# WOMEN VOTERS AND TRADE PROTECTIONISM IN THE INTERWAR YEARS

Alan de Bromhead (Queen's University Belfast)

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ALAN DE BROMHEAD*

This paper examines the lessons of the interwar period to place current concerns regarding a return to protectionism in historical context, highlighting the unique and one-time changes in voting rights that took place during the period and their relationship with trade policy. A particularly novel finding is the impact of women voters on the politics of protectionism. Public opinion survey evidence from the interwar years indicates that women were more likely to hold protectionist attitudes than men, while panel data analysis of average tariff rates during the interwar period 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.

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**JEL Codes:** N40, N70, F50.

* Queen's Management School and Queen's University Centre for Economic History, Queen's University Belfast. Address: Riddel Hall, 185 Stranmillis Road, Belfast, Northern Ireland, BT9 5EE, United Kingdom. Email: a.debromhead@qub.ac.uk.

# 1.  Introduction

In a recent report on G-20 Trade Measures, the World Trade Organisation expressed its mounting concern over what it called the "revival of protectionist rhetoric in some countries" (World Trade Organization, 2012 p.1). As the report states:

> "Some G-20 governments are reportedly considering raising import barriers, or in some cases have already done so, to protect their domestic industries from what they may consider to be unfair competition." (World Trade Organization, 2012 p.1)

Perhaps not surprisingly, the WTO presents these protectionist measures not just as a threat to the international trading system but also to global economic revival:

> "Increasing trade is critical to stimulating global recovery and to supporting fiscally sustainable growth. Stronger global cooperation is needed to rebuild a robust architecture for trade in the 21$^{st}$ century. Greater international cooperation is also needed to make the case for open trade, escape the current economic crisis, and advance the multilateral trade agenda." (World Trade Organization, 2012 p.1)

These appeals for international cooperation to resist protectionism echo those made by the League of Nations in the 1920s and 1930s, as they attempted to guide the reconstruction of the international economic system following the First World War. Although the onset of the Great Depression would later add a greater impetus to their mission, the protectionist rise had been identified even before the onset of the economic crisis. The declaration of the World Economic Conference in 1927 was clear about the need to address the issue of growing protectionism:

> "The time has come to put a stop to the growth of Customs tariffs and to reverse the direction of the movement" (League of Nations & Condliffe, 1932 p. 277).

Despite the recommendations of the conference, by 1928:

> "there were many signs that the protectionist current was setting in more strongly than ever." (League of Nations & Condliffe, 1932 p.279)

Indeed the onset of the Great Depression would ultimately accelerate this move towards protectionism. Average tariff rates for industrialised countries increased by 11 percent in the

period 1923 to 1926, by 13 percent between 1927 and 1931 and by 18 percent between 1932 and 1939 (James, 2002).

The WTO report identifies domestic political economy as being central to understanding the current resurgence in protectionism; indeed that "the politics of trade in some countries seems to be turning inward-looking." (World Trade Organization, 2012 p.1). In this paper I argue that the apparent increase in protectionism that was characteristic of the interwar years was also 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 for previously disenfranchised working-class men on the political economy of the period has been identified previously but not extensively tested (Eichengreen, 1992; Polanyi, 1944). Another, and perhaps more substantial, dimension of post-First World War franchise extensions that has been even less well explored is the extension of voting rights to women that took place in many countries. For this reason the principal aim of this paper is to explore the impact of the extension of voting rights to women on tariff policy. An empirical analysis of public opinion survey evidence from the period suggests that women were more likely to express a preference for trade protection, 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, appear to have had a negative effect on tariff rates. The conclusions of this analysis reminds us of limits of drawing mechanical comparisons between current fears of a resurgence of protectionism and the experience of the interwar period. The current economic crisis may have some parallels with the interwar experience but the political environment in which these respective economic crises took place are markedly different.

The analysis of the link between women's voting rights and tariff rates will proceed 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 the forth section examines the contemporary debates surrounding women's attitudes to trade. The fifth section 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. The final section outlines some general conclusions.

## 2. Democracy and Protectionism

The relationship between democracy and trade is one that is often assumed to be causal, although whether the effect is positive or negative is disputed (Eichengreen & LeBlang, 2008). So too is the direction of causality running between them. 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 & LeBlang, 2008). A number of studies have uncovered a positive correlation between democracy and trade while those uncovering a negative relationship are probably in the minority (Lopez-Cordova & Meissner, 2005; Rigobon & Rodrik, 2005; Eichengreen & LeBlang, 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 liberalisation being judged to foster the globalisation of trade, while increased trade discourages political liberalization. The potential for endogeneity in any analysis of the relationship between voting rights and trade policy is apparent, a concern that will be addressed using instrumental variables estimation in the analysis that follows.

One drawback of these studies of the relationship between democracy and trade 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. 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 failure 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.[1] This then rises to +10 in 1922 where it remains to the present day. However, only 16 percent of the population could vote in 1901. By 1929, after successive franchise extensions, this figure had reached 63 percent. 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. The inclusion of measures of the extent of the franchise in the empirical analysis in this paper, in addition to measures such as Polity scores, is an attempt to capture more completely the changes to political systems that took place during the interwar years.

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 may have 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 also important.


## 3. Women and Protectionism

The debate surrounding women's attitudes to trade policy is a relatively recent one. One of the first studies was Hall, Kao and Nelson's (1998) analysis of time-series data from the United States 1866-1934. Their analysis was conducted using a political economy model of political preference based on a household in which men are assumed to be factor market

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

participants and women product market participants. In effect this 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. The model is tested using a dummy variable indicating the period after 1920, with the results leading the authors to conclude that the granting of voting rights to women had the effect of lowering tariffs. Their validity of these conclusions 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.[2] 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.[3] Scheve and Slaughter (2001) uncover a similar gender gap in their analysis of survey data from the United States in 1992 and 1996. Mayda and Rodrik (2005) and O'Rourke and Sinnot (2001) confirm the existence of a comparable difference between attitudes of men and women towards trade protection using the same International Social Survey data. Most recently, using survey data from the United States between 1986 and 1998, Blonigen (2011) found that women are 9.5 percent more likely than men to support new import limits.

So what is behind these differences between men and women? 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 & Bernasek, 1998; Barber & Odean, 2001; Croson & 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

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[2] The opening quote of Hall, Kao and Nelson (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.

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

based solutions to economic problems (Gidengil *et al.*, 2001). 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 recognised 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 (Norton, 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.[4] 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 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* (6 December 1923) put it: "women want to know, first of all, how tariffs will affect their shopping".

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[4] The franchise was initially only extended to women over 30, provided they met a minimum property requirement (UK Parliament, ).

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 attitude 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 position 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 prioritise 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

*A. 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 utilised 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 & Sinnott, 2001; Mayda & Rodrik, 2005; Blonigen, 2011). Nevertheless 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). Through a probit analysis of these data, differing attitudes towards trade policy can be revealed. 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 "depends" being asked an additional question: "Do you believe in

free trade".[5] The survey data 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. 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 can be seen in tables 1, 2 & 3.

Table 2 shows the results of the analysis of the first question. 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 & 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 Stopler-Samuelson theorem that the relatively scarce factor, labour in the case of United States, would favour protection. 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 Stopler-Samuelson interpretation. Additionally, an

[5] The responses to the first question are coded as "good", "bad" or "depends" in the original data. In order undertake this analysis the data was coded 1 if the response was "good" and zero otherwise. The second question therefore only includes those that answered "bad" or "depends" in the first question. The response of these individuals is either "Yes" or "No" as to whether or not they believed in free trade. The analysis was also conducted using an ordered probit specification. This produced very similar results.

independent effect is also evident of being a "Housekeeper" (housewife) – the category into which 85 percent of women in the sample fall – with those in this category being 6 percentage points more likely to favour tariffs than the reference category. Using the *Clarify* (Tomz *et al.*, 2003) package for STATA to calculate predicted values suggests that, based on the specification in model 4, female housekeepers were around 12 percentage points more likely to agree that a high tariff was a "good thing" than men. 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 table 3. 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 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 net effect for female housekeepers in model 4 is again calculated using *Clarify* and suggests that female housekeepers were 4 percentage points less likely to believe in free trade. The opinions of women alone are once more explored in model 5. 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.

*B. 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, the next step is to test various hypotheses using a macroeconomic panel data approach. In order to clarify our expectations regarding the association between the variables capturing democracy and tariff policy, the hypothesised relationships are summarised in table 4. Firstly, if the view that women cared more about the effect of tariffs on prices is assumed, then the relationship between the extension of the franchise to women and tariff rates would be expected to be negative. Female enfranchisement would result be the addition of a large group of relatively price sensitive voters to the electorate. This would imply a shift of the median voter in the electorate towards a voter that is more inclined towards free trade. However if this assumption is incorrect or if, for instance, women's relative risk aversion dominates then the opposite effect could potentially be observed. The relationship is therefore not determined *a priori*. 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.[6] 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 have be negatively related to tariff rates.

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

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[6] According to the Stopler-Samuleson theorem, 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 in increase in the franchise benefits labour. As such an extension of the franchise of this sort could be expected to reduce protectionism.

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, the most widely used and accepted measure used to compare tariff regimes across countries and over time (Rodriguez & Rodrik, 2001). Descriptive statistics are included in table 5 while full details of all variables included in the analysis can be found in the appendix.[7]

The first group of independent variables, central to this analysis, are those relating to democracy. The variable *Franchise* is the proportion of the population with the right to vote in national elections. Whether or not a country had extended the vote to women is captured by the dummy variable *Female Vote*.[8] The variable *Polity* is the Polity 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 (*Polity*), in line with the majority of studies that link increasing democratisation 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 & 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 framework for empirical investigation of the determinants of tariff policy during the interwar years will take the form of Ordinary Least Squares panel regression, with the log of the average tariff rate as the dependent variable across all specifications. 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, as well as effects that are specific to particular years will be employed.

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[7] "Trade Openness" or total trade divided by GDP (or alternatively total imports divided by GDP) were also considered and did not result in the main conclusions being altered substantially. Although this is not an equivalent measure of relative trade protection it has been utilised in previous studies of the relationship between democracy and trade. This measure has however been subject to criticism (Blattman *et al.*, 2003).

[8] The date of women's voting rights acquisition for the countries in the sample can be seen in Appendix table A1.

The results of the regression analysis can be seen in table 6. Model 1 examines the effect of the variable *Female Vote* in isolation, while also controlling for unobserved heterogeneity at the country level. The coefficient on *Female Vote* implies that the women's voting rights are associated with a $100[exp(0.468) -1] = 60$ percent higher tariff rates, all else held constant.[9] 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 percent to 13.4 percent.

Models 2 and 3 adds the "intensive" measure of democracy in the form of the Polity score and the variable capturing the proportion of the population entitled to vote, (log) *Franchise*, with and without the inclusion of country fixed effects respectively. The coefficient on *Polity* is negative and significant in both models, 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. However the coefficient on *Franchise* is not statistically significant in either model. Most importantly the coefficient on the female vote variable remains positive and significant; indicating that extending the vote to women and increasing the openness of democratic institutions influenced tariffs in different directions.

Models 4 introduces controls for GDP per capita and includes year dummies to capture time fixed effects. It also includes 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, 1994).[10] 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

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[9] An alternative set of results whereby Female Vote equals one from the first election in which women were entitled to vote was also examined. The results are very similar to those presented here.

[10] Somewhat surprisingly, although highlighting its importance, Simmons (1994) finds no evidence for a "beggar thy neighbour" effect during the period.

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 percent 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 percent the following year. Clearly, the retaliatory nature of tariff policy was an important contributor to the overall increase in tariff rates over the period.

The coefficients on *Female Vote* and *Polity* in model 4 are consistent with the previous model and remain statistically significant. However the coefficient on *Franchise* is now negative and statistically significant, indicating that holding all else constant, a 10 percent increase in the proportion of the population entitled to vote is associated with a 7 percent decrease in the tariff rate. 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 significance 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 5 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.[11]

Next it is important to attempt to estimate the net effect of increases in the franchise based on model 5. Using the *Clarify* package, the effect when the franchise variable changes

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[11] Regressions 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.

from its mean value when women cannot vote, to its mean value when women can vote (while the interaction effect also changes) is simulated. This exercise suggests that such a change in voting rights would have the effect of lowering tariffs by approximately 30 percent. This suggests that the negative effects of the male franchise on tariff rates dominates the positive effects of women voters. However, it is important to note that due to female enfranchisement, tariffs were higher than they would otherwise have been.

As a robustness check, two additional factors are considered in model 6. 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 (2010) propose, although it is not statistically significant at any conventional level.

The importance of agricultural interests are also recognized by James (2002). 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 (James, 2002). 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).

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 technique is applied. In order to implement this analysis 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 (Harrison, 1998). On the one hand, 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. 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 the Catholic Church in Quebec to female suffrage (Jackel, 2013). On the other hand, there was a strong association between pre-war suffrage organisations and Protestantism, with suffrage organisations by and large being largely protestant movements (Stanton *et al.*, 1886; Murphy, 1997; Clark, 2004)

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*)* with a first stage F-statistic greater than 10, the threshold suggested by (Staiger & Stock, 1997) for a sufficiently strong instrument. 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 liberalisation (Díaz-Domínguez, 2010), the relationship between Protestantism and tariff policy has, to the best of my knowledge, not been previously established.[12]

The results of the instrumental variables analysis can be seen in models 7 and 8. As the *Majority Protestant* instrument does not vary over time country fixed effects cannot be included. Nonetheless, the coefficient on *Female Vote* is positive and significant in both models with the results for other variables also consistent with the previous OLS regressions.

Most important of all, the signs of the coefficients on the political variables that are the principal focus of this analysis, *Female Vote*, *Franchise* and *Polity*, are consistent across the various specifications, while remaining statistically significant in almost all 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

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[12] While 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.

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 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

The extensions of voting rights that occurred after the First World War represented a dramatic change in the political landscape. In many countries the right to vote was no longer the exclusive right of property holding or literate men as it had been for most of the 'long' 19th century. Workers now had a political voice that fully represented their share of the population. Women, too, acquired a political voice in a number of countries. Indeed, in terms of numbers of votes, the extension of the franchise to women represented a greater change than any that had come about previously. The effect of this surge in the size of the electorate could not have failed to alter the political environment. Policies that received support from the electorate of the 19th century could no longer be assured of the same support from the enlarged electorate of the post- World War I years. The rise of the Labour Party and the beginnings of the welfare state in Britain cannot be understood without reference to the new working-class voter. But what of the effect of the impact of the millions of new women voters? 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 that 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 many other determining factors, the impact of the granting of votes to women comes through

strongly 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. Nonetheless these results provide lessons regarding current fears over of rising protectionism and parallels drawn with the interwar experience. While identifying similarities can be useful, the differences between the two periods, especially those relating to the political environment and the changes in voting rights that occurred, should be given equal recognition before any conclusions are reached.

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TABLE 1: DESCRIPTIVE STATISTICS

*Fortune Magazine Poll, September 1939*

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

*Source:* Author calculations

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?"*

Dependent Variable: "Good Policy" = 1

| Variable | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| *Female* | 0.0740*** | 0.0739*** | 0.0608** | 0.0621** | - |
| | (0.0138) | (0.0138) | (0.0263) | (0.0267) | |
| *Age Over 40* | | -0.00530 | -0.00114 | 0.00424 | -0.000263 |
| | | (0.0139) | (0.0145) | (0.0149) | (0.0210) |
| *Proprietor-Farm* | | | 0.0604** | 0.0656** | 0.184*** |
| | | | (0.0288) | (0.0291) | (0.0609) |
| *Proprietor-Other* | | | 0.0391 | 0.0289 | -0.186* |
| | | | (0.0291) | (0.0301) | (0.111) |
| *Housekeeper* | | | 0.0665** | 0.0644** | 0.116** |
| | | | (0.0314) | (0.0319) | (0.0499) |
| *Salaried-Executive* | | | -0.0759* | -0.0779* | 0.0838 |
| | | | (0.0433) | (0.0438) | (0.109) |
| *Salaried-Minor* | | | 0.0426 | 0.0402 | 0.0735 |
| | | | (0.0277) | (0.0281) | (0.0517) |
| *Wages-Factory* | | | 0.0792* | 0.0860* | 0.102 |
| | | | (0.0451) | (0.0450) | (0.165) |
| *Wages-Farm* | | | 0.182*** | 0.187*** | 0.199*** |
| | | | (0.0295) | (0.0297) | (0.0500) |
| *Wages-Other* | | | 0.104*** | 0.103*** | 0.225*** |
| | | | (0.0252) | (0.0257) | (0.0262) |
| *Retired* | | | 0.0346 | 0.0257 | -0.0345 |
| | | | (0.0444) | (0.0455) | (0.134) |
| *Would vote FDR* | | | | -0.00361 | -0.00462 |
| | | | | (0.0153) | (0.0213) |
| Pseudo R-squared | 0.005 | 0.005 | 0.014 | 0.015 | 0.018 |
| AIC | 1.217 | 1.217 | 1.211 | 1.213 | 1.139 |
| BIC | -31104.568 | -31096.335 | -31066.850 | -29733.114 | -11854.070 |
| Observations | 4,346 | 4,346 | 4,346 | 4,184 | 1,865 |

Robust standard errors in parentheses             *** significant at the 1% level
Marginal effects at means of independent variables     ** significant at the 5% level
*Source:* Author calculations                            * significant at the 10% level

*Fortune Magazine Poll, September 1939*

*"(If bad or depends) do you believe in free trade?"*

Dependent Variable: "Yes" = 1

| Variable | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| *Female* | -0.0548* | -0.0557* | -0.208*** | -0.224*** | - |
|  | (0.0289) | (0.0289) | (0.0522) | (0.0532) |  |
| *Age Over 40* |  | -0.0288 | -0.0233 | -0.0420 | -0.0788 |
|  |  | (0.0283) | (0.0295) | (0.0303) | (0.0482) |
| *Proprietor-Farm* |  |  | 0.00575 | 0.00413 | 0.0191 |
|  |  |  | (0.0615) | (0.0624) | (0.284) |
| *Proprietor-Other* |  |  | -0.131** | -0.114** | -0.185 |
|  |  |  | (0.0534) | (0.0558) | (0.139) |
| *Housekeeper* |  |  | 0.164** | 0.187*** | 0.153** |
|  |  |  | (0.0639) | (0.0653) | (0.0772) |
| *Salaried-Executive* |  |  | -0.0386 | -0.0119 |  |
|  |  |  | (0.0702) | (0.0725) |  |
| *Salaried-Minor* |  |  | -0.0371 | -0.0254 | -0.0358 |
|  |  |  | (0.0547) | (0.0560) | (0.123) |
| *Wages-Factory* |  |  | 0.0740 | 0.0734 |  |
|  |  |  | (0.113) | (0.115) |  |
| *Wages-Farm* |  |  | -0.00403 | 0.0333 | -0.102 |
|  |  |  | (0.108) | (0.112) | (0.254) |
| *Wages-Other* |  |  | 0.0127 | 0.0169 | -0.156 |
|  |  |  | (0.0581) | (0.0597) | (0.153) |
| *Retired* |  |  | -0.219*** | -0.200** | 0.397* |
|  |  |  | (0.0766) | (0.0803) | (0.218) |
| *Would vote FDR* |  |  |  | 0.173*** | 0.0937* |
|  |  |  |  | (0.0315) | (0.0498) |
| Pseudo R-squared | 0.0021 | 0.0027 | 0.0193 | 0.0389 | 0.0344 |
| AIC | 1.369 | 1.37 | 1.362 | 1.338 | 1.358 |
| BIC | -7070.189 | -7064.107 | -7028.018 | -6782.745 | -2077.323 |
| Observations | 1,232 | 1,232 | 1,232 | 1,192 | 448 |

Robust standard errors in parentheses       \*\*\* significant at the 1% level

Marginal effects at means of independent variables     \*\* significant at the 5% level

*Source:* Author calculations       \* significant at the 10% level

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

TABLE 4: Expected Relationships Between Democracy Variables and Tariffs

| Variable | Expected Direction of Effect on Tariffs |
|---|---|
| *Female Vote* | positive/negative |
| *Polity* | negative |
| *Franchise* | negative |

TABLE 5: DESCRIPTIVE STATISTICS

OLS Fixed Effects Analysis

| VARIABLES | (1) N | (2) mean | (3) sd | (4) min | (5) max |
|---|---|---|---|---|---|
| *Log Tariff Rate* | 578 | -2.144 | 0.728 | -4.453 | -0.680 |
| *Female Vote* | 627 | 0.522 | 0.500 | 0 | 1 |
| *Polity* | 625 | 0.686 | 0.311 | 0 | 0.952 |
| *Log Franchise* | 571 | 3.547 | 0.625 | 1.569 | 4.228 |
| *Log tariff main trade partner (lagged)* | 556 | -2.009 | 0.532 | -3.764 | -1.098 |
| *Log GDP per capita* | 600 | 8.054 | 0.456 | 6.907 | 8.839 |
| *Population in Agriculture* | 584 | 40.971 | 18.982 | 5.100 | 82.400 |
| *On Gold* | 627 | 0.284 | 0.451 | 0 | 1 |
| *Majority Protestant* | 630 | 0.433 | 0.496 | 0 | 1 |

*Source:* Author calculations

TABLE 6: AVERAGE TARIFF RATE & VOTING RIGHTS

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

| Variable | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| | OLS | OLS | OLS | OLS | OLS | OLS | IV | IV |
| Female Vote | 0.468*** | 0.526** | 0.431* | 0.232* | -0.628*** | 0.248* | 1.035* | 1.023* |
| | (0.143) | (0.192) | (0.224) | (0.134) | (0.142) | (0.123) | (0.540) | (0.561) |
| Polity | | -1.556*** | -0.802*** | -0.877*** | -0.908*** | -0.886*** | -0.777** | -0.793** |
| | | (0.335) | (0.285) | (0.261) | (0.260) | (0.242) | (0.330) | (0.347) |
| Log Franchise | | 0.115 | -0.152 | -0.721*** | -0.763*** | -0.706*** | -0.561* | -0.527 |
| | | (0.255) | (0.149) | (0.245) | (0.252) | (0.252) | (0.306) | (0.334) |
| Log tariff main trade partner (lagged) | | | | -0.0910 | -0.0617 | -0.0769 | 0.119 | 0.125 |
| | | | | (0.152) | (0.150) | (0.157) | (0.159) | (0.164) |
| Log GDP per capita | | | | -0.0724 | -0.0593 | -0.0411 | 0.153 | 0.280 |
| | | | | (0.411) | (0.406) | (0.409) | (0.256) | (0.431) |
| Female Vote*Log Franchise | | | | | 0.269*** | | | |
| | | | | | (0.0524) | | | |
| Constant | -2.383*** | -1.755* | -1.299** | 0.402 | 0.459 | -0.662 | -1.023 | -2.290 |
| | (0.0731) | (0.979) | (0.492) | (3.100) | (3.045) | (3.755) | (1.966) | (4.030) |
| Country Fixed Effects | YES | YES | NO | YES | YES | YES | NO | NO |
| Year Fixed Effects | NO | NO | NO | YES | YES | YES | YES | YES |
| Other Control Variables | NO | NO | NO | NO | NO | YES | NO | YES |
| First Stage F-statistic | | | | | | | 12.048 | 11.484 |
| Observations | 578 | 531 | 531 | 487 | 487 | 472 | 487 | 472 |
| R-squared | 0.030 | 0.249 | 0.107 | 0.632 | 0.640 | 0.641 | 0.178 | 0.162 |
| Number of id | 30 | 30 | 30 | 30 | 30 | 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

APPENDIX

*Countries included in the analysis.—*

Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Czechoslovakia, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, The Netherlands, New Zealand, Norway, Peru, Poland, Portugal, Romania, South Africa, Spain, Sweden, Switzerland, United Kingdom, United States and Uruguay.

*Dependent variables.—*

Customs revenue divided by the value of total imports (x 100). Data from Mitchell (2007a; 2007b; 2007c). Data for alternative measures of trade openness (exports + imports/GDP and imports/GDP) taken from Eichengreen and Leblang (2008).

*Independent variables.—*

**Franchise:**

Electorate/registered voters as a proportion of the population. Electoral data from Nohlen, Krennerich and Thibaut (2001), Nohlen (2005a; 2005b) and Nohlen and Stöver (Nohlen & Stöver, 2010). Additional electoral data and population data from Banks (2011).

**Female Vote:**

Dummy variable taking on a value of 1 if full voting rights had been extended to women. Data from Ramirez *et al* (1997).

**Polity:**

Polity IV scores scaled to be between zero and one. Data from Polity IV (2009).

**GDP per capita:**

GDP data from Maddison (2009). GDP in 1990 International Geary-Khamis dollars. Data on GDP of South Africa from Eichengreen and LeBlang (2008). Bulgarian data from Ivanov (2011).

**Tariff of Main Trading Partner:**

Main trading partner(s) identified according to trade data from Mitchell (Mitchell, 2007a; Mitchell, 2007b; 2007c).

**On Gold:**

Dummy variable indicating years of membership of interwar gold standard taken from Eichengreen (1992). No distinction made between de jure and de facto adherence, de facto abandonment considered sufficient.

**Population in Agriculture:**

Percentage of working population employed in agriculture from Banks (2011).

**Majority Protestant:**

Equals one if Protestants represent > 50% of the population, zero otherwise. Based on various national censuses and individual country histories.

*Fortune Magazine Survey, September 1939.*—

**All binary variables**

*Female* = 1 if respondent was female, zero otherwise

*Age Over 40* = 1 if respondent aged over 40 years old, zero otherwise.

*Occupation Categories* = 1 if respondent was placed in a particular occupation category, zero otherwise. Categories are: "Professional" (omitted category in analysis), "Proprietor - Farm", "Proprietor - Other", "Housekeeper", "Salaried - Minor", "Salaried - Executive" and "Wages-Factory", "Wages-Farm", "Wages-Other" and "Retired".

*Would Vote FDR* = 1 if respondent indicated their intention to vote for Franklin Roosevelt in the next election, zero otherwise.

*TABLE A1: WOMEN'S SUFFRAGE ACQUISITION*

| Country | Year | Country | Year | Country | Year |
|---|---|---|---|---|---|
| New Zealand | 1893 | Sweden | 1919 | Hungary | 1945 |
| Australia | 1902 | Canada | 1920 | Japan | 1945 |
| Finland | 1906 | United States | 1920 | Italy | 1946 |
| Norway | 1913 | Ireland | 1922 | Romania | 1946 |
| Denmark | 1915 | United Kingdom | 1928 | Argentina | 1947 |
| Austria | 1918 | South Africa | 1930* | Belgium | 1948 |
| Germany | 1918 | Spain | 1931 | Greece | 1952 |
| Czechoslovakia | 1919 | Uruguay | 1932 | Switzerland | 1971 |
| The Netherlands | 1919 | Bulgaria | 1945 | Portugal | 1974 |
| Poland | 1919 | France | 1945 | Peru | 1979** |

* European women only. ** Equal voting rights in 1955 but literacy restrictions remained.

*Source:* Ramirez, Soysal and Shanahan (1997)

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

| Variable | (1) | (2) |
|---|---|---|
| | OLS | OLS |
| | | |
| *Majority Protestant* | 0.451*** | 0.442*** |
| | (0.128) | (0.128) |
| *Polity* | 0.232 | 0.208 |
| | (0.141) | (0.151) |
| *Log Franchise* | 0.434*** | 0.463*** |
| | (0.108) | (0.120) |
| *Log tariff main trade partner (lagged)* | 0.037 | 0.039 |
| | (0.081) | (0.083) |
| *Log GDP per capita* | -0.251* | -0.132 |
| | (0.139) | (0.211) |
| *Constant* | 0.651 | -0.478 |
| | (1.011) | (1.792) |
| | | |
| *Country Fixed Effects* | NO | NO |
| *Year Fixed Effects* | YES | YES |
| *Other Control Variables* | NO | YES |
| | | |
| *First Stage F-statistic* | 12.048 | 11.484 |
| | | |
| Observations | 487 | 472 |
| R-squared | 0.680 | 0.692 |
| Number of id | 30 | 28 |

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