 163 countries[6]. This model sequence also has the most consistent statistical significance from regressions 1 to 4 and contains information on all subcomponents mentioned above. Across four out of five regressions, EFW's impact on the percentage of women in parliament is positive and significant. Our summary measure includes largest impacts, suggesting a one unit-increase in our composite measure leads to increases in the percentage of women in parliament, ranging from 3.5% to 4.8%. The major contributors to this increase are *Area 2* (Sound Money) and Area 5 (Regulation)*,* which increase these leadership roles for women by as much as 3.5%.

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[6] Our controls decreased the sample size by 36, from 163 countries to 127 countries. Despite this, regressions 1 through 4 maintained statistical significance.

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*Table 5: The symbol "***" indicates a high level of significance with a p-value < 1%, "**" indicates a p-value <5%, "*" indicates a p-value < 10% and "†" indicates a p-value < 15%.*

Tables 5 to 7 present information on EFW's impact on private leadership. One might expect the strongest results here, as the subcomponent areas of EFW, along with the summary measure itself, are measures of *market* institutions. Indeed, they specifically measure characteristics of the market that make it easier to engage in trade, start businesses, or have confidence in the

economy. However, this is where we have the least amount of information available – with a maximum of only 289 observations, 129 countries, and only four years of comparable data (2015-2018) in some regressions. With the low sample size, we heed the results with some caution.

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13

All significant results for firm female ownership (Table 6) are positive as anticipated. This indicates that increases in EFW (in both composite form and sucomponents) lead to increases in percentage of female managers (at firms), percentage of female owners (at firms), and percentage of female sole proprietors. As mentioned above, poor observation counts mean we likely won't see significance in the more complicated models. However, there are a few worth noting.

We see other results in Table 6, after regressing percentage of female owners (at firms) on *Area 3* (Sound Money) (although results are only signifant at a p-value of .15). This regression has signs that we anticipate and are significant for our fourth regression sequence, which includes fixed effects and controls. For *Area 3* (Sound Money), a one-unit increase in *sound money* increases the percentage of female ownership at firms by as much as 2.74%. This suggests that stable, low-inflation economies allow for greater financial freedom and confidence for women, providing incentives for entrepreneurship and other work in the private sector.

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(4), when regressing women in public leadership and our EFW summary measure. These strong results indicate an empirical relationship stronger than an association. Women in positions of public leadership also have the most authority and ability to alter the system in their favor, but our results for these regressions shouldn't be statistically significant – if the model describing the world were the opposite, the model would break down.

We do not have many statistically significant results for the non-associative regressions for

labor force participation rate we include in all of our regressions arguably represents a proxy for women's preferences to engage in the public or private spheres, it does not entirely capture the *reasons* why women choose between different types of careers or lifestyles.

Conclusion

Chizema, A., D.S. Kmauriwo, and Y. Shinozawa (2015). "Women on Corporate Boards around the World: Triggers and Barriers." *The Leadership Quarterly*, 26:6, 1051-1065.

Fike, R. (2018). "Impact of Economic Freedom and Women's Well-Being." Vancouver: Fraser Institute.

Fike, R. (2017). "Adjusting for Gender Disparity in Economic Freedom and Why it Matters" in

Russell, H.M., W. Tervo, D. Ariail, and L.M. Smith (2020). "Relationship of Economic Freedom to Economic Performance, Gender Equality, and Social Progress." *World Economics* 21(4), 171-190

Stroup, M. (2011). "Does Economic Freedom Promote Women's Well-Being" in Gwartney, J., R. Lawson, and J. Hall, *Economic Freedom of the World: 2011 Report*.

Teague, M., V. Storr, and R. Fike (2020). "Economic Freedom and Materialism: An Empirical Analysis." *Constitutional Political Economy*, Vol. 31, 1-44.

Terjesen, S., R.V. Aguilera, and R. Lorenz (2014). "Legislating a Woman's Seat on the Board: Institutional Factors Driving Gender Quotas for Boards of Directors." *Journal of Business Ethics*, 128, 233–251.

Thams, Y., B. Bendell, and S. Terjesen (2018). "Explaining Women's Presence on Corporate Boards: The Institutionalization of Progressive Gender-Related Policies." *Journal of Business Research*, Volume 86, 130-140.

Whaples, R., M. Munger, and C. Coyne (eds.) (2023).