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Women voters and trade protectionism in the inter-war years

By Alan de Bromhead

Abstract

This paper examines the relationship between the granting of voting rights to women and protectionism during the interwar years. Public opinion survey evidence from the period indicates that women were more likely than men to hold protectionist attitudes, while panel data analysis of average tariff rates shows that when women were entitled to vote tariffs were, on average, higher. This result is supported by an instrumental variables approach using Protestantism as an instrument for female voting rights as well as an event-study analysis.

JEL Codes: F50, N70, N40

1 Introduction

A dramatic increase in trade protection was one of the prominent features of the breakdown of the international economic system that took place during the interwar years. Average tariff rates for industrialized countries increased by 11% in the period 1923 to 1926, by 13% between 1927 and 1931 and by 18% between 1932 and 1939 (James, 2009, p.108). Needless to say, trade policy was a highly political issue, as it is today.¹ Calls for increased protection of home producers, either from special interests or from those who argued that higher tariffs were in the best interests of the public in order to maintain employment, became increasingly loud. Even in Britain, where the doctrine of Free Trade had been most firmly established in the 19th century, advocates of protectionism were becoming ever more vocal.

In this paper I highlight an aspect of the interwar period that potentially contributed to this increase in tariff rates: the extension of voting rights to women. I argue that the protectionism that was characteristic of the period was related to domestic politics, specifically the abrupt changes to national political systems that occurred in the aftermath of the First World War. Of these political changes, arguably the most significant were the extensions of the franchise that gave previously disenfranchised groups a distinct political voice for the first time. The effects of increased voting rights

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¹The World Trade Organization (2012) raised concerns that the politics of trade was turning inward, even before the referendum on the UK's membership of the EU or the recent US Presidential election.

for previously disenfranchised working-class men on the political economy of the period has been identified previously (Polanyi, 1944; Eichengreen, 1992). However, despite representing a change of greater magnitude where it took place, the extension of voting rights to women has been less well explored. My analysis of public opinion survey evidence from the period suggests that women were more likely to express a preference for trade protection, much as they do today. Furthermore, the cross-country evidence presented in this paper indicates that where women were entitled to vote tariff rates were, on average, higher. In contrast, the granting of voting rights to previously disenfranchised men, largely working class, appears to have had a negative relationship with tariff rates. The findings of this paper are a reminder of the limits to drawing mechanical comparisons between current fears of a resurgence of protectionism and the experience of the interwar period. The recent economic crisis may have some parallels with the interwar experience, but the political environments in which these respective economic crises took place are markedly different.

The analysis of the link between women's voting rights and tariff rates proceeds as follows: the next section examines the theoretical relationships between democracy and protectionism. Section 3 explores the relationship between women's voting rights and trade policy, while section 4 examines the contemporary debates surrounding women's attitudes to trade. Section 5 contains the empirical analysis, presenting public opinion survey evidence of a difference between the trade policy preferences of men and women during the interwar period. Following this, a cross-country analysis of the determinants of interwar trade policy is undertaken, and the implications considered. Finally section 6 outlines some general conclusions.

2 Democracy and Protectionism

Democracy and openness to trade are often assumed to go hand in hand (Eichengreen and LeBlang, 2008). However this link between greater democracy and increased trade is disputed. On the one hand, trade is believed to increase the level of transparency and accountability of political institutions, while politically open societies are less likely to desire restrictions on freedom of trade. On the other hand, where sections of the economy in import competing sectors have a political voice, democracy may result in a higher level of trade protection (Eichengreen and LeBlang, 2008). A positive correlation between democracy and trade has been uncovered in a number of studies, while a negative relationship has been found perhaps less frequently (Rigobon and Rodrik, 2005; Eichengreen and LeBlang, 2008; López-Córdova and Meissner, 2008). Attempts have also been made to address the problem of the simultaneity between democracy and trade. Eichengreen and LeBlang (2008) address the two-way causation issue using an instrumental variables approach with an extensive sample covering the years 1870-2000. Using distance and years since independence as instruments for the ratio of trade to GDP, as well as democracy measures such as polity scores and a dummy variable indicating the contestability of elections, they find positive effects running in both

directions. Yu (2007) takes a different approach to untangling the ‘endogeneity nexus’ and employs a gravity model to analyse data from 134 IMF countries between 1974 and 1998. The relationship found is a complex one, with political liberalization being judged to foster the globalization of trade, while increased trade dampens political liberalization.

One drawback of these studies is that they rely on measures of democracy that do not adequately capture the effects of changes in the extent of the franchise. Polity scores and dummy variables based on the contestability of elections do not capture the change in the composition of the electorate that occurs when the franchise is extended, or a shift in the median voter that leads to policy change.² Although it is necessary to consider democracy along the ‘intensive’ dimension – the degree of openness and contestability of the political institutions – this is not sufficient, as it fails to capture changes resulting from increases in the extent of democracy – or the ‘extensive’ dimension. This failure of Polity scores to capture the extent of voting rights has been identified by Moon *et al.* (2006), Munck and Verkuilen (2002) and Paxton (2000). This shortcoming is evident if we look at some examples. From 1901 the UK receives a Polity score of +8, two points from the highest possible democracy rating.³ This then rises to +10 in 1922 where it remains to the present day. However, only 16% of the population could vote in 1901. By 1929, after successive franchise extensions, this figure had reached 63%. This dramatic change in the electorate is only represented by a two point increase in the Polity score. Similarly, France attained a +10 polity score in 1930, some fifteen years before women were entitled to vote.

As the extension of the franchise to women, where it occurred, represented a greater increase in the number of voters that had occurred previously, it is also important to assess the potential impact that the granting of voting rights to women had on the political economy of the period. If men and women had different opinions regarding protectionism, then the granting of votes to women in many countries following the First World War would likely have altered the political environment. Furthermore, the impact would have been even greater in those countries which suffered a large number of casualties during the war. In many countries the extension of voting rights to women constituted a more than doubling of the electorate following the deaths of a large number of male soldiers Boak (1989). As such, an understanding of women’s attitudes towards trade protection is important when estimating the effect of women’s enfranchisement on trade policy.

3 Women and Protectionism

The relationship between women’s suffrage and economic policy has been identified previously, particularly with respect to government spending and the size of the state (Lott and Kenny, 1999;

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²According to the median-voter theorem, it is the voter at 50th percentile of the political preferences distribution that determines policy. Although the model is far from fool-proof (Gerber and Lewis, 2004), it has been employed previously in the analysis of female enfranchisement (Miller, 2008).

³This is the same Polity score, for example, awarded to the Czech Republic in 2009.

Aidt *et al.*, 2006; Aidt and Dallal, 2008; Bertocchi, 2011). However women’s attitudes to trade policy is a less well-explored area. One of the first studies was an analysis of time-series data from the United States, 1866-1934 by Hall *et al.* (1998). Their study, based on a model of political preference in which men are assumed to be factor market participants and women product market participants, concluded that the granting of voting rights to women resulted in lower tariffs. In effect, the model incorporates the belief that women cared only about tariffs in relation to prices and were not influenced at all by the impact of tariffs on labour markets. Hall *et al.* test their theoretical model with a time-series analysis of US average tariff rates 1866-1934, using a dummy variable that equals zero before 1920 and one from 1920-1934 to capture the advent of female suffrage (finding a negative coefficient). Although the time series regressions contain some important macroeconomic control variables, it is possible that other unobservables may be driving the relationship. Blattman *et al.* (2003) observe that tariff rates declined markedly in the US in the late 19th Century from over 40% in 1870 to around 5% in 1920. However the tariff rates then increased to around 15-20% over the course of the interwar period. The panel data and instrumental variable approach taken in this paper is an attempt to improve on the Hall *et al.* analysis.

The theoretical conclusions of Hall *et al.* have been challenged by Burgoon and Hiscox (2004) who argued that their basic claim- that women were only concerned about the effect of tariffs on prices - is based on anecdotal evidence only and runs contrary to public opinion surveys from the period.⁴ The authors examine survey data from the United States in 2003 and find that women were more likely to favour protectionism. Furthermore, this result remains even after controlling for other factors such as occupation and skill level. The reason suggested for this gender gap is that men have a greater exposure to economic theory, as the gap is only evident among the college educated.⁵ Scheve and Slaughter (2001) uncover a similar gender gap in their analysis of survey data from the United States in 1992 and 1996, while Mayda and Rodrik (2005) and O’Rourke and Sinnott (2001) confirm the existence of a comparable difference between attitudes of men and women towards trade protection using the same International Social Survey data. Using survey data from the United States between 1986 and 1998, Blonigen (2011) found that women are 9.5% more likely than men to support new import limits. Most recently, Mansfield *et al.* (2015) conclude that the gender gap in trade is not driven by material self-interest but by less favourable attitudes toward competition, a reluctance to relocate for jobs and more isolationist non-economic foreign policy attitudes among women.

So what is behind these differences between men and women? Although the existence of a ‘gender gap’ in preferences, however explained, is all that is needed for women to influence policy,

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⁴The opening quote of Hall *et al.* (1998) sets the tone of the analysis, outlining the convictions of the President of the American Tariff League in 1928, W. Warren Barbour, that two-thirds of women are opposed to tariffs solely due to their impact on consumer prices. Burgoon and Hiscox (2004) cite a Fortune magazine survey from 1939 but do not, as far as can be ascertained, undertake a more rigorous statistical analysis.

⁵The level of education of the respondent is unfortunately unavailable for the interwar survey analysis that follows.

the reasons behind it are nonetheless of interest. As survey studies that control for individual's socio-economic characteristics still find a 'gender gap' in attitudes towards trade policy, the cause of this persistent gap is therefore most likely to be found in attributes that are not captured by the data. One potential source of difference between men and women that might help explain the gender gap is attitudes towards risk. A number of behavioural studies suggest that women are consistently more risk averse than men (Jianakoplos and Bernasek, 1998; Barber and Odean, 2001; Croson and Gneezy, 2009). With respect to tariff policy, if favouring domestic production is perceived as being less risky than having to rely on foreign goods, then consequently women may display a greater appetite for protectionism relative to men. Other possible explanations of the gender gap include those that are socio-psychological in nature, with women suggested to be more sceptical of market based solutions to economic problems (Gidengil, 1995; Gidengil *et al.*, 2003) or even different attitudes to workers' rights, which may also have an influence on their preferences for trade protection (McDonagh and Price, 1985; Braun and Kvasnicka, 2013). As such, explaining the gender gap in attitudes to trade policy may go beyond a traditional political economy framework. With this gender gap in mind, it is also important to explore the relationship between women voters and tariffs during the interwar period from the point of view of contemporary observers. Was there a consensus about how women voters were different to men in how they viewed the issue of free trade? Were women recognized as an important constituency that needed to be convinced of the merits or evils of protectionist tariffs? These questions will be explored in the next section.

4 Women and the Tariff Question: Interwar Britain and the United States

The increase in the size of the electorate in many countries between the wars was of an unprecedented magnitude. In Britain the Representation of the People Act of 1918 resulted in the number of people entitled to vote increasing from 8 million to 21 million, of which 9 million were women (Jones, 2012). The Equal Franchise Act of 1928 extended voting rights to women, on an equal footing to men, resulting in a further 7 million new women voters.⁶ In fact, principally due to the losses of the First World War, women voters now outnumbered men. In all countries that extended voting rights to women the debate over how these newly enfranchised women would vote became an important element of the electoral calculus. The propaganda machines of the political parties made direct appeals to women with both sides claiming that women would naturally favour their policies. No issue was perhaps more prominent in the debate over which way women would vote during the interwar years than that of trade policy, particularly during the elections of the 1920s.

Perhaps the most widely used appeal to women to support the free trade policies of the Liberal

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⁶The franchise was initially only extended to women over 30, provided they met a minimum property requirement (Ogg, 1918).

Party in Britain during the 1920s was the claim that trade protection would raise the prices of everyday items. As women were seen as being overwhelmingly, if not exclusively, concerned with the day-to-day of domestic management, their sensitivity to changes in the prices they faced for household necessities would predispose them to favour free trade. As the *Manchester Guardian* (1923) put it: ‘women want to know, first of all, how tariffs will affect their shopping’.

Although acknowledging this view of women as the overseers of the domestic budget, the Conservative Party, which advocated tariffs on non-Empire products with the stated intention of bolstering domestic industry, claimed that women understood that maintaining employment was a far greater concern. In an appeal to women voters in the build up to the 1924 parliamentary election, Neville Chamberlain outlined the pro-employment argument in favour of protection:

‘In considering the possible effect of the tariff on prices, you who have to spend the money of the household have not to think merely of the cost of the things you are purchasing. You have to consider what is coming in to the household as well as what is going out. It is no use having the cheapest market in the world if you have nothing with which to buy what you want’. (*New York Times*, 1923)

Ultimately, the tone of the debate over women’s attitudes towards tariff protection throughout the 1920s was based around whether women were more sensitive to the issue of prices, or to that of unemployment. The Labour Party standpoint was somewhat different however. Although traditionally supporters of free trade, the Labour Party position was more complex than that of the Liberals. The view that trade policy should prioritize the goal of welfare above wealth was one that was gaining ground throughout the 1920s, not least among the women’s sections of the labour movement (Trentmann, 1997). The women’s section of the Labour Party increased from 120,000 in 1923 to 300,000 in 1927, with women becoming the majority in most local Labour group meetings. Indeed the traditional pro-Free Trade position came under sustained criticism from women members in particular (Trentmann, 2008). Although it is difficult to tell which of the arguments in favour or against free trade appealed to women voters overall, and indeed the weighting of the issue of free trade in women’s voting decisions, the landslide Conservative victory in 1924 at least casts doubt on the simplistic notion that women voters only cared about the price of the goods in their shopping basket.

The granting of universal voting rights to women in the United States in 1920 also engendered an energetic debate as to where these new votes would go. As in Britain, women were often assumed to be motivated by domestic management concerns and a similar division among the traditionally pro-free trade party and the party more amenable to the imposition of protective tariffs was apparent. The Democratic Party appeal to women on the tariff issue was similar to that employed by the Liberals in Britain. The Democratic National Committee argued that women would oppose the tariff platform promoted by the Republican Party for the 1924 election asserting that women had

seen ‘all she wears and cooks and uses growing costlier ... due to the tariff’ (Washington Post, 1923). Republicans generally agreed that women were concerned mainly with household affairs but argued both that women would see that prices need not necessarily rise due to the imposition of tariffs on imported goods, and that the issue of prices was a lower priority than that of maintaining household income. The priority for women according to Mrs. Pauline Sabin, Chairman of the Women’s Division of the Republican national committee, was to maintain the employment and output on which their family income depended:

‘(women) support the Republican Party because they believe in a protective tariff that will insure plenty of work at good wages for our citizens. That will keep our factories busy, our mills humming, our mines running and our wheat fields producing grain at a profit to the farmer’ (New York Times, 1924a).

Commentators from both sides of the tariff divide nevertheless agreed on the importance of the ‘women’s vote’ in determining the outcome of elections in the 1920s:

‘It is admitted on all sides that women will cast the deciding vote determining whether Republican tariff legislation shall be sustained or blocked’ (Washington Post, 1922).

As such, great lengths were taken to attempt to sway women towards the merits of the respective arguments. Both Democrats and Republicans put on special exhibits directed at women voters to demonstrate the effects of tariffs on consumer prices. In the final weeks of the 1924 election campaign, leading Democratic women – among them Eleanor Roosevelt – gave ‘practical demonstration of how the protective tariff affects the prices of what women wear and use in the home’ (New York Times, 1924b).

Republicans were equally keen to show that tariffs would not necessarily increase consumer prices. At a meeting of the Women’s Republican Club in 1922, Senator William M. Calder gave a somewhat theatrical demonstration. He produced a suitcase containing various household items and explained the proportions of the retail costs that were derived from the tariff and the relative costs of the items in the United States versus the country of origin:

‘This electric iron... has a foreign list price of 59 cents. The present duty is about 12 cents and the new duty will be about 36 cents. This same iron is sold in Brooklyn for \$6.50... I am doing this to show that a higher tariff does not mean higher prices. We just want to raise the tariff high enough to give the American manufacturer a chance. I hope that you women will see that a great number of necessities and luxuries could stand a higher rate of duty without making you pay one cent more’ (New York Times, 1922).

For officials of both parties, new women voters represented perhaps the best opportunity to gain an edge over their political rivals. Ultimately, the pro-tariff Republican Party was victorious in all the Presidential elections of the 1920s. Women voters were seen as being instrumental to this electoral success, not least in the campaign of Herbert Hoover against Al Smith in 1928:

‘The recent campaign of hectic memory, however, brought out what is generally accepted as the largest women’s vote in history, as well as the largest general vote. And since the election various statements have been issued by G.O.P. managers reiterating the dulcet observation that the ladies elected Mr. Hoover’ (Huntington-Smith, 1929, p.126).

Clearly, millions of women, whom the Democrats believed to be naturally averse to tariffs, voted for a party that openly advocated the raising of tariffs during this period.

5 Empirical Analysis

5.1 Fortune Magazine Public Opinion Poll

Although recent survey analysis is useful in revealing the existence of more protectionist attitudes among women, it is possible that this gender gap is a phenomenon unique to recent decades. Uncovering women’s attitudes towards free trade and protectionism during the interwar years is a more difficult task due to the dearth of individual level information available. As previously discussed, numerous modern studies of women’s attitudes towards trade and protectionism have utilized public opinion surveys, with the general conclusion that women are more likely than men to favour protectionism, or at least are less likely to support free trade (O’Rourke and Sinnott, 2001; Mayda and Rodrik, 2005; Blonigen, 2011).

However, a valuable source relating to women’s attitudes to trade policy in this period exists in the form of a Fortune magazine public opinion survey from the United States in 1939. The market research firm of Elmo Roper completed its first public opinion survey in the United States for Fortune magazine in July 1935, while the first question dealing directly with opinions on free trade was included in their survey of almost 5,000 individuals in September 1939 (Walden, 1996).⁷ The first part of the question asks ‘Do you believe that a high tariff to keep out foreign goods in competition with American goods is good policy or bad policy?’ with those responding either ‘bad’ or ‘it depends’ being asked an additional question: ‘Do you believe in free trade’. Through a probit analysis of these data, differing attitudes towards trade policy can be revealed. The equation to be

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⁷It was unfortunately not possible to uncover public opinion survey data for other countries during this period and care must be taken in interpreting these findings as being representative of women’s attitudes towards protection in different periods and places. However the fact that the gender gap uncovered in this analysis is consistent with modern cross-national surveys offers some reassurance.

Table 1: Public Opinion Survey Descriptive Statistics
Fortune Magazine Poll, September 1939

VARIABLES	(1) N	(2) mean	(3) sd	(4) min	(5) max
<i>High Tariff a "Good Thing"</i>	4,346	0.699	0.459	0	1
<i>Believe in Free Trade</i>	1,232	0.434	0.496	0	1
<i>Female</i>	5,146	0.498	0.500	0	1
<i>Age Over 40</i>	5,146	0.523	0.500	0	1
<i>Professional</i>	5,146	0.042	0.200	0	1
<i>Proprietor-Farm</i>	5,146	0.083	0.276	0	1
<i>Proprietor-Other</i>	5,146	0.087	0.281	0	1
<i>Housekeeper</i>	5,146	0.413	0.492	0	1
<i>Salaried-Executive</i>	5,146	0.034	0.181	0	1
<i>Salaried-Minor</i>	5,146	0.102	0.302	0	1
<i>Wages-Factory</i>	5,146	0.020	0.140	0	1
<i>Wages-Farm</i>	5,146	0.032	0.175	0	1
<i>Wages-Other</i>	5,146	0.110	0.313	0	1
<i>Retired</i>	5,146	0.025	0.155	0	1
<i>Would vote FDR</i>	4,869	0.363	0.481	0	1

Source: Author calculations

estimated is:

$$R_i = \alpha + \beta Female_i + \gamma X_i + \epsilon_i \quad (1)$$

Where R_i is binary outcome variable reflecting the respondent's answer to a particular survey question, $Female_i$ is an indicator variable for gender and X is a vector of control variables. The survey data therefore allow for the isolation of a gender effect, while controlling for a number of other factors such as age (over 40 years old or not), occupation and political inclination, in the form of a variable capturing whether or not the respondent intended to vote for President Franklin D. Roosevelt in the next election.⁸ Although a more complete list of control variables would be desirable, the limitations of these data mean that only the factors listed above can be controlled for. Nonetheless the variables that can be included are likely to be important determinants of trade policy preferences and therefore represent a significant improvement over an analysis that merely tabulates the response of men and women separately. Descriptive statistics and the results of the analysis of both questions are presented in tables 1 & 2.

⁸The inclusion of the 'Would vote FDR' variable in some specifications allows us to test whether the relationship between gender and tariff attitudes is driven by political preference alone. If women were more likely to vote for a Republican candidate and this led them to support higher tariffs, then we might expect the Female variable to become statistically insignificant once political inclination is included in the model. The results however are robust to the inclusion of this variable.

Table 2 shows the results of the analysis of the first question: ‘Do you believe that a high tariff to keep out foreign goods in competition with American goods is good policy or bad policy?’ The first column (Model 1) gives the marginal effects of the dummy variable indicating a female respondent based on a probit regression model, with the following columns giving the marginal effects from probit regressions including each of the control variables added in turn. The marginal effects indicate that women are 7 percentage points more likely than men to believe that a high tariff ‘is good policy’, with this result robust and highly significant across all specifications. Furthermore, this gap is of a very similar size to the effect identified in modern surveys (Mayda and Rodrik, 2005).

Neither age nor voting intention has a significant effect. Attitudes to tariff policy also differ according to occupation. Those individuals classified as ‘Waged’ are more likely to look on tariffs favourably relative to the omitted category, ‘Professional’, while ‘Salaried Executives’ are less likely to favour trade protection than professionals. This indicates that support for protectionist policies was not uniform across social class and specifically, that support for tariffs was greater among the wage-earning classes. This is an interesting result as it is consistent with the Stolper-Samuelson theorem that the relatively scarce factor, labour in the case of United States, would favour protection (Stolper and Samuelson, 1941). Notably, those classed as ‘Proprietor-Farm’ were also pro-tariff relative to the omitted professional category, a result that is perhaps not surprising given the general preference for protection among agricultural interests. Nevertheless the fact that US wage-earners are relatively more protectionist than farm proprietors is also consistent with a Stolper-Samuelson interpretation. Additionally, an independent effect is also evident of being a ‘Housekeeper’ (housewife) – the category into which 85% of women in the sample fall – with those in this category being 6 percentage points more likely to favour tariffs than the reference category. The fact that the female dummy variable remains positive and statistically significant indicates that differences between the tariff policy preferences of men and women are not driven by occupation alone.

In order to further explore differences in women’s attitudes to free trade by occupation, model 5 considers a sample consisting of women only. The positive and significant coefficient on ‘Housekeeper’ implies that these women were more likely to believe that tariffs were a ‘good thing’, than females from the ‘Professional’ reference category. However, ‘Housekeepers’ did not have the greatest relative support for tariffs among women, with women involved with farming and those falling into the ‘Wages-Other’ category more likely to see tariffs as a ‘good thing’. However the idea that ‘Housekeepers’ were naturally pro-free trade, based on this evidence, seems questionable.

The follow up question also reveals some interesting patterns, as can be seen in columns 6-10 of table 2. Of those respondents who answered ‘bad’ or ‘depends’ to the first question, i.e. those individuals that were relatively more inclined towards free trade, women were approximately 5 percentage points less likely to believe in free trade than men. Again this result is robust after

Table 2: Probit Marginal Effects

*Fortune Magazine Poll, September 1939**"Do you believe that a high tariff to keep out foreign goods in competition with American goods is good policy or bad policy?"**"(If bad or depends) do you believe in free trade?"*

	Dependent Variable: "Good Policy" = 1 (mean = 0.70)				Dependent Variable: "Yes" = 1 (mean = 0.43)			
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Female</i>	0.074*** (0.014)	0.061** (0.026)	0.062** (0.027)		-0.055* (0.029)	-0.208*** (0.052)	-0.224*** (0.053)	
<i>Age Over 40</i>		-0.001 (0.015)	0.004 (0.015)	-0.000 (0.021)		-0.023 (0.030)	-0.042 (0.030)	-0.079 (0.048)
<i>Proprietor-Farm</i>		0.060** (0.029)	0.066** (0.029)	0.184*** (0.061)		0.006 (0.062)	0.004 (0.062)	0.019 (0.284)
<i>Proprietor-Other</i>		0.039 (0.029)	0.029 (0.030)	-0.186* (0.111)		-0.131** (0.053)	-0.114** (0.056)	-0.185 (0.139)
<i>Housekeeper</i>		0.067** (0.031)	0.064** (0.032)	0.116** (0.050)		0.164** (0.064)	0.187*** (0.065)	0.153** (0.077)
<i>Salaried-Executive</i>		-0.076* (0.043)	-0.078* (0.044)	0.084 (0.109)		-0.039 (0.070)	-0.012 (0.073)	
<i>Salaried-Minor</i>		0.043 (0.028)	0.040 (0.028)	0.073 (0.052)		-0.037 (0.055)	-0.025 (0.056)	-0.036 (0.123)
<i>Wages-Factory</i>		0.079* (0.045)	0.086* (0.045)	0.102 (0.165)		0.074 (0.113)	0.073 (0.115)	
<i>Wages-Farm</i>		0.182*** (0.029)	0.187*** (0.030)	0.199*** (0.050)		-0.004 (0.108)	0.033 (0.112)	-0.102 (0.254)
<i>Wages-Other</i>		0.104*** (0.025)	0.103*** (0.026)	0.225*** (0.026)		0.013 (0.058)	0.017 (0.060)	-0.156 (0.153)
<i>Retired</i>		0.035 (0.044)	0.026 (0.046)	-0.034 (0.134)		-0.219*** (0.077)	-0.200** (0.080)	0.397* (0.218)
<i>Would vote FDR</i>			-0.004 (0.015)	-0.005 (0.021)			0.173*** (0.032)	0.094* (0.050)
Pseudo R-squared	0.005	0.014	0.015	0.018	0.0021	0.0193	0.0389	0.0344
AIC	1.217	1.211	1.213	1.139	1.369	1.362	1.338	1.358
BIC	-31104.568	-31066.850	-29733.114	-11854.070	-7070.189	-7028.018	-6782.745	-2077.323
Observations	4,346	4,346	4,184	1,865	1,232	1,232	1,192	448

Robust standard errors in parentheses. Marginal effects at means of independent variables

*** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level

Note: "Salaried-Executive" and "Wages-Factory" omitted in Model V due to colinearity

Source: Author calculations

including the controls for age, occupation and voting intention. Among those who did not see tariff protection as an unambiguously ‘good thing’, the retired and non-farm proprietors were relatively less devoted to free trade, while those expressing an intention to support President Franklin D. Roosevelt were more likely to also believe in free trade. Interestingly, although women in this sample were less likely to believe in free trade than men, ‘Housekeepers’ were more likely to believe in free trade relative to the ‘Professional’ occupation category. The opinions of women alone are once more explored in model 10. Of the women who answered ‘bad’ or ‘it depends’ to the question of whether higher tariffs were a good or bad thing, ‘Housekeepers’ had the highest likelihood of believing in free trade, with the exception of the retired. Overall the results indicate that, even among the subsample of individuals who hesitated to support tariffs, women were relatively less likely to believe in free trade than men.

The results of the analysis of inter-war public opinion suggests that women overall were more likely to favour trade protection in the form of tariffs. Contrary to the view that women would support free trade because they were the guardians of the household budget, and as such would be drawn to the guarantee of low prices that free trade ostensibly promised, women housekeepers were actually more likely to support tariffs than many categories of employed women. Attitudes towards tariffs are also correlated with occupation, with wage-earners in the United States being the group most inclined to support tariffs.

5.2 Cross-country Panel Data Analysis

Having outlined the theories related to the determination of tariff policy and uncovered evidence of a gender gap in trade policy preferences during the interwar period, at least in the United States, the next step is to test various hypotheses using a macroeconomic panel data approach. Firstly, if the preferences of women uncovered by the public opinion survey analysis of the previous section reflect those of women more generally, then the relationship between the extension of the franchise to women and tariff rates would be expected to be positive. Extensions of the franchise to previously disenfranchised male voters are expected to have a negative effect on tariff rates in the empirical analysis that follows. As the sample of countries is mainly European, where labour was relatively abundant and where labour movements traditionally supported free trade, the granting of voting rights to largely working-class men would have the effect of shifting the median voter to one that is more free trade inclined.⁹ Finally, an increase in ‘institutional’ democracy as captured by the polity score, based on the findings of the majority of the literature, is also expected to be negatively related to tariff rates.

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⁹According to the Stolper-Samuleson theorem (1941), the relatively scarce factor will favour protection. In the context of this model we are assuming that land is scarce relative to labour (as was the case in Europe) and that an increase in the franchise benefits labour. As such an extension of the franchise of this sort could be expected to reduce protectionism.

The sample consists of data from 30 countries covering the period 1919-1939 and contains observations from Africa, Asia as well as from North and South America. The remainder, or about two-thirds of the sample, is made up of European countries. The dependent variable under examination is the natural log of the average tariff rate, calculated as the total customs revenue divided by the value of total imports, probably the most widely used and accepted measure used to compare tariff regimes across countries and over time. This variable is not a perfect measure of trade policy however as it fails to capture non-tariff barriers which may be substitutes for tariffs. Likewise these simple averages put less weight on items with high tariff rates as imports of these products tend to be low. Nonetheless the variable is widely and consistently available across countries and periods (especially historically) and is less subjective than many of the ‘trade openness’ indices that have been created for the post-war period in particular (Rodriguez and Rodrik, 2001). It is for these reasons that Rodriguez and Rodrik believe simple tariff averages to be the most direct indicators of trade restrictions. Descriptive statistics are included in table 3 while full details of all variables included in the analysis can be found in the online appendix.

The framework for empirical investigation of the determinants of tariff policy during the interwar years will take the form of an OLS estimation of the following equation:

$$TariffRate_{it} = \beta FemaleVote_{it} + \theta Franchise_{it} + \lambda Polity_{it} + \gamma X_{it} + \alpha_i + \eta_t + \epsilon_{it} \quad (2)$$

where $TariffRate_{it}$ is the log of the average tariff rate in country i in year t as the dependent variable in all specifications, $FemaleVote_{it}$ is an indicator variable for the extension of full voting rights to women and X_{it} is a vector of control variables.¹⁰ In order to control for unobserved heterogeneity that is likely to cause problems for the analysis, a fixed effects approach is undertaken. As such, dummy variables to control for unobserved heterogeneity associated with time-invariant country characteristics α_i , as well as effects that are specific to particular years η_t , will be employed. The other independent variables, central to this analysis, are those relating to democracy. The variable $Franchise_{it}$ is the log of the proportion of the population with the right to vote in national elections.¹¹ The variable $Polity_{it}$ is the Polity IV score scaled to be between zero and one, and represents the ‘intensive’ or ‘institutional’ measure of democracy.

If the conclusion of the analysis of the interwar US public opinion survey is correct, then a positive relationship might be expected to exist between tariff rates and the granting of voting rights to women. Whereas tariff rates are expected to increase with this measure of the extent of democracy, the opposite effect might be expected for the ‘institutional’ measure of democracy

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¹⁰The date of women’s voting rights acquisition for the countries in the sample can be seen in the appendix, table A1.

¹¹The franchise variable is log transformed in the analysis to capture a non-linear relationship between changes in voting rights and tariff policy. Therefor the coefficient should be interpreted as an elasticity.

(*Polity*), in line with the majority of studies that link increasing democratization to declining trade protection. As countries' governmental institutions become more democratic, it is suggested, the societal benefits of free trade induce the citizenry to push policy makers into reducing barriers to trade (Eichengreen and LeBlang, 2008). In addition, the extension of voting rights to previously disenfranchised men, particularly in labour abundant countries, may be associated with lower tariff rates, as previously outlined.

The results of the regression analysis can be seen in table 4. Model 1 considers the variables *Female Vote*, *Polity* and (log) *Franchise*, after controlling for country and year fixed effects. The coefficient on *Female Vote* has the expected sign, however it is not statistically significant at conventional levels. The coefficient on *Polity* is negative and significant, indicating a negative relationship between 'institutional' democracy and average tariff rates. This is what is predicted by the majority of studies exploring the link between democracy and trade; that more open and transparent political institutions foster trade openness. The inclusion of the franchise variable, alongside the dummy variable indicating whether or not the vote had been given to women, will help to separate the two different aspects of the franchise; male and female. As extensions to the male franchise were generally to those who previously failed to meet property and literacy requirements, i.e. ordinary workers, the extension of voting rights to these individuals may have a different effect than that of granting voting rights to women, who were restricted from voting based on gender above all else. The coefficient on *Franchise* is negative and statistically significant in the model. This effect is consistent with the view that men gaining the vote were more likely to be ordinary workers, or from lower down the income distribution, and would therefore have been more inclined to support lower tariffs due to the disproportionate impact of tariffs on their real wages. Of most interest however is that the effects of granting voting rights to women and extending the vote to male workers appear to run in opposite directions.

Model 2 adds controls for GDP per capita and a variable capturing the tariff rate of the country's main trading partner in the previous year. Much has been made about 'beggar-thy-neighbour' policies as a key element of the slide into protectionism during the interwar years (Simmons, 1997).¹² If tariff policy was influenced by the policies of trading partners then a positive coefficient is expected. However a negative and insignificant effect is observed. A plausible explanation for this result is that the inclusion of fixed effects for specific years is already largely controlling for this effect in that the retaliatory changes to tariffs were affecting all countries to some extent over this period. If the time fixed effects are dropped (not reported) then a positive and significant coefficient on the tariff rate of a country's main trading partner in the previous year is observed. Specifically this suggests that 10% increase in the tariff rate of a country's main trading partner is expected to increase the home country's tariff rate by approximately 4% the following year. Clearly, the retaliatory nature of tariff

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¹²Somewhat surprisingly, although highlighting its importance, Simmons finds no evidence for a 'beggar thy neighbour' effect during the period.

Table 3: Descriptive Statistics
Panel Data Analysis

VARIABLES	(1) N	(2) mean	(3) sd	(4) min	(5) max
<i>Log Tariff Rate</i>	578	-2.144	0.728	-4.453	-0.680
<i>Female Vote</i>	578	0.512	0.500	0	1
<i>Polity</i>	577	0.691	0.317	0	0.952
<i>Log Franchise</i>	532	3.536	0.637	1.569	4.228
<i>Log tariff main trade partner (lagged)</i>	526	-2.013	0.519	-3.579	-1.098
<i>Log GDP per capita</i>	564	8.062	0.465	6.907	8.839
<i>Population in Agriculture</i>	545	40.504	19.121	5.100	82.400
<i>On Gold</i>	578	0.299	0.458	0	1
<i>Inter-State War</i>	578	0.016	0.124	0	1
<i>Years of Female Vote</i>	578	7.765	10.407	0	47
<i>Majority Protestant</i>	578	0.464	0.499	0	1
<i>Plough</i>	578	0.856	0.346	0	1

Source: Author calculations

policy was an important contributor to the overall increase in tariff rates over the period. Once these important controls are included however, the coefficient on *Female Vote* becomes statistically significant, implying that women's voting rights are associated with a $100[\exp(0.232) - 1] = 26\%$ higher tariff rates, all else held constant. As an illustration, if the average (unweighted) tariff rate for the sample in 1920 is taken as a reference point, then the extension of the franchise to women implies tariff rates would rise from 8.4% to 10.6%.

Model 3 considers the interaction effect between *Female Vote* and *Franchise*. As the franchise variable automatically increases when women are given the vote, it is important to consider the effects of increasing the franchise both when women can and can't vote. Firstly, the independent effect of an increase in the franchise when *Female Vote* = 0, or when women cannot vote, is negative, indicating that extensions of the male franchise were associated with lower tariffs. Secondly, the positive interaction term indicates that the effect of increasing voting rights, when women are entitled to vote, is less negative than when women cannot vote. Although it is difficult to untangle the separate effects of the extension of voting rights to men and women completely, the positive interaction term is consistent with male and female voters having different trade policy preferences.¹³

¹³Regressions using observations when only men were able to vote and when both men and women were able to vote were also separately undertaken. The results produced were very similar to those of the regression including the interaction between female vote and franchise.

Table 4: Average Tariff Rate & Female Voting Rights
(OLS and IV estimation. Dependent Variable: Natural log of average tariff rate)

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	OLS	OLS	OLS	OLS	OLS	IV	IV
<i>Female Vote</i>	0.167 (0.152)	0.232* (0.134)	-0.628*** (0.142)	0.252* (0.128)	0.231* (0.120)	1.035* (0.540)	1.015* (0.561)
<i>Polity</i>	-0.725** (0.283)	-0.877*** (0.261)	-0.908*** (0.260)	-0.884*** (0.241)	-0.855*** (0.234)	-0.777** (0.330)	-0.787** (0.339)
<i>Log Franchise</i>	-0.674*** (0.234)	-0.721*** (0.245)	-0.763*** (0.252)	-0.712** (0.270)	-0.706*** (0.231)	-0.561* (0.306)	-0.525 (0.334)
<i>Log tariff main trade partner (lagged)</i>		-0.091 (0.152)	-0.062 (0.150)	-0.080 (0.154)	-0.104 (0.158)	0.119 (0.159)	0.121 (0.167)
<i>Log GDP per capita</i>		-0.072 (0.411)	-0.059 (0.406)	-0.033 (0.412)	-0.018 (0.401)	0.153 (0.256)	0.272 (0.421)
<i>Female Vote*Log Franchise</i>			0.269*** (0.0524)				
<i>Years of Female Vote</i>					-0.013 (0.014)		
<i>Constant</i>	-0.081 (0.760)	0.402 (3.100)	0.459 (3.045)	-0.725 (3.740)	-0.750 (3.691)	-1.023 (1.966)	-2.243 (3.935)
<i>Country Fixed Effects</i>	YES	YES	YES	YES	YES	NO	NO
<i>Year Fixed Effects</i>	YES	YES	YES	YES	YES	YES	YES
<i>Other Control Variables</i>	NO	NO	NO	YES	YES	NO	YES
<i>First Stage F-statistic</i>						12.050	11.550
Observations	531	487	487	472	472	487	472
R-squared	0.589	0.632	0.640	0.641	0.646	0.178	0.169
Number of id	30	30	30	28	28		

Robust standard errors clustered by country in parentheses

Source: Author calculations

*** significant at the 1% level

** significant at the 5% level

* significant at the 10% level

5.2.1 Robustness

As a robustness check, some additional factors are considered in models 4 and 5. and Irwin Eichengreen and Irwin (2010) suggest that the gold standard contributed to higher tariffs during the period, as countries reverted to tariff policy as a way to influence their economies when the tools of monetary policy were unavailable to them. To control for this effect, a dummy variable indicating gold standard membership is included. The effect (not reported) is positive, as Eichengreen & Irwin propose, although it is not statistically significant at any conventional level.

The importance of agricultural interests are also recognized by James (2009). The unique position of farmers within the political system – that they often held the balance of power between socialist and conservative factions – is suggested to have produced a shift towards protectionism. Farmers are often assumed to have been in favour of protectionism as land is finite; ownership of land allows for the benefits derived from protection to be more securely captured, as farmers are relatively more insulated from domestic competition that might erode these benefits. To control for this effect the proportion of the population employed in agriculture is also included in model 6. Again the coefficient is positive but not significant (not reported) while the effect of the female vote remains robust.

An additional factor that may jointly determine tariff rates and female vote is the occurrence of war. Hicks (2013) and Przeworski (2009) identify that external conflict accelerated female suffrage. Conceivably, war may also have had an influence on tariff policy. In order to control for the impact of war, a dummy variable was constructed from the Correlates of War dataset (Sarkees and Wayman, 2010) indicating periods of inter-state conflict. This variable (as well as 2-year and 1-year lags to capture recent wars) was also included in model 4. Indeed the coefficient is positive and significant, indicating a relationship between periods of war and higher tariffs. Importantly however the coefficient of the female vote variable remains positive.¹⁴

A study by Lott and Kenny (1999) identified that female suffrage coincided with immediate increases in US state spending and revenues. They also found that this effect increased over time, due to growing political participation of women after voting rights were initially granted. In order to test for an increasing impact of female suffrage over time, an additional variable is included in model 5: the number of years since female voting rights were granted. If the effect of female voting is thought to increase over time, we might expect a positive relationship between this variable and tariff rates. However, the coefficient is insignificant, while the coefficient on female vote remains consistent.¹⁵

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¹⁴A variable ‘unrest’ based on Przeworski (2009) was also constructed to capture the threat of revolution. This was the sum of all riots, strikes and demonstrations in a year (lagged one year) from Banks (2011). This was also included in model 4 (not reported) but was not statistically significant and did not materially change the results.

¹⁵Alternative specifications based on model 4 were also considered (not reported): These models included a country-specific time trend, a one-year lagged dependent variable (and two year lagged tariff of main trading partner) and the growth rate of GDP per capita as additional explanatory variables. The percentage change in tariff rates was also considered as an alternative dependent variable. The coefficients were generally consistent with those for model

In order to visualize the results, model 4 of table 4 can be reconfigured as an event study analysis based on Bailey and Goodman-Bacon (2015). The following model is estimated:

$$TariffRate_{it} = \sum_{t=-10}^{10} \pi_t D_i(t - T_i^* = y) + \gamma X'_{it} + \alpha_i + \eta_t + \epsilon_{it}$$

where $TariffRate_{it}$ is the log of the average tariff rate in country i in year t , X_{it} is a vector of the right-hand side variables in model 5 of table 4, α_i is a country specific fixed effect and η_t is a year specific fixed effect as before. D_i is an indicator variable equal to one if a country enfranchised women before World War Two and zero otherwise. This “treatment” variable is then interacted with event-period dummies, $1(t - T_i^* = y)$, which equal one when the year of observation falls in a two-year interval $y = -10, \dots, 0, \dots, 10$ from T_i^* , the year when female suffrage was extended in country i ($y = 0$ omitted). Dummy variables were also created for observations more than 10 years before or more than 10 years after female enfranchisement. The model is estimated using OLS as before with the coefficients π_t describing the evolution of tariff rates before and after the granting of female voting rights after controlling for changes in countries that did not grant voting rights to women and additional explanatory variables. The coefficient estimates (along with 90 per cent confidence intervals) are presented in figure 1 and indicate that before the introduction of women’s voting, tariff rates were not higher in countries that would go on to introduce women’s suffrage, and that the introduction of women’s suffrage had a seemingly persistent effect. Taking the coefficient representing 5-6 years after female enfranchisement for example indicates that tariffs were $100[\exp(0.174) - 1] = 19$ per cent higher in “treated” countries.

A potential criticism when exploring the relationship between female vote and tariff rates is that female vote is determined endogenously. As such a causal interpretation of the relationship may be incorrect. To address this problem an instrumental variables analysis is undertaken as an additional robustness check. In order to do this, a valid instrument must first be found that is sufficiently strongly correlated with the endogenous variable *Female Vote*, but that is arguably not related to the dependent variable in any way but through the endogenous independent variable. Although finding such a variable in the context of cross-country regressions poses something of a challenge, a potential candidate is suggested by the literature: that Protestant countries were more likely to grant female suffrage earlier. Firstly, the Catholic Church was less inclined to support women’s suffrage, actively discouraging women’s activity in the political sphere (Iadarola, 1985). The experience of Quebec in Canada offers one such example (Jackel, 2013). The province was the last to grant voting rights to women in provincial elections in 1940, despite the fact that women were entitled to vote in federal elections for over twenty years; the reason given being the opposition of

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4 above.

Figure 1: Event Study Analysis - Female Suffrage and Tariff Rates

the Catholic Church in Quebec to female suffrage . Secondly, there was a strong association between pre-war suffrage organisations and Protestantism, with suffrage organisations by and large being protestant movements (Stanton *et al.*, 1887; Murphy, 1997; Clark, 2004). Indeed the relationship religion and female suffrage is supported empirically by a number of studies Przeworski (2009); Bertocchi (2011); Braun and Kvasnicka (2013); Hicks (2013).

The relationship between Protestantism and the female vote is confirmed in the first stage regressions that include a variable indicating whether a country was majority protestant as an instrument for *Female Vote* (see appendix, table A2) with a first stage F-statistic greater than 10, the threshold suggested by Staiger and Stock (1997) for a sufficiently strong instrument.¹⁶ However it is also necessary that the instrument satisfies the exclusion restriction, in that it must not be correlated with the dependent variable except through its relationship with Female Vote. Although some studies have suggested an association between religiosity and trade openness, in that strong religious ties within a community can act as a support system that cushions the negative effects of trade liberalization (Díaz-Domínguez, 2010), the relationship between Protestantism and tariff policy has, to the best of my knowledge, not been previously established.¹⁷

¹⁶Due to the lack of detailed data on the religious makeup of many countries in the sample during this period a parsimonious dummy variable approach was employed.

¹⁷While it may be argued that Protestantism and tariff policy may be related in an indirect way, perhaps through an ‘economic liberalism’ effect, this would suggest that Protestantism and the female vote should be negatively associated with tariff rates, the opposite direction to what this analysis suggests.

The results of the instrumental variables analysis can be seen in models 6 and 7. As the *Majority Protestant* instrument does not vary over time country fixed effects cannot be included.¹⁸ Nonetheless, the coefficient on *Female Vote* is positive and significant in these models with the results for other variables of interest also consistent with the previous OLS regressions.

A final robustness check that can be undertaken is to look at the subsample of country-years in which women were entitled to vote before the Second World War and to assess whether the number of years since female suffrage was related to tariff policy in these countries. To do this, models with a similar specification to those in the previous section are estimated but with the number of years of since the granting of the female vote in place of a *Female vote* dummy variable. The results of this analysis are presented in table 5. The results of the various specification in models 1-3 again suggest a positive relationship between female voting rights and tariff rates. To address the endogeneity of voting rights, an instrumental variables approach is again undertaken but this time using an alternative instrument. Alesina *et al.* (2013) argue that countries that traditionally practiced plough agriculture (measured as the proportion of citizens with ancestors that used the plough in pre-industrial agriculture) have less equal gender roles today, including female participation in politics. In models 4 and 5 of table 5, their measure of plough adoption is used as an instrument for *Years of Female Vote*.¹⁹ The first stage of the 2SLS estimation indicates that there is a strong correlation between plough adoption and the timing of female enfranchisement, with a first-stage F-test statistic of 44.74 in model 5.²⁰ Taking the coefficient estimates in model 5, an additional year of female voting is associated with $100[\exp(0.036) - 1] = 3.7$ per cent higher tariffs.

Most important of all, the signs of the coefficients on the political variables that are the principal focus of this analysis, *Female Vote* & *Years of Female Vote*, *Franchise* and *Polity*, are consistent across the various specifications, while remaining statistically significant in most cases. After controlling for a number of other determinants of trade policy, as well as employing an instrumental variables approach, the opposite effects of the two measures of the extent of democracy are evident, lending support to the idea that extending the franchise to women may have had a different impact to that of increased voting rights for working class men. Indeed it would appear that tariff rates would have been considerably lower had the franchise only been extended to men. Also clear is that more democratic political institutions, as measured by the Polity score, are associated with lower tariffs. This adds an interesting element to the debate over the relationship between democracy and trade policy during the interwar years, which may perhaps extend to the relationship in other periods also. Future research could examine whether such a relationship existed prior to the First World War, when a small number of countries had extended the vote to women, or perhaps to the

¹⁸Model 6 shows a specification equivalent to model 2 (OLS) while model 7 is an IV estimation including time fixed effects and the additional control variables.

¹⁹Again this variable is time-invariant so country fixed effects cannot be included.

²⁰Full results of the first stage regressions are given in the appendix, table A3.

Table 5: Average Tariff Rate and Years of Female Vote

(OLS and IV estimation. Dependent Variable: Natural log of average tariff rate)

Variable	(1)	(2)	(3)	(4)	(5)
	OLS	OLS	OLS	IV	IV
<i>Years of Female Vote</i>	0.047*** (0.012)	0.037* (0.018)	0.068*** (0.013)	0.038** (0.016)	0.036** (0.015)
<i>Polity</i>	-0.891** (0.339)	-1.163*** (0.203)	-1.082*** (0.167)	-0.528 (0.348)	-0.544* (0.328)
<i>Log Franchise</i>	-0.013 (0.203)	0.124 (0.174)	0.008 (0.184)	-0.276* (0.147)	-0.153 (0.237)
<i>Log tariff main trade partner (lagged)</i>		0.044 (0.213)	0.072 (0.176)	0.049 (0.263)	0.082 (0.252)
<i>Log GDP per capita</i>		-0.081 (0.400)	0.116 (0.321)	0.002 (0.422)	0.262 (0.727)
<i>Constant</i>	-2.288*** (0.673)	-1.618 (3.069)	-5.821** (2.450)	-1.158 (3.499)	-3.953 (6.881)
<i>Country Fixed Effects</i>	YES	YES	YES	NO	NO
<i>Year Fixed Effects</i>	YES	YES	YES	YES	YES
<i>Other Control Variables</i>	NO	NO	YES	NO	YES
<i>First Stage F-statistic</i>				33.400	44.740
Observations	292	272	269	272	269
R-squared	0.597	0.638	0.703	0.250	0.299
Number of id	18	18	17		

Robust standard errors clustered by country in parentheses

*** significant at the 1% level

Source: Author calculations

** significant at the 5% level

* significant at the 10% level

analysis of support for tariff policies in the United States, in which a number of states granted female suffrage towards the end of the 19th century.

6 Concluding Remarks

Modern survey evidence suggests that women and men do not have identical preferences when it comes to economic policies. Differences in attitudes to trade protection in particular have been highlighted, with numerous studies showing women to have more protectionist attitudes than men. If this is true today it is quite conceivable that this gap also existed in the interwar years. Although widely held at the time, the notion that women only cared about the price of consumer goods and would therefore naturally favour free trade, has been found to be unconvincing. In fact, the survey evidence available for the period suggests the opposite conclusion: that women were more protectionist than men, as they appear to be today. If this is indeed the case, then where women had the means to express their preferences at the ballot box, they may have influenced the political economy of trade policy formation. Evidence presented in this paper detects such an effect. Even after controlling for other determining factors, the impact of the granting of votes to women is revealed in the cross-country analyses. Although the extension of the franchise to previously disenfranchised working-class men appears to have had a negative effect on tariffs, where women were able to vote, tariffs tended to be higher. Uncovering this effect suggests an important factor that conceivably contributed to higher levels of trade protection during the interwar years. The reason why women appear to have been more protectionist than men however is not revealed in this analysis. It is likely that the gender gap in trade policy preferences is due to differences that are not controlled for in conventional survey analysis, such as differences in risk aversion between men and women. A full exploration of these explanations is reserved for future research.

Supplementary material

Supplementary material (the Appendix) is available online at the OUP website. The data used in the paper are confidential but the replication files have been made available here.

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Appendix

Section 1

TABLE A1: WOMEN'S SUFFRAGE ACQUISITION

Country	Year	Country	Year	Country	Year
New Zealand	1893	Sweden	1920	Japan	1945
Australia	1902	Canada	1920	Italy	1945
Finland	1906	United States	1920	Romania	1946
Norway	1915	Ireland	1922	Argentina	1947
Denmark	1915	United Kingdom	1928	Bulgaria	1947
The Netherlands	1917	South Africa	1930*	Belgium	1948
Austria	1919	Spain	1931	Greece	1952
Germany	1919	Uruguay	1932	Peru	1955
Czechoslovakia	1919	France	1944	Switzerland	1971
Poland	1919	Hungary	1945	Portugal	1976

* European women only.

Source: Ramirez, Soysal and Shanahan (1997)

TABLE A2: IV-2SLS ESTIMATION
(Dependent Variable: Female Vote)

Variable	(6)	(7)
	OLS	OLS
<i>Majority Protestant</i>	0.451*** (0.130)	0.441*** (0.130)
<i>Polity</i>	0.232 (0.143)	0.208 (0.152)
<i>Log Franchise</i>	0.434*** (0.110)	0.462*** (0.122)
<i>Log tariff main trade partner (lagged)</i>	0.037 (0.082)	0.038 (0.088)
<i>Log GDP per capita</i>	-0.251* (0.141)	-0.134 (0.214)
<i>Constant</i>	0.755 (1.073)	-0.408 (1.798)
<i>Country Fixed Effects</i>	NO	NO
<i>Year Fixed Effects</i>	YES	YES
<i>Other Control Variables</i>	NO	YES
<i>First Stage F-statistic</i>	12.05	11.55
Observations	487	472
R-squared	0.673	0.680

Robust standard errors clustered by country in parentheses

*** significant at the 1% level

** significant at the 5% level

* significant at the 10% level

Source: Author calculations

TABLE A3: IV-2SLS ESTIMATION
(Dependent Variable: Years of Female Vote)

Variable	(6)	(7)
	OLS	OLS
<i>Plough</i>	-21.992*** (3.805)	-22.173*** (3.315)
<i>Polity</i>	2.323 (2.733)	0.892 (2.966)
<i>Log Franchise</i>	5.458*** (1.219)	8.897*** (2.325)
<i>Log tariff main trade partner (lagged)</i>	1.163 (1.197)	0.477 (0.827)
<i>Log GDP per capita</i>	-4.883 (4.911)	7.887* (4.143)
<i>Constant</i>	62.262 (41.572)	-70.152 (43.405)
<i>Country Fixed Effects</i>	NO	NO
<i>Year Fixed Effects</i>	YES	YES
<i>Other Control Variables</i>	NO	YES
<i>First Stage F-statistic</i>	33.40	44.74
Observations	272	269
R-squared	0.749	0.827

Robust standard errors clustered by country in parentheses

*** significant at the 1% level

** significant at the 5% level

* significant at the 10% level

Source: Author calculations