

The Gender Gap in Attitudes toward Trade: Putting Gender Back into the Equation

Alexandra Guisinger, Associate Professor at Temple University

Alexandra.Guisinger@temple.edu

Katja Kleinberg Associate Professor at Binghamton University (SUNY)

kkleinbe@binghamton.edu

The Gender Gap in Attitudes toward Trade: Putting Gender Back into the Equation

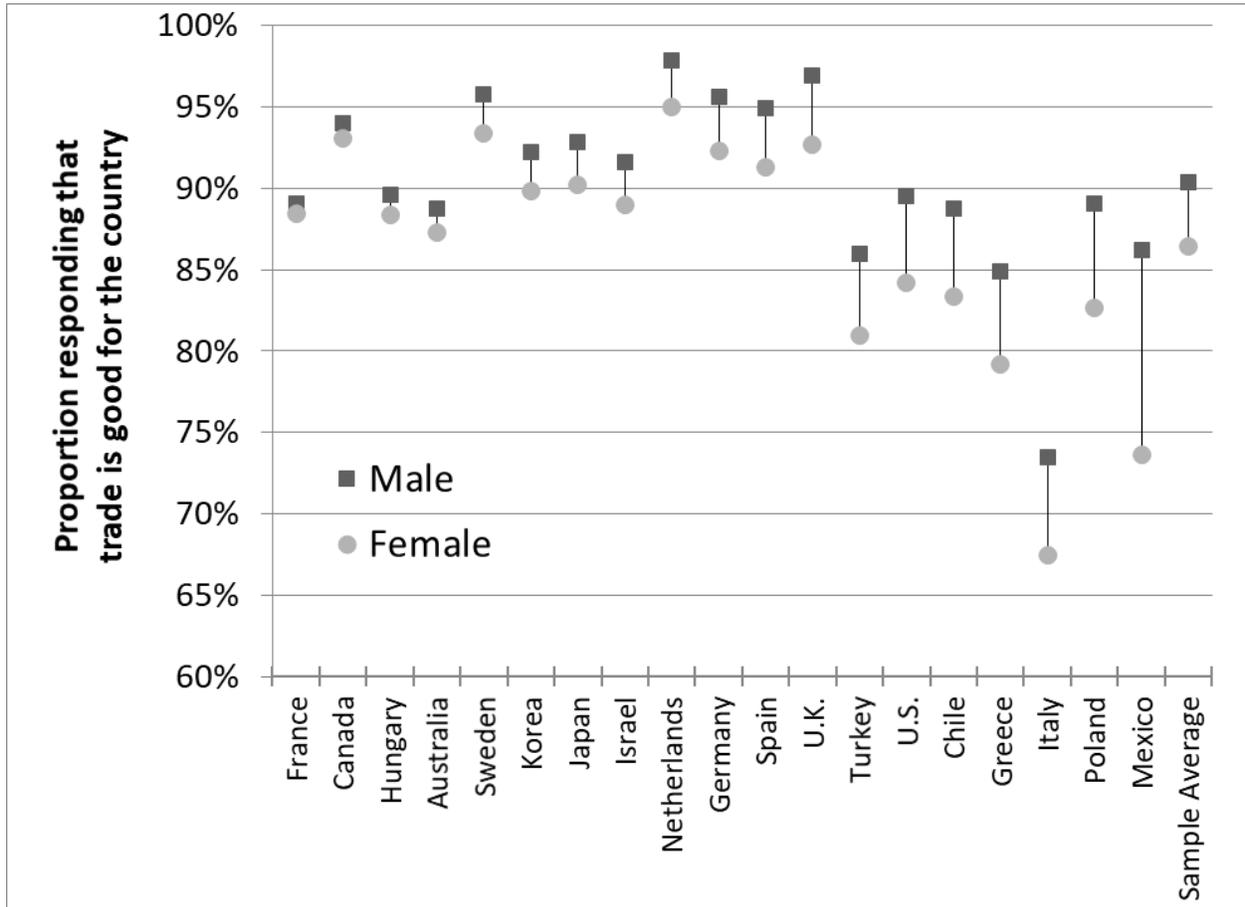
In 2017, members of the World Trade Organization formally recognized that while trade has the potential to empower women and contribute to gender equality worldwide, challenges remain.¹ Women face higher barriers than men to profiting from international trade and are more vulnerable trade-related economic shocks and adjustment. A report by the WTO and World Bank has recommended a range of policies to reduce gendered barriers that perpetuate gender gaps in wages, employment, and productivity (World Bank and World Trade Organization 2020). If it is the case, as the report suggests, that government policies generate (or fail to ameliorate) gender inequality in the effects of trade, this should be reflected in a gender gap in attitudes toward trade.

Scholars of international political economy have taken a growing interest in the sources of the public's views on trade. One of the most robust empirical findings to emerge from this work over the past 20 years is a specific gender gap: In developed countries, women are less positive about trade and more supportive of protectionist policies than men, even after controlling for individual-level economic characteristics such as skill and sector of employment (O'Rourke and Sinnott 2001; Hiscox and Burgoon 2004; Beaulieu and Napier 2008). While studies have sought to explain why the trade attitudes of men and women differ, another empirical regularity has received much less attention: The gender gap in attitudes toward trade varies considerably across countries.

¹ In 2017, members of the World Trade Organization agreed to support the Buenos Aires Declaration on Trade and Women's Economic Empowerment; an Informal Working Group on Trade and Gender convened for the first time in September 2020.

Figure 1 summarizes responses from a recent Pew Global Attitudes survey to the question *“In general, do you think trade and business ties between [survey country] and other countries around the world is a good thing or a bad thing for [survey country]?”* (Pew Global Attitudes Project 2017). Across the 20,631 respondents from the 19 OECD countries included in the survey, both men and women were generally positive about the prospect of trade for their country, with 85% of respondents stating that trade is “a good thing.” On average, men were four percentage points more likely to respond this way (87%) than women (83%). But this average represents reality in only a handful of countries. At the low end, in countries such as France, Canada, Hungary, and Australia, the gender gap is so small as to be statistically insignificant. In contrast, in countries such as Greece, Italy, Poland, and Mexico, the size of the gender gap approaches or exceeds double digits. The gender gap is not a relatively constant, global, unexplained difference between men’s and women’s attitudes but instead varies widely, even across similarly developed and democratic countries.

Figure 1: The trade attitude gender gap in 19 OECD Countries (Pew Global Attitudes, 2017)



In this study, we develop and test a novel explanation for this variation. Treating the gender gap as a country-level characteristic, we argue that it arises—and varies systematically across countries—due to the way in which gender norms and formal institutions shape the extent to which men and women are differentially affected by an economy’s changing exposure to trade. The gender gap is in part the product of gender discrimination.

Existing theoretical explanations for the gender gap in public opinion on trade fall into two broad categories. One large body of research focuses on the effect of trade liberalization on

wages and employment volatility, using standard economic models that derive individuals' trade preferences from their role in production (O'Rourke and Sinnott 2001; Mayda and Rodrik 2005; Hiscox and Burgoon 2004; Beaulieu and Napier 2008; Guisinger 2009). In these accounts, the gender gap arises from different skill levels and employment patterns for men and women as increased economic openness benefits some industries while harming others. Empirical support has been inconsistent for this line of argument, and the gender gap persists even when studies control for individual-level factors such as education, income, sector of employment, or homeownership (Scheve and Slaughter 2001; Hiscox and Burgoon 2004; Beaulieu and Napier 2008).

A second strand of research seeks to explain trade attitudes with reference to characteristics for which there may be fundamental differences across genders. The argument here is that differences in national pride, isolationism, sociotropism, and risk-orientation also drive differences in related concerns such as trade, contributing to the gender gap (O'Rourke and Sinnott 2001; Mansfield and Mutz 2009; Ehrlich and Maestas 2010; Mansfield, Mutz, and Silver 2015). Other studies have pointed to knowledge gaps and gender differences in survey-taking behavior, making the gender gap in part an artifact of opinion measurement (Guisinger 2009, 2016; Kleinberg and Fordham 2018).

This prior work has substantially broadened our understanding of the sources of trade policy preferences. Yet as explanations of the gender gap in support for trade, these accounts fall short. Most importantly, they fail to consider the gap as a phenomenon in itself. Instead, these studies are attempting to explain away the gender gap on trade as an artifact of economic and non-economic individual-level characteristics that appear to vary with gender. Prior studies effectively set aside cross-national variation when they use individual-level data to compare the

trade preferences of the ‘average man’ to the ‘average woman’ in a country. By doing so, existing work can identify the existence of a gender gap across countries, but it cannot predict where it will be larger or smaller.

We argue that gender differences in attitudes towards trade arise from national contexts that discriminate between men and women. Within an economy, increased trade will profit some industries while harming others, yet these industry gains and losses are not necessarily distributed equally across employees. A range of norms and formal institutions affect individuals’ ability to benefit from the new opportunities created by trade—or to cope with the increased employment volatility and economic insecurity associated with it. Even within the same industry, women may face higher levels of economic vulnerability than men due to discrimination in hiring, retention, and wages (Hall 1972; Ureta 1992; Padavic and Reskin 2002). Such different treatment suggests that accounting for skill or industry affiliation alone is unlikely to explain the gender gap in trade attitudes.

Gender discrimination varies greatly across countries, even among OECD countries that are otherwise similar in levels of economic development and political inclusion (Pearse and Connell 2015; World Bank Group 2020). We argue that the gender gap in trade attitudes should be most prominent in countries in which discrimination is more pervasive, that is, where women’s and men’s economic experience most differ. We test implications from this argument using three different measures of structural discrimination and cross-national public opinion data for OECD countries between 2002-2017.

Our findings show not only that women hold consistently less-positive views about trade than men and but that this gender gap is larger in countries with greater *de jure* and *de facto* discrimination against women. Additional analyses confirm that the cross-national variation in

the gender gap is driven by variation in women's rates of support for trade, and specifically by the relationship between gender discrimination and women's trade views. These findings suggest that the differential experience of men and women in the economy cannot simply be modeled away by the inclusion of industry-affiliation or other individual-level characteristics but instead requires an understanding of the extent of gender equality or inequality present in a country.

In addition to providing a theoretically grounded explanation for a longstanding empirical puzzle, this study has several broader implications for the study of public opinion in international political economy. It offers a reminder to IPE scholars that gender, race, and similar identity differences need not be spurious or mere proxies for other attributes. Instead, they can be manifestations of measurable institutional and societal structures. Just like the market, formal and informal institutions facilitating gender and other inequalities can shape how individuals perceive trade and other economic policies from migration to austerity programs. By recognizing the structural differences and rational responses to these differences, our findings also offer a counter to the common implicit assumption that women's preferences should be more like men's, and instead present women's preferences as worthy of consideration in themselves. In doing so, these findings also highlight the potential persistence of these differences, the implication of which we discuss in the conclusions.

Gender Discrimination, Economic Outcomes, and Trade Opinion

The effects of trade liberalization on incomes and employment volatility are well documented in existing scholarship. Some industries and firms, and the people employed in them, benefit from expanded markets and productivity gains; others face greater and potentially harmful competition. Greater exposure to trade has been linked to short-term adjustments in employment

and increased employment volatility longer-term (Beaulieu, Dehejia, and Zakhilwal 2004). At the same time, norms and institutional structures create cleavages with respect to who is able to benefit from expanded opportunities or cope with increased uncertainty, above and beyond those associated with education, sector of employment, and other considerations typically controlled for in models of trade preference formation.

One such cleavage is gender. Economies are not gender neutral. Research in feminist political economy, welfare capitalism, and public policy has documented how institutionalized gender differences affect a wide range of economic and political outcomes, including labor market participation, wages and pensions, and equal representation in board rooms and legislatures (Hall, Kao, and Nelson 1998; Iverson and Rosenbluth 2008; Pearse and Connell 2015). This work suggests that in societies with greater gender discrimination, women are more likely than men to be exposed to the downside risks associated with trade liberalization and other economic shocks (Kushi and McManus 2018; Women's Budget Group 2018).

This problem is not limited to occupational segregation. Women are more likely to work part-time, in low-skill occupations, and in non-regular work (Kushi and McManus 2018, 569-70). But even *within* industries, including those that stand to gain from trade liberalization, researchers have found significant gender differences in hiring and retention and in wages, even within similar job classifications (Hall 1972; Ureta 1992; Padavic and Reskin 2002; BMFSFJ 2019). Laws and regulations restricting such gender discrimination in the workplace and in society vary greatly across countries (World Bank Group 2020).

Most advanced industrialized countries have welfare state provisions designed to alleviate some of the employment and income volatility associated with economic openness (Ruggie 1982; Hays et al. 2005). Yet the extent to which national insurance schemes are premised on full-

time, lifelong employment, or a male breadwinner, can make them inherently discriminatory—even when generous—against women whose professional careers might be interrupted by childbirth or elder care (Sainsbury 1999; Razavi et al. 2012). Women also often carry a ‘double burden’ of paid work outside the home and unpaid work at home. Employing time use data, studies have found pervasive gender inequality in time spend on ‘unpaid care work.’² In the presence of gender discrimination, welfare state provisions alone are unlikely to eliminate differences between men’s and women’s expectations about the costs and benefits of trade.

Whether formal or informal, discrimination produces and reproduces differential access to employment and other resources. In the context of international trade, gender discrimination can exacerbate the economic insecurity associated with being a ‘loser’ from trade; it can also prevent women from taking equal advantage of the new opportunities and higher incomes that trade affords the ‘winners.’ As a result, men and women may reasonably hold different expectations about the effects of trade due to the national context. Moreover, these institutionalized gender differences affect women more than men. A recent study summarizing a wide range of research on gendered policies and practices concluded that much of the world is built with men (rather than women) in mind as the ‘default human,’ effectively stacking the deck against women (Criado Perez 2019). We thus expect the effect of discrimination on trade attitudes to run primarily through women’s experiences.

In sum, we argue that trade affects the availability and stability of employment. Gender discrimination conditions the extent to which this increased employment volatility is experienced

² Globally, the value of women’s unpaid labor amounted to over US\$10.9 trillion in 2018, according to a recent study by Oxfam (Coffey et al. 2020). While this gender gap is smaller in wealthier countries than in poorer ones, even within the group of ‘high-income’ countries, women spend on average twice as much time as men on household chores and caring for children and the elderly (Ferrant et al. 2014; Ferrant and Thim 2016).

differently by men and women. These differential experiences, in turn, shape the gender gap in attitudes toward trade.

In the analyses below, we focus on aggregate, cross-country differences. Recent economic studies have shown that in countries with greater gender discrimination, women are more likely than men to be exposed to the downside risks of economic adjustments (e.g., Kushi and McManus 2018). We take this structure of analysis to the next logical step by looking at how country-level gender discrimination effects country-level differences in the gender gap in trade attitudes. While structural discrimination in labor markets and societies will not affect all women (and men) equally within a country, it provides a national context that shapes individuals' expectations. It is the backdrop against which women's and men's (economic) lives unfold. We hypothesize that in countries where discrimination is low, men and women will be more likely to perceive the impact of increased economic openness in similar terms. But where discrimination is higher, men's and women's assessments of the costs and benefits of increased economic openness should diverge more. To the extent that these assessments drive attitudes toward trade liberalization, we expect the size of the gender gap to vary predictably with the extent of structural discrimination.

Research Design

We test three observable implications derived from our broader argument, which allows us to pinpoint the relationship between gender inequality and trade attitudes with greater confidence. First, our main test of the hypothesized relationship assesses the correlation between discrimination and the gender gap. Second, as a test of the conjecture that it is women's (rather than men's) attitudes driving the gap, we separately analyze the relationship between female and

male opinion and the gender gap. Finally, we test the hypothesis that gender inequality affects women's attitudes (rather than men's) by analyzing separately the relationship between gender inequality and female and male views on trade, respectively.

To test our expectation that the size of the gender gap in trade attitudes grows in relation to the extent of gender discrimination, we compare the gender gap and gender discrimination across 22 OECD countries using eight cross-national sets of survey data collected between 2002 and 2017. During the sample period, countries faced varied economic challenges including a global financial crisis that rolled out unevenly across the world economy. Pooling across multiple cross-national panels ensures that our findings are not the result of a single snapshot in time.

We restrict our data collection to members of the OECD (Organization for Economic Co-operation and Development), which allows for a comparison across similar countries. To join, members must have committed to democratic principles of the rule of law and protection of human rights and economic principles of open, transparent, and free-market economies. Thus, our sample consists of countries that are actively participating in the global economy and that have publics who are able to politically mobilize on issues of global trade. Additionally, OECD countries have historically been high-income, highly developed countries, although the World Bank classifies two OECD countries in our sample (Mexico and Turkey) as upper middle income. Within developed countries, the wage effects of trade for high skilled workers should be relatively consistent, although our analysis includes additional controls.

We employ three different measures to capture the complexity of gender discrimination. First, the World Bank Group's Women, Business and the Law (WBL) index provides a measure of cross-national variation in *de jure* discrimination: government rules and regulations affecting women's economic opportunities, such as requirements for equal pay or gender-specific

restrictions on hazardous employment. For each country, the WBL index aggregates four to five sets of binary indicators of legal restrictions to equality across eight areas selected to represent different aspects of a woman's career: going places; starting a job, getting paid, getting married, having children, running a business, managing assets, and getting a pension (World Bank Group 2020). The scores range from 0 (legal restrictions in each category) to 100 (no legal restrictions in any category); we rescale the index to range between 0 and 1.

Our second measure attempts to quantify *de facto* discrimination that may exist above and beyond laws and regulations. The Global Gender Gap (GGG) is an outcome-based measure of countries' progress towards gender parity provided by the World Economic Forum. The full index captures four thematic areas: economic participation and opportunity, educational attainment, health and survival, and political empowerment. We use only the economic participation and opportunity index (GGG EPO) as it most closely matches our theoretical interests by measuring the participation gap, the remuneration gap, and the advancement gap.³ The data is standardized and weighted to generate a gender equality scale ranging from 0 (imparity) to 1 (parity) (World Economic Forum 2016).

³ The EPO index aggregates a combination of hard and soft data: labor force participation rates, the ratio of estimated female-to-male earned income, results from a wage equality question in the annual Executive Opinion survey, female to male ratios in legislators, officials, and senior management, and finally female to male ratios in technical and professional workers. Prior studies (O'Rourke and Sinnott 2001; Mayda and Rodrik 2005; Beaulieu and Napier 2008) have considered cross-national variation in female labor force participation as a potential explanation for the gender gap (generally as a secondary analysis or robustness check) with inconsistent results. Here labor force participation is one part of one of the broader measures we employ. We also consider a larger number of survey years than previous studies.

Both the WBL index and the GGG EPO index provide substantial cross-national variation but limited cross-time variation in our sample of OECD countries. The *de jure* WBL index measure ranges from 0.71 for Turkey to 1.00 for multiple countries, including Belgium, France, Latvia, and Sweden, but the overall average increases by only 0.04 points within the ten years from 2009 to 2018 (see Appendix Table A1). The *de facto* GGG EPO index measure of gender equality ranges from 0.43 for Turkey at the low end to 0.81 for Norway at the top of the distribution, but the overall average increases by only 0.03 between 2006 to 2018 (see Appendix Table A2). In light of the limited cross-time variation, in our primary analysis, we extend the 2009 WBL data to 2008 and 2007 to provide more comparable coverage with the other measures of gender inequality.⁴

Our third measure captures societal level attitudes towards gender discrimination in employment. Structural discrimination extends beyond rules and procedures; it also includes broader cultural discrimination based upon widely shared social paradigms (Burns 2008, 152). Gender norms are embedded in a wide range of institutions, setting limits of socially approved or required behaviors that differ for women and men and often also governing interactions between them (Pearse and Connell 2015, 35). They prominently manifest in attitudes toward the distribution of domestic responsibilities and women's participation in the labor force: whether women, especially mothers of younger children, should work outside the home, what types of jobs and industries are fit for women, etc. (Seguino 2007).

Using the World Values Survey (WVS) national identity module, we calculate country-level proportions of all respondents (men and women) who agree with the following statement “*When*

⁴ Results from the non-extended version (available on request) do not substantially differ.

jobs are scarce, men should have more right to a job than women.” (Inglehart et al. 2014). We assume that women’s opportunities will be more constrained in countries with higher proportions of the population as a whole sharing this sentiment. This “Prioritize Men’s Employment” indicator is broader than the *de jure* and *de facto* measures provided by the WBL and GGG EPO. It captures underlying attitudes that are likely to give rise to discriminatory policies or, at a minimum, make gender discrimination more acceptable. It also proxies for other manifestations of structural discrimination that are not captured by the other two measures.

The World Value Survey aggregates data in waves rather than in consecutive years. The number of countries covered in each wave varies substantially. The WVS last asked about prioritizing men’s employment in wave 6, which spanned 2010-2014. As we do not expect rapid changes in such societal norms, we compile the proportion for each pertinent WVS wave (3-6) and then link the wave to the set of comparable years (see Appendix Table A3). In the absence of a more recent release, we extend the data from wave 6 (2010 to 2014) to 2017. In our sample of OECD countries, the WVS measure shows substantial cross-national variation. For example, in wave 3, which included 22 countries, the proportion answering that they would prioritize male employment ranges from 8% in Sweden to 67% in Turkey.

Our dependent variable is the gender gap in trade attitudes. Internal and external conditions may lead the public to be more or less protectionist in any one particular country compared to another; for example, protectionist sentiment in the U.S. is much higher than in the export-oriented economies of Japan and South Korea. Because of the high degree of variation in protectionist sentiment across countries, we calculate the difference between men’s and women’s responses to focus on the difference rather than the level. To be clear, we do not imply that women’s attitudes should match men’s, but instead argue that the difference is a rational

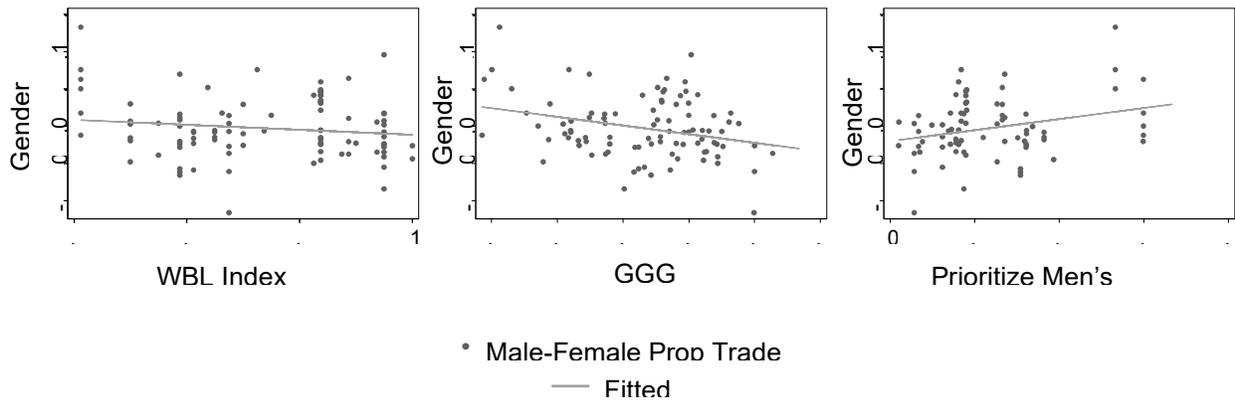
response due to different economic conditions for men and women, be they differences in skill-level, education, income, or—as we theorize—employment vulnerability due to discrimination. In subsequent analysis, we analyze men’s and women’s response proportions individually.

We use data from the Pew Global Attitudes surveys (Pew 2020). Between 2002 and 2017, Pew repeatedly asked a version of the question *“What do you think about the growing trade and business ties between (survey country) and other countries – do you think it is a very good thing, somewhat good, somewhat bad or a very bad thing for our country?”* Although the wording of the introduction and available responses varied slightly and particularly in 2017 (see Appendix B for complete wording), the Pew data allows for eight cross-national panels in 2002, 2007, 2008, 2009, 2010, 2011, 2014, and 2017. By using all available iterations of the survey, we ensure that our findings are not the result of a random draw or outliers in the data. For each country-year, we calculate the proportions of respondents identifying as “male” and “female”⁵ who responded that trade is good for the country.⁶ Figure 2 illustrates the relationship between our dependent variable and each measure of gender discrimination.

⁵ The Pew Global Attitude surveys offer respondents a binary choice of “male” and “female” and use the terms gender and sex interchangeably in survey documents. As our theoretical concept primarily focuses on societal gender constructs, we use gender-based terms (e.g. man/woman) in the text, but for transparency, when referencing the data, we utilize the same male/female terminology provided by the survey. It is also important to note that in some survey-sample languages (e.g. German) the linguistic distinction is less clear without additional context.

⁶ Response options changed in 2017. For all prior years, we recoded the data to combine the response options of “very good” or “somewhat good” as simply “good”. For 2017 (as shown in Figure 1), we recoded the response category of “good thing” as “good”. The survey did not offer respondents non-response options but did capture and code alternative responses (2017: Both, Neither, Don’t Know, Refused; other years: Don’t Know/Refused). Non-

Figure 2: Bivariate relationship between discrimination measures and the trade attitude gender gap in 22 OECD countries (Pew Global Attitudes Survey, 2002-2017)



We further include a set of control variables to account for the extent to which trade and other economic factors could exacerbate or diminish employment volatility. Some scholars have argued that women have a stronger aversion to risk and/or competition (Mansfield, Mutz, and Silver 2015). As our focus is on cross-national differences, we control for additional country-level factors that could increase or decrease risk and competition and thus increase or decrease the gender gap. One such factor is a country’s vulnerability to volatility in international markets due to trade openness, measured by the log of a country’s ratio of trade to Gross Domestic Product (GDP). If it is simply that women across the world are on average more concerned with the risk trade brings to themselves or society, then higher levels of openness (Log Trade/GDP) should be strongly correlated greater with higher gaps. If we do not observe a strong correlation, one potential explanation is that internal domestic employment conditions—such as

response proportions were approximately 0.03 among male respondents and 0.06 among female respondents. By design, non-responders are not included in the analyses.

discrimination—influence whether men and women have a structural reason to perceive the risk from exposure to volatile external markets differently.

Similarly, if the alternative argument is that women are more risk-averse than men, then general economic conditions—such as the country’s economic growth—should abate or exacerbate women’s concerns about foreign trade and in turn the size of the gender gap. Thus, we include a measure of GDP growth, assuming that if women are responding to risk alone, the gap should be lower (higher) when GDP growth is higher (lower). As with trade openness, if we do not observe a strong correlation, it is not the risk itself but how risk interacts with structural discrimination that determines whether men and women perceive trade similarly or not. We do not include gender differences in employment, education, or income since these are themselves linked to our variables of interest. We do include a control for “Asia” since Japan and Korea appeared as outliers in initial analyses.

The Pew panels are irregularly timed and include different sets of countries. Inconsistent country coverage for our dependent variable, combined with limited cross-time structural changes in gender discrimination during the period under consideration, prevents robust time-series analysis. At the same time, pooling the data across all available years provides the broadest possible cross-national coverage for our concepts of interest and gives us greater confidence in the external validity of our study.

Empirical Results

Discrimination and the gender gap

Our primary research question concerns the cross-national variation in the gender gap between men's and women's attitudes towards trade, as measured by the gender gap in respondents saying that trade is "good" for the country. Within our timeframe (2002 to 2017), the vast majority of respondents in OECD countries expressed positive beliefs about trade ranging from proportions in the mid 80's and low 90's for countries like Germany, Japan, Sweden, and the United Kingdom to the low 50's for countries like Turkey and the U.S. Yet, regardless of the level of overall support, women were consistently less likely to respond as positively as men. In 85 of the 96 country-year observations, women were as negative or more negative about trade than men. Of the 11 country-years in which surveyed men were more negative about trade than women, this reverse gender gap was statistically significant in only one case (the U.S. in 2010).

The fullest version models the gender gap (the proportion of men responding that trade is good minus the proportion of women responding that trade is good) in a given country-year as a function of a country's measure of inequality for that year, its trade openness, GDP growth, position in Asia, and year.⁷ As the data includes eight, non-symmetric panels years (2002⁸, 2007, 2008, 2009, 2010, 2011, 2014, 2017), we cluster on country and control for panel year.

⁷ See Appendix C for summary statistics.

⁸ 2002 analysis includes only the WVS measure of discrimination.

$$\begin{aligned}
& (\text{Male(Good)}_{ct} - \text{Female(Good)}_{ct}) \\
& = \beta_1 \text{Inequality}_{ct} + \beta_2 \ln\left(\frac{\text{Trade}_{ct}}{\text{GDP}_{ct}}\right) + \beta_3 \text{GDPgrowth}_{ct} + \beta_4 \text{Asia}_c + \omega_t \\
& + \varepsilon_{ct}
\end{aligned}$$

Table 1 presents the results of the OLS analysis of the three gender inequality measures on the gender gap in trade attitudes. While each measure captures different national characteristics, the indicators are unsurprisingly highly correlated (0.71 between the WBL Index and GGG EPO, -0.70 between the WBL Index and Prioritizing Men’s Employment, and -0.83 between GGG EPO and Prioritizing Men’s Employment). For this reason, we analyze them separately.

As expected, in the base model (left), higher levels of both *de jure* (WLB) and *de facto* (GGG EPO) gender equality are correlated with a smaller gender gap in attitudes, although in this analysis only the GGG Economic Participation and Opportunity *de facto* measure is significantly so (-0.11, s.e. 0.06). Also, as expected, countries with a higher proportion of respondents prioritizing employment for men have a statistically significant larger gender gap in attitudes towards trade (+0.08, s.e. 0.03). Adding economic and regional controls (middle and right) simply increases the significance of the correlation, particularly for “Prioritize Men’s Employment” whose coefficient almost doubles to +0.14 (s.e. 0.03).

Table 1: Analysis of relationship between discrimination measures and the trade attitudes gender gap (Pew Global Attitudes Survey, 2002-2017)

Predictor	Gender Gap: M-F Differences in Trade is good for the [country]								
	Base			Economic Controls			"Asia" Dummy		
WBL Index Extended	-0.06 (0.09)			-0.10 (0.09)			-0.11 (0.10)		
GGG EPO		-0.11* (0.06)			-0.12* (0.06)			-0.13** (0.06)	
Prioritize Men's Employment			0.08** (0.03)			0.12** (0.04)			0.14*** (0.03)
Log Trade/GDP				0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
GDP Growth				0.00 (0.00)	0.00 (0.00)	-0.01 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.01 (0.00)
Asia							-0.01 (0.01)	-0.02 (0.01)	-0.02** (0.01)
Constant	0.12 (0.08)	0.13*** (0.04)	0.01 (0.02)	0.1 (0.09)	0.11* (0.06)	-0.02 (0.03)	0.11 (0.10)	0.13* (0.07)	-0.01 (0.02)
<i>Number of Obs</i>	93	93	77	93	93	77	93	93	77
<i>Number of Clusters</i>	22	22	16	22	22	16	22	22	16
<i>R-squared</i>	0.08	0.13	0.13	0.09	0.14	0.18	0.09	0.16	0.21

Note: OLS, standard errors in parentheses, clustered on country. Year controls not shown. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. World Bank's Women, Business, and the Law 2009 data extended to 2007 and 2008 (see appendix for non-extended version).

To understand the size of these relationships, consider that the mean of the gender gap in the sample is 0.045 with a standard deviation of 0.039. In the case of the GGG EPO index, a one standard deviation increase in equality (+ 0.09, on for 0-1 measure) relates to a one percentage point decrease (ranging from -0.01 to -0.012 for all versions of the model) in the gender gap measure, the equivalent of one-fourth of the standard deviation. In the case of the WVS Prioritize Men's Employment, the model variants generate a larger range of estimates. A one standard deviation increase in equality (-0.14 decrease in the proportion prioritizing men's employment) relates to between a 1 to 2 percentage point decrease in the gender gap, the equivalent of one-

fourth to one-half of the standard deviation of the gender gap measure.⁹ In either case, there is a meaningful relationship between the gender inequality measure and gender gap in attitudes.

Are female or male responses driving the gender gap?

The model above provides evidence of a link between measures of gender inequality and the gender gap in trade attitudes. However, the gap itself could be driven by women's responses, men's responses, or both. Theoretically, the relationship between inequality and the gender gap could be driven by male responses to gender inequality as inequality could also limit men's employment options. Empirically, as men's level of support for trade with other countries become very high, smaller gender gaps could be an artifact of a ceiling effect that limits how much more positive men's attitudes toward trade can be than women's attitudes. If either were true, we should observe a relationship between male response proportions and the gender gap. If instead, the gap is primarily driven by women's response to economic conditions, then we should observe a relationship between female response proportions and the gender gap.

The raw data alone offer initial evidence in support of women's responses influencing the size of the attitude gap. In the OECD sample, the average gap between the proportion of men and the proportion of women with positive trade attitudes is 0.05. Setting this gap aside, the data suggest a similar distribution of responses: men's and women's beliefs about trade are highly correlated (0.92), with similar ranges of proportions saying that trade is "good" (0.55 to 0.98 for

⁹ Dropping 2002 to increase symmetry across the discrimination measures results in a higher estimated coefficient and higher statistical significance for WVS Prioritize Men's Employment (+ 0.10, s.e. 0.035, and p-value = 0.014 for the base model).

men and 0.52 to 0.96) and similar standard deviations (0.09 for men and 0.10 for women). Yet, the correlation between the gap and men’s response proportions is small (0.01), especially compared to the correlation between the gap the women’s response proportions (-0.39). This suggests that variation in women’s responses, not men’s, drives the gender gap.

Modeling the gap as a function of first women’s and then men’s responses allows us to better estimate which is the primary driver. Here we expand the fullest version of the first model to incorporate in turn a measure of the proportion of women responding “good” to the question of trade’s effect on the country and then the proportion of men responding “good.”

$$\begin{aligned}
 & (\text{Male(Good)}_{ct} - \text{Female(Good)}_{ct}) \\
 &= \delta \text{Female(Good)}_{ct} + \beta_1 \text{Inequality}_{ct} + \beta_2 \ln\left(\frac{\text{Trade}_{ct}}{\text{GDP}_{ct}}\right) + \beta_3 \text{GDPgrowth}_{ct} \\
 &+ \beta_4 \text{Asia}_c + \omega_t + \varepsilon_{ct}
 \end{aligned}$$

$$\begin{aligned}
 & (\text{Male(Good)}_{ct} - \text{Female(Good)}_{ct}) \\
 &= \delta \text{Male(Good)}_{ct} + \beta_1 \text{Inequality}_{ct} + \beta_2 \ln\left(\frac{\text{Trade}_{ct}}{\text{GDP}_{ct}}\right) + \beta_3 \text{GDPgrowth}_{ct} \\
 &+ \beta_4 \text{Asia}_c + \omega_t + \varepsilon_{ct}
 \end{aligned}$$

Table 2 presents the results of the analysis of the gender gap for each measure of gender discrimination (as in Table 1) but with the addition of a measure of female responses (left panel) and a measure of male responses (right panel). The resulting coefficients provide a comparison of their relative influence and also evidence against the gender gap being merely a function of “ceiling” effects. For all female response models, the “Female Proportion Answering ‘Good’” is strongly correlated with the gender gap. Additionally, as would be expected, its addition erodes

the direct influence of the discriminatory variable: the *de facto* GGG EPO measure of equality loses size and significance, and the social “Prioritize Men’s Employment” measure shrinks in size although it remains significant. In contrast, note that in none of the male response models is the “Male Proportion Answering ‘Good’” significantly correlated with the size of the gender gap. Nor does the inclusion of this variable substantially alter the relationship between the gender inequality measures and the size of the gap in trade attitudes. This analysis suggests that inequality is influencing women’s perceptions, which in turn are driving the gender gap.

Table 2: Analysis of gender gap components (Pew Global Attitudes Survey, 2002-2017)

Predictor	Gender Gap: M-F Differences in Trade is good for the [country]					
	Female Response Model			Male Response Model		
Female Prop. Answering "Good"	-0.23***	-0.20***	-0.20***			
	-0.08	-0.07	-0.06			
Male Prop. Answering "Good"				0.05	0.05	0.07
				-0.07	-0.07	-0.09
WBL Index Extended	-0.01			-0.12		
	(0.08)			(0.11)		
GGG EPO		-0.08			-0.14**	
		(0.07)			(0.06)	
Prioritize Men's Employment			0.09**			0.15***
			(0.03)			(0.03)
Log Trade/GDP	0.03**	0.03**	0.04***	0.01	0	0
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
GDP Growth	0.00	0.00	0	0.00	0.00	-0.01
	0.00	0.00	0.00	0.00	0.00	0.00
Asia	0	0	-0.01	-0.01	-0.02	-0.02**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
Constant	0.1	0.14**	0.05	0.11	0.12*	-0.04
	(0.08)	(0.07)	(0.04)	(0.10)	(0.07)	(0.03)
<i>Number of Obs</i>	93	93	77	93	93	77
<i>Number of Clusters</i>	22	22	16	22	22	16
<i>R-squared</i>	0.27	0.29	0.33	0.1	0.16	0.22

Note: OLS, standard errors in parentheses, clustered on country. Year controls not shown. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. World Bank's Women, Business, and the Law 2009 data extended to 2007 and 2008 (see appendix for non-extended version).

Is it female or male trade attitudes that vary with gender inequality?

Finally, we decompose the gender gap measure to estimate the unique relationship between measures of gender inequality and beliefs about trade. While the first model assessed the link between gender inequality and the gender gap and the second model assessed the link between women's beliefs and the gap, this third model completes the circle. By changing the dependent variable to the proportion of female respondents and then to the proportion of male respondents saying that trade is 'good,' we can estimate the relationships between gender inequality and both women's and men's beliefs. A finding of no correlation (or a negative correlation) between greater equality and the proportion of women with positive trade beliefs would suggest that the findings from model 1 and model 2 are likely spurious.

In prior models, one gender served as a baseline of trade sentiment in the country. Since this final model estimates men's and women's response proportions individually, we now require another means of capturing the baseline cross-national variation in trade sentiment (see figure 1). As a proxy, we rely on a measure of national economies' dependence on trade, the log of exports as a percentage of GDP. Publics with a high economic dependence on exports theoretically should and empirically do express more positive views of trade (Guisinger 2017).

$$\begin{aligned} \text{Female(Good)}_{ct} &= \beta_1 \text{Inequality}_{ct} + \beta_2 \ln\left(\frac{\text{Trade}_{ct}}{\text{GDP}_{ct}}\right) + \beta_3 \text{GDPgrowth}_{ct} + \beta_4 \text{Asia}_c \\ &+ \beta_5 \ln\left(\frac{\text{Exports}_{ct}}{\text{GDP}_{ct}}\right) + \omega_t + \varepsilon_{ct} \end{aligned}$$

$$\text{Male(Good)}_{ct} = \beta_1 \text{Inequality}_{ct} + \beta_2 \ln\left(\frac{\text{Trade}_{ct}}{\text{GDP}_{ct}}\right) + \beta_3 \text{GDPgrowth}_{ct} + \beta_4 \text{Asia}_c \\ + \beta_5 \ln\left(\frac{\text{Exports}_{ct}}{\text{GDP}_{ct}}\right) + \omega_t + \varepsilon_{ct}$$

Table 3 provides the results of the OLS regression of gender inequality measures and national economic characteristics on the proportion of female respondents (left side) and male respondents (right side) responding that trade is “good.” All three measures of gender discrimination are strongly correlated with women’s opinions on trade in the expected directions. Countries with higher *de jure* (WBL Index) and *de facto* (GGG EPO) levels of gender equality have higher proportions of female respondents with positive beliefs about trade, whereas countries with more unequal gender norms (i.e., those with higher proportions prioritizing men’s employment) have lower proportions of female respondents with positive beliefs. The relationship between these measures and men’s beliefs is still significant for two of the three measures (the *de jure* WBL Index and Prioritize Men’s Employment) but also substantially weaker.

One potential reading would suggest that measures of *de jure* rules and attitudes towards women’s employment capture not only gender inequality but other indicators of liberalness and conservatism. Many would not be surprised by the idea that more liberal societies are both more likely to have greater equality but also greater support for trade openness and vice versa. That said, the GGG Economic Participation and Opportunity measure, our outcome-based indicator that most directly captures *de facto* gender discrimination in an economy, is not significantly correlated with men’s response proportions. Its coefficient is significant only for women’s

attitudes, as might be expected given that it specifically aligns with the day-to-day experiences of women in employment and the broader economy.

Table 3: Analysis of gender inequality measures on proportion of men and women responding that trade is good for the country (Pew Global Attitudes Survey, 2002-2017)

Predictor	Trade is good for the [country]					
	Female Response Prop.			Male Response Prop.		
WBL Index Extended	0.44** (0.19)			0.33** (0.12)		
GGG EPO		0.26** (0.12)			0.13 (0.12)	
Prioritize Men's Employment			-0.23*** (0.06)			-0.09* (0.05)
Log Exports/GDP	0.50** (0.23)	0.46* (0.23)	0.36** (0.15)	0.50** (0.22)	0.47** (0.23)	0.37** (0.13)
Log Trade/GDP	-0.47* (0.26)	-0.38 (0.25)	-0.26 (0.18)	-0.45* (0.23)	-0.39 (0.24)	-0.27* (0.14)
GDP Growth	0.01** (0.00)	0.01 (0.01)	0.01 (0.01)	0.01** (0.00)	0.00 (0.01)	0.00 (0.01)
Asia	0.02 (0.03)	0.03 (0.03)	0.03* (0.02)	0.01 (0.02)	0.01 (0.03)	0.01 (0.01)
Constant	0.53 (0.34)	0.57* (0.29)	0.72*** (0.19)	0.63** (0.26)	0.72** (0.28)	0.72*** (0.15)
<i>Number of Obs</i>	93	93	77	93	93	77
<i>Number of Clusters</i>	22	22	16	22	22	16
<i>R-squared</i>	0.53	0.5	0.57	0.55	0.51	0.58

Note: OLS, standard errors in parentheses, clustered on country. Year controls not shown. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. World Bank's Women, Business, and the Law 2009 data extended to 2007 and 2008 (see appendix for non-extended version).

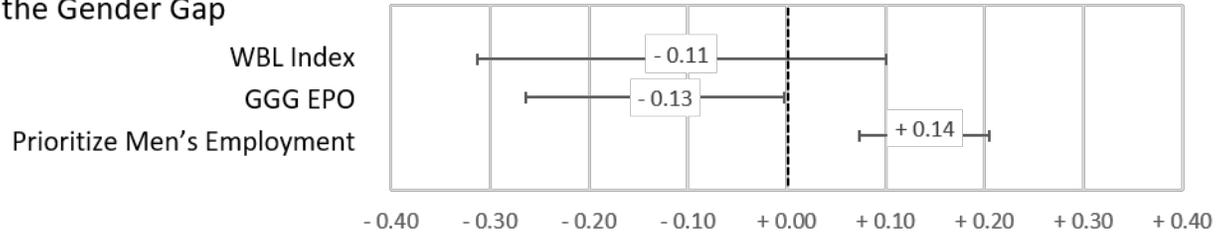
Linking gender inequality to the gender gap in attitudes

The three prior analyses trace out a series of relationships which suggest that gender inequality correlates with women's negative attitudes towards trade, that women's attitudes towards trade are the strongest predictor of the gender gap in trade attitudes, and that gender discrimination predicts the gender gap in trade attitudes. Figure 3 summarizes the primary relationships of interest from the three separate analyses by displaying the relevant coefficients and 95 percent confidence intervals: notably, the negative relationship of gender equality on the gender gap for

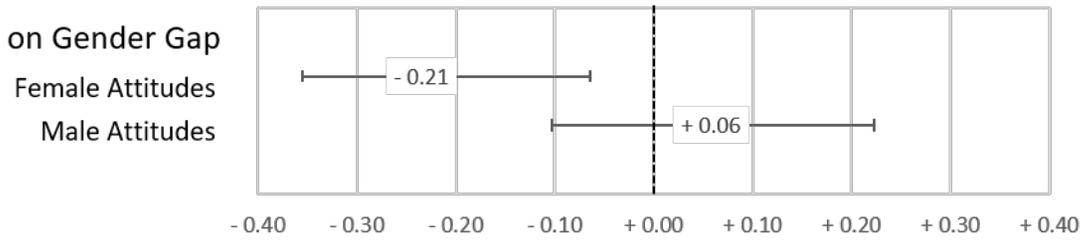
both the GGG EPO and the Prioritize Men's Employment measures (panel 1); the negative and significant average relationship between female attitudes (but not male attitudes) and the size of the gender gap (panel 2), and positive relationship between gender equality and positive attitudes towards trade within female (but again not male) respondents (panels 3a and 3b, respectively). These findings suggest that for women in developed countries, the conditions of employment generated by the extent of gender inequality influence their interpretation of the pros and cons associated with greater exposure to global markets.

Figure 3: Summary of key coefficients with 95% confidence intervals

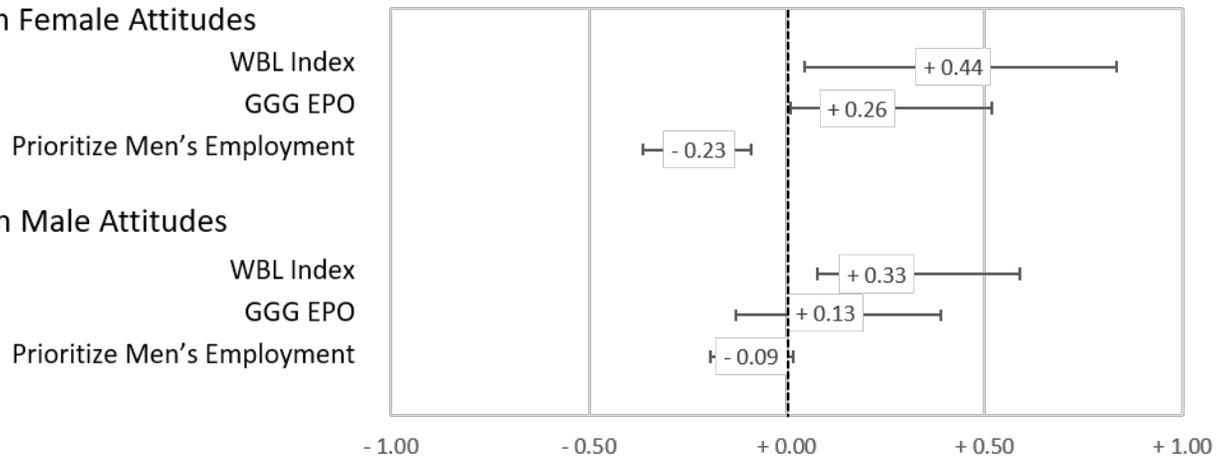
1. Inequality on the Gender Gap



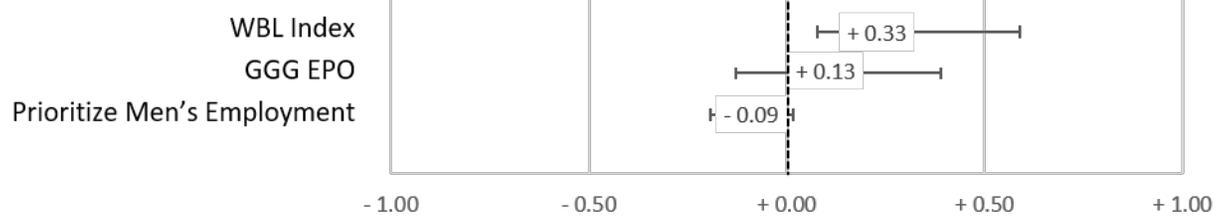
2. Female/Male Attitudes on Gender Gap



3a. Inequality on Female Attitudes



3b. Inequality on Male Attitudes



While we hesitate to claim the effects of gender inequality are mediated solely through women's opinion, these types of results invite mediation analysis. We used a STATA casual mediation package developed by Hicks and Tingley (2011) to implement the Baron and Kenny method of estimating the direct and indirect effect of gender inequality on the gender gap in attitudes and to also assess the sensitivity of the model to violations of the sequential ignorability assumption (Imai, Keele, and Yamamoto 2010; Hicks and Tingley 2011). The method assumes all observations are either treated or untreated. Since all of the measures of our independent variable - gender inequality - are continuous, we categorize observations as treated or untreated according to whether they fell above or below the sample mean.¹⁰

Estimates of the indirect effect via women's attitudes ranged from 58% to 83%, whereas the estimated percentage of total effects mediated via men's attitudes estimates were small and negative ranging between -11% and -5%.¹¹ Such estimates reinforce our interpretation of the non-mediated results presented above: regardless of the type of measure of gender inequality, women's (not men's) attitudes serve as the primary mediator between gender inequality and the gap in attitudes. More broadly these results strongly support our argument that gender inequality influences women's attitudes towards economic conditions which in turn drives a gap between men's and women's attitudes.

Conclusion

¹⁰ Histograms displayed in Appendix Figure D1 show the distribution and relevant cut point for each of the gender inequality measures.

¹¹ Appendix D, Tables D1, D2, and D3 provide detailed results. Appendix Figure D2 displays the estimated direct and indirect relationship of "Prioritize Men's Employment" on trade attitudes gender gap.

What explains the gender gap in public opinion on trade? Why are women less supportive of trade and trade liberalization than men even when researchers account for economic characteristics and other gender differences? This study suggests that by focusing narrowly on individual-level characteristics such as employment and risk orientations and individual attitudes, prior studies have overlooked broader institutional features that condition the impact of economic shocks on opinion formation. Our argument highlights one such feature, gender discrimination. Differential treatment of men and women in the economy generates predictable—and predictably different—views on international trade. Moreover, cross-national variation in the extent of gender discrimination is reflected in substantial variation in the gender gap. By drawing attention to institutional features, this study provides needed context for prior research on the determinants of trade attitudes.

In focusing on aggregate differences across countries, this study also suggests potential avenues for future research. We have set aside the precise processes by which structural discrimination shapes trade views at the individual level. Scholarship in psychology, sociology, and economics is investigating how norms generate economic outcomes and how changes in material divisions, such as trends in female paid employment, affect gender norms over time (Seguino 2007; Ferrant, Pesandro, and Nowacka 2014). Research in IPE can draw on, and contribute to, this work in order to disentangle how structural discrimination—regarding gender and other identities—influences individual-level attitudes. At the same time, our findings should caution researchers against implicit assumptions about the symmetry of effects: differences in gender discrimination against women (and in favor of men) affected the gender gap by shifting women's views but not men's.

Understanding of the pervasive differences in economic realities as experienced by men and women also provides some clues about the likely future direction of mass public opinion on trade. Norms and institutions that produce discriminatory practices even in the presence of laws mandating equal treatment appear to be sticky. For example, gendered divisions of labor are rooted in part in slow-changing cultural norms and expectations (Badgett and Folbre 1999) and can reassert themselves in times of economic crisis (Karamessini and Rubery 2014; Economist 2020). Studies have also shown that when women move into a predominantly ‘male’ industry, wages decline for all workers in that industry (Goldin 2002; Levanon et al. 2009). These dynamics suggest that structural forces continue to generate divergent economic experiences for men and women and may prevent the gender gap on trade closing in the direction of more support for trade.

By recognizing structural differences and rational responses to them, this study also offers a counter to the assumption, implicit in empirical studies and policy debates, that the gender gap arises because women’s preferences deviate from men’s due to some innate difference or shortcoming on the part of women. It instead views these preferences as worthy of consideration in themselves. Women’s lived experiences in the global economy are distinct and varied; they are also frequently subject to external constraints that differ substantially from those affecting men’s lives and livelihoods. Similar dynamics are likely to be present for other identity groups. If we are seeking a nuanced understanding of the determinants of public opinion on trade and other economic issues, we should not ignore the variety of group experiences and their structural determinants.

References

- Badgett, M. V. Lee, and Nancy Folbre. 1999. Assigning Care: Gender Norms and Economic Outcomes. *International Labour Review* 138(3):311-326.
- Beaulieu, Eugene, and Michael Napier. 2008. The Gender Gap in Support for Trade Liberalization. *Unpublished manuscript*.
- Beaulieu, Eugene, Vivek H. Dehejia, and Hazraf-Omar Zakhilwal. 2004. International Trade, Labour Turnover and the Wage Premium: Testing the Bhagwati-Dehejia Hypothesis for Canada. CESifo Working Paper Series No. 1149.
- Bundesministerium für Familie, Senioren, Frauen, und Jugend (BMFSFJ). 2019. Bericht der Bundesregierung zur Wirksamkeit des Gesetzes zur Förderung der Entgelttransparenz zwischen Frauen und Männern. Deutscher Bundestag Drucksache 19/11470.
- Burns, Tom R. 2008. Toward a Theory of Structural Discrimination: Cultural, Institutional and Interactional Mechanisms of the 'European Dilemma.' In: Gerard Delanty, Ruth Wodak, Paul Jones (Eds.) *Identity, Belonging and Migration*. Liverpool University Press.
- Coffey, Clare, Patricia Espinoza Revollo, Rowan Harvey, Max Lawson, Anam Parvez Butt, Kim Piaget, Diana Sarosi and Julie Thekkudan. 2020. Time to Care: Unpaid and Underpaid Care Work and the Global Inequality Crisis. Cowley, UK: Oxfam International.
- Criado Perez, Caroline. 2019. *Invisible Women: Data Bias in a World Designed for Men*. New York, NY: Abrams Press.
- The Economist. 2020. This Time is Different. *Print edition, June 4*.
- Ehrlich, Sean, and Cherie Maestas. 2010. Risk Orientation, Risk Exposure, and Policy. *Political Psychology* 31(5):657-684.
- Ferrant, Gaelle, Luca Maria Pesandro, and Keiko Nowacka. 2014. Unpaid Care Work: The Missing Link in the Analysis of Gender Gaps in Labour Outcomes. Issues paper: OECD Development Centre.
- Ferrant, Gaelle, and Annelise Thim. 2016. Measuring Women's Economic Empowerment: Time Use Data and Gender Inequality. OECD Development Policy Papers No. 16.
- Goldin, Claudia. 2002. A Pollution Theory of Discrimination: Male and Female Differences in Occupations and Earnings. NBER Working Paper No. 8985.
- Guisinger, Alexandra. 2009. Determining Trade Policy: Do Voters Hold Politicians Accountable? *International Organization* 63(3): 533-557.
- Guisinger, Alexandra. 2016. Information, Gender, and Differences in Individual Preferences for Trade. *Journal of Women, Politics & Policy* 37(4):538-561.

- Guisinger, Alexandra. 2017. *American Opinion on Trade: Preferences Without Politics*. Oxford University Press.
- Hall, Robert. 1972. Turnover in the Labor Force. *Brookings Papers on Economic Activity* 3:709-756.
- Hall, H. Keith, Chihwa Kao, and Douglas Nelson. 1998. Women and Tariffs: Testing the Gender Gap Hypothesis in a Downs-Mayer Political-Economy Model. *Economic Inquiry* 36(2): 320-332.
- Hays, Jude C., Sean D. Ehrlich, and Clint Peinhardt. 2005. Government Spending and Public Support for Trade in the OECD: An Empirical Test of the Embedded Liberalism Thesis. *International Organization* 59(2): 473-494.
- Hicks, Raymond, and Dustin Tingley. 2011. Causal Mediation Analysis. *The Stata Journal* 11(4):605-619.
- Hiscox, Michael, and Brian A. Burgoon. 2004. The Mysterious Case of Female Protectionism: Gender Bias in Attitudes Toward International Trade. Working Paper. Harvard University.
- Imai, Kosuke, Luke Keele, and Teppei Yamamoto. 2010. Identification, Inference, and Sensitivity Analysis for Causal Mediation Effects. *Statistical Sciences* 25: 51-71.
- Inglehart, Ronald, Christian Haerpfer, Alejandro Moreno, Christian Welzel, Kseniya Kizilova, Jaime Diez-Medrano, Marta Lagos, Pippa Norris, Eduard Ponarin, and Bi Puranen (eds.). 2014. World Values Survey: All Rounds - Country-Pooled Datafile 1981-2014. Madrid: JD Systems Institute.
- Iverson, Torben, and Frances Rosenbluth. 2008. Work and Power: The Connection Between Female Labor Force Participation and Female Political Representation. *Annual Review of Political Science* 11: 479-495.
- Karamessini, Maria, and Jill Rubery (Eds). 2014. *Women and Austerity*. London, UK: Routledge.
- Kleinberg, Katja B., and Benjamin O. Fordham. 2018. Don't Know Much about Foreign Policy: Assessing the Impact of "Don't Know" and "No Opinion" Responses on Inferences about Foreign Policy Attitudes. *Foreign Policy Analysis* 14(3): 429-448.
- Kushi, Sidita, and Ian P. McManus 2018. Gendered Costs of Austerity: The Effects of Welfare Regime and Government Policies on Employment across the OECD, 2000-13. *International Labour Review* 157(4): 557-587.
- Levanon, Asaf, Paula England, and Paul Allison. 2009. Occupational Feminization and Pay: Assessing Causal Dynamics Using 1950-2000 U.S. Census Data. *Social Forces* 88(2): 865-891.
- Mansfield, Edward D., and Diana C. Mutz. 2009. Support for Free Trade: Self-Interest, Sociotropic Politics, and Out-Group Anxiety. *International Organization* 63(3): 425-457.
- Mansfield, Edward D., Diana C. Mutz, and Laura R. Silver. 2015. Men, Women, Trade, and Free Markets. *International Studies Quarterly* 59(2):303-315.

- Mayda, Anna Maria, and Dani Rodrik. 2005. Why Are Some People (and Countries) More Protectionist than Others? *European Economic Review* 49(6):1393-1430.
- Organization for Economic Cooperation and Development (OECD). 2019. Gender Equality Data Portal: Time Spent in Paid and Unpaid Work, by Sex. URL: <http://www.oecd.org/gender/data/employment/> (accessed October 19, 2019).
- O'Rourke, Kevin H., and Richard Sinnott. 2001. The Determinants of Individual Trade Policy Preferences: International Survey Evidence. *Brookings Trade Forum*, 157-206.
- Padavic, Irene, and Barbara Reskin. 2002. *Women and Men at Work*. 2nd Ed. Thousand Oaks, CA: Pine Forge Press.
- Pearse, Rebecca, and Raewyn Connell. 2015. Gender Norms and the Economy: Insights from Social Research. *Feminist Economics* 22(1):30-53.
- Pew Global Attitudes Project. [various years] <http://pewglobal.org/datasets/> (accessed March 4, 2020)
- Razavi, Shahra, Camila Arza, Elissa Braunstein, Sarah Cook, and Kristine Goulding. 2012. Gendered Impacts of Globalization: Employment and Social Protection. United Nations Research Institute for Social Development, UNRIS Research Paper 2012-3.
- Ruggie, John G. 1982. International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order. *International Organization* 36(2): 379-415.
- Sainsbury, Diane. 1999. *Gender and Welfare State Regimes*. Oxford, Oxford University Press.
- Scheve, Kenneth F., and Matthew J. Slaughter. 2001. What Determines Individual Trade-Policy Preferences? *Journal of International Economics* 54(2):267-292.
- Seguido, Stephanie. 2007. Plus Ça Change? Evidence on Global Trends in Gender Norms and Stereotypes. *Feminist Economics* 13(2):1-21.
- Ureta, Manuelita. 1992. The Importance of Lifetime Jobs in the U.S. Economy, Revisited. *American Economic Review* 82(1):822-835.
- Women's Budget Group. 2018. Exploring the Economic Impact of Brexit on Women. URL: <https://wbg.org.uk/wp-content/uploads/2018/03/Economic-Impact-of-Brexit-on-women-briefing-FINAL-for-print.pdf> (accessed May 11, 2020).
- World Bank Group. 2020. Women, Business and the Law 2020. Washington, DC: World Bank. DOI:10.1596/978-1-4648-1532-4.
- World Bank and World Trade Organization. 2020. *Women and Trade: The Role of Trade in Promoting Gender Equality*. Washington, DC: World Bank. DOI:10.1596/978-1-4648-1541-6.
- World Economic Forum. 2020. Global Gender Gap Report 2020. Geneva, Switzerland. URL: <http://reports.weforum.org/global-gender-gap-report-2016/measuring-the-global-gender-gap/> (accessed May 11, 2020).

Appendices

Appendix A: Gender Equality Measures

- Table A1: World Bank Labor Equality Index (WBL, 2009-2018)
- Table A2: Economic Participation and Opportunity Index (GGG, alternate years 2006-2018)
- Table A3: National proportion agreeing with statement “When jobs are scarce, men should have more right to a job than women.” (WVS, waves 3-6)

Appendix B: Trade Attitude Survey Questions

Appendix C: Summary Statistics

Appendix D: Mediation Analysis

- Table D1: Mediation analysis of direct and indirect relationship of the Women, Business, and the Law (WBL) index, on trade attitudes gender gap
- Table D2: Mediation analysis of direct and indirect relationship of GGG Economic Participation and Opportunity (GGG EPO) on trade attitudes gender gap
- Table D3: Mediation analysis of direct and indirect relationship of “Prioritize Men’s Employment” on trade attitudes gender gap
- Figure D1: Histograms of WBL Index, GGG EPO, and proportion prioritizing men’s employment
- Figure D2: Estimated direct and indirect relationship of “Prioritize Men’s Employment” on trade attitudes gender gap

Appendix E: Robustness Checks

- Table E1 Table 1 – Social Welfare Spending

Appendix A: Gender Equality Measures

Table A1: World Bank Labor Equality Index (WBL, 2009-2018)

OECD Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average (2009-2018)
Australia	0.87	0.87	0.87	0.94	0.94	0.97	0.97	0.97	0.97	0.97	0.93
Austria	0.94	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.97
Belgium	0.94	0.98	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	0.98
Canada	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Chile	0.75	0.75	0.75	0.75	0.78	0.78	0.78	0.78	0.78	0.78	0.77
Czech Republic	0.91	0.91	0.91	0.91	0.94	0.94	0.94	0.94	0.94	0.94	0.93
Denmark	0.98	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Estonia	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.98	0.98	0.93
Finland	0.94	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.97
France	0.92	0.92	0.92	0.94	0.94	0.98	0.98	1.00	1.00	1.00	0.96
Germany	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Greece	0.88	0.88	0.91	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.95
Hungary	0.88	0.88	0.91	0.91	0.94	0.94	0.94	0.94	0.94	0.94	0.92
Iceland	0.91	0.91	0.91	0.91	0.94	0.94	0.94	0.94	0.97	0.97	0.93
Ireland	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.98	0.95
Israel	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Italy	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.94	0.94	0.94	0.93
Japan	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Korea	0.83	0.83	0.83	0.83	0.85	0.85	0.85	0.85	0.85	0.85	0.84
Latvia	0.98	0.98	0.98	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.99
Lithuania	0.91	0.91	0.91	0.91	0.94	0.94	0.94	0.94	0.94	0.94	0.93
Luxembourg	0.94	0.94	0.94	0.97	0.97	1.00	1.00	1.00	1.00	1.00	0.98
Mexico	0.75	0.75	0.75	0.75	0.78	0.83	0.86	0.86	0.86	0.86	0.81
Netherlands	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.94	0.92
New Zealand	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.91	0.91	0.89
Norway	0.88	0.88	0.88	0.88	0.88	0.88	0.94	0.94	0.94	0.94	0.91
Poland	0.79	0.79	0.82	0.85	0.85	0.85	0.88	0.88	0.88	0.94	0.85
Portugal	0.95	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.97
Slovak Republic	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Slovenia	0.94	0.94	0.94	0.94	0.94	0.91	0.91	0.91	0.91	0.91	0.92
Spain	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Sweden	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	0.98
Switzerland	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Turkey	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.79	0.79	0.79	0.73
United Kingdom	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.98	0.98	0.98	0.94
United States	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
<i>Min</i>	<i>0.71</i>	<i>0.78</i>	<i>0.78</i>	<i>0.78</i>	<i>0.73</i>						
<i>Max</i>	<i>0.98</i>	<i>0.98</i>	<i>0.98</i>	<i>0.98</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>0.99</i>
<i>Mean</i>	<i>0.89</i>	<i>0.90</i>	<i>0.90</i>	<i>0.90</i>	<i>0.91</i>	<i>0.92</i>	<i>0.92</i>	<i>0.93</i>	<i>0.93</i>	<i>0.93</i>	<i>0.91</i>
<i>s.d.</i>	<i>0.07</i>										

Table A2: Economic Participation and Opportunity Index (GGG, alternate years 2006-2018)

Country	2006	2008	2010	2012	2014	2016	2018 (2006-2018)	Average
Australia	0.73	0.73	0.74	0.76	0.80	0.72	0.72	0.75
Austria	0.55	0.59	0.60	0.65	0.67	0.65	0.66	0.63
Belgium	0.62	0.65	0.71	0.72	0.76	0.73	0.71	0.70
Canada	0.73	0.74	0.78	0.79	0.79	0.73	0.75	0.76
Chile	0.51	0.52	0.53	0.55	0.55	0.57	0.59	0.54
Czech Republic	0.63	0.64	0.62	0.60	0.62	0.65	0.65	0.63
Denmark	0.71	0.71	0.74	0.77	0.81	0.74	0.73	0.75
Estonia	0.68	0.70	0.72	0.72	0.71	0.70	0.73	0.71
Finland	0.73	0.74	0.76	0.78	0.79	0.79	0.79	0.77
France	0.52	0.66	0.66	0.67	0.70	0.68	0.69	0.66
Germany	0.67	0.69	0.71	0.74	0.74	0.69	0.73	0.71
Greece	0.59	0.63	0.62	0.63	0.64	0.65	0.68	0.64
Hungary	0.64	0.67	0.69	0.66	0.67	0.67	0.68	0.67
Iceland	0.71	0.73	0.75	0.75	0.82	0.81	0.79	0.77
Ireland	0.64	0.68	0.74	0.75	0.75	0.71	0.73	0.72
Israel	0.64	0.66	0.69	0.68	0.64	0.68	0.68	0.67
Italy	0.53	0.59	0.59	0.59	0.57	0.57	0.59	0.58
Japan	0.55	0.54	0.57	0.58	0.62	0.57	0.60	0.57
Korea	0.48	0.49	0.52	0.51	0.51	0.54	0.55	0.52
Latvia	0.71	0.75	0.75	0.76	0.79	0.79	0.81	0.77
Lithuania	0.71	0.74	0.76	0.76	0.74	0.76	0.77	0.75
Luxembourg	0.56	0.61	0.75	0.81	0.75	0.75	0.69	0.71
Mexico	0.48	0.48	0.52	0.54	0.55	0.54	0.57	0.53
Netherlands	0.64	0.67	0.72	0.76	0.71	0.66	0.70	0.70
New Zealand	0.71	0.78	0.77	0.78	0.75	0.77	0.76	0.77
Norway	0.73	0.78	0.83	0.83	0.84	0.82	0.81	0.81
Poland	0.64	0.62	0.65	0.65	0.68	0.69	0.71	0.66
Portugal	0.67	0.70	0.67	0.68	0.72	0.71	0.72	0.69
Slovak Republic	0.65	0.64	0.64	0.63	0.64	0.65	0.66	0.64
Slovenia	0.67	0.71	0.72	0.71	0.78	0.78	0.80	0.74
Spain	0.54	0.58	0.62	0.65	0.65	0.67	0.66	0.63
Sweden	0.73	0.78	0.77	0.80	0.80	0.80	0.81	0.79
Switzerland	0.71	0.66	0.73	0.75	0.78	0.75	0.74	0.73
Turkey	0.43	0.41	0.39	0.41	0.45	0.46	0.47	0.43
United Kingdom	0.66	0.69	0.72	0.73	0.71	0.70	0.71	0.71
United States	0.76	0.75	0.80	0.81	0.83	0.75	0.78	0.78
<i>Min</i>	<i>0.43</i>	<i>0.41</i>	<i>0.39</i>	<i>0.41</i>	<i>0.45</i>	<i>0.46</i>	<i>0.47</i>	<i>0.43</i>
<i>Max</i>	<i>0.76</i>	<i>0.78</i>	<i>0.83</i>	<i>0.83</i>	<i>0.84</i>	<i>0.82</i>	<i>0.81</i>	<i>0.81</i>
<i>Mean</i>	<i>0.63</i>	<i>0.66</i>	<i>0.68</i>	<i>0.69</i>	<i>0.70</i>	<i>0.69</i>	<i>0.70</i>	<i>0.68</i>
<i>s.d.</i>	<i>0.09</i>	<i>0.09</i>	<i>0.09</i>	<i>0.10</i>	<i>0.10</i>	<i>0.08</i>	<i>0.08</i>	<i>0.09</i>

Table A3: Prioritize Men’s Employment. By country, proportion of respondents agreeing with statement “When jobs are scarce, men should have more right to a job than women.” (WVS, waves 3-6)

OECD Country	Wave 3 (1994-1998)	Wave 4 (1999-2004)	Wave 5 (2005-2009)	Wave 6 (2010-2014)
Australia	26%		14%	7%
Canada	-	15%	14%	-
Chile	30%	25%	30%	18%
Czech Republic	32%	-	-	-
Estonia	33%	-	-	18%
Finland	14%	-	10%	-
France	-	-	18%	-
Germany	22%	-	18%	16%
Hungary	44%	-	13%	-
Italy	-	-	22%	-
Japan	33%	32%	27%	32%
Latvia	25%	-	-	-
Lithuania	32%	-	-	-
Mexico	26%	34%	25%	17%
Netherlands	-	-	12%	8%
New Zealand	13%	-	8%	7%
Norway	14%	-	6%	-
Poland	45%	-	31%	27%
Slovenia	26%	-	14%	10%
Korea	43%	39%	36%	32%
Spain	27%	17%	17%	12%
Sweden	8%	-	2%	2%
Switzerland	27%	-	22%	-
Turkey	67%	60%	53%	60%
United Kingdom	24%	-	16%	-
United States	19%	10%	7%	6%
<i>Observations</i>	22	8	15	22
<i>Min</i>	8%	10%	2%	2%
<i>Max</i>	67%	60%	53%	60%
<i>Mean</i>	29%	29%	19%	18%
<i>s.d.</i>	0.13	0.16	0.12	0.15

Appendix B: Trade Attitude Survey Questions

Pew Global Attitudes: Is Trade Good?

Spring 2017 (Q28):

In general, do you think Trade and business ties between (survey country) and other countries around the world is a good thing or a bad thing for (survey country)?

- | | |
|----------------------|----------------------------|
| 1 Good thing | 4 Neither (DO NOT READ) |
| 2 Bad thing | 8 Don't know (DO NOT READ) |
| 3 Both (DO NOT READ) | 9 Refused (DO NOT READ) |

Spring 2014 (Q27); Spring 2011 (Q19); Spring 2010 (Q24); Spring 2009 (Q13); Spring 2008 (Q14); Spring 2007 (Q21); Spring 2002 (Q24).

What do you think about the growing trade and business ties between (survey country) and other countries – do you think it is a very good thing, somewhat good, somewhat bad or a very bad thing for our country?

- | | |
|-----------------|------------------------------|
| 1 Very good | 4 Very bad |
| 2 Somewhat good | 5/8 Don't know (DO NOT READ) |
| 3 Somewhat bad | 6/9 Refused (DO NOT READ) |

Appendix C: Summary statistics for dependent and independent variables

Definition	Obs	Mean	S.D.	Min	Max	Years Avail.
M-F Difference in Prop. Answering Trade "Good"	106	0.05	0.04	-0.07	0.18	2002, 2007-2011, 2014, 2017
Male Prop. Answering Trade "Good"	106	0.84	0.09	0.55	0.98	"
Female Prop. Answering Trade "Good"	106	0.80	0.10	0.52	0.96	"
WBL Index Extended	65	0.87	0.08	0.71	1.00	2008-2018
GGG Eco. Participation & Opportunity (GGG EPO)	93	0.63	0.10	0.39	0.83	2006-2018
% Agreeing Should Prioritize Men's Employment	77	0.24	0.15	0.02	0.60	1994-2015 (extended to 2017)
Log Trade/GDP	106	4.09	0.42	3.03	5.13	2002-2017
Log Exports/GDP	106	3.39	0.45	2.21	4.48	"
GDP Growth	106	2.29	2.95	-5.62	11.11	"

Appendix D: Mediation Analysis

Table D1: Mediation analysis of direct and indirect relationship of the Women, Business, and the Law (WBL) index, on trade attitudes gender gap

I Stage: Mediating Variable as function of independent (treatment) variable, and other control variables

Female Prop. Answering "Good"	Coef.	s.e.	P> t	Male Prop. Answering "Good"	Coef.	s.e.	P> t
WBL Index	0.058	0.022	**	WBL Index	0.056	0.020	***
Log Trade/GDP	0.095	0.027	***	Log Trade/GDP	0.101	0.024	***
GDP Growth	0.005	0.005		GDP Growth	0.005	0.004	
Asia	0.059	0.028	**	Asia	0.054	0.024	*
Constant (year fixed effects not shown)	0.300	0.101	***	Constant (year fixed effects not shown)	0.346	0.089	***
<i>Number of obs</i>	93			<i>Number of obs</i>	93		
<i>Prob > F</i>	0			<i>Prob > F</i>	0.00		
<i>R-squared</i>	0.45			<i>R-squared</i>	0.49		
<i>Adj R-squared</i>	0.38			<i>Adj R-squared</i>	0.43		
<i>Root MSE</i>	0.08			<i>Root MSE</i>	0.07		

II Stage: Dependent variable as function of mediating, independent (treatment) variable, and other control variables

Gender Gap: M-F Diff	Coef.	s.e.	P> t	Gender Gap: M-F Diff	Coef.	s.e.	P> t
WBL Index	0.012	0.011		WBL Index	-0.003	0.012	
Female Prop. Answering "Good"	-0.245	0.050	***	Male Prop. Answering "Good"	0.023	0.065	
Log Trade/GDP	0.029	0.013	**	Log Trade/GDP	0.003	0.015	
GDP Growth	0.001	0.002		GDP Growth	0.000	0.003	
Asia	0.010	0.013		Asia	-0.006	0.015	
Constant (year fixed effects not shown)	0.119	0.048	**	Constant (year fixed effects not shown)	0.037	0.057	
<i>Number of obs</i>	93			<i>Number of obs</i>	93		
<i>Prob > F</i>	0.00			<i>Prob > F</i>	0.884		
<i>R-squared</i>	0.28			<i>R-squared</i>	0.066		
<i>Adj R-squared</i>	0.18			<i>Adj R-squared</i>	-0.061		
<i>Root MSE</i>	0.04			<i>Root MSE</i>	0.042		

III Stage: Estimated Effects of Gender Inequality on the Gender Gap

Female opinion as mediator	Mean	95% Conf. Int.	Male opinion as mediator	Mean	95% Conf. Int.
ACME	-0.014	-0.028 -0.003	ACME	0.001	-0.006 0.011
Direct Effect	0.012	-0.009 0.034	Direct Effect	-0.003	-0.028 0.021
Total Effect	-0.002	-0.025 0.020	Total Effect	-0.002	-0.024 0.022
% of Total Effect mediated	64%		% of Total Effect mediated	-6%	

IV Stage: Sensitivity analysis

Rho at which ACME = 0	-0.478	Rho at which ACME = 0	0.039
R ² _M *R ² _{Y*} at which ACME = 0	0.228	R ² _M *R ² _{Y*} at which ACME = 0	0.002
R ² _M ~R ² _{Y~} at which ACME = 0	0.091	R ² _M ~R ² _{Y~} at which ACME = 0	0.001

Table D2: Mediation analysis of direct and indirect relationship of GGG Economic Participation and Opportunity (GGG EPO) on trade attitudes gender gap

I Stage: Mediating Variable as function of independent (treatment) variable, and other control variables

Female Prop. Answering "Good"	Coef.	s.e.	P> t 	Male Prop. Answering "Good"	Coef.	s.e.	P> t
GGG EPO	0.033	0.019	*	GGG EPO	0.024	0.017	
Log Trade/GDP	0.133	0.024	***	Log Trade/GDP	0.136	0.022	***
GDP Growth	-0.001	0.004		GDP Growth	-0.001	0.004	
Asia	0.046	0.027	*	Asia	0.039	0.024	
Constant (year fixed effects not shown)	0.190	0.101	*	Constant (year fixed effects not shown)	0.246	0.090	***
<i>Number of obs</i>	93			<i>Number of obs</i>	93		
<i>Prob > F</i>	0			<i>Prob > F</i>	0		
<i>R-squared</i>	0.42			<i>R-squared</i>	0.45		
<i>Adj R-squared</i>	0.35			<i>Adj R-squared</i>	0.39		
<i>Root MSE</i>	0.08			<i>Root MSE</i>	0.07		

II Stage: Dependent variable as function of mediating, independent (treatment) variable, and other control variables

Gender Gap: M-F Diff	Coef.	s.e.	P> t 	Gender Gap: M-F Diff	Coef.	s.e.	P> t
GGG EPO	-0.001	0.009		GGG EPO	-0.009	0.010	
Female Prop. Answering "Good"	-0.227	0.049	***	Male Prop. Answering "Good"	0.027	0.062	
Log Trade/GDP	0.034	0.013	**	Log Trade/GDP	0.000	0.015	
GDP Growth	0.000	0.002		GDP Growth	0.000	0.002	
Asia	0.003	0.012		Asia	-0.009	0.014	
Constant (year fixed effects not shown)	0.099	0.046	*	Constant (year fixed effects not shown)	0.050	0.053	
<i>Number of obs</i>	93			<i>Number of obs</i>	93		
<i>Prob > F</i>	0.01			<i>Prob > F</i>	0.823		
<i>R-squared</i>	0.27			<i>R-squared</i>	0.075		
<i>Adj R-squared</i>	0.17			<i>Adj R-squared</i>	-0.050		
<i>Root MSE</i>	0.04			<i>Root MSE</i>	0.042		

III Stage: Estimated Effects of Gender Inequality on the Gender Gap

Female opinion as mediator	Mean	95% Conf. Int.		Male opinion as mediator	Mean	95% Conf. Int.	
ACME	-0.008	-0.018	0.001	ACME	0.001	-0.003	0.006
Direct Effect	-0.001	-0.019	0.017	Direct Effect	-0.009	-0.029	0.011
Total Effect	-0.009	-0.029	0.010	Total Effect	-0.009	-0.028	0.011
% of Total Effect mediated	58%			% of Total Effect mediated	-5%		

IV Stage: Sensitivity analysis

Rho at which ACME = 0	-0.456	Rho at which ACME = 0	0.048
R ² _M *R ² _{Y*} at which ACME = 0	0.208	R ² _M *R ² _{Y*} at which ACME = 0	0.002
R ² _M ~R ² _{Y~} at which ACME = 0	0.088	R ² _M ~R ² _{Y~} at which ACME = 0	0.001

Table D3: Mediation analysis of direct and indirect relationship of “Prioritize Men’s Employment” on trade attitudes gender gap

Female Prop. Answering "Good"	Coef.	s.e.	P> t 	Male Prop. Answering "Good"	Coef.	s.e.	P> t
Prioritize Men's Employment	-0.072	0.024	***	Prioritize Men's Employment	-0.053	0.021	**
Log Trade/GDP	0.135	0.023	***	Log Trade/GDP	0.143	0.020	***
GDP Growth	0.004	0.005		GDP Growth	0.002	0.004	
Asia	0.089	0.028	***	Asia	0.069	0.025	***
Constant (year fixed effects not shown)	0.235	0.090	**	Constant (year fixed effects not shown)	0.260	0.080	***
<i>Number of obs</i>	77			<i>Number of obs</i>	0		
<i>Prob > F</i>	0			<i>Prob > F</i>	0		
<i>R-squared</i>	0.51			<i>R-squared</i>	-0.10		
<i>Adj R-squared</i>	0.43			<i>Adj R-squared</i>	-0.07		
<i>Root MSE</i>	0.08			<i>Root MSE</i>	0.00		

II Stage: Dependent variable as function of mediating, independent (treatment) variable, and other control variables

Gender Gap: M-F Diff	Coef.	s.e.	P> t 	Gender Gap: M-F Diff	Coef.	s.e.	P> t
Prioritize Men's Employment	0.001	0.012		Prioritize Men's Employment	0.022	0.013	
Female Prop. Answering "Good"	-0.254	0.059	***	Male Prop. Answering "Good"	0.047	0.075	
Log Trade/GDP	0.042	0.014	***	Log Trade/GDP	0.001	0.017	
GDP Growth	-0.001	0.002		GDP Growth	-0.002	0.003	
Asia	0.002	0.014		Asia	-0.023	0.016	
Constant (year fixed effects not shown)	0.085	0.045		Constant (year fixed effects not shown)	0.013	0.053	
<i>Number of obs</i>	77			<i>Number of obs</i>	77		
<i>Prob > F</i>	0.02			<i>Prob > F</i>	0.931		
<i>R-squared</i>	0.27			<i>R-squared</i>	0.070		
<i>Adj R-squared</i>	0.15			<i>Adj R-squared</i>	-0.088		
<i>Root MSE</i>	0.04			<i>Root MSE</i>	0.041		

III Stage: Estimated Effects of Gender Inequality on the Gender Gap

Female opinion as mediator	Mean	95% Conf. Int.	Male opinion as mediator	Mean	95% Conf. Int.
ACME	0.018	0.005 0.034	ACME	-0.002	-0.012 0.006
Direct Effect	0.001	-0.023 0.026	Direct Effect	0.022	-0.005 0.049
Total Effect	0.019	-0.009 0.043	Total Effect	0.020	-0.006 0.046
% of Total Effect mediated	83%		% of Total Effect mediated	-11%	

IV Stage: Sensitivity analysis

Rho at which ACME = 0	-0.471	Rho at which ACME = 0	0.078
R ² _M *R ² _{Y*} at which ACME = 0	0.222	R ² _M *R ² _{Y*} at which ACME = 0	0.006
R ² _M ~R ² _{Y~} at which ACME = 0	0.080	R ² _M ~R ² _{Y~} at which ACME = 0	0.003

Figure D1: Histograms of WBL Index, GGG EPO, and the proportion prioritizing men’s employment

(The x-axis line marks mean and cut point between 0 “no treatment” and 1 “treatment” for mediation analysis)

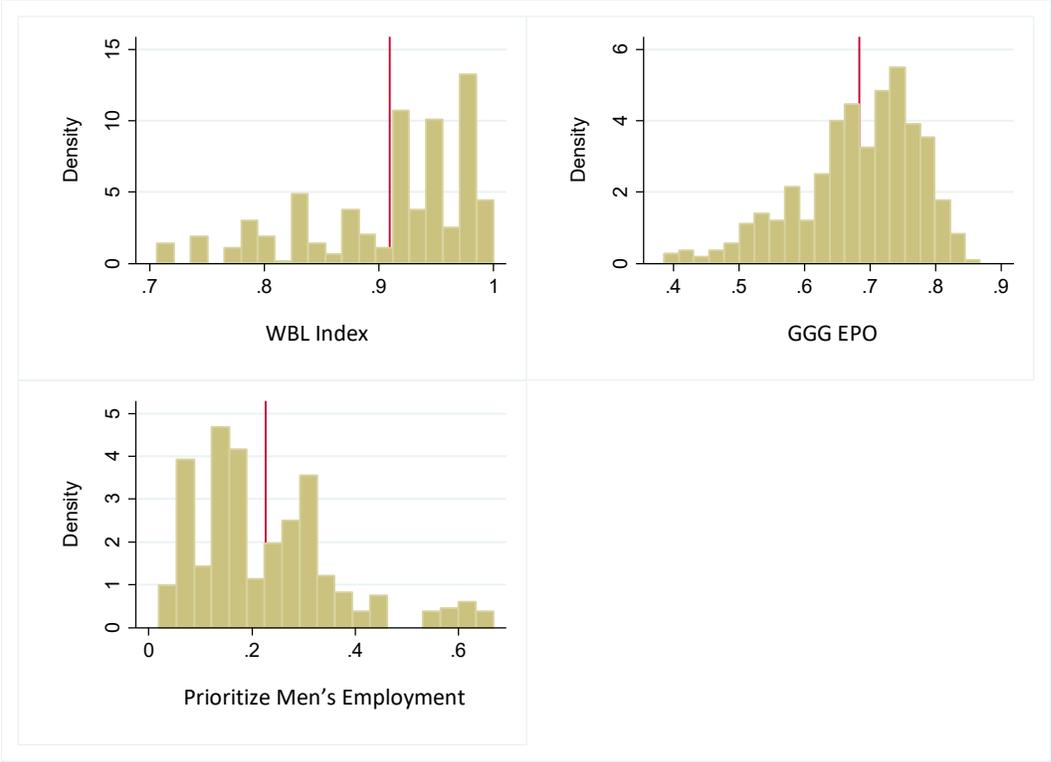
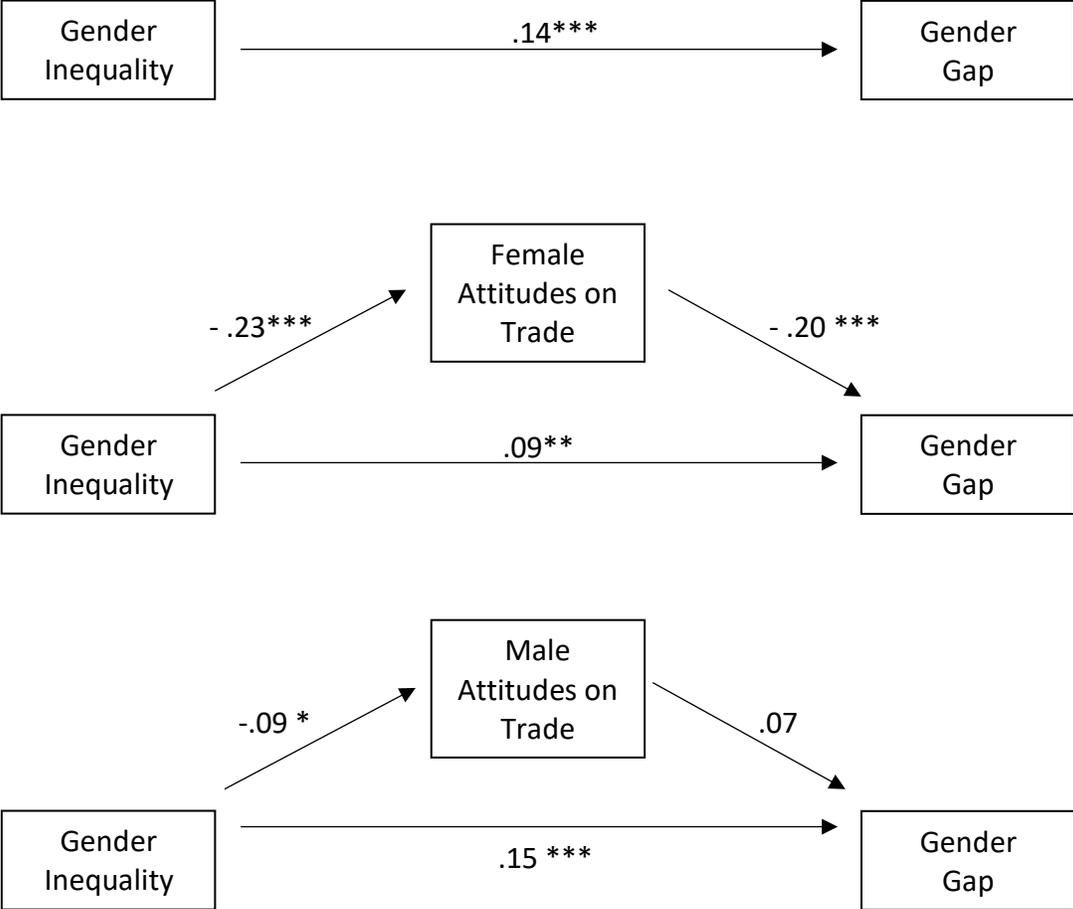


Figure D2: Estimated direct and indirect relationship of “Prioritize Men’s Employment” on trade attitudes gender gap



Appendix E: Robustness Checks

Table E1a: Analysis of relationship between discrimination measures and the trade attitudes gender gap (Pew Global Attitudes Survey, 2002-2017) including welfare expenditure

Predictor	Gender Gap: M-F Differences in Trade is good for the [country]								
	Base			Economic Controls			"Asia" Dummy		
WBL Index Extended	-0.06			-0.19			-0.19		
	(0.09)			(0.12)			(0.12)		
GGG EPO		-0.11*			-0.16**			-0.17**	
		(0.06)			(0.07)			(0.07)	
Prioritize Men's Employment			0.08**			0.13**			0.14***
			(0.03)			(0.04)			(0.03)
Log Trade/GDP				0.02	0.01	0.01	0.02	0	0.01
				(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
GDP Growth				0.00	0.00	-0.01	0.00	0.00	-0.01
				(0.00)	(0.00)	(0.00)	0.00	0.00	0.00
Welfare Expenditure				0.00	0.00	0.00	0.00	0.00	0.00
				(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Asia							-0.01	-0.01	-0.02***
							(0.01)	(0.01)	(0.01)
Constant	0.12	0.13***	0.01	0.1	0.11*	-0.02	0.11	0.13*	-0.01
	(0.08)	(0.04)	(0.02)	(0.09)	(0.06)	(0.03)	(0.10)	(0.07)	(0.02)
<i>Number of Obs</i>	93	93	77	93	93	77	93	93	77
<i>Number of Clusters</i>	22	22	16	22	22	16	22	22	16
<i>R-squared</i>	0.08	0.13	0.13	0.12	0.17	0.18	0.12	0.18	0.21

Note: OLS, standard errors in parentheses, clustered on country. Year controls not shown. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. World Bank's Women, Business, and the Law 2009 data extended to 2007 and 2008 (see appendix for non-extended version).

Table E1b: Analysis of relationship between discrimination measures and the trade attitudes gender gap (Pew Global Attitudes Survey, 2002-2017) with lagged independent variables

Predictor	Gender Gap: M-F Differences in Trade is good for the [country]								
	Base			Economic Controls			"Asia" Dummy		
WBL Index Extended L1	-0.09			-0.28**			-0.28**		
	(0.10)			(0.12)			(0.12)		
GGG EPO L1		-0.11*			-0.15**			-0.16**	
		(0.06)			(0.06)			(0.06)	
Prioritize Men's Employment L1			0.08**			0.10***			0.11***
			(0.04)			(0.03)			(0.02)
Log Trade/GDP L1				0.02	0	0.01	0.02	0	0
				(0.02)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
GDP Growth L1				0.00	0.00	0.00001	0.00	0.00	0.00001
				(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Welfare Expenditure L1				0.00	0.00	0.00	0.00	0.00	0.00
				(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Asia							-0.01	-0.01	-0.02*
							(0.01)	(0.01)	(0.01)
Constant	0.13	0.13***	0.01	0.16	0.11**	-0.02	0.17*	0.13**	-0.01
	(0.09)	(0.04)	(0.02)	(0.09)	(0.05)	(0.02)	(0.09)	(0.06)	(0.03)
<i>Number of Obs</i>	76	93	79	76	93	79	76	93	79
<i>Number of Clusters</i>	20	22	16	20	22	16	20	22	16
<i>R-squared</i>	0.08	0.13	0.13	0.12	0.17	0.18	0.12	0.18	0.21

Note: OLS, standard errors in parentheses, clustered on country. Year controls not shown. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. World Bank's Women, Business, and the Law 2009 data extended to 2007 and 2008 (see appendix for non-extended version).

Table E2a: Analysis of gender gap components (Pew Global Attitudes Survey, 2002-2017) with welfare spending

Predictor	Gender Gap: M-F Differences in Trade is good for the [country]					
	Female Response Model			Male Response Model		
Female Prop. Answering "Good"	-0.22***	-0.20***	-0.23***			
	-0.08	-0.07	-0.07			
Male Prop. Answering "Good"				0.05	0.04	0.08
				-0.07	-0.07	-0.08
WBL Index	-0.08			-0.21		
	(0.11)			(0.13)		
GGG EPO		-0.12			-0.17**	
		(0.07)			(0.07)	
Prioritize Men's Employment			0.10***			0.14***
			(0.03)			(0.03)
Log Trade/GDP	0.04**	0.03**	0.04***	0.01	0	0
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
GDP Growth	0.00	0.00	0.00	0.00	0.00	-0.01
	0.00	0.00	0.00	0.00	0.00	0.00
Welfare Expenditure	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00
Asia	0.01	0.00	0.00	-0.01	-0.02	-0.02**
	(0.01)	(0.01)	0.00	(0.01)	(0.01)	(0.01)
Constant	0.12	0.14**	0.04	0.13	0.13*	-0.03
	(0.08)	(0.06)	(0.04)	(0.09)	(0.06)	(0.04)
<i>Number of Obs</i>	93	93	77	93	93	77
<i>Number of Clusters</i>	22	22	16	22	22	16
<i>R-squared</i>	0.28	0.32	0.35	0.13	0.19	0.22

Note: OLS, standard errors in parentheses, clustered on country. Year controls not shown. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table E2b: Analysis of gender gap components (Pew Global Attitudes Survey, 2002-2017) with lagged independent variables

Predictor	Gender Gap: M-F Differences in Trade is good for the [country]					
	Female Response Model			Male Response Model		
Female Prop. Answering "Good"	-0.21**	-0.21***	-0.26***			
	-0.09	-0.07	-0.07			
Male Prop. Answering "Good"				0.07	0.04	0.06
				-0.06	-0.07	-0.08
WBL Index Extended L1	-0.14			-0.32**		
	(0.14)			(0.12)		
GGG EPO L1		-0.11			-0.17**	
		(0.07)			(0.06)	
Prioritize Men's Employment L1			0.08**			0.11***
			(0.03)			(0.02)
Log Trade/GDP L1	0.04**	0.03**	0.04***	0.02	0	-0.01
	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
GDP Growth L1	0.00	0.00	0	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00
Asia	0	0	0	-0.01	-0.02	-0.02*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Constant	0.13	0.14**	0.04	0.17*	0.12*	-0.02
	(0.08)	(0.06)	(0.05)	(0.09)	(0.06)	(0.04)
<i>Number of Obs</i>	76	93	79	76	93	79
<i>Number of Clusters</i>	20	22	16	20	22	16
<i>R-squared</i>	0.28	0.32	0.35	0.16	0.18	0.17

Note: OLS, standard errors in parentheses, clustered on country. Year controls not shown. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. World Bank's Women, Business, and the Law 2009 data extended to 2007 and 2008 (see appendix for non-extended version).

Table E3a: Analysis of gender inequality measures on proportion of men and women responding that trade is good for the country (Pew Global Attitudes Survey, 2002-2017) with welfare spending

Predictor	Trade is good for the [country]					
	Female Response Prop.			Male Response Prop.		
WBL Index Extended	0.60**			0.40**		
	(0.22)			(0.16)		
GGG EPO		0.26			0.09	
		(0.17)			(0.17)	
Prioritize Men's Employment			-0.18**			-0.04
			(0.08)			(0.06)
Log Exports/GDP	0.57**	0.46*	0.25	0.53**	0.44*	0.26
	(0.23)	(0.24)	(0.22)	(0.20)	(0.21)	(0.16)
Log Trade/GDP	-0.56**	-0.38	-0.14	-0.49**	-0.36	-0.14
	(0.25)	(0.26)	(0.25)	(0.21)	(0.23)	(0.19)
GDP Growth	0.01**	0.01	0.01	0.01**	0.01	0.00
	0.00	(0.01)	(0.01)	0.00	(0.01)	(0.01)
Welfare Expenditure	0.00	0.00	0.00	0.00	0.00	0.00*
	0.00	0.00	0.00	0.00	0.00	0.00
Asia	0.01	0.03	0.05*	0.01	0.02	0.03
	(0.02)	(0.03)	(0.03)	(0.02)	(0.03)	(0.02)
Constant	0.57*	0.57*	0.53	0.65**	0.69**	0.53**
	(0.31)	(0.29)	(0.31)	(0.25)	(0.27)	(0.24)
<i>Number of Obs</i>	93	93	77	93	93	77
<i>Number of Clusters</i>	22	22	16	22	22	16
<i>R-squared</i>	0.54	0.5	0.61	0.55	0.51	0.62

Note: OLS, standard errors in parentheses, clustered on country. Year controls not shown. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. World Bank's Women, Business, and the Law 2009 data extended to 2007 and 2008 (see appendix for non-extended version).

Table E3b: Analysis of gender inequality measures on proportion of men and women responding that trade is good for the country (Pew Global Attitudes Survey, 2002-2017) with lagged independent variables

Predictor	Trade is good for the [country]					
	Female Response Prop.			Male Response Prop.		
WBL Index L1	0.80***			0.53***		
	(0.19)			(0.18)		
GGG EPO L1		0.26			0.1	
		(0.16)			(0.16)	
Prioritize Men's Employment L1			-0.13**			-0.02
			(0.05)			(0.05)
Log Exports/GDP L1	0.58*	0.45*	0.29	0.63**	0.45**	0.32
	(0.30)	(0.24)	(0.27)	(0.24)	(0.18)	(0.19)
Log Trade/GDP L1	-0.56	-0.37	-0.18	-0.59**	-0.37*	-0.21
	(0.33)	(0.26)	(0.31)	(0.26)	(0.20)	(0.23)
GDP Growth L1	0.01*	0.00	0	0.01**	0.00	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	0.00	0.00
Welfare Expenditure L1	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00
Asia	0.02	0.03	0.04	0.00	0.02	0.02
	(0.02)	(0.03)	(0.03)	(0.02)	(0.03)	(0.02)
Constant	0.44	0.56*	0.58	0.66*	0.70***	0.60*
	(0.37)	(0.27)	(0.38)	(0.32)	(0.24)	(0.30)
<i>Number of Obs</i>	76	93	79	76	93	79
<i>Number of Clusters</i>	20	22	16	20	22	16
<i>R-squared</i>	0.57	0.51	0.6	0.59	0.54	0.64

Note: OLS, standard errors in parentheses, clustered on country. Year controls not shown. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. World Bank's Women, Business, and the Law 2009 data extended to 2007 and 2008 (see appendix for non-extended version).