



# Who Are Opposed to Free Trade in the Philippines?

GLORIA O. PASADILLA AND CHRISTINE MARIE M. LIAO\*

## ABSTRACT

In a democratic country, economic policies succeed or fail depending on the political support they receive. Open trade policies that were initiated and accepted years ago can be reversed in accordance with the government's free trade conviction and popular pressure. However, popular pressure for or against open trade is affected by other factors. This paper attempts to link these factors with individual preferences toward either more protectionism or greater trade liberalization. Using ordered logit estimation of thousands of survey data, the paper finds that gender, economic class, and urban population negatively correlate with pro-trade attitudes in the Philippines. It also notes that the effect of some of the demographic variables on protectionist sentiment is markedly different from their effects among more developed Western nations.

**F**ilipinos as a people are very open to strangers and foreigners. They take pride in their so-called "Filipino hospitality," where they try to make visitors feel at home and comfortable, even, at times, at great personal cost. But when it comes to trade, the Philippines is, ironically, relatively closed. For instance, based on the average most-favored-nation (MFN) tariffs, the Philippines is no match to its ASEAN neighbors Singapore, Brunei, and Malaysia—countries that have relatively low mean and median tariff rates. Rather, the Philippines is among those with an average MFN rate higher than 10 percent.

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\* Senior Research Fellow and Consultant, respectively, Philippine Institute for Development Studies. The authors may be contacted at [gpasadilla@mail.pids.gov.ph](mailto:gpasadilla@mail.pids.gov.ph) and [cmliao@drownthestars.org](mailto:cmliao@drownthestars.org).

A scan of local newspaper articles shows a strong undercurrent of anti-globalization sentiment, especially among those who belong to certain sectors of society. Faced with this tendency toward protection, it would be worthwhile to examine what lies behind certain people's protectionist ideals. What are the traits that lead particular persons to be more anti-globalization than others?

This paper attempts to determine the characteristics that make individuals either more protectionist or more open to free trade. It examines the issue through an ordered logit approach using data from the 2003 International Social Survey Programme (ISSP) national survey in the Philippines. The survey asks 1,200 respondents how they feel about limiting foreign imports. These responses are then correlated with their demographic characteristics to establish some linkages with individual trade policy preferences.

The number of studies that relate demographic characteristics to trade has actually increased since survey data have been made more widely available in recent years, but none have yet been applied specifically to the Philippine case. Mayda and Rodrik (2001) and O'Rourke and Sinnott (2001) use similar survey data in 1995 across several countries to run huge panel data regressions and find that personal characteristics such as gender, age, and social status are significant in explaining trade policy preferences. Using various country survey data, Scheve and Slaughter (2001) for the United States, Pasadilla (2002) for Switzerland, and Balistreri (1997) for Canada all find that noneconomic variables significantly explain their trade-related results.

A demographic understanding of how individual incentives and characteristics affect trade policy choices is important, especially for policymakers. If they believe in the virtues of free trade, as many economists do, an understanding of how the general public's trade opinion is formed can help policymakers cater their pitches to the right target groups and thus better gather support for trade liberalization programs.

The next section provides a background on the role of trade preferences. Section 3 expounds on the data and methodology employed in this study as well as briefly describes the theory behind the use of demographic and institutional variables. Section 4 presents the results of the empirical work, and Section 5 presents the conclusions.

## **BACKGROUND**

Economists tend to construct economic models that ignore political and institutional realities. This perhaps explains why only economists nearly unanimously extol the desirability of free trade.<sup>1</sup> The reality is that there are but a few economies

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<sup>1</sup> In a 1992 study by Alston et al., more than 90 percent of economists who responded indicated a belief that different trade barriers reduce general economic welfare.

in the world, e.g., Singapore and Hong Kong, that have trade policies close to what economics textbooks preach. The majority pose some form of trade protection, either through the imposition of positive tariffs or through other nontariff barriers such as liberal anti-dumping policies, dubious standards requirements, and quotas.

The existence of political considerations can explain why free trade is virtually nonexistent. In some policy models, the trade policy that is adopted may not be the economically optimal one but it is what clears the political market. The political market consists of those that demand certain types of trade policy (e.g., interest group and businessmen) and those that supply it (i.e., policymakers under a given institutional structure). The policy that results is the outcome of the demand and supply, in much the same way as price is the result of the demand and supply of a commodity in a traditional economic market. This "political equilibrium" may be found in trade policies that create distortions. In usual economic parlance, these are considered economic inefficiencies, but they persist as long as they cause the political market to clear.

As in the traditional goods market, individual preferences for particular trade policies ultimately affect demand for certain types of policies. If certain types of individuals prefer good A over good B in the goods market, so do different types of individuals prefer certain forms of trade policies over others in the political market.

This paper modestly contributes to this rich literature by describing the characteristics of individuals that would have particular preferences for or against trade openness in the Philippines.

## **DATA AND METHODOLOGY**

This section presents the ordered logit model regression that maps different individual characteristics to explain the probability of an individual being pro- or anti-trade. First, it discusses the basic characteristics of the data, particularly the main variable—the protect variable (as explained below). It then proceeds to discuss the methodological framework, the construction of variables, and the analysis of results.

### **Survey data, economic condition, and trade preference**

The Social Weather Station (SWS) used multistage probability sampling to select the 1,200 voting-age (i.e., 18 years old and above) respondents for the survey. Covering the entire Philippines, the research body targeted 300 individuals each from the National Capital Region (NCR), and the main islands of Luzon (excluding NCR), Visayas, and Mindanao. The questionnaire contained more than 100 questions, but this subsection will discuss only the major policy variables. Table 1 presents the salient characteristics of the 2003 sample.

**Table 1. ISSP sample characteristics**

Characteristics	Sample Share of Each Characteristic (%)
Male	50.2
Mean age	39.4 years
Self-employed	32.1
Employed in public sector	8.9
Urban	54.1
Economic Class	
Class AB (richest)	0.4
Class C	8.6
Class D	66.1
Class E (poorest)	24.9

The main variable or question that asks respondents how they feel about limiting foreign imports (which is assumed to represent trade policy preference) is designated as the protect variable. The individual's answer uses a 5-point scale (where 1= "strongly agree") for the question:

How much do you agree or disagree with the following statement? The Philippines should limit the import of foreign products in order to protect its national economy.

Lower values for the protect variable indicate anti-trade sentiments, as this would be taken to mean agreeing to limit foreign imports, while high values indicate pro-trade preference.<sup>2</sup>

The 2003 mean value of the protect variable is 2.10, which leans toward the more protectionist end, with 72.6 percent of the respondents preferring to limit imports (Table 2).<sup>3</sup>

It must be acknowledged that the phrasing of the question may lend a protectionist bias to the responses. Such is the shortcoming of employing survey data. However, since the goal of the study is not to prove or disprove that Filipinos are generally protectionist, but rather to determine the factors behind the variations in responses of individuals, the results should hold as long as the bias is uniform across respondents.<sup>4</sup>

<sup>2</sup> Dropping the respondents who replied "don't know" or "refused to answer" to the dependent variable under consideration, the final number of observations left in the data is 1,180.

<sup>3</sup> Percentage of people answering "strongly agree" (response=1) or "agree" (response=2).

<sup>4</sup> There were other questions in the survey that could also be taken to indicate trade sentiment. When asked whether they agreed that large international companies damaged local business, 52.1 percent answered in the affirmative, with a mean of 2.55 in a range of 1 (strongly agree) to 5 (strongly disagree).

Table 2. Frequencies of responses to a proposal to limit imports

Response	Frequency	Percent	Cumulative percent
(1) Agree Strongly (Anti-trade Position)	393	33.3	33.3
(2) Agree	464	39.3	72.6
(3) Neither Agree Nor Disagree	186	15.8	88.4
(4) Disagree	101	8.6	97.0
(5) Disagree Strongly (Pro-trade Position)	36	3.0	100.0
Total	1,180	100.0	

### Methodological framework<sup>5</sup>

Individual responses to the above-cited question on limiting imports are treated as the dependent variable. Given the discrete and ordinal variable response (i.e., 1 for "strongly agree" up and 5 for "strongly disagree") in the dependent variable, the study uses an ordered logit estimation.

Consider the anti- or pro-trade stance of an individual as a function of a vector of characteristics  $X$ . Furthermore, an individual's vote for or against open trade is dependent on a marginal benefits and costs consideration, the income effect of trade being an example. Since this marginal benefits/costs consideration is generally unobservable, consider a latent variable regression,

$$y^* = X\beta + \varepsilon$$

where  $\varepsilon$  has a standard logistic distribution with mean zero and variance one. Although one cannot observe here the individual benefits of trade, one can determine such from the survey data on whether or not the individual supports open trade. Presumably, in the case of strong agreement with limiting trade, the trade benefits to the individual are not commensurate to the cost, or that  $y^* \leq \mu_1$  or some cut-off point, while the benefits are much higher or  $y^* \geq \mu_4$  for those who are

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When queried, meanwhile, on whether they believed that free trade led to better products, 58.7 percent responded in the affirmative, leaving greater than 40 percent of the respondents with an unfavorable view. The mean here is 2.40, where 1 means that the individual strongly agrees that free trade leads to better products, and 5 indicates that the respondent strongly disagrees with the statement. It can be noted that even with such positive phrasing, one cannot conclude that there is a particularly strong support for globalization in the country.

<sup>5</sup> This subsection follows the discussion in Mayda and Rodrik (2001), Green (2002), and Stata Reference Manual.

strongly for trade liberalization. For trade sentiments that lie in between, the benefits and costs valuation are sandwiched between two thresholds. Thus, if  $y_i$  is the trade preference vote of the individual and  $y_i = 1, 2, 3, 4,$  and  $5$ , one can define the following probabilities:

$$\text{Prob}(y=1|X) = \text{Prob}(y^* \leq \mu_1)^6 = F(\mu_1 - X\beta),$$

$$\text{Prob}(y=2|X) = \text{Prob}(\mu_1 \leq y^* \leq \mu_2) = F(\mu_2 - X\beta) - F(\mu_1 - X\beta),$$

$$\text{Prob}(y=3|X) = \text{Prob}(\mu_2 \leq y^* \leq \mu_3) = F(\mu_3 - X\beta) - F(\mu_2 - X\beta),$$

$$\text{Prob}(y=4|X) = \text{Prob}(\mu_3 \leq y^* \leq \mu_4) = F(\mu_4 - X\beta) - F(\mu_3 - X\beta),$$

$$\text{Prob}(y=5|X) = \text{Prob}(y^* \geq \mu_4) = 1 - F(\mu_4 - X\beta).$$

Here,  $\mu_1 < \mu_2 < \mu_3 < \mu_4$ , are the cutoff values for the ordered logit model, and  $F$  is the cumulative distribution function of the logistic distribution.<sup>7</sup>

The coefficients in ordered logit regressions are not equal to the effect on the probabilities of changes in the independent variables. Instead, the coefficients must undergo a transformation process before interpretation.<sup>8</sup>

It should be noted that, keeping  $\beta$  and  $\mu$  constant, an increase in the independent variables  $X$  has an unambiguous effect on the probabilities of the *first* and the *last* categories, but is ambiguous with regard the middle categories. A positive coefficient estimate of  $\beta_j$  means that an increase in the regressor  $X$  decreases the probability of the lowest category (i.e., decreases the probability of anti-trade preference) and increases the probability of the highest category (i.e., probability of pro-trade preference). If the lowest two ( $y = 1$  and  $2$ ) and the highest two ( $y = 4$  and  $5$ ) marginal probabilities are summed up, one can, likewise, get an unambiguous conclusion from a positive  $\beta_j$ . In particular,

$$\frac{\partial \text{Prob}(y=4|X)}{\partial X} + \frac{\partial \text{Prob}(y=5|X)}{\partial X} = f(\mu_3 - X\beta) \cdot \beta$$

<sup>6</sup>  $\text{Prob}(y^* \leq \mu_1) = \text{Pr}(X\beta + \varepsilon \leq \mu_1) = \text{Pr}(\varepsilon \leq \mu_1 - X\beta) = F(\mu_1 - X\beta)$ .

<sup>7</sup> The cumulative distribution function of the logistic distribution is  $F(z) = \frac{e^z}{1+e^z} = \frac{1}{1+e^{-z}}$ .

<sup>8</sup> The marginal effects of changes in the independent variables are computed as follows:

$$\frac{\partial \text{Prob}(y=1|X)}{\partial X} = -f(\mu_1 - X\beta) \cdot \beta$$

$$\frac{\partial \text{Prob}(y=2|X)}{\partial X} = -[f(\mu_2 - X\beta) - f(\mu_1 - X\beta)] \cdot \beta$$

$$\frac{\partial \text{Prob}(y=3|X)}{\partial X} = -[f(\mu_3 - X\beta) - f(\mu_2 - X\beta)] \cdot \beta$$

or, given positive  $\beta_j$ , an increase in  $X$  increases the probability of at least a fair support for open trade.<sup>9</sup>

### Variable construction

Given the 100-odd questions in the survey, several variables can be pinpointed as having a theoretical link to trade policy preferences. The framework being used is a loose interpretation of the Stolper-Samuelson theorem,<sup>10</sup> whereby it is expected that demographic differences, just like differences in input ownership, will lead to certain groups benefiting more greatly from trade than others. The groups receiving higher benefits are expected to have a stronger preference for free trade.

### The dependent variable

As previously mentioned, trade policy preference is measured by the individual response to whether the country should limit imports. The five-point scaled response is 1=strongly agree, 2=agree, 3=neither agreeing nor disagreeing, 4=disagree, and 5=strongly disagree. This is called the protect variable, where higher values imply greater pro-trade preferences, and lower values imply anti-trade ones.

### The independent variables

There is a large set of sociodemographic data available from the survey, including gender, age, subjective economic class, trade union membership, religion, political affiliation, area of residence, employment in the public sector, unemployment,<sup>11</sup> self-employment, and work status. Many of these variables are similar to those that have been found important in similar studies on other nations, and are thus utilized in the models as well.

In particular, most studies have found that men, non-Catholics, public officials, and relatively well-off people tend to favor open trade, while union members, the old, and the rural population oppose it (Table 3).

$$\frac{\partial \text{Prob}(y=4|X)}{\partial X} = -[f(\mu_{4-X}\beta) - f(\mu_{3-X}\beta)] \cdot \beta$$

$$\frac{\partial \text{Prob}(y=5|X)}{\partial X} = f(\mu_{4-X}\beta) \cdot \beta$$

<sup>9</sup> Stata is the program of choice for running the regressions, and in this software, the constant is not separately estimated but is rather subsumed by the cut-off values.

<sup>10</sup> The theorem itself states that, assuming full employment both before and after trade, the owners of the abundant factor of a nation will find their real incomes increasing and the owners of the scarce factor will find their real incomes decreasing as input prices change.

<sup>11</sup> It could be theorized, based on the framework, for example, that the unemployed may benefit from liberalization in that it might increase the availability of jobs in the economy. Would this belief lead them to be more pro-trade than the gainfully employed? The following estimation explores that question.

**Table 3. Expected relations with open trade sentiments**

Variable	Construction	Expected Sign	Basis
Age	Actual	- Older ones are less pro-trade	Mayda and Rodrik (2001), O'Rourke and Sinnott (2001), Pasadilla (2002), Balistreri (1997)
Gender	1=male, 0=female	+ Men are generally pro-trade	Mayda and Rodrik, O'Rourke and Sinnott, Scheve and Slaughter (2001)
Relative Income	1=above sample median, 0 otherwise	+ Relatively higher income groups are pro-trade	Mayda and Rodrik
Economic Class	Class E=1, D=2, C=3, AB=4	+ Relatively higher income groups are pro-trade	Mayda and Rodrik, Balistreri
Religion	1=non-Catholic, 0=Catholic	+ Non-Catholics are more pro-trade	O'Rourke and Sinnott
Right-wing Party Affiliation	1=right and far right, 0 otherwise	+ Right-wing affiliates are more open to trade	Scheve and Slaughter
Area of Residence	1=urban, 0=rural	+ Those living in urban areas are pro-trade	Mayda and Rodrik, O'Rourke and Sinnott, Balistreri
Unemployment	1=unemployed, 0 otherwise	+ Unemployed are pro-trade	Pasadilla, O'Rourke and Sinnott
Self-employment	1=self-employed, 0 otherwise	+ Self-employed are pro-trade	O'Rourke and Sinnott
Public Employment	1=nongovernment, 0=government	+ Public officials are protectionist	O'Rourke and Sinnott
Union Membership	1=nonmember, 0=member	+ Union members are not for open trade	Mayda and Rodrik, Scheve and Slaughter, Balistreri



## REGRESSION RESULTS

### The model

The study then went through several demographic variables that were tested and/or found significant in other studies. The first model included standard demographics such as age, gender, economic class, religion, and affiliation with the right. Dummy variables for work-related characteristics such as unemployment, self-employment, employment in the public sector, and membership in a trade union, as well as for area of residence, were added in the second model. A third model, testing for the influence of income, included relative family income. A fourth took into account relative personal income instead (Table 4).

Variables found to be significant in different specifications were gender, economic class, personal income, area of residence, and employment in the public sector.

### Gender

Unlike results from other studies that find men to be generally more open to trade, women in the Philippines are more likely to support a more open trade policy. More specifically, being female increases the probability of disagreeing with trade restrictions by anywhere between 2.0 and 2.4<sup>12</sup> percentage points (significant at the 5%-10% level).

Several reasons can explain this distinct Philippine result. First, it has been noted that the increased globalization has led to the "feminization of employment" in developing countries because of the increased reliance on women's contribution in the labor force. For instance, Orbeta (2002), using Philippine manufacturing subindustry level data from 1993 to 1997, finds that women in the manufacturing sector are positively affected by export activities. It is then no surprise that the influence of gender would be different from the results in the previously referenced studies.

Second, women may also be more pro-trade based on the effects women perceive as buyers. In a matriarchal society such as the Philippines, women are the designated household managers and typically in charge of shopping for household needs. Thus, they would more easily observe the tangible changes that globalization brings, including decreases in prices and a greater variety of available goods and services.

### *Economic class/personal income*

The significance of economic class is affirmed in this study. Again, results are different from those of studies on developed nations, where the higher classes

<sup>12</sup> Sum of the two marginal probabilities  $dP(y=4)$  and  $dP(Y=5)$ .

**Table 4. Regression results**

Method	Model 1		Model 2		Model 3		Model 4	
	Ordered Logit		Ordered Logit		Ordered Logit		Ordered Logit	
Variable	y = protect							
	dPr(y=5)	dPr(y=4)	dPr(y=5)	dPr(y=4)	dPr(y=5)	dPr(y=4)	dPr(y=5)	dPr(y=4)
Age	-0.0000839 <i>-0.72</i>	-0.0001988 <i>-0.72</i>	-0.0000469 <i>-0.39</i>	-0.0001125 <i>-0.39</i>	-0.0000508 <i>-0.42</i>	-0.0001218 <i>-0.43</i>	-0.0000595 <i>-0.5</i>	-0.000143 <i>-0.5</i>
Gender	-0.0071275 <i>1.94*</i>	-0.0168542 <i>-2.01**</i>	-0.006463 <i>-1.79*</i>	-0.0154783 <i>-1.84*</i>	-0.0063597 <i>-1.75*</i>	-0.0152395 <i>-1.81*</i>	-0.0037345 <i>-0.99</i>	-0.0089658 <i>-1</i>
Economic Class	-0.0083373 <i>-2.68***</i>	-0.0197425 <i>-2.85***</i>	-0.0053736 <i>-1.79*</i>	-0.012883 <i>-1.84*</i>	-0.0043667 <i>-1.38</i>	-0.0104746 <i>-1.41</i>	-0.0053811 <i>-1.8*</i>	-0.0129233 <i>-1.85*</i>
Religion	-0.0011912 <i>-0.27</i>	-0.0028292 <i>-0.27</i>	-0.0049342 <i>-1.19</i>	-0.0119729 <i>-1.19</i>	-0.0049052 <i>-1.18</i>	-0.011908 <i>-1.18</i>	-0.0048691 <i>-1.18</i>	-0.0118336 <i>-1.18</i>
Affiliation with the Right	0.0005166 <i>0.12</i>	0.0012217 <i>0.12</i>	-0.0003185 <i>-0.08</i>	-0.000764 <i>-0.08</i>	-0.0005804 <i>-0.14</i>	-0.001394 <i>-0.14</i>	-0.0009733 <i>-0.24</i>	-0.0023426 <i>-0.23</i>
Locale			-0.0143577 <i>-3.01***</i>	-0.0337841 <i>-3.33***</i>	-0.013524 <i>-2.88***</i>	-0.0318816 <i>-3.12***</i>	-0.0138049 <i>-2.98***</i>	-0.0325675 <i>-3.29***</i>
Unemployment			0.0269211 <i>1.19</i>	0.0582715 <i>1.33</i>	0.0265633 <i>1.18</i>	0.0576037 <i>1.32</i>	0.0235672 <i>1.09</i>	0.0517466 <i>1.21</i>
Self-employment			-0.0001426 <i>-0.04</i>	-0.0003418 <i>-0.04</i>	-0.0002264 <i>-0.06</i>	-0.0005432 <i>-0.06</i>	0.0027505 <i>0.63</i>	0.006578 <i>0.63</i>
Public Employment			0.0136553 <i>2.78***</i>	0.0341821 <i>2.89***</i>	0.0133515 <i>2.79***</i>	0.0334094 <i>2.89***</i>	0.0120938 <i>2.47**</i>	0.0301839 <i>2.52**</i>
Trade Union Membership			-0.0106828 <i>-0.41</i>	-0.0245673 <i>-0.43</i>	-0.0121362 <i>-0.45</i>	-0.0277677 <i>-0.48</i>	-0.0171683 <i>-0.58</i>	-0.0385735 <i>-0.62</i>

Table 4 continued

Method	Model 1		Model 2		Model 3		Model 4	
	Ordered Logit		Ordered Logit		Ordered Logit		Ordered Logit	
Variable	y = protect							
	dPr(y=5)	dPr(y=4)	dPr(y=5)	dPr(y=4)	dPr(y=5)	dPr(y=4)	dPr(y=5)	dPr(y=4)
Relative Family Income					-0.0035735	-0.0085754		
					-0.92	-0.92		
Relative Personal Income							-0.0080927	-0.0194627
							-1.96**	-2.02**
<i>Pseudo-R2</i>	0.005	0.005	0.0132	0.0132	0.0135	0.0135	0.0146	0.0146
<i>No. of Observations</i>	1067	1067	1056	1056	1056	1056	1056	1056

The table shows the estimated marginal probabilities of being pro-trade, given an increase in the value of the relevant regressor, holding all other regressors at their mean value. The z-scores of the marginal effects are presented under each one. Asterisks pertain to significance, with \* being significant at the 10 percent level, \*\* being significant at the 5 percent level, and \*\*\* being significant at the 1 percent level.

were found to be more keen toward liberalization. In the Philippines, the higher one's economic class, the more protectionist one becomes. This outcome may be explained by remembering that those in the higher classes in the Philippines are owners of businesses. These are the ones who have benefited from protection in the past and are therefore likely to be wary of changes in the status quo. As capitalists, they are naturally opposed to imports, which will provide competition for the products they sell.

Similarly, those who earn above the median income are more protectionist than those earning below it. Based on Model 4 (Table 4), by moving from below-to above-median income earner, the probability of respondents disagreeing with import restrictions decreases by around 2.7 percent (significant at the 5% level). It may be conjectured that those with high incomes are either owners themselves or occupy high positions in specific firms and whose fortunes are therefore intimately tied to the fortunes of these companies upon the opening of trade. High earners, then, may benefit from their businesses' continued insulation from competition, and thus do they have a more negative stance toward imports.

### *Urban/Rural*

The area of residence—i.e., urban or rural—is yet another significant factor, perhaps the strongest in the set of explanatory variables in terms of the significance level. Being urban dwellers decrease the probability of disagreeing with trade restrictions from 4.4 to 4.8 percentage points (significant at the 1% level). Again, results differ from those of other nations, whose urban respondents were more open to liberalization—presumably because of their more cosmopolitan outlook—than their rural counterparts.

In the Philippines, those in the rural areas often find themselves employed in agriculture, which explains why they do not feel strongly threatened by products coming in from other countries. That is, since the demand for Philippine agriculture outstrips the supply, the country has to import considerable amounts of rice (and other key products) from neighboring nations. Those who are in agriculture therefore know and accept that there is room for both domestically produced and imported grains in the market.

In addition, the poor infrastructure in the country makes the transportation of such imports from ports more difficult, erecting natural barriers and allowing the small-time farmers to still be able to market their goods with relative ease to neighboring towns.<sup>13</sup>

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<sup>13</sup> Citing studies by Power and Sicat (1971) and Bautista, Power and Associates (1979), a referee suggested that another reason for this divergence in opinion is that import substitution took place mainly in urban settings, where the incentives were made more available. Hence, the urban population would naturally be more opposed to liberalization.

### *Employment*

Employment in the public sector makes a person more protectionist, decreasing the probability of disagreeing with trade restrictions by 4.7 percentage points, again significant at the 1 percent level and robust across various models. One important implication of the removal of trade barriers is the reduction in government revenues. With roughly 20 percent of government income coming from import taxes and other import duties, a drop in resources will negatively affect those employed by the public sector, mainly because the most likely reaction to reduced funds is the trimming of the bureaucracy. Second, it can also be posited that trade barriers bestow government employees a certain amount of power, especially if they are recipients of requests with regard trade protection. Trade barriers allow public employees some rent-seeking behavior. Such employees would therefore not want to allow any breakdown in trade regulation to take away their influence as bureaucratic middlemen.

The results of the model are supported by the descriptive statistics shown in Table 5, where one can clearly see that the mean values and percentage of respondents who are pro-trade are indeed significantly lower among males, urbanites, public sector employees, and upper classes. The gaps appear to be particularly significant between those publicly and privately employed, as well as those differing in economic class. There is a marked divide between those in the AB and C classes, and those in the D and E classes, especially percentage-wise. Interestingly, in the highest economic class, not one of the respondents indicated a pro-trade stance.

**Table 5. Descriptive statistics**

	No. of Respondents	Mean	Percentage Pro-trade	Percentage Anti-trade
<b>GENDER</b>				
Male	592	2.02	11.15	75.68
Female	588	2.16	12.07	69.56
<b>LOCALE</b>				
Urban	733	1.99	10.78	76.53
Rural	439	2.2	11.39	67.65
<b>EMPLOYMENT</b>				
Public sector	98	1.79	6.12	84.69
Private sector	1074	2.12	12.1	71.6
<b>ECONOMIC CLASS</b>				
Class AB	8	1.88	0	75
Class C	129	1.8	5.43	83.72
Class D	750	2.1	12.53	71.87
Class E	293	2.18	12.29	69.97

Notes: Values for percentage pro-trade were found by dividing the number of respondents who chose "4" (disagree) or "5" (strongly disagree) in response to the proposal that imports should be limited, over the total number of respondents per category. Hence, 11.15% or 66 of the 592 males disagreed with the statement. Those who chose "1" (strongly agree) or "2" (agree) were designated as anti-trade. The difference between the total and the sum of the two percentages presented are those who neither agreed nor disagreed with the statement.

As earlier mentioned, the general response is protectionist, given that all the mean values are closer to 1 than to 5, indicating an average response of "agree."

### Comparative analysis

The results of this study, in quick comparison with the results of five other papers are shown in Table 6. A highly notable feature of this comparison is that the Philippine results often deviate from those found in studies for developed economies. In particular, the Philippine study yields different signs for four out of the five significant variables: gender, area of residence or locale, relative income, and social class. As previously discussed, there are country characteristics peculiar to the Philippines that explain these disparities.

To test the robustness of the results, ordered probit regressions using the same independent variables were ran for the final combined model. Both the signs and the significance of the variables largely remained the same. Lastly, a simple OLS regression of the final model also bore similar results in the signs of variables.<sup>14</sup>

**Table 6. The study's results compared to others**

Variable	Philippines	USA <sup>a</sup>	Switzerland <sup>b</sup>	Canada <sup>c</sup>	Cross-country <sup>d</sup>	Cross-country <sup>e</sup> <i>Demographics</i>
Age	No	No	Yes (-)	Yes	Yes (-)	Yes (-)
Gender	Yes (-) *	Yes (+)	No	Not tested	Yes (+)	Yes (+)
Citizenship	Not tested	Not tested	No	Not tested	Yes (-)	Not tested
Locale	Yes (-) *	Not tested	No	Yes	Yes (+)	Yes (+)
Public Sector	Yes (+)	Not tested	Not tested	Not tested	Not tested	No
Unemployment	No	No	Yes (+)	Not tested	Not tested	No
Self-employment	No	Not tested	Not tested	Not tested	Not tested	Yes (-)
Union Membership	No	Yes (+)	Not tested	Yes	Yes (+)	No
Relative Income	Yes (-) *	Not tested	Not tested	Yes (not relative)	Yes (+)	Not tested
Mobility	Not tested	Not tested	Not tested	Not tested	Not tested	Yes (+)
Religion	No	Not tested	Not tested	Not tested	Not tested	Yes (+)
Affiliation with the Right	No	Yes (+)	Not tested	Not tested	No	Not tested
Social Class	Yes (-) *	Not tested	Not tested	Yes	Yes (+)	Not tested

Notes: A positive sign means that an increase in the variable increases the probability that the respondent is pro-trade.

'Yes' ('No') means statistically significant (insignificant). \* means variable sign is different from other studies.

Sources: <sup>a</sup>Scheve and Slaughter (2001); <sup>b</sup>Pasadilla (2002); <sup>c</sup>Balistreri (1997); <sup>d</sup>Mayda and Rodrik (2001); <sup>e</sup>O'Rourke and Sinnott (2001).

<sup>14</sup> These results are available from the authors upon request. Another check of the robustness of the model was undertaken. Given the Social Weather Stations' unique method of sampling that gave equal weights to the four study areas, it was conjectured that more representative results might be found if the sample was to more accurately reflect the distribution of Filipinos across Luzon, Visayas, and Mindanao. The random selection of cases was then done, basing the weights on the latest population data from the 2000 census conducted by the National Statistics Office. The model was ran on the smaller data set obtained, with 665 respondents. The results were largely the same.

## SUMMARY AND CONCLUSIONS

This study contributes to the growing empirical literature that seeks out the determinants of individual trade policy preferences. It finds, based on a national identity survey undertaken in 2003, that demographic characteristics play a key role in shaping a person's opinion on trade. In particular, females in the Philippines are more likely to be pro-trade than the males. This observation can be attributed to the unique employment experiences in, as well as the matriarchal culture of, the nation. Those who rank themselves as belonging to the higher economic classes and those who earn above the median income are more protectionist, a result that can be viewed as stemming from their ownership of or strong ties to local business. Those who are employed in the public sector and whose sources of income, both direct and indirect, may be threatened by the demolition of trade barriers, are significantly and notably more anti-trade than those in the private sector. Another remarkable finding is that those in the rural areas are more open to trade than urban dwellers, an outcome that may be traced to differing sectoral experiences of competition.

It is interesting to note that many of the variables operated differently in the Philippines compared to countries covered by previous studies. This serves to highlight the differences among nations both in economic terms as well as with regard to cultural backgrounds. It is important for policymakers all over the world, especially those who work jointly with international organizations such as the World Trade Organization, to take note of this reality if they are to gain the necessary public support for their policy actions.

On the domestic front, meanwhile, policymakers can better focus their information campaigns on specific sectors if they first identify which social groups are more averse toward trade. Additionally, since these results imply that the groups more resistant to liberalization are not benefiting from it in a tangible way or are being adversely affected by it, decisionmakers ought to explore the possibilities of creating safety nets or arranging for transfers toward these particular segments of society. This way, the benefits of liberalization will be more widely felt throughout the populace.

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