

**The Mysterious Case of Female Protectionism:  
Gender Bias in Attitudes Toward International Trade**

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## **The Mysterious Case of Female Protectionism: Gender Bias in Attitudes Toward International Trade**

### Abstract

We examine new survey data on attitudes towards international trade showing that women are significantly less likely than men to support increasing trade with foreign nations. This gender difference remains large even when controlling for a broad range of other demographic and socio-economic characteristics among survey respondents. And the gender gap widens markedly among older and married respondents: while male attitudes are relatively stable, women are far more likely to oppose trade when they are older and when they are married. This suggests that labor-market dynamics associated with maternity may be playing an important role in shaping attitudes. Women with family responsibilities that make it more costly or difficult for them to switch jobs may be more sensitive to the risks of economic dislocation associated with trade openness. We fail to find direct evidence supporting this proposition, however, since various indicators of the risks and the costs of job loss do not appear to be related at all to the gender gap in trade preferences or its expansion among older and married respondents. We also do not find any strong evidence that gender differences in non-material values or along ideological dimensions have any affect on attitudes toward trade. Female protectionism thus represents a compelling puzzle and, we suggest, a good focal point for theoretical work on the role of gender in political economy. It also holds considerable substantive importance in terms of actual trade policy outcomes, since it suggests that increased female political influence may be associated with higher levels of trade protection.

## **I. Introduction**

The last four decades have witnessed a dramatic growth in international trade and a growing political debate over the costs and benefits of trade liberalization and “globalization” writ large. Recent debates over the creation of the North American Free Trade Agreement, and the launch of the latest round of World Trade Organization negotiations, have revealed significant political opposition to trade liberalization. And recent scholarly research examining public opinion on the trade issue has concluded that a large proportion of voters actually favor new trade restrictions (e.g., Scheve and Slaughter 2001; Mayda and Rodrik 2001). The political scene appears to be set for a major political battle over trade policy in the near future.

One curious aspect of the nascent “backlash” against globalization, that has so far received almost no attention from scholars at all, is that it appears to have a very strong gender bias. The available survey evidence indicates that women in the United States, and in advanced economies more generally, are significantly more likely than men to support new restrictions on trade. This gender difference remains large even when controlling for a range of other demographic and socio-economic characteristics among individuals. In all the recent research that examines survey data on attitudes toward trade, this gender gap is either ignored altogether or noted only in passing, the implicit assumption being that there are bigger theoretical “fish” to fry when it comes to explaining individuals’ policy preferences (e.g., Mayda and Rodrik 2001; O’Rourke and Sinnott 2002). To date, no concerted attempt has been made to investigate and explain the gender bias in attitudes toward international trade.

This we think is a major oversight. In terms of the potential for theoretical development, linking this puzzle to the growing body of political-economy research on the role of gender in the politics of the welfare state is an important next step for models of policymaking. Numerous studies have now shown that women are much more supportive than men of various types of social welfare and employment protections, even when controlling for a host of demographic and economic variables. One hypothesis is that this is due to the lopsided labor-market risks associated with maternity (e.g., Estevez-Abe, Iversen,

and Soskice 2001). If women with families face higher costs than others when entering and leaving the labor force, because employers are more wary about hiring and training them, for instance, or because fewer jobs have hours or locations that are consistent with their family duties, they may demand more insurance from the government against the risk of job loss. This same logic may account for gender differences in attitudes toward globalization. Or something else might be at work here, driving a wedge between the policy preferences of men and women. This gender gap over trade, and its origins, holds more than just a theoretical appeal since a gendered political opposition to globalization may have a substantial impact upon policy outcomes as rates of female participation in the workforce and in politics continue to grow in many economies.

Our aim in this paper is to provide a detailed study of gender bias in attitudes toward international trade, making use of an entirely new set of survey data from a sample of over 1,400 American adults interviewed in July and August 2003. The data reveal a large and statistically significant gender difference in attitudes toward trade, confirming the basic results reported in other research. Controlling for a wide variety of other demographic and socio-economic variables that affect individuals' preferences, women are approximately 11% more likely to be opposed to increased international trade than are men. We also find that this gender gap in attitudes is related strongly to age and marital status; that is, the gap it widens dramatically among older and among married respondents. This result suggests that labor-market dynamics associated with maternity may be playing an important role in shaping attitudes. Women with family responsibilities that make it more costly or difficult for them to switch jobs may be more sensitive to the risks of economic dislocation associated with trade openness. We fail to find direct evidence supporting this proposition, however, since various indicators of the risks and the costs of job loss (e.g., whether respondents have very specialized skills, whether they feel trade makes their job less secure, how difficult they think it would be for them to find a new job) do not appear to be related at all to the gender gap in trade preferences or its expansion among older and married respondents.

We are thus left with an intriguing puzzle. As far as we can tell, none of the existing approaches to explaining gender differences in the policy preferences of individuals can account for the large gender gap over trade policy. There are alternative, non-economic types of explanations that are worth investigating, since they have been highlighted in recent research on trade preferences (e.g., O'Rourke and Sinnott 2002; Mayday and Rodrik 2001). It is plausible that women, and especially those in older age brackets, are separated from men by significant differences in values or along ideological dimensions. Plausible claims can be made that women are less supportive of market arrangements in general, for example, and more supportive of government interventions. Or perhaps there is a relevant gender bias in religious beliefs or in attachments to local communities, and the willingness to trade-off personal material benefits in order to mitigate losses felt by others. We have explored these claims wherever the data permits, but have found no clear non-material explanation for the gender bias in protectionism.

In the next section we provide a brief overview of previous studies indicating a gender bias in attitudes towards international trade, and review research on the role of gender in shaping support for other types of economic policies. Sections III through V present and analyze the new survey data, estimating the size of the gender bias in trade preferences and exploring a range of possible explanations for it, including those associated with maternity and its attendant labor-market effects for women. In section VI we discuss some of the avenues for further research and why these should be pursued. One interesting implication of the findings here is that increased female political influence may be associated with higher equilibrium levels of trade protection. Resistance to globalization does appear to be a very gendered thing.

## **II. Gender and Attitudes Towards Trade: Previous Studies**

Previous studies of the determinants of individual attitudes toward globalization, and towards trade in particular, have focused predominantly on occupational differences among survey respondents. This is in keeping with standard economic models of the income effects of trade, which emphasize the

importance of the different types of productive inputs people own and the different types of industries in which they are employed. According to the well-known Stolper-Samuelson theorem (1941), which assumes that factors of production are highly mobile between sectors in the economy, trade benefits those who own productive factors with which the economy is relatively well endowed and hurts owners of other factors. In advanced economies like the United States, this model predicts a fairly straightforward class divide over trade: since these economies are well endowed with physical and human capital relative to the rest of the world, yet poorly endowed with low-skilled labor, the trade issue is expected to pit free-trade capitalists and skilled workers against protectionist blue-collar workers (see Magee 1980; Rogowski 1989). The main alternative approach to mapping the distributional effects of trade, often referred to as the “specific factors” model, allows that it can be quite costly to move some factors of production between different sectors in the economy, and so the returns to these “specific” factors will be tied more closely to the fortunes of the industries in which they are employed. Those individuals employed or invested in export industries benefit from trade according to this model, while those attached to import-competing industries are harmed (see Jones 1971; Mussa 1974). In the U.S. economy the implication is that individuals employed in export-oriented industries like aerospace, pharmaceuticals, computer software, construction equipment, entertainment, and financial services, will be much more supportive of trade and globalization than those working in, say, the textiles, footwear, or steel industries, which face intense pressure from import competition.

Several recent studies have used survey data to examine individual trade policy preferences, concentrating on testing the predictions from these types of economic models. Scheve and Slaughter (2001) analyzed U.S. data from National Election Studies (NES) surveys conducted in 1992, 1994, and 1996 which asked respondents about their views regarding both trade or immigration policy. Scheve and Slaughter emphasized the impact of the skill levels of individuals (measured by years of education) on stated policy preferences, while finding that the effects of industry-of-employment seemed to be much less clear. Mayda and Rodrik (2001) and O’Rourke and Sinnott (2002) have taken a similar approach in

examining cross-national survey data from the International Social Survey Programme (ISSP), which contains individual-level data from people in 23 nations, including responses to a question about whether they were in favor of restrictions on trade. Again, skill levels – measured either by education years (Mayda and Rodrik) or occupational categories (O’Rourke and Sinnott) – appear to have large effects on attitudes to trade, although Mayda and Rodrik also find evidence that people in import-competing industries are significantly more likely than others to favor trade protection.<sup>1</sup>

What is especially interesting, however, is something that goes largely unexamined in the results in all these studies: gender shows up as a strong, consistent predictor of trade policy preferences. Women are much more protectionist than men, even controlling for the effects of education/skill and industry variables (the principal foci of these analyses) and a range of other possible economic and political correlates, including political ideology, partisanship and patriotism. Mayda and Rodrik (2001, 11) estimate that males are, on average, 7.4 percent more likely than women to support trade openness. To date this gender gap in attitudes toward trade has been ignored, for the most part, in the existing research. The two studies that do comment specifically on the gender effect pause just long enough to note that it is not simply a function of differences in labor force participation rates (Mayda and Rodrik, 2001, 11 fn.7; O’Rourke and Sinnott 2002, 180 fn. 42).<sup>2</sup> We are thus left with a real mystery. Why are women seemingly so much more protectionist than men?

The inattention to the gender issue in studies of attitudes toward trade stands in marked contrast to the growing body of research devoted to examining the role of gender in shaping preferences and policy outcomes in other areas of politics. Studies of individual preferences over a range of social, welfare, and tax policies have consistently found that women are more supportive than men of various kinds of social

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<sup>1</sup> Similar findings have been reported in related studies, including those by Balistreri (1997) and Beaulieu (2002) that make use of data from a Canadian National Election Studies poll on attitudes towards the Canadian-U.S. Free Trade Agreement in 1988, and also in the work by Gabel (1998a, 1998b) using Eurobarometer data on attitudes toward European integration between 1975 and 1992. Since these studies do not allow for any gender effects, however, we do not focus on them specifically here. Older studies of individual support for European integration, it might be noted, do show less support among women than men (see Wessels 1995, 111-114).

welfare assistance, provision of public goods, and other forms of income redistribution, even controlling for differences in income, age, wealth, education, and employment across individuals (Gilligan 1982; Korhauser 1987; Welch and Hibbing 1992; Alvarez and McCaffery 2001; Iversen and Soskice 2001). The gender bias in support for social welfare, in particular, has been confirmed for a broad cross-section of OECD countries and across multiple types of welfare provisions – that is, not only those tied to the specific needs of women, such as maternity leave or child-care, but many other forms of social security, health insurance, unemployment insurance, and employment protections (Estevez-Abe, Iversen, and Soskice 2001; Iversen and Soskice 2001). And there is clear evidence that these differences matter in terms of policymaking. Several important studies have focused on the role that gender politics has played in shaping social policy outcomes in the United States (e.g., Orloff 1991; Skocpol et al. 1993; Gordon 1994; Mink 1995; Skocpol 1995). Recent studies have shown that female political candidates focus on very different types of issues than do male candidates when running for elected office, emphasizing “female” priorities such as health care, education, and tax relief for working families, for instance (see Kahn 1993; Fox 1997). And in the United States, the gender gap in policy preferences appears to have generated a sizeable gender divide in presidential elections over the last two decades, with the Democrats capturing a large majority of the female vote, due it seems to their reputation for prioritizing “women’s issues” (see Cook and Wilcox 1995; Chaney et al. 1998; Mattei and Mattei 1998).<sup>3</sup>

At least two different types of arguments appear in this body of research as possible explanations for the gender gap in social and fiscal policy preferences. One takes a standard political-economy form, locating the origins of the difference in preferences toward welfare policy in the gendered experience surrounding maternity and its effects on the expected incomes of women (Estevez-Abe et al. 2001; Iversen and Soskice 2001). Women sacrifice more in terms of their professional lives to have and raise children

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<sup>2</sup> Mayda and Rodrik do suggest at one point that gender effects might be related to differences in “values” but they never return to this theme or provide any evidence linking values to the gender gap. This is an issue we pursue in section V.

<sup>3</sup> A growing body of recent work has also explored the ways in which various types of social welfare affect the labor market activities of women and indicators of female living standards (e.g., Esping-Anderson 1990, 1996, 1999, 2000; Orloff 1993, 1996; Buessemaker and van Kersebergen 1993).

and this disproportional sacrifice leads, it is argued, to a strong preference for welfare measures that can indemnify them against the risks associated with leaving active employment to take on family duties. Much about this relationship remains unclear, however, since the effects of maternity and child rearing *per se* are not actually measured directly in the existing empirical studies – this particular interpretation is simply given to the gender effect in the statistical results (e.g., Iversen and Soskice 2001). A different type of argument for why women might be more pro-welfare and pro-redistribution than men has been based upon a presumed gender difference in values. The general claim is that women, for reasons having to do with nature and/or nurture, tend to be more compassionate than men in their attitudes toward and treatment of less fortunate members of society, and are conversely less driven by immediate and personal “pocketbook” calculations about the impact of such policies (see Gilligan 1982; Chaney et al 1998; Welch and Hibbing 1992). A female bias in favor of more generous provisions and protections for those experiencing economic hardship is thus expected. Again, this is not entirely convincing as an explanation for the observed gender gap in policy preferences, since to a large degree it merely restates the puzzle at a different level or in different terms, leaving it unclear as to why men and women would have such distinct sets of values and whether these values are stable over time and across different cultural, ethnic, and religious groups.

It seems natural to link the theoretical arguments advanced in the research on gender differences in attitudes toward social and fiscal policies to the gender gap in attitudes towards trade. In particular, one might speculate that the lop-sided income risks associated with maternity may bias women to be more supportive of trade protection in addition to social welfare and employment protections. Trade barriers can mitigate the risk of local economic dislocations due to exposure to world markets, just as employment regulations and unemployment insurance mitigate the risks due to fluctuations in the business cycle. Rodrik (1997, 1998) has made the case that greater trade openness drives citizens to demand that governments increase spending in order to offset the added volatility in incomes that would otherwise befall them due to greater exposure to the vicissitudes of world markets. From this perspective, trade

protection and government spending (on social welfare programs in particular) are regarded as substitutes. Whether this logic alone is enough to account for the observed gender differences in attitudes toward trade is an open question. An alternative or additional explanation, perhaps based on gender differences in values or ideology, may be required. Pushing forward in this direction should at least help to shed more light on the interaction between economic openness and the provision of social welfare. Research on this relationship has evolved in recent years from debates over how and why economic openness might either spur or constrain welfare provision (c.f. Cameron 1978; Katzenstein 1985; Rodrik 1997, 1998), towards discussion of mediating conditions (e.g., Garrett 1996, 1998; Swank 2000, 2001; Adsera and Boix 2002; Burgoon 2002; Rudra 2002).<sup>4</sup> Much of the debate turns on questions of under what conditions, and to what extent, groups made vulnerable by economic openness demand particular types of insurance or compensation and are able to influence policy outcomes. Making allowance for the gender bias in attitudes toward openness, and how it relates to the gender bias in support for welfare, could make a critical difference in these debates.

In sum, though gender is a fundamental aspect of political and economic life, we know surprisingly little about the role it plays in shaping the political economy of globalization and the interrelated processes that determine trade and welfare policies in modern economies. This represents a major challenge for existing theoretical frameworks in political economy, especially those used in the study of international trade. And it is not only a concern for the theory-minded. If women prefer very different types of economic policies than men, *ceteris paribus*, differences in rates of female participation in the workforce and in politics may produce significant variation in policy over time and cross-nationally. In the final section of the paper, in fact, we examine available evidence suggesting that higher rates of female labor force participation and female political power do appear to be associated with higher levels of trade protection.

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<sup>4</sup> The list of mediating conditions includes Garrett's (1996, 1998) combination of strong, centralized labor unions and Left party strength mediating whether openness spurs (with strong Left-Labor power) or constrains (with weak power) welfare spending (see also Rudra 2002). Swank (2001) focuses on a range of political, market, and welfare

### **III. American Attitudes Toward International Trade: New Survey Results**

We analyze new data from a survey administered to over 1,400 American adults by telephone in July and August 2003 by the Center for Survey Research at Indiana University. The set of questions asking respondents about their attitudes toward international trade, and about their current employment status and prospects, were included as part of a set of surveys sponsored by the Time-Sharing Experiments for the Social Sciences (TESS) program.<sup>5</sup> These survey questions were proposed by Hiscox (2002b) as a survey experiment to examine individual trade preferences and gauge the effects of framing (see appendix for questions and full descriptive statistics).<sup>6</sup> An extensive set of survey pre-tests, along with interviewer training, was conducted by CSR in May and June 2003, aimed at making the questions as clear as possible and improving response rates and reliability. As of August 28, data from the first 1141 of the interviews was available from CSR in electronic form, and all our results are based on this initial set of data (we will be updating the analysis as new data arrives).

At the outset of the interview, interviewers informed survey respondents that they would like to ask them a few questions about their views on international trade. Respondents were then asked the following question:

*Do you favor or oppose increasing trade with other nations?*

1. Favor
2. Oppose
8. Don't know
9. Refused

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institutions and how they mediate the political voice and incentives of vulnerable groups. Adsera and Boix (2002) emphasize how the simultaneous choice of openness and welfare is conditioned by level of democracy.

<sup>5</sup> *Time-Sharing Experiments for the Social Sciences*, NSF Grant 0094964, Diana C. Mutz and Arthur Lupia, Principal Investigators.

<sup>6</sup> Respondents were randomly allocated to different groups that received different introductions to the questions about trade, emphasizing either positive or negative effects of trade, both types of effects, or none (see appendix for full question wordings). Since the gender difference was almost identical regardless of question framing, we do not separate out the experimental groups for the purpose of presenting frequencies in Tables 1-3, though we do include dummy variables to control for the effects of frames on responses in all the probit estimations that follow below (Tables 4-6).

Depending on their answer, the interviewer then asked:

*Is that strongly favor (oppose) or somewhat favor (oppose)?*

1. Strongly
2. Somewhat
8. Don't know
9. Refused

How strong is the gender bias in attitudes towards international trade? As a basic gauge of the gender divide, Tables 1 and 2 report the simple frequencies of each type of response broken down by gender. The differences are stark. For a group of randomly selected adults, some 12% more women than men are opposed to increasing international trade. Among those who favor increasing trade (the majority of respondents, it should be noted) men are evenly split between favoring it strongly and only somewhat, but women are far less likely to be strongly in favor of greater trade.

[Tables 1 and 2]

Of course, several types of broad differences between male and female respondents might be generating this gender gap. To make a quick inspection of some of the “usual suspects” we compared response rates across a few basic groups in the sample. Table 3 first breaks down the frequencies of the simple favor/oppose responses according to whether the individuals are employed (part time or full time) or not employed (unemployed, on disability, retired, or “other not working”). The gender gap is actually identical among both employed and non-employed individuals, with the non-employed (of both sexes) generally more protectionist than the employed counterparts. This does not provide us with much confidence that the observed gender bias in attitudes toward trade is related to labor market conditions rather than other (e.g., non-material) factors. The gender divide cannot be reduced to a simple gender difference in levels of education among individuals either: the gender gap is almost equivalent among those respondents with high levels of education (education beyond high school) and those in the less educated group. And finally, simple gender differences in party affiliation (which may stand in for differences in values or ideology) do not appear to explain the divide in attitudes towards trade: while a

greater proportion of women than men identify themselves as Democrats, the gender difference on the trade issue is roughly identical when comparing groups identifying themselves with both political parties.

[Table 3]

Next we used respondents' answers to the basic question about whether they favored or opposed increasing trade as our main dependent variable (1=favor and 0=oppose) and estimated a series of probit models. Table 4 reports the results. As a first pass through the data we included a list of possible demographic and socio-economic predictors: gender, age, race, employment status, education, personal income, and party affiliation.<sup>7</sup> We find strong gender effects on trade preferences that are robust to the inclusion of all these various controls. In the most basic model, column (1), being female decreases the probability that an individual favors trade by 11% (s.e. 3%), with all other variables set to their mean values. The size and significance of this effect is not radically altered by the inclusion of other variables.

[Table 4]

Among the other variables, age is associated strongly with protectionism, as reported in some earlier studies. Mayda and Rodrik (2001) and O'Rourke and Sinnott (2002) found similar age effects using the ISSP data, although Scheve and Slaughter (2001) reported that age had no significant effect on attitudes towards trade in their analysis of NES surveys. In the most basic model (1), comparing a 30-year old respondent to a 50-year old (with all other variables at mean values) the probability of support for trade drops by 6% (s.e. 2%). This is clearly another issue on which more empirical and theoretical work is warranted, and we return to it in the next section. The race variables do not have significant effects on trade preferences, and neither does employment status. On the other hand, personal income (whether the individual reports having an annual income greater than \$35,000) has a sizeable positive effect on support for trade: a higher income individual is 9% (s.e. 4%) more likely to support increasing trade than is

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<sup>7</sup> As noted above, all estimations also included dummy variables (not shown in Tables 4-6) to control for whether respondents were read a pro- or anti-trade framing sentence before the question was asked. Whether these controls were included or not made no difference to the estimated effect of gender on preferences, indicating that women were no more or less susceptible to framing effects.

someone earning less than \$35,000 annually.<sup>8</sup> This is consistent with results produced by Mayda and Rodrik (2001), the only other study that controls for the effects of personal income. Presumably this group of individuals is more likely to be drawing income from ownership of capital (physical and or human), and thus the finding here fits broadly with expectations from the Stolper-Samuelson model. But income is a very indirect indicator of capital ownership, and many other forces may be at work: (e.g., higher income individuals travel more, have different consumption patterns, are more educated and informed about politics and economics, and tend to have less nationalist sentiments in general).

As discovered in previous studies, education levels have strong positive effects on support for trade. In columns (2) and (3) we introduce a categorical variable for educational attainment, collected in the general TESS survey (1=less than 12 years of school; 2=finished high school; 3=some college or vocational/technical school; 4=college degree or higher).<sup>9</sup> Respondents with education going beyond the high school level were 9% (s.e. 3%) more likely to favor increasing trade than those who only finished high school. Exactly how we should interpret this result is not entirely clear, however, and the relationship between support for trade liberalization and educational levels has been discussed frequently in previous work (e.g., Bauer, Poole, and Dexter 1972, 103; Schneider 1985, 932; Holsti 1996, 87-88). Recent studies have usually treated it as confirmation of the Stolper-Samuelson prediction that skilled workers in advanced economies expect to do better from increased international trade than unskilled workers (Scheve and Slaughter 2001; Mayda and Rodrik 2001). But it might also reflect the fact that more educated respondents are more informed about the overall efficiency gains associated with trade, are less susceptible to simplistic protectionist appeals based upon nationalist and anti-foreigner sentiments, or have a broader or more enlightened concept of self-interest (see Schneider 1985:932). One major empirical problem for the simple Stolper-Samuelson interpretation is the evidence that more educated

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<sup>8</sup> There is a more detailed question about personal income in the general TESS survey, but fewer than half of the respondents answered it, so we use the blunter measure here. None of the results are affected by this choice.

<sup>9</sup> This is also a measure of “highest grade or level” of education completed for each individual in the survey, which is similar to a continuous “years of education” variable, but becomes only a rough approximate for post high school education. The results are not sensitive to the choice of measure.

respondents to surveys in (skill scarce) developing nations are also significantly more supportive of international trade than are less educated individuals (see Graham 2002; Baker 2003).

We can address this particular issue in part by examining a more direct measure of job-related skills, assessing whether the gender effect survives at the same time. The survey included two questions aimed at measuring the degree to which respondents had acquired specialized labor skills for their work. Interviewers first asked employed individuals:

*For your current job, did you have to be trained for specialized skills, either before you were hired or while you were on the job?*

1. Yes
2. No
8. Don't know
9. Refused

If the answer to this question was yes, the respondents were then asked:

*Do you feel it took a great deal of training, some training, or a little training to learn the specialized skills for your current job?*

1. A great deal of training
2. Some training
3. A little training
8. Don't know
9. Refused

We used the answers to these questions to create a categorical skills/training variable, with possible values of 0 (=no training for specialized skills), 2(=a little training, 3(=some training), and 4(=a great deal of training).<sup>10</sup> Women in were roughly as likely as men to report substantial levels of training

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<sup>10</sup> Wording this question in a satisfactory manner proved especially difficult, and one objection here is that two dimensions of training/skills are being conflated: the degree of training overall and the specificity of the skills being acquired. Since we were limited to one question here, given the allocation of TESS survey space, and we are interested in the combination of both elements, we settled on this wording. This is unlikely to pose a large problem since Mincer (1993) has found that both levels of general and specific skills are highly correlated across individual workers. We experimented with a range of question wordings here, asking respondents about different types of training programs for instance, and whether (hypothetically) they felt their skills could be applied in jobs in other industries, but the pre-tests revealed that such questions were highly confusing for many respondents and response rates were very low.

and skill acquisition for their job: 32% of women and 22% of men reported undergoing “some training,” while 39% of women and 48% of men reported having “a great deal of training.”

We examine the effects of including this variable in estimations of trade preferences in Table 5. We find that, in keeping with standard expectations, respondents with higher levels of skills tend to be more favorably disposed to trade, but the estimate effect is very small and not significant at standard levels. This finding holds whether or not education, which is positively correlated with the skills variable, is excluded from the estimation. The implication, we suggest, is that the estimated effects of education on trade preferences are likely capturing a variety of things besides skill levels and how they relate to the income effects of trade. The more pertinent question for us here, of course, involves the gender effect. Including a more specific measure of training does not appear to make any difference to the estimated gender gap in trade preferences. We also tried allowing for an interaction between gender and skill levels, in model (2), on the assumption that female workers with highly specific skills may be much less enthusiastic about trade (and its attendant risks) than male workers since the costs of changing jobs is higher for them. Iversen and Soskice (2001) have argued that individuals with more specialized skills have more to fear from economic dislocations in general and are thus more supportive of various types of employment protections and social welfare. If women are more risk averse than men on top of that, the interaction between gender and skills may have a significant negative effect on support for trade. But the evidence suggests no clear difference between men and women along these lines.

[Table 5]

Another important possibility, of course, is that women may be employed at disproportionate rates in particular industries (e.g. textiles, footwear, and clothing) that are adversely affected by import competition. One fairly indirect way to address this issue is to try to locate respondents by industry, using their responses to a standard survey question about the type of business in which they are employed, then controlling in some way for the aggregate trade positions of those industries when estimating

preferences.<sup>11</sup> There are at least two problems with this approach. First, accurately coding respondents by industry of employment using standard 3-digit or even 2-digit industrial classifications is extremely difficult. Respondents typically give very vague answers to questions about the “type of business” they work for, and individual coders who later attempt to match these answers to one classification or another frequently choose differently.<sup>12</sup> The second problem involves accurately measuring the trade policy position of each industry using measures such as import penetration or export dependence. Trade flows in each industry are themselves a function of existing tariff and non-tariff policies, of course, so they are often a poor guide to industry preferences (if an industry lobby succeeds in winning high levels of protection, for instance, actual imports may be negligible). There is also the question of whether aggregate trade positions thus measured are an accurate reflection of the trade positions of firms in the various sub-categories within each broad 2-digit or 3-digit grouping.

To account for industry-of-employment effects here we have relied instead upon a much more direct measure of the likely impact of trade on specific jobs. In the new survey, employed respondents were asked the following question:

*Do you think that increased trade with other nations makes your own job more secure, less secure, or does it have no clear effect?*

1. More secure
2. Less secure, or
3. No clear effect
8. Don't know
9. Refused

Answers to this question were used to create a categorical variable measuring the expected effects of trade on job security, with possible values of 1 (=trade makes respondent's own job less secure), 2(=no clear effect, and 3(=more secure). Here we did find more of a gender difference in the distribution of men

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<sup>11</sup> Scheve and Slaughter (2001) examine industry specific effects using this approach and industry data supplied in the NES. Mayda and Rodrik (2001) had to make an extra step, since the ISSP data does not provide for coding of respondents by industry. They inferred industry of employment from occupational codes assigned to respondents instead.

<sup>12</sup> The staff at the Panel Study of Income Dynamics recently checked a random sample of surveys and found that industry codes differed across coders in 14% of cases (see PSID 1999). The U.S. Census Bureau has identified this

and women, although nothing that would immediately signal a simple explanation for female protectionism. More men than women (21% compared with 13%) reported that increasing trade made their own jobs more secure but, on the other side of the coin, more men also reported that trade made their jobs less secure (13% compared with only 7% of women).

We introduced this “trade effects” variable in estimations of trade preferences: see models (3) and (4) in Table 5. The measure was strongly and significantly related to support for increasing trade as expected, and in keeping with “specific factors” models of the income effects of trade. The probability of support for increasing trade rises by a whopping 44% (s.e. 8%) when comparing those for whom trade raises job security with those reporting that trade makes their job less secure (with all other variables set to mean values). But including this variable in the estimation does not reduce the size of the gender bias in trade preferences. We tested again for an interaction effect in model (4) allowing that, if women are more risk averse because they expect to pay higher costs when changing jobs, they may also be more sensitive than male counterparts to the specific effects of trade on their job security. But we found no significant difference along these lines.

We have experimented (in as many sensible ways as possible at this preliminary stage) with a variety of more complicated conditional hypotheses and interaction effects, comparing the relative sensitivity of highly skilled men and women to the effects of trade on job security, for instance, and allowing that all those sensitivities may be affected by levels of personal and household income. The TESS survey also asked respondents how difficult they felt it would be for them to find a new job that would be acceptable to them if they lost their current job. We have used responses to this question as an alternative, more general measure of the employment risks faced by individuals, using it in place of and in addition to the skills and trade effects variables in the various estimations of trade preferences. So far, however, we have found no significant relationships along any of these lines that have any mitigating effect on the basic gender difference in trade preferences. There is a very clear gender gap in individuals’

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as a major priority when training interviewers and coders for the National Longitudinal Surveys (Jay Mesenheimer, US Census Bureau, personal communication, July 2003).

attitudes toward trade that is not easily reduced to any simple gender differences in employment status, education, job-related skills, or industry effects, or to gender differences in sensitivity to the effects of these variables on the risks associated with greater trade openness.

#### **IV. Gender, Age, and Marital Status**

We do have some ways to try to explore more directly the arguments made about the effects of maternity and family duties on female policy preferences. While the general TESS survey does not ask respondents whether they have children, it does ask about marital status, including whether respondents have been married at any time in the past. And parental and other family duties that fall more heavily upon women than upon men presumably loom larger for individuals in different age brackets. We might expect this to show up in stated preferences with regard to trade: among older respondents and among those who are married we should expect that the difference between men and women in terms of their aversion to the risks of trade openness (and economic dislocation more generally) should be much larger than it is among younger and unmarried respondents.

We tested this argument by re-running our preferred model of preferences that includes the skills and trade effects measures as well as the other basic controls. This time, however, we divided the analysis between different groups of respondents. The results are reported in Table 6. First we estimated preferences for those under the age of 35 (1), for those aged between 35 and 55 (2), and for those aged 55 or above (3) The differences are quite dramatic. The estimated gender effect among the youngest group of individuals is much smaller and is no longer significant at standard levels. The real difference between men and women in attitudes towards trade only emerges among older cohorts, which is broadly consistent with the general claims about family duties (or at least, their likely timing) and how they might affect policy preferences.<sup>13</sup>

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<sup>13</sup> One very interesting finding here is that, among older respondents, the estimated effect of the industry of employment variable is much larger than among the younger group. This actually fits well with the only theoretical piece we are aware of on trade and age. Li and Mayer (1996) have shown that, in a model in which labor can move between sectors only slowly, older workers will be much more sensitive to the industry effects of trade than younger

[Table 6]

Fitting with this interpretation too, it is clear that the pattern that emerges here is due to changes in female (not male) attitudes towards trade across age brackets. Male attitudes actually remain very stable across age groups. Looking at the frequencies of different responses: among those 35 or younger, for instance, 73% of men favored trade compared to 71% of women; among those aged between 35 and 55, the corresponding rates were 72% and 59%; and among those aged over 55, 73% of men still supported trade while only 54% of women did. The one significant oddity here, however, from the point of view of the maternity hypothesis, is that women in the oldest age bracket (55 years and above) are markedly more protectionist in their attitudes than those in the middle bracket (35-55) who presumably are more constrained by maternal duties and the added costs they impose on movements in and out of the labor market.

Next we estimated the same basic model, this time dividing the sample according to whether respondents were married. As shown in column (3), the gender gap in attitudes toward trade disappears altogether among unmarried individuals! The gender divide appears only among married respondents (column 4), where the effect is now much larger than previously estimated: with all other variables set to their means values, being female rather than male lowers the probability that an individual will support trade by 17% (s.e. 4%).<sup>14</sup> We ran the same model for married respondents in different age brackets (although we do not report the results in Table 6) and found that this effect is almost identical in each bracket (i.e. it is not simply a product of age). This is also clear from model (5), where we estimate preferences across the entire set of respondents again, this time testing for the separate interaction effects of marital status with gender and age with gender: both effects appear to be operating, helping to account

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workers, since they have shorter employment time horizons. The other complementary result, is that the estimated effect of the skill level of respondents on trade preferences becomes much smaller in the older group than in the younger group (although in neither is it significant): this fits with the idea that Stolper-Samuelson effects require longer time horizons among individuals than specific-factors effects, since the former depend on the assumption that factors of production are perfectly mobile between sectors.

<sup>14</sup> We produced almost identical results to these by comparing “never marrieds” with other respondents in the sample; the logic here is that those who are single now but have been married in the past are more likely (than those

for the overall gender divide in attitudes towards trade. Notice too that the estimated effect of being married if the respondent is male is positive and significant, while the effect of being married if female is significant and negative. A very curious split in preferences appears to coincide with marriage. The raw percentages actually capture these effects fairly accurately: among unmarried respondents, 66% of men and 64% of women report favoring increased trade; but among married individuals 77% of men and only 56% of women favor trade.

We have tested several other types of hypotheses related to possible effects of maternity (though we do not report these additional results here). The survey asked respondents whether their employers' offered various family-related job benefits (including parental leave, flexible working hours, and daycare facilities). It is feasible that access to such benefits can lower anxiety about the particular career costs of maternity, thus leveling the playing field between male and female workers in terms of whether they expect to be searching for a new job (in a potentially more uncertain labor market) in the future. We tested various forms of the claim that individuals, and women in particular, who have access to such benefits have different preferences over trade policy than those who do not. But we found no support for this claim. Whether respondents enjoy flexible-work time hours, parental leave, or daycare provisions through their employer has no significant bearing on trade preferences for openness or closure, nor do any of these variables test significant when entered into models in interaction with gender.

Overall then, while the powerful interaction effects that gender, age, and marital status have on trade preferences does lend indirect support to the argument that the disproportional family duties (and associated labor-market risks) related to maternity may lie at the heart of the puzzle, we still do not have a real smoking gun.

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who have never married) to have continuing parental duties that might give rise to a gender bias in policy preferences.

## **V. Ideology and Values?**

Where do we go from here? It is probably time to consider some plausible non-material determinants of trade policy preferences. In their analysis of the ISSP data, O'Rourke and Sinnott (2002) argue that among the strongest predictors of support for trade protection are measures of national pride and nationalist sentiment. Mayda and Rodrik (2001) end their paper with a similar claim (using some of the same ISSP variables), suggesting that self-expressed values, identities, and attachments are critical determinants of attitudes towards trade. Individuals who identify themselves more closely with their local and national communities are more protectionist. The interesting question from our perspective is whether gender differences along these non-economic dimensions may be responsible for the overall gender divide on trade. At one point in their paper Mayda and Rodrik state that the gender difference in trade attitudes "provides us with an early glimpse into the important role played by values in shaping preferences" (2001, 11). Later in the paper they examine the effects of values such as national pride and community, regional, national, and international "attachments," but they say nothing further about gender.

The possibility that differences in values or ideologies fundamentally shape trade policy preferences among voters is not one that can be dismissed out of hand. And the policy stakes are actually quite high. As O'Rourke and Sinnott (2002, 159) point out, if support for protectionism is reducible to purely material incentives, it can be dealt with by purely material solutions. That is, those opposed to globalization can presumably be won over by compensatory side-payments or forms of insurance against material risk. If this is not the case, the prospects for continued globalization may appear considerably dimmer, or at least more uncertain.

The key question for us is whether women, and especially those women who are older and married, can be significantly distinguished from their male counterparts along certain ideological or values dimensions that are relevant for the formation of trade policy preferences. Perhaps women are just less supportive of market arrangements in general, for example, and more supportive of government

regulations or interventions in all spheres of economic life. Or perhaps there is a relevant gender bias in attachments to local communities, and the willingness to trade-off personal material benefits in order to mitigate losses felt by others in those communities. The latter may include greater sensitivity among women to concerns about environmental degradation in developing nations, or abuses of human rights, that are (rightly or wrongly) associated with globalization.

On this front, one clear reason not to discount a values-based explanation for the gender gap over trade too quickly is that women's political groups seem to place such a heavy emphasis on non-material priorities when speaking out against trade and globalization. In recent years both the *National Organization for Women* and *Feminist Majority* have denounced "fast-track" trade legislation before Congress, and trade agreements in general, focusing on the potential dangers to the environment and to working conditions for women in developing nations, and to community attachments in the United States. For instance *NOW* has cited concerns that trade disproportionately benefits "powerful corporations searching the globe for cheap labor, lowering standards for workers' rights, public health and education, consumer rights, and environmental laws worldwide."<sup>15</sup> Similarly, the *Feminist Majority* has argued that "current trade agreements, like NAFTA, violate the rights of women workers" and has cited concerns about working conditions in export processing zones in developing nations.<sup>16</sup> Similar themes are emphasized in the work of feminist scholars that specifically discusses the effects of globalization on women (see Bayes, Hawkesworth, and Kelly 2001).

We have explored some of these claims in a very preliminary way using a range of measures available in the TESS survey data. The TESS data does not include any direct indicators of community attachments or national pride or patriotism, unfortunately, so we cannot investigate those specific types of

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<sup>15</sup> In the words of president Kim Gandy, in a statement made in 2002, "in the race toward economic globalization, poor women are at a particular advantage," and *NOW* stands "firmly against any international trade policy that does not protect women workers around the world" (see <http://www.now.org/issues/economic/>).

<sup>16</sup> The group's official statements also express concerns about the connection between privatization and free trade agreements around the world, and about the commercialization of agriculture, the increased role of agribusiness, and the destabilization of small and family farms (see <http://www.feminist.org/>).

effects highlighted by other authors. But we can examine the effects of various measures of ideological and religious beliefs on trade preferences. In the estimations discussed above we have already found that respondents who identify themselves as Republicans tend to be marginally less supportive of trade than others, especially among older individuals, although the effect is not especially robust to the inclusion or exclusion of other variables in the model. It is plausible that this partisan effect is picking up differences in values or ideologies among respondents, although the relationships are not immediately clear. One might have expected that Democrats and independents, who typically express greater concerns about the effects of globalization on the environment and on labor standards, would actually be less supportive of trade than Republicans. On the other hand, isolationist sentiments in American politics have been more closely associated with the Republicans than with Democrats, at least historically. Experimenting with the ideology variables does not add much new insight here (results are reported in Table 7). We excluded party affiliation from the model and included dummy variables for whether respondents identify themselves as “liberal” or “conservative” (over half of respondents instead chose “moderate” or “I haven’t thought about this”). Liberals were much more supportive of trade compared with all others (including conservatives), but conservatives were not noticeably biased one way or the other on the trade issue compared with those who did not claim to have a clear ideological position. Most importantly, controlling for ideology does not affect the gender gap.

[Table 7]

We also tested whether religious respondents (those who identified themselves as having a particular religious faith) were more or less supportive of globalization than non-religious individuals. Since roughly 88 percent of respondents claim to be religious, we did not expect that this would prove very helpful, and this is clear from the results (model 2 in Table 7). We also tested for whether there was a significant difference between Christians and non-Christians, and between members of distinct faiths, all to no avail. Interacting these indicators of religious faith with gender and the other explanatory variables, on the presumption that such non-material values may reduce the degree to which individuals’

attitudes respond to material incentives, we still found no significant effects, and no relationships that explained the gender division on trade (results from all these tests are available from the authors).

The TESS survey also asked respondents whether their plans for starting or raising a family had significantly affected their choice of occupation. Individuals who permit family considerations to significantly constrain their career choices may hold different values than those who do not, placing less emphasis on personal returns from employment relative to other types of goals (or even just relative to total household income). Among employed respondents, 25% of men indicated that they considered family issues a priority when choosing their occupation, compared with 32% of women. Including this dummy variable in the standard estimations does not remove the gender bias toward protectionism (see column 3 in Table 7), however, though it does appear that such familial concerns are associated with greater reticence about trade. Again, interacting this “values” indicator with gender and with other RHS variables does not help explain individuals’ trade preferences or the gender gap in evident in those preferences.

Finally, one interesting measure we have for differences in values across individuals, especially when it comes to how much they might be swayed by the thought of losses suffered by members of their community, is a variable indicating whether or not individuals’ are employed in “caregiver” sectors of the economy.<sup>17</sup> As a first test, we identified these sectors as elementary and secondary schools (NAIC code 6111), health care (621), hospitals (622), nursing and residential care (623) and social assistance (624), with coding based upon answers to the survey’s industry-of-employment question. Among employed respondents some 29% of women, compared with only 8% of men, worked in these sectors. But including this dummy variable in the estimations (column 4 in Table 7) has a very similar effect, in all respects, as including the “family priority” variable, and does not account for the gender division over trade (though the estimated size of that gender gap is reduced slightly).

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<sup>17</sup> We are grateful to Jonas Pontussen for suggesting this as measure.

Overall, the results reported here suggest that while there may well be some important values-based gender differences that may have an impact on trade policy preferences, the differences we can measure here are not ones that account for the large gender divide over trade. It also seems possible that there are relevant gender-based differences between individuals in terms of the value trade-offs they make between the economic benefits of trade and the potential costs or risks trade poses to the environment or to international labor standards. Without better measures of such differences, however, this is only speculation. One possible avenue for further research then, involves re-examining the ISSP and NES survey data, which have many more indicators of values and ideologies, as well as data on individuals' attitudes toward environmental and human rights issues. An even better approach would be to design new survey questions aimed directly at measuring whether, or to what extent, individuals themselves reference these non-economic values and ideologies when assessing the costs and benefits of increasing international trade.

## **VI. Implications**

Women appear to be much less favorably inclined towards international trade than men. Is this particularly important? It clearly poses a theoretical challenge for political-economy approaches to trade, and other dimensions of economic policy, that do not allow for gender differences in the policy preferences of individual voters. And there are direct implications in terms of expected trade policy outcomes. Mayda and Rodrik (2001) have shown that attitudes expressed towards trade in surveys seem to be related to actual trade policies: the average support for trade openness in different countries included in the ISSP survey data in 1995 is correlated negatively with average tariff levels. If the gender gap on trade is as large as it appears, it may register in the form of higher equilibrium trade barriers in political systems in which women have greater voice. In general, higher levels of female participation or influence in politics can be expected to raise equilibrium trade barriers, all else equal. Rising female membership in

political organizations such as parties, labor unions, and environmental groups, for instance, may be reshaping the policy positions of these organizations and thus, ultimately, trade policy outcomes.

This paper provides a very preliminary study of gender bias in voter attitudes toward trade. We have focused for the most part on examining a new set of survey data on attitudes towards trade in the United States. The data indicate that women are significantly less likely than men to support increasing international trade. This gender difference remains large even when controlling for a broad range of demographic and socio-economic characteristics that influence the way individuals are affected by trade in material terms. And the gender gap widens markedly among older and married respondents: while male attitudes are relatively stable, women are far more likely to oppose trade when they are older and when they are married. This suggests that labor-market dynamics associated with maternity may be playing an important role in shaping attitudes. Women with family responsibilities that make it more costly or difficult for them to switch jobs may be more sensitive to the risks of economic dislocation associated with trade openness. We fail to find direct evidence supporting this proposition, however, since various indicators of the risks and the costs of job loss do not appear to be related at all to the gender gap in trade preferences. We also do not find any strong evidence that gender differences in non-material values or along ideological dimensions have any affect on attitudes toward trade. Female protectionism thus stands out as a compelling puzzle and, we suggest, a good focal point for theoretical work on the role of gender in political economy

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## **Appendix: TESS Survey – Additional Information**

The data examined here are from a survey designed explicitly as an experiment to test for framing effects in attitudes towards international trade (see Hiscox 2002b). Though we do not analyze framing effects in this paper (we found no gender bias in the degree to which respondents reacted to issue framing), the effects themselves are significant and we include controls for frames in all the estimations we performed for the paper.

For the survey experiment, respondents were randomly assigned to 8 groups. The interviewer read each of these groups a particular “frame” before asking questions about their attitudes towards international trade. Percentages indicate the size of the group in relation to the entire sample.

Group 1 (15%): Pro-trade frame.

Many people believe that increasing trade with other nations creates jobs and allows Americans to buy more types of goods at lower prices.

Group 2 (15%): Anti-trade frame.

Many people believe that increasing trade with other nations leads to job losses and exposes American producers to unfair competition.

Group 3 (15%): Both frames.

Many people believe that increasing trade with other nations creates jobs and allows Americans to buy more types of goods at lower prices. Others believe that increasing trade with other nations leads to job losses and exposes American producers to unfair competition.

Group 4 (15%): No frame

[No frame]

Groups 5-8 received identical frames (in corresponding order), but they were first read the following:

According to the New York Times, almost 100 percent of American economists support increasing trade with other nations. In 1993 over a thousand economists, including all living winners of the Nobel Prize in economics, signed an open letter to the New York Times urging people to support efforts to increase trade between the United States and neighboring countries.

Group 5 (10%): NYT Endorsement plus pro-trade frame.

Group 6 (10%): NYT endorsement plus anti-trade frame.

Group 7 (10%): NYT endorsement plus both frames.

Group 8 (10%): NYT endorsement, no frame.

**Table A.1: Descriptive Statistics**

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	Obs.	Mean	Std Dev	Min.	Max.
Favor Trade (bin)	1125	.6524444	.4764057	0	1
Favor Trade (cat)	1125	2.802667	1.015972	1	4
Female	1141	.5836985	.4931609	0	1
Age	1135	48.14714	17.25482	18	94
Employed	1141	.5845749	.4930113	0	1
Republican	1141	.3155127	.4649235	0	1
Black	1141	.0999124	.3000146	0	1
Latino	1141	.0613497	.2400759	0	1
Asian	1141	.3742331	.4841365	0	1
Education (cat)	1137	3.040457	.9805049	1	4
Income >\$35k	1141	.4425942	.4969114	0	1
Skills (cat)	656	2.938931	1.146433	1	4
Trade effects (cat)	656	2.073171	.5190829	1	3
Married	1141	.5188431	.4998639	0	1
Flexible Hours	658	.5972644	.4908215	0	1
Parental Leave	620	.5580645	.4970181	0	1
Daycare	649	.1263482	.3324977	0	1
Liberal	1135	.1700441	.3758371	0	1
Moderate	1135	.2678414	.4430297	0	1
Conservative	1135	.2740088	.44621	0	1
Religious	1137	.8759894	.3297386	0	1
Christian	1137	.759015	.4278695	0	1
Family Priority	658	.2857143	.4520976	0	1
Caregiver job	667	.1949025	.3964229	0	1

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**TABLE 1: Gender Bias in Basic Attitudes Towards Trade**

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**Question: *Do you favor or oppose increasing trade with other nations?***

	<b>Men</b>	<b>Women</b>
Favor	72% N=341	60% N=393
Oppose	28% N=130	40% N=261

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**TABLE 2: Gender Bias in Intensity of Attitudes Towards Trade**

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**Question: *Is that strongly favor or somewhat favor? (Is that strongly oppose or somewhat oppose?)***

	<b>Men</b>	<b>Women</b>
Strongly Favor	39% N=182	23% N=148
Somewhat Favor	34% N=159	37% N=245
Somewhat Oppose	14% N=65	25% N=165
Strongly Oppose	14% N=65	15% N=96

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**TABLE 3: Gender Bias in Attitudes Towards Trade Among Groups****Question: *Do you favor or oppose increasing trade with other nations?***

	<b>Men</b>	<b>Women</b>
Employed <sup>†</sup>		
Favor	74% (230)	62% (216)
Oppose	26% (81)	38% (130)
Not employed		
Favor	69% (111)	57% (177)
Oppose	31% (49)	43% (131)
Highly Educated <sup>‡</sup>		
Favor	77% (254)	65% (277)
Oppose	23% (75)	35% (149)
Less Educated		
Favor	61% (87)	51% (116)
Oppose	38% (55)	48% (112)
Republican		
Favor	71% (129)	59% (102)
Oppose	29% (53)	41% (71)
Democrat		
Favor	73% (104)	59% (150)
Oppose	27% (39)	41% (106)

<sup>†</sup> Full- or part-time working for pay<sup>‡</sup> College-level or above (> high school) education

**TABLE 4: Determinants of Individual Support for Increasing International Trade – A First Cut**

Dependent variable =1 if respondent favors increasing trade with other nations (=0 if opposes).

	(1)	(2)	(3)
Female	-0.33*** (0.08)	-0.30*** (0.08)	-0.31*** (0.08)
Age	-0.007*** (0.002)	-0.007*** (0.003)	-0.007*** (0.003)
Employed	0.03 (0.09)	-0.12 (0.09)	-0.12 (0.09)
Black	0.03 (0.13)	0.12 (0.13)	0.09 (0.14)
Latino	0.06 (0.17)	0.13 (0.17)	0.12 (0.17)
Asian	-0.08 (0.08)	-0.06 (0.08)	-0.06 (0.08)
Education		0.24*** (0.04)	0.24*** (0.04)
Income >\$35,000		0.22** (0.09)	0.23** (0.09)
Republican			-0.10 (0.09)
Constant	1.07 (0.23)	0.35 (0.23)	0.38 (0.23)
Pseudo R <sup>2</sup>	0.05	0.08	0.08
Log Likelihood	-688.6	-662.9	-662.3
N	1119	1116	1116

Probit estimations with standard errors in parentheses. All models include dummy variables for question framing (see appendix). \* p<0.10 \*\* p<0.05 \*\*\* p<0.01

**TABLE 5: Individual Support for Increasing International Trade – Fuller Models**

Dependent variable =1 if respondent favors increasing trade with other nations (=0 if opposes).

	(1)	(2)	(3)	(4)
Female	-0.32*** (0.11)	-0.32 (0.29)	-0.32*** (0.11)	-0.25 (0.54)
Age	-0.007 (0.005)	-0.007 (0.005)	-0.005 (0.005)	-0.005 (0.005)
Income >\$35,000	0.18 (0.12)	0.18 (0.12)	0.20* (0.12)	0.21* (0.12)
Education	0.25*** (0.06)	0.25*** (0.06)	0.23*** (0.07)	0.23*** (0.07)
Republican	-0.22* (0.12)	-0.22* (0.12)	-0.23* (0.12)	-0.23* (0.12)
Skills	0.04 (0.05)	0.04 (0.07)		
Female*skills		0.0001 (0.09)		
Trade effects/ own job			0.59*** (0.11)	0.63*** (0.15)
Female*Trade effects				-0.08 (0.22)
Constant	0.17 (0.32)	0.17 (0.36)	-0.98** (0.39)	-1.12** (0.48)
Pseudo R <sup>2</sup>	0.08	0.08	0.12	0.12
Log Likelihood	-367.7	-367.7	-351.9	-351.8
N	641	641	639	639

Probit estimations with standard errors in parentheses. All models include dummy variables for question framing (see appendix). \* p<0.10 \*\* p<0.05 \*\*\* p<0.01

**TABLE 6: Individual Support for Increasing International Trade – Age and Marriage****Dependent variable =1 if respondent favors increasing trade with other nations (=0 if opposes).**

	<35yrs (1)	35-54yrs (2)	>54yrs (3)	Unmarried (4)	Married (5)	(6)
Female	-0.08 (0.21)	-0.36** (0.16)	-0.75** (0.36)	0.07 (0.18)	-0.57*** (0.17)	0.68* (0.41)
Age	-0.08** (0.03)	-0.010 (0.014)	-0.003 (0.03)	-0.013* (0.007)	-0.002 (0.007)	0.002 (0.007)
Income >\$35,000	0.07 (0.24)	0.31* (0.17)	0.41 (0.40)	-0.03 (0.20)	0.37** (0.17)	0.16 (0.13)
Education	0.29** (0.13)	0.34*** (0.09)	-0.06 (0.20)	0.33*** (0.11)	0.22** (0.09)	0.24*** (0.07)
Republican	-0.09 (0.24)	-0.18 (0.17)	-1.18** (0.39)	-0.29 (0.20)	-0.26 (0.16)	-0.26** (0.12)
Skills	0.07 (0.09)	-0.01 (0.07)	0.26 (0.14)	0.02 (0.07)	0.09 (0.07)	0.05 (0.05)
Trade effects/ own job	0.36* (0.22)	0.69*** (0.15)	1.45*** (0.51)	0.42*** (0.16)	0.82*** (0.17)	0.59*** (0.11)
Married						0.42** (0.18)
Female*Married						-0.68*** (0.23)
Female*Age						-0.015* (0.009)
Constant	0.90 (0.94)	-1.18* (0.75)	-1.66 (2.25)	-1.00* (0.58)	-1.60*** (0.60)	-1.60*** (0.46)
Pseudo R <sup>2</sup>	0.14	0.15	0.37	0.14	0.18	0.14
Log Likelihood	-98.8	-184.8	-44.2	-153.0	-183.1	-345.7
N	183	345	111	280	359	639

Probit estimations with standard errors in parentheses. All models include dummy variables for question framing (see appendix). \* p<0.10 \*\* p<0.05 \*\*\* p<0.01

**TABLE 7: Individual Support for Increasing International Trade – Values and Ideology****Dependent variable =1 if respondent favors increasing trade with other nations (=0 if opposes).**

	(1)	(2)	(3)	(4)
Female	-0.31*** (0.12)	-0.29*** (0.11)	-0.27** (0.11)	-0.24** (0.12)
Age	-0.004 (0.005)	-0.005 (0.005)	-0.006 (0.005)	-0.005 (0.005)
Income >\$35,000	0.20* (0.12)	0.18 (0.12)	0.18 (0.12)	0.17 (0.12)
Education	0.21*** (0.07)	0.22*** (0.07)	0.23*** (0.07)	0.24*** (0.07)
Skills	0.03 (0.05)	0.03 (0.05)	0.04 (0.05)	0.04 (0.05)
Trade effects/ own job	0.62*** (0.11)	0.60*** (0.11)	0.59*** (0.11)	0.58*** (0.11)
Liberal	0.46*** (0.16)			
Conservative	0.05 (0.13)			
Religious		-0.07 (0.17)		
Family priority			-0.22* (0.12)	
Caregiver job				-0.23* (0.14)
Constant	-1.22 (0.40)	-1.01** (0.40)	-1.01** (0.39)	-1.11*** (0.39)
Pseudo R <sup>2</sup>	0.13	0.12	0.12	0.12
Log Likelihood	-347.7	-353.3	-352.1	-352.5
N	638	638	639	639

Probit estimations with standard errors in parentheses. All models include dummy variables for question framing (see appendix). \* p<0.10 \*\* p<0.05 \*\*\* p<0.01