IS TRADE POLICY FOR SALE?
CONGRESSIONAL VOTING ON
RECENT TRADE BILLS

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ABSTRACT

This paper examines voting by members of Congress on three trade bills introduced in 1993

and 1994: the North American Free Trade Agreement (NAFTA), the agreements concluded in the

Uruguay Round of multilateral trade negotiations (GATT), and most-favored-nation status for China.

We first review recent political economy models of trade policy and then, after presenting a brief

legislative history of the three bills, use these models to formulate an empirical specification of

political behavior. In our empirical tests, we find evidence that campaign contributions given by

political action committees influenced legislators' votes on both the NAFTA and GATT bills.

Contributions from labor groups were associated with votes against freer trade, while contributions

from business groups were associated with votes in favor of freer trade. We also find that the broad

policy views of the legislators, industry employment in each member's state or congressional district,

and general economic conditions in the district or state affected voting on the trade bills.

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"...The bigger contributions you accept, the more expectations some people have that they have a call on their government for something in return."[1]

-- Senator Joseph Lieberman, October 22, 1997

I. Introduction

Conventional wisdom suggests that interest groups are buying something when they contribute to a politician's campaign. Contributions are either given to influence the outcome of the election or to influence policy decisions made by elected officials. The statement of the senator from Connecticut quoted above highlights the second possibility -- that campaign contributions allow interest groups to affect policy outcomes. Theoretical models in the economics and political science literature suggest that this *quid pro quo* aspect of contributions may play an important role in the determination of public policy (Magee, Brock and Young, 1989; Grossman and Helpman, 1994; Austen-Smith, 1995).

This paper investigates the importance of campaign contributions and other factors affecting congressional voting behavior on three important trade-policy issues that came before the U.S. Congress in 1993-94, namely, the North American Free Trade Agreement (NAFTA), the agreements resulting from the Uruguay Round of multilateral trade negotiations held under the auspices of the General Agreement on Tariffs and Trade (GATT) and approval of most-favored-nation status (MFN) for China. These liberalizing measures were approved by Congress only after intense lobbying efforts (especially over NAFTA) by both opponents and supporters. Determining the economic, social and political factors that influenced the votes of members of Congress on these measures is not only important for

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[1]Quoted in the *New York Times*, October 23, 1997.

understanding past trade policies but for assessing the prospects for continued trade liberalization, especially in view of the recent failure of President Clinton to gain congressional approval of fast-track negotiating authority. In addition, our analysis provides a test of traditional hypotheses about congressional voting behavior.

The following section briefly outlines some of the analytical models developed by economists and political scientists in trying to understand how members of Congress and various political pressure groups interact to determine a particular voting outcome. In section III, we provide a brief legislative history of each of the three trade bills we examine. Section IV outlines the political economy framework on which our econometric model is based, while Section V includes the specification of the empirical model and a description of the data used in the tests. The results of the statistical analysis are presented in Section VI, and the final section concludes.

II. Models of Political Behavior

In treating policy outcomes as endogenous, economists focus on the interactions between welfare-maximizing elected officials, who are suppliers of particular public policies, and welfare maximizing organized interest groups, who are demanders of such policies. The organized economic interest groups seek public policies that maximize the economic rents they can earn. A key element in the maximization efforts of elected officials is to achieve reelection, an activity that requires campaign funds in order to stress the merits of their candidacies to imperfectly informed voters. Policies are determined by the interaction between economic interest groups and politicians. The interest groups provide campaign funds in return for public policy actions that increase their economic rents. The rent-seeking activities are constrained by increased political opposition from individuals and firms whose welfare is adversely affected by the policy actions.

One well-known version of endogenous policy analysis uses the concept of political support functions (see Hillman, 1989).[2] Elected officials weigh the increased political support they receive from pursuing policies beneficial to a particular industry against lost support from consumers and input-using firms. In the end, government officials implement the policy that maximizes their political support.

Grossman and Helpman (1994) model the political decision-making process in a manner that reduces the "black box" elements of the political support function approach. Elected officeholders value both campaign contributions and increases in social welfare. Interest groups form and offer the government a menu of political contributions that each group is willing to offer for a variety of trade policies chosen. The government then chooses the particular set of contributions and associated policies that maximize its welfare function.

Magee, Brock, and Young (1989) present a related model of endogenous policy formation. In their framework, political candidates set their policy positions and then interest groups contribute funds in order to improve the probability that their preferred candidate will be elected. Since politicians choose their policy stances in anticipation of the contributions they will receive from interest groups, the predictions of this model are very similar to those of the Grossman and Helpman (1994) model. Elected officials sell trade policy in exchange for campaign contributions.

In Mayer (1984), trade policy is determined by majority voting. Under this framework, the preferences of the median voter determine the policy outcome. Elected officials, acting to maximize their chances of re-election in this setting, vote in the economic interests of the majority of their constituents. With perfect information, campaign contributions do not affect the policy choices of members of Congress.

Political scientists have long viewed some public policies as determined by competing domestic

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[2]For a systematic review of political economy models developed by economists, see Rodrik (1995).

economic interest groups interacting with government officials, as E.E. Schattschneider's (1935) classic study of the Tariff Act of 1930 illustrates. They model the policy-making process in broader political terms than economists, however, and give greater importance to the institutional framework within which the decision process takes place.

There is a rich informal literature theorizing about various factors that influence how members of Congress make voting decisions as well as a considerable body of empirical research on the subject, but extensive formal modeling of the process by political scientists is comparatively recent. (See Smith 1995; Bender and Lott 1996; and Morton and Cameron 1992 for recent surveys of this literature). The orthodox view of political scientists has been that political contributions buy access to elected officials but influence voting decisions only under special circumstances (Smith 1995, pp. 91-97; Morton and Cameron 1992, pp. 80-83; Austen-Smith and Wright 1992 and 1994). According to this interpretation, members of Congress generally respond favorably only to information from lobbyists that is consistent with their basic ideological positions. Consequently, lobbyists only try to gain access to members who already support the positions advocated by the lobbyists. Some political scientists (e.g., Hall and Wayman 1990) argue that, although campaign contributions by interest groups may only rarely buy roll call votes, these funds influence policy indirectly by buying the time of legislators to promote the objectives of the interest groups within legislative committees.

Among political scientists who have argued relatively recently that the conventional view underestimates the importance of campaign contributions and lobbying in influencing voting behavior and who have formally modeled the manner in which this influence takes place are Austen-Smith (1991, 1995), Austen-Smith and Wright (1992, 1994), and Ainsworth and Sened (1993). Their models exploit the idea that legislators possess incomplete information about the consequences of a particular policy for their electorate. The legislators may seek information from lobbyists who are prepared to incur the costs

of acquiring such information as part of their efforts to influence legislators' policy positions. By strategically providing this information, lobbyists can sometimes increase their economic rents by altering legislators' voting behavior and benefit elected officials by providing uncertainty-reducing information. Smith (1984) similarly argues that politicians have imperfect information about the consequences of legislation and how it will affect the attainment of their personal goals. Consequently, lobbyists and other elected officials are able to influence a legislator's voting behavior with arguments about how a vote on a particular measure affects the legislator's personal goals.

As the preceding description of political economy models indicates, there are significant differences in the manner in which economists and political scientists analyze political decision-making. In most economic models, campaign contributions from organized interest groups play the major role in accounting for the widespread existence of public policies that reduce aggregate social welfare. For example, in the Grossman-Helpman model, the socially desired outcome occurs if politicians give a zero weight to the desirability of campaign contributions. In contrast, the mainstream view of political scientists is that campaign contributions and lobbying have little success in influencing voting behavior. Furthermore, those political scientists who do believe that contributions and lobbying significantly affect voting behavior explain the process by which this occurs quite differently than do economists. In their view, contributions by interest groups buy access to legislators but it is then through the value of the information provided that these interest groups affect voting behavior. They reject the notion of economists that political favors are directly exchanged for campaign contributions (Austen-Smith, 1991).

Both economists and political scientists agree, however, that constituent interests (including those of organized interest groups) are important determinants of legislators' vote. The median-voter, political-support and political-contributions approaches of economists all include the concept that elected officials consider the interests of constituents in determining their voting behavior, since to do otherwise

leads to defeat at the polls. Most political scientists also regard constituent interests as a major factor shaping voting behavior because of the power of constituents at the ballot box (Kingdon, 1973 and Arnold, 1990). Political scientists in addition postulate that voting behavior is affected by such factors as pressure from political leaders in the legislative and executive branches and a legislator's personal ideology. As Kau and Rubin (1982, pp. 31-35) point out, some of these factors can be interpreted as indicating the greater interest by political scientists than economists in the manner in which legislators gauge constituent interest rather than representing independent forces shaping voting behavior.

The numerous statistical studies (mostly by political scientists) that have been undertaken to determine the influence of political contributions on congressional voting yield inconclusive results. (See Smith 1995 for a summary of the findings of recent studies.) Some investigators find contributions to be largely unrelated to congressional voting behavior, while others report statistically significant relationships between these two variables. Still others come up with mixed conclusions. However, statistical analyses focussing on trade-policy legislation generally find that interest-group contributions do influence congressional voting behavior, e.g., Baldwin 1976, Coughlin 1985, Tosini and Tower 1987, Marks 1993, Kahane 1996, and Steagall and Jennings 1996. For example, Kahane (1996) runs two single-equation logit regressions (one for the House and one for the Senate) estimating the vote on NAFTA as a function of state characteristics and contributions received from labor groups. He finds that greater contributions from labor groups are significantly correlated with an increased likelihood of voting against NAFTA. Steagall and Jennings (1996) also analyze the NAFTA vote. They run a single-equation probit regression on the House vote and likewise find that labor contributions are negatively correlated with a favorable NAFTA vote, while business contributions are positively correlated with such a vote. A problem with the approach taken in each of these papers, as well as in the other trade-policy studies cited above, is that, as Chappell (1982) points out, campaign contributions are endogenous.

Labor organizations, for instance, are likely to have donated funds in 1992 to representatives they knew would oppose NAFTA. Thus, campaign contributions are correlated with the residual in the voting equation and the coefficient estimates on these variables are biased. We solve this problem by jointly estimating the probability of voting for each trade bill and the amount of campaign contributions received simultaneously.

III. NAFTA, GATT/WTO and MFN for China: A Brief Legislative History

Congressional approval in 1993 and 1994 of measures establishing a free trade area for the United States, Canada and Mexico, implementing the multilateral agreements reached in the Uruguay Round and continuing most-favored-nation status for China represented a major accomplishment for those favoring greater trade liberalization in contrast to increased protectionism. Their approval was remarkable in that interest groups that were exploiting the appeal of "fair" trade to push for protectionist policies seemed to be gaining political dominance in the 1980s and the first few years of the 1990s. Approval of each of the three measures was bitterly contested, however, and the outcome of the NAFTA legislation was still in doubt at the time of the final vote.

NAFTA

Of the three measures, the one involving the greatest controversy nationally was clearly NAFTA. Destler (1995, p. 217) states that NAFTA "set off the most prominent and contentious domestic debate on trade since the Smoot-Hawley Tariff Act of 1930." The prominence and intensity of the debate is somewhat surprising because half of Mexican imports were already entering the United States duty free and the remainder faced an average tariff rate of only 4 percent, there was already the lack of significant investment barriers between the two countries, and the Mexican economy was small compared to that of the United States (Mexico's GDP was only 1/25th of that of the United States). Furthermore, most general equilibrium analyses found the impact of the agreement to be very modest, with U.S. average

wages estimated to rise from between .1 and .3 percent and aggregate U.S. employment to increase by between .03 and .08 percent (International Trade Commission 1993, chp. 2). These models predicted appreciable job losses in only a few industries, such as apparel, household appliances, sugar and ceramics.

Several factors explain why the NAFTA debate was more intense and widespread than seems justified by its predicted economic impact. The most important reason was the decision by organized labor to oppose congressional approval in the strongest terms. In doing so, most labor unions were convinced that the adverse employment effects would be much more widespread than economists had predicted. They also seemed to fear that approval of NAFTA would lead to similar agreements with many other low wage countries. The result might be that a moderate inflow of Mexican goods intensively using low-skill labor would turn into a flood of such imports that would exert strong downward pressures on U.S. employment and wages.

Concerns expressed by various environmental groups over the polluting activities of the many *maquiladoras* near the U.S.-Mexican border further focused attention on NAFTA. Not only were these groups apprehensive about a rise in pollutants along the border as production in Mexico expanded, but they were fearful that a rush of U.S. firms to Mexico to take advantage of cheap labor and more lenient environmental standards would exert pressure on American legislators to weaken U.S. environmental laws.

The initial position of President Clinton toward NAFTA also helps account for the heated nature of the debate as well as the closeness of the vote. The agreement had been negotiated by the Bush administration and was not formally signed until December of 1992. President Clinton had endorsed the basic text but called for side agreements that would strengthen organizing rights and safety standards for Mexican workers, tighten environmental standards in Mexico and guard against surges of imports.

However, once in office, he did not press for rapid negotiation of the side agreements and subsequent submission of the package to Congress for approval under existing fast-track procedures.

Negotiations on the side agreements were not completed and approved by President Clinton until August of 1993. After hesitating throughout most of the summer, the White House finally launched a vigorous effort to gain support for the agreement that closely involved the President and other key administration officials. Traditional supporters of a liberal trade policy such as the business community, editorial writers and academics became better organized, while opposition from most environmental groups ceased due to the provisions of the side agreement on the environment. In addition, meetings between President Clinton and undecided House members at which the President agreed to various provisions designed to protect certain industries in their districts against injurious Mexican imports or granted unrelated favors appear to have been effective in gaining votes for NAFTA.

The success of these various efforts is indicated by the fact that administration leaders believed in September that they were far short of the votes needed to gain House approval[3], whereas a week before the final vote they thought they were only about 10 votes short of a majority. The House actually approved the North American Free Trade Agreement by a vote of 234 to 200 on November 17, 1993. Only 40 percent of Democrats (102 members) voted in favor of the measure, however, whereas 75 percent of the House Republicans (132 members) supported NAFTA. The Senate approved the pact by a vote of 61 to 38 on November 20, 1993.

GATT/WTO

Though it received far less national media attention than the vote on NAFTA, the favorable House and Senate action in late November and early December of 1994 on legislation implementing the Uruguay Round agreements is likely to affect the welfare of U.S. citizens much more significantly than

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[3]A September 20, 1993 poll of the House of Representatives on NAFTA by USA found that 190 Representatives opposed NAFTA, while 161 supported it. (Destler, 1995, p.225)

the NAFTA legislation. Among the major accomplishments of the agreements signed by some 125 countries are: (i) the return of agriculture and the textiles/apparel industries to the discipline of GATT rules by beginning to reduce export subsidies and import quotas in the agricultural sector and by gradually phasing out the quantitative import restrictions of the Multifiber Arrangement; (ii) extension of GATT rules to trade in services; (iii) negotiation of a multilateral agreement protecting intellectual property rights; (iv) liberalization of trade-related investment measures; (v) reducing average tariff levels by about one-third and banning so-called voluntary export restraints; (vi) significantly strengthening dispute settlement procedures; and (vii) establishing a new international agency, the World Trade Organization (WTO), which greatly strengthens the institutional framework for administering the various new and old rules relating to international trade.

Unlike NAFTA, President Clinton did not inherit an international agreement on GATT/WTO rules that had already been signed. (See Preeg (1995) for an excellent discussion of the Uruguay Round). Although the Bush administration made a concerted effort to complete the negotiations, which had started in 1986, the effort failed and the Clinton administration was faced with the tasks of completing the international negotiations and obtaining congressional approval of the resulting set of agreements. As with the endeavor to obtain congressional approval of NAFTA, completing the first task was hampered by the President's primary concern with domestic issues such as health care reform. However, in the spring of 1993 President Clinton did obtain from Congress an extension of his authority to seek fast-track approval of trade agreements until April 15, 1994, a date that meant he had to complete the Uruguay Round negotiations by December 15, 1993 in order to satisfy the 120-day consultation period with the Congress prior to formal signing. Fortunately, the general sense among negotiators from the major countries that this definitely was the last deadline for completing the Uruguay Round coupled with the appointments of a new Director General of the GATT (Peter Sutherland), a new chief negotiator for

the European Union (Leon Brittan) and a new U.S. Trade Representative (Mickey Kantor) seemed to revitalize the negotiations, and they were successfully completed in early December.

The congressional approval process continued for another year, however. Objections raised by some members of Congress concerning a loss of U.S. sovereignty under the WTO and the high of permitted R&D subsidies under the subsidies/countervailing duty agreement were two of the main reasons for the delay. Environmentalists, who had split over NAFTA approval, were united in their disapproval of the Uruguay Round agreements, whereas organized labor, which had vigorously fought against NAFTA, criticized the agreements but did not oppose them as strenuously. Ross Perot and consumer advocate Ralph Nader opposed approval of the agreements, as they had NAFTA. However, after President Clinton dropped his efforts to include language specifying that environmental and labor standards be included in future agreements and further concessions were made to ease the concerns about loss of sovereignty, the implementing legislation passed in the House on November 29, 1994 by a 288 to 146 vote and in the Senate on December 1, 1994 by a 76 to 24 vote. A majority of both parties in the House and Senate approved the measure.

MFN for China

As part of the efforts to improve U.S.-Chinese relations and in response to China's move in the late 1970s toward a more market-oriented economy, the president first granted most-favored-nation status to China in 1980 under authority set forth in the Trade Act of 1974. This Act provides that the president can extend MFN treatment on an annual basis, provided Congress does not vote to disapprove such action. Until the military action taken in 1989 against Chinese dissidents in Tienanmen Square, there was little congressional resistance to the continuance of this trade policy toward China. However, since then, a significant number of legislators have sought to tie continuation of MFN to improvements in the Chinese government's human rights behavior. President Bush was unwilling to agree to such a

link, but President Clinton, while a candidate for the presidency, argued that the renewal of MFN for

China should be tied to its human rights record. In 1993, President Clinton secured a one-year extension

but issued an executive order tying the 1994 extension to improved human rights performance by the

Chinese government. However, under strong political pressure from the business community, he decided

in 1994 not only to renew MFN for China but to de-link human rights from the annual renewal process,

even though he explicitly recognized that the Chinese government had not made the significant progress

in human rights called for in his executive order. He argued that maintaining close contact with the

Chinese through trade would better serve overall U.S. goals than the withdrawal of MFN status. While

there were some expressions of dissatisfaction with this policy position, the proposal to disapprove

President Clinton's renewal action was easily defeated.

IV. Political Economy Framework

The political economy framework we adopt draws on the modeling efforts of both economists

and political scientists. On the formal economic side, we assume a perfectly competitive economy with

two factors of production, capital, which is industry specific and immobile, and labor, whose income also

consists in part of rents due to industry specific skills (Magee, 1980; Baldwin, 1984). With the Metzler

paradox ruled out, a reduction in the country's import tariffs decreases the domestic prices of its import-

competing goods and thus reduces the real earnings of capitalists and workers in the industries producing

these goods. In contrast, capital and labor employed in the country's export-oriented industries gain

from the relative increase in the prices of export goods.

Members of Congress are assumed to behave in a manner designed to maximize their chances of

reelection. In doing so, they are influenced by what they perceive to be the economic impact of a trade

bill on their constituency. One widely held view of NAFTA, for instance, was that it would result in

lower wages for less educated workers. Thus, the probability that a member will vote against the bill

increases as the proportion of less educated individuals in a district or state rises. Similarly, since reciprocal trade liberalizing measures tend to increase both imports and exports, a member's voting position is influenced by the relative importance of export-oriented and import-competing industries in his or her district or state. Legislators also take into account the income interests of particular industries present in their constituencies, especially if management and labor leaders in these industries believe the bills being considered will significantly affect them. Thus, if the apparel industry believes it will be hurt by NAFTA, the probability that a legislator votes against the bill increases the higher the proportion of apparel workers in the district or state.

Ideological considerations are likely to be important factors in determining how legislators vote for two reasons. Since agreements such as NAFTA are viewed by most voters as having little direct impact on their real income levels, the broad political, social and economic concerns of voters are not overwhelmed by the personal economic implications of the measures. Consequently, their views on legislation of this nature are likely to be determined by whether they think it is consistent with their broad political, social and economic concerns. These views, in turn, will be reflected in the broad policy stances of successful legislators. In addition, each politician may have an interest in defining himself as a conservative, a liberal, a "national defense hawk," or an ally of labor in order to appeal to a constituency particularly important to his or her re-election efforts. Votes on previous bills before Congress provide information on each member's core constituency and thus indicate the likelihood the legislator will support the trade measures we examine.

Imperfect information on the part of both voters and legislators allows campaign contributions to affect legislators' voting patterns. Information is costly for voters to acquire and thus members of Congress can improve their reelection prospects by spending funds to explain their positions to constituent groups and promote their candidacies. Opportunities arise, then, for organized interest

groups to provide legislators with desired campaign funds in exchange for a promise to support that group's interest.[4] In addition, information about the effects of the trade measures on constituent welfare is costly for legislators to acquire. Interest groups can thus influence congressional voting behavior by strategically providing legislators with information on these effects. Campaign contributions buy access to the legislator, with greater contributions from an interest group allowing a greater degree of access. Both interpretations of the lobbying process lead to the same prediction. Greater contributions increase the likelihood a legislator will vote in the interest group's favored manner.

Interest groups consider a number of factors in determining the magnitude of campaign funds given to a member of Congress.[5] One is the influence of the member in the legislative process. Being a member of a committee that deals with most of the legislation that affects an interest group tends to increase a member's contribution from the interest group. Business interest groups, for example, are likely to provide disproportionately large contributions to members serving on committees dealing with taxes, whereas labor unions are likely to favor members of committees dealing largely with labor issues. In addition, leadership positions are likely to be positively related to legislative influence and thus the extent of campaign contributions. Political action committees will also tend to support legislators with a record of voting in the group's interest and those who have built up a strong personal influence within Congress.

V. Econometric Specification and Data

The political economy framework described above suggests that a legislator's voting behavior is influenced by various constituency characteristics and by the magnitude of campaign contributions from

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[4]We assume that the general voter does not contribute any significant amount of funds to legislators due to the free-rider problem.
[5]We assume that contributors take election probabilities as given and attempt to alter the policies of elected candidates. As Stratmann (1991) and others have pointed out, most studies do not show that incumbents' expenditures have a significant effect on the number of votes they receive.

different interest groups. The campaign funds received by a member of Congress depend on the legislator's policy positions (or expected policy positions) and the influence he or she wields within the government. As Chappell (1982) and Stratmann (1991) point out, the residuals in the voting and contribution equations may be correlated. In addition, legislators who take a policy stance on one of the trade bills are likely to vote similarly on the other bills. Thus, the residuals in the voting equations for NAFTA, GATT/WTO and MFN for China may also be correlated. Consequently, we analyze the voting on all three legislative initiatives and the campaign contributions received by each member of Congress from labor and business groups simultaneously by the method of full information maximum likelihood (FIML). The system of equations we estimate for the House of Representatives is:

$$\text{Vote}_{\text{nafta}} = F(A'X + A_L*(\text{Labor Con}) + A_B*(\text{Bus Con})) + \varepsilon_n$$

$$\text{Vote}_{\text{gatt}} = F(B'X + B_L*(\text{Labor Con}) + B_B*(\text{Bus Con})) + \varepsilon_g$$

$$\text{Vote}_{\text{mfn}} = F(C'X + C_L*(\text{Labor Con}) + C_B*(\text{Bus Con})) + \varepsilon_m$$

$$\text{Labor Con} = \begin{cases} D'Y & \text{if } D'Y - \sigma_l\varepsilon_l \geq 0 \\ 0 & \text{if } D'Y - \sigma_l\varepsilon_l < 0 \end{cases}$$

$$\text{Bus Con} = \begin{cases} E'Z & \text{if } E'Z - \sigma_b\varepsilon_b \geq 0 \\ 0 & \text{if } E'Z - \sigma_b\varepsilon_b < 0, \end{cases}$$

where X is a vector of constituency variables that influence members voting behavior and Y and Z are vectors of variables that determine campaign contributions received by members from labor and business PACs, respectively.

The roll call votes of members of the House and Senate on NAFTA, GATT/WTO, and MFN for China are taken from the Congressional Quarterly Almanac. A vote in favor of approving these measures is assigned a value of one, while a vote of disapproval is assigned a zero. Since the dependent variable is dichotomous in each of the voting equations, the votes are estimated using probit equations, so that the function F listed above refers to the cumulative normal distribution. The campaign contributions received from labor and business groups are estimated as Tobit equations since the

dependent variable is censored at zero. Because there were so few business contributions censored at zero (only 16 representatives received no contributions from business groups), business contributions are estimated as a linear equation. Our estimation technique is similar to the simultaneous probit-Tobit model pioneered by Chappell (1982).

For the Senate, because there are fewer observations, we are unable to estimate all five equations simultaneously. Instead we estimate three separate systems, one for each of the votes on the trade bills, with three equations each (one voting and two contribution equations). There are also so few censored observations for contributions in the Senate that we use linear rather than Tobit equations. We estimate the following system of equations in the Senate for j = (GATT, NAFTA, and MFN):

$$\text{Vote}_j = F(A_j'X_j + A_{Lj}*(\text{Labor Con}) + A_{Bj}*(\text{Bus Con})) + \varepsilon_j$$

$$\text{Labor Con} = D_i'Y + \varepsilon_l$$

$$\text{Business Con} = E_i'Z + \varepsilon_b,$$

where X is a vector of constituency variables that influence voting on the measures and Y and Z are vectors of variables affecting campaign contributions to senators.

One of the advances in our study is that we include detailed data on employment by industry within each congressional district in our estimations. Employment in congressional districts by two- and three-digit manufacturing industries is estimated from data collected at the county level in the 1993 County Business Patterns. If a county contains more than one congressional district within its borders, the number of workers from an industry who are in each district is estimated by using the fraction of the county's population (in 1990) residing in each district. For example, if 40% of the county's population lives in a congressional district, that district receives 40% of the county's workers in each industry in our data set. On the basis of this procedure, we create variables indicating the fraction of the workforce that each industry represents in the congressional district. Population size by congressional district and

county are reported in <u>Congressional Districts in the 1990s</u> (1993). In this paper we examine only 2-digit SIC industries. We have also examined 3-digit SIC industries when studies predicted that they would be strongly affected by either the GATT/WTO agreements or NAFTA, but we found that 3-digit industry variables rarely had sizable impacts on voting decisions. Employment data for states by SIC industries and for broad non-manufacturing sectors are taken directly from the 1993 <u>County Business Patterns</u>. Employment data for the agricultural sector comes from the <u>1992 Census of Agriculture</u>.

Industries predicted to be significantly harmed by NAFTA include apparel, ceramic tiles, household appliances, sugar, citrus fruit, and vegetables, while the computing sector is usually cited as the main employment gainer.[6] The sectors expected to be harmed by the GATT agreement, according to industry representative or studies by economists, are dairy, textiles, apparel, lumber and wood products, paper, footwear, steel, and motor vehicles. Sectors expected to gain and thus support the Uruguay Round agreements include most agricultural products, chemicals, nonelectrical machinery, computing equipment, and instruments. Little formal analysis of the sectoral impact of withdrawing MFN for China exists but we expect labor-intensive sectors such as apparel and footwear to favor withdrawal and skill-intensive, high technology industries to support the continuation of China's MFN status.

To investigate the influence of a district's or state's trade with other countries on members' voting behavior, we create a variable (EXPRATIO) indicating the dependence of the district or state on export jobs relative to import-competing jobs. We divide industries (at the 4-digit SIC level) into those for which the United States is a net importer and those for which it is a net exporter and then sum up total district employment in net exporting and in net importing industries. We expect the probability of a vote in favor of NAFTA, GATT/WTO and MFN for China to be higher the larger the ratio of export jobs to

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[6] The main studies from which we take predictions about the impact of NAFTA and the GATT/WTO agreements are USITC (May 1992), USITC (January 1993), and USITC (June 1994).

import-competing jobs in a congressional district or state.

Broader economic features and conditions of districts and states than given by industry data are available from the Census Bureau in their publication, Population and Housing Characteristics for Congressional Districts of the 103rd Congress. Variables of this type that are included in the data base are per capita income in dollars (PERCAP), the proportions of individuals over 25 years old with no high school degree (NOHSDEG) or with a high school diploma but no college degree (HSNOCOLL), and the unemployment rate (UNEMP) in the district or state. These data are for 1990, but they serve as proxies for the values of these variables in 1993 and 1994. We expect that lower per capita income, a less-educated labor force, and a higher unemployment rate in a district or state to be correlated with votes against NAFTA, GATT/WTO and MFN for China. We also include the fraction of population of Hispanic origin (PERHISP) in the NAFTA voting equation. A measure of organized labor's strength included in the analysis is the proportion of private sector workers who are union members in 1993 (UNION). Information on union representation is available only at the state level (McCallion, 1994).[7]

Information about members of Congress themselves comes from a variety of sources. The number of terms served (TERMS) and membership in congressional committees are taken from Duncan (1994), while the interest groups' ratings of members of Congress were obtained directly from the organizations. These interest groups list 8-25 important votes each year and rate members of Congress on the percentage of times the politician voted in the group's interest (100 indicates complete agreement with the interest group). We combined the two yearly ratings for the 103rd Congress (1993-94) into one variable for each interest group. The AFL-CIO ratings (AFL) measures how closely each politician is aligned with labor interests, while the Chamber of Congress ratings (COC) indicates how closely he or she is tied to business interests. The American Conservative Union (ACU) measures the conservative

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[7]We are grateful to Representative Scott Klug's office for the data on union representation.

leanings of each member of Congress. Finally, the League of Conservation Voters (LCV) ranks

members on environmental votes, while the American Security Council provides a national security

voting index (NSI) measuring how consistently the representatives vote in favor of strong national

defense. Since the AFL-CIO, COC and ACU ratings included how members voted on the NAFTA

and/or GATT/WTO bills, we recalculated these ideological ratings excluding those two bills. We

interpret these ratings as indicators of the broad policy views of a majority of a member's voting

constituents. A dummy variable (DEMOCRAT) is used to indicate the political party to which a member

of Congress is associated, with a one denoting that the member is a Democrat.

Data on contributions given to members of Congress are available in Makinson and Goldstein

(1994). The contribution data used in this study are the total contributions received by each member in

the previous election from political action committees that Makinson and Goldstein identify as

representing either labor (LABCON) or business interests (BUSCON). Both are measured in thousands

of dollars.

VI. Empirical Results

House Votes

Table 1 presents the results of estimating simultaneously the five equations on labor

contributions, business contributions, and the votes on NAFTA, GATT/WTO and MFN (1993) by the

method of full information maximum likelihood. The first column specifies the list of variables, while

the second indicates the effect of a unit increase in the variable above its mean level (given in the fourth

column) on the probability of a favorable vote or on the expected campaign contributions received. The

third column lists the actual coefficients from the Tobit labor contribution equation, the linear business

contribution equation and the three probit voting equations. For example, the NAFTA voting equation

indicates that a unit increase in the index number rating by the AFL-CIO from its mean of 58.7 increases

the probability of a negative vote by 1.8 percent and that a one percentage point increase in the proportion of individuals 25 years of age or more without a high school degree reduces the probability of a favorable vote by 2.4 percentage points from its mean of 25.0 percent.

For both NAFTA and GATT/WTO, the coefficients on the labor and business contribution variables are statistically significant (at the 1% level for labor contributions and the 10% level for business contributions) with the expected signs. A $1,000 increase in a member's contributions from labor groups beyond the mean level increased the probability of voting against NAFTA by 0.4 percentage points, whereas a $1,000 addition to contributions from business PAC's increased the probability of voting to approve this free trade agreement by 0.09 percentage points. The comparable probabilities on the GATT/WTO vote are 0.4 and 0.06 percentage points. These are rather large impacts on voting probabilities considering that the standard deviation of labor contributions is $61,000 and that of business contributions is $123,000 in our data set. Neither labor nor business contributions had a statistically significant effect on representatives voting on the MFN bill. The two contribution variables are jointly significant (as measured by the likelihood-ratio test) at the 5% level in the NAFTA voting equation, at the 1% level in the GATT/WTO equation, and insignificant in the MFN equation.

In order to investigate the economic significance of the impact of campaign contributions on voting probabilities, we performed a number of simulations, which are presented in Table 2. First, we used the coefficient estimates from our model and the values of the variables for each representative to predict his or her probability of voting in favor of the bill. Then we summed the probabilities for all representatives to get the predicted total number of votes. The model's prediction for the total number of votes is almost exactly right for the NAFTA vote, while it overpredicts the number of votes received on GATT/WTO and MFN93 by about 6-7 votes. We then recalculate each representative's probability of voting for each of the bills under three counterfactuals. First, we held all other variables at their actual

levels but set total contributions from labor groups equal to zero. For the second simulation, we set total business contributions to zero, and finally we set both business and labor contributions to zero.

Table 2 shows the large effects that labor and business contributions had on the total predicted number of votes for NAFTA and the GATT agreement. First, without labor contributions, the model predicts that 62 more representatives would have voted in favor of NAFTA while 56 more would have voted in favor of the GATT agreement. With zero business contributions received by each representative, 33 fewer representatives would have voted for NAFTA and 33 fewer for GATT. Since NAFTA passed the House by only 34 votes, the model predicts that the switch of 33 individuals from favoring to opposing NAFTA would have resulted in NAFTA not being approved had there been no campaign contributions from business PAC's. The net effect of contributions was to reduce the number of votes for NAFTA by about 28 votes and reduce the number of votes for the GATT agreement by about 33 votes. Thus our model suggests that trade policy is for sale in the House of Representatives.

The economic interests of constituents also play a role in determining a legislator's vote. A favorable vote on all three measures was, for example, more likely the higher the ratio of workers employed in export-oriented to import-competing industries. An affirmative vote for NAFTA was more likely the larger the proportion of Hispanics in a member's district, whereas voting against this measure was more likely the larger the fraction of workers without a high school degree and the higher the fraction of unionized workers in the state. None of these variables were significant in either the GATT/WTO or MFN votes. A high unemployment rate in a member's district significantly reduced the probability of a vote for the GATT agreement, had no significant effect on the NAFTA vote, and raised the probability of voting for MFN for China. The changes in significance levels and sometimes the signs of the coefficients on the constituency variables suggest that legislators and interest groups view each measure separately rather than formulating a common position toward all bills representing a movement

in favor of or against freer trade. The coefficients on the general economic characteristics of the district are jointly significant at the 1% level for NAFTA and GATT and at the 5% level for MFN for China.

Once total employment in exporting and import-competing industries was accounted for, employment in most industries had little impact on legislators' voting. Large employment in the textiles industry significantly reduced the likelihood of voting for either GATT or MFN, but (consistent with the fact that the industry did not oppose NAFTA) did not affect the NAFTA vote. It is surprising that employment in the apparel industry had no significant effect on the GATT and NAFTA votes. Despite the relatively few significant coefficients among the industry variables, it would be a mistake to omit them, however. Likelihood-ratio tests show that the coefficients on the industry variables are jointly significant at the 1% level for both the GATT and MFN votes and at the 5% level for the NAFTA vote. This suggests that previous estimates from House voting studies, which often exclude industry characteristics, are flawed because of omitted variable bias if industry employment is correlated with such variables as contributions, per-capita income, union strength, or ideological ratings included in these studies.

Ideological variables, as measured by legislators' past voting records, were particularly important determinants of congressional voting. As expected, those ranked highly by the AFL-CIO and American Conservative Union tended to oppose NAFTA, GATT/WTO and MFN for China, while members ranked highly by the American Security Council tended to favor these measures. A high rating by the Chamber of Commerce was associated with approval of GATT/WTO, but the rankings by this group for the other two measures were not quite significant at the 10% level. The rankings by the League of Conservation Voters did not significantly affect either the NAFTA or GATT vote but did reduce the likelihood of voting for MFN status for China. The coefficients on the ideological variables are jointly significant at the 1% level in all three voting equations. As pointed out in Section IV, we

view these variables as reflecting the ideological leanings of legislators' constituents.

As noted in the section describing the legislative history of the various measure, the effort to secure approval of NAFTA involved extensive lobbying of members of Congress by President Clinton in which various concessions relating to the agreement or dealing with quite separate matters were made. Based on interviews and various public records, Grayson (1995, chp. 9, Table 10) provides a list of 45 Representatives who allegedly obtained special benefits from the Administration in return for supporting NAFTA. Using the coefficients reported in Table 1, we estimated the predicted probability of a vote for NAFTA by these members in the absence of any special favors. Of the 29 members of the House for which we have sufficient data to make a prediction, we estimated that 22 would have voted for NAFTA without any special consideration whereas 7 changed a predicted negative vote to a favorable one.

Senate Votes

Full information maximum likelihood estimates of voting behavior in the Senate on the three measures are presented in Table 3. One difference from the House results is that PAC contributions from labor and business groups significantly affected the NAFTA vote but not the GATT/WTO vote. Business contributions also significantly affected the MFN vote in the Senate, whereas they did not affect the House vote. The effect of a $1,000 increase in labor and business contribution on the probability of an affirmative NAFTA vote are -.4 percent and .1 percent, respectively. These are very close to the estimated marginal effects on the House vote. The fraction of unionized workers is significantly negative in the NAFTA and MFN votes, and the industry ratio of export-oriented to import-competing workers is significantly positive in the NAFTA vote.

Due to the small number of observations, it was not possible to include the full range of ideological ratings by special interests that are included in the House equations. The AFL-CIO and U.S. Chamber of Commerce ratings are significant with the expected signs in the GATT/WTO vote but have

unexpected signs in the other two votes, with the labor variable being significantly positive in the China vote. As in the House, the fraction of employment in the textile sector is significantly negative in the GATT/WTO and NAFTA votes.

VII. Conclusions

The major conclusion of this study is that voting behavior on recent trade bills can be explained reasonably well by the variables typically included in the political economy models of economists. In particular, political contributions to legislators by organized labor and business groups significantly affected the voting outcome in two of the three bills in the House (GATT/WTO and NAFTA) and two of the three bills in the Senate (NAFTA and MFN for China). One advantage of our analysis over most others is that the endogeneity of the contribution variables is recognized in a simultaneous equations model and the full information maximum likelihood method is used to estimate the relationships.

Our results and those of others suggest that contributions do not significantly increase the probability of voting as the contributors wish on every bill but only on those where the interest groups lobby the legislators most vigorously. The fact that contributions from both labor and business groups had much smaller effects on the MFN vote may be explained by the weaker opposition of labor to MFN for China than to NAFTA and GATT/WTO. The much stronger opposition by organized labor to NAFTA than GATT is not picked up in the marginal coefficients of the labor contributions variable in the House votes, since the marginal NAFTA coefficient is only slightly larger than the GATT/WTO coefficient. The similar marginal coefficients in the AFL-CIO ratings for the two votes also indicates that labor's stronger opposition to NAFTA than GATT/WTO did not directly affect the marginal voting behavior of pro-labor legislators. Where the labor unions' anti-NAFTA campaign seems to have paid off in the House is through the lobbying of their own members as well as less-educated workers who, in turn, exerted political pressures on their Representatives. These coefficients are not only significant in

the NAFTA case but their marginal negative effects are much larger than on the GATT vote (the coefficients in the GATT/WTO equation are actually positive).

Not only do private interest groups affect voting outcome through campaign contributions but the president can also, in effect, "buy" votes by providing special benefits to members of Congress. For example, we estimate that President Clinton bought about 7 House votes in favor of NAFTA by this means. In the Senate, labor and business contributions had statistically significant and large effects on the NAFTA vote but not on the GATT/WTO vote. Interestingly, the general belief that business lobbied hard for MFN for China is borne out by the statistically significant and large positive coefficient on this variable in the voting equation..

While contributions do affect voting outcomes, they by no means dominate the outcome. Also important in explaining the voting outcomes for the bills analyzed here are: (i) general economic conditions in a legislator's district or state, e.g., the unemployment rate, the degree of unionization, the proportion of less educated to well-educated workers, and the relative importance of export-oriented to import-competing employment; (ii) the industry-specific distribution of employment; and (iii) the broad policy views of legislators as indicated by past voting performance on bills of interest to particular political pressure groups. We interpret these results to be evidence that legislators are responding to the economic and social concerns of their constituencies as well as responding to the wishes of their major contributors.

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TABLE 1

HOUSE VOTES ON NAFTA, GATT/WTO AND MFN FOR CHINA

	Marginal Effects	Actual Coefficients	District Mean of Variables	
FIML Estimation				
Labor Contributions				
Tobit Equation				
CONSTANT	-44.885656	-54.139221	1.000000	
AFL	1.143729	1.379518***	58.743410	(based on 100)
LABOR COM	32.251416	38.900324***	0.091127	(1= on Labor Comm.)
TERMS	-0.893290	-1.077450*	5.009592	(number)
DEMOCRAT	16.522328	19.928548	0.594724	(1=Democrat)
SCALE	35.088630	51.04635		
Business Contributions				
Linear regression				
CONSTANT	-1.902332	-1.902332	1.000000	
COC	1.235697	1.235697**	59.525180	(based on 100)
WAYSMEANS	84.184333	84.184333***	0.088729	(1= Ways & Means)
TERMS	9.212651	9.212651***	5.009592	(number)
DEMOCRAT	45.359923	45.359923	0.594724	(1=Democrat)

*,**,*** indicate significance at the 10%, 5% and 1% levels, respectively.

NAFTA

Probit Voting Equation

	Marginal Effects	Actual Coefficients	District Mean of Variables	
CONSTANT	2.641427	6.657735***	1.000000	
ACU	-0.029569	-0.074528***	46.728200	(based on 100)
AFL	-0.018117	-0.045663***	58.743410	(based on 100)
NSI	0.007598	0.019151***	60.167870	(based on 100)
COC	0.004876	0.012290	59.525180	(based on 100)
LCV	-0.002003	-0.005048	51.354920	(based on 100)
PERHISP	0.008105	0.020429***	8.803491	(percent)
UNION	-0.019407	-0.048916**	11.027820	(percent)
DEMOCRAT	-.05050	-0.328228	0.594724	(1=Democrat)
EXPRATIO	0.256400	0.646259***	1.370947	(ratio)
LABOR CON	-0.004476	-0.011281**	53.467630	(thousands of $s)
BUS CON	0.000905	0.002280*	152.201400	(thousands of $s)
NOHSDEG	-2.378224	-5.994330**	0.249774	(proportion)
HSNOCOLL	-0.550806	-1.388311	0.487950	(proportion)
UNEMP	0.028829	0.072663	6.449640	(percent)
PERCAP	-0.000021	-0.000052	14434.59	(dollars)
AGR	-0.000001	-0.000003	7182.38	(number of individuals)
Food	-0.312826	-0.788480	0.016845	(all industries in proportions)
Tobacco	12.529162	31.579844	0.000378	
Textiles	1.342770	3.384461	0.006998	
Apparel	1.064526	2.683146	0.010943	
Lumber	1.007084	2.538363	0.008389	
Furniture	8.098280	20.411774	0.005177	
Paper	4.294403	10.824074	0.007069	
Printing	2.803351	7.065866	0.015121	
Chemicals	-10.042801	-25.312952**	0.009077	
Petroleum	-10.081083	-25.409444	0.001270	
Rubber prods.	3.942201	9.936345	0.009924	
Leather	18.241907	45.978859	0.001193	
Stone, clay, glass	4.262248	10.743026	0.005386	
Primary metals	-9.226519	-23.255509*	0.007330	
Fabr. metals	7.320660	18.451777*	0.014622	
Mach. ex. elec.	-6.352629	-16.011848*	0.018472	
Elec. equip.	6.126001	15.440629*	0.014955	
Transp. equip.	1.265003	3.188450	0.016755	
Instruments	-3.100693	-7.815320	0.008979	
Misc. mfrs.	5.570941	14.041598	0.004070	
Baseline probability	0.541847			

GATT/WTO

Probit Voting Equation

	Marginal Effects	Actual Coefficients	District Mean of Variables	
CONSTANT	2.123342	8.809286**	1.000000	
ACU	-0.042471	-0.176205***	46.728200	(based on 100)
AFL	-0.017242	-0.071532***	58.743410	(based on 100)
NSI	0.013943	0.057846***	60.167870	(based on 100)
COC	0.005946	0.024668**	59.525180	(based on 100)
LCV	-0.001214	-0.005035	51.354920	(based on 100)
UNION	0.001252	0.005195	11.027820	(percent)
DEMOCRAT	-0.02975	-0.808643	0.594724	(1=Democrat)
EXPRATIO	0.222591	0.923481***	1.370947	(ratio)
LABOR CON	-0.004062	-0.016851***	53.467630	(thousands of $s)
BUS. CON	0.000657	0.002727*	152.201400	(thousands of $s)
NOHSDEG	1.089901	4.521762	0.249774	(proportion)
HSNOCOLL	-0.432669	-1.795050	0.487950	(proportion)
UNEMP	-0.045495	-0.188750**	6.449640	(percent)
PERCAP	0.000003	0.000014	14434.59	(dollars)
AGR	0.000003	0.000011	7182.38	(number of individuals)
Food prods	-3.493697	-14.494593*	0.016845	(all industries in proportions)
Tobacco	16.422247	68.132357	0.000378	
Textiles	-6.190414	-25.682690***	0.006998	
Apparel	3.002536	12.456874	0.010943	
Lumber	4.668351	19.367981	0.008389	
Furniture	2.392995	9.928021	0.005177	
Paper	-4.653988	-19.308393	0.007069	
Printing	1.120072	4.646937	0.015121	
Chemicals	-2.454984	-10.185197	0.009077	
Petroleum	3.2530	13.496342	0.001270	
Rubber prods.	-4.295692	-17.821899	0.009924	
Leather	1.688375	7.004704	0.001193	
Stone, clay, glass	0.825994	3.426870	0.005386	
Primary metals	0.655914	2.721247	0.007330	
Fabr. metals	3.215998	13.342482	0.014622	
Mach. ex. elec.	3.611220	14.982171	0.018472	
Elec. equip.	-5.022537	-20.837422**	0.014955	
Transp. equip.	3.194073	13.251518**	0.016755	
Instruments	0.903741	3.749428	0.008979	
Misc. mfrs.	10.193889	42.292245	0.004070	

Baseline probability	0.842279

China MFN 1993

Probit Voting Equation

	Marginal Effects	Actual Coefficients	Mean of Variables	
CONSTANT	0.246431	1.095497	1.000000	
ACU	-0.017175	-0.076350***	46.728200	(based on 100)
AFL	-0.008681	-0.038592***	58.743410	(based on 100)
NSI	0.002586	0.011496*	60.167870	(based on 100)
COC	0.003153	0.014018	59.525180	(based on 100)
LCV	-0.006849	-0.030448***	51.354920	(based on 100)
UNION	0.000635	0.002821	11.027820	(percent)
DEMOCRAT	0.083406	1.082189*	0.594724	(1=Democrat)
EXPRATIO	0.069790	0.310250**	1.370947	(ratio)
LABOR CON	0.000459	0.002040	53.467630	(thousands of $s)
BUS CON	0.000143	0.000636	152.201400	(thousands of $s)
NOHSDEG	0.357706	1.590169	0.249774	(proportion)
HSNOCOLL	0.855968	3.805169	0.487950	(proportion)
UNEMP	0.047803	0.212504**	6.449640	(percent)
PERCAP	0.000012	0.000055	14434.59	(dollars)
AGR	-0.000005	-0.000024	7182.38	(number of individuals)
Food prods.	7.246111	32.212280**	0.016845	(all industries in proportions)
Tobacco	-6.789067	-30.180510	0.000378	
Textiles	-3.742146	-16.635551**	0.006998	
Apparel	-1.867479	-8.301801	0.010943	
Lumber	-1.398544	-6.217166	0.008389	
Furniture	1.542779	6.858359	0.005177	
Paper	3.399354	15.111685	0.007069	
Printing	-2.721518	-12.098395	0.015121	
Chemicals	-0.624924	-2.778075	0.009077	
Petroleum	0.054615	0.242790	0.001270	
Rubber prods.	-4.675351	-20.784073	0.009924	
Leather	-1.411156	-6.273235	0.001193	
Stone, clay, glass	-1.796422	-7.985918	0.005386	
Primary metals	-1.953680	-8.685002	0.007330	
Fabr. metals	4.930365	21.917728	0.014622	
Mach. ex. elec.	-1.631266	-7.251725	0.018472	
Elec. equip.	1.640368	7.292187	0.014955	
Transp. equip.	-0.660089	-2.934398	0.016755	
Instruments	0.145778	0.648048	0.008979	
Misc. mfrs.	9.028820	40.137238	0.004070	

Baseline probability 0.857794; Log likelihood -5209.08; Number of Observations = 417

Table 2

Model Predictions for the House of Representatives

NAFTA **(We can predict votes for 426 members who voted on NAFTA)**

Reality:	229	of these members voted for NAFTA	
Model Predicts:	228.6	will vote for NAFTA	
No Labor Contributions:	290.8	will vote for NAFTA	(- 62)
No Business Contributions:	195.2	will vote for NAFTA	(+ 33.4)
No Contributions:	256.4	will vote for NAFTA	(- 28)

GATT **(We can predict votes for 424 members who voted on GATT)**

Reality:	283	of these members voted for GATT	
Model Predicts:	289.9	will vote for GATT	
No Labor Contributions:	345.9	will vote for GATT	(- 56)
No Business Contributions:	256.8	will vote for GATT	(+ 33)
No Contributions:	322.7	will vote for GATT	(- 33)

MFN for China, 1993 **(We can predict votes for 419 members who voted on MFN93)**

Reality:	313	of these members voted for MFN	
Model Predicts:	318.9	will vote for MFN	
No Labor Contributions:	311.0	will vote for MFN	(+ 8)
No Business Contributions:	311.0	will vote for MFN	(+ 8)
No Contributions:	302.4	will vote for MFN	(+ 16.5)

TABLE 3

SENATE VOTE ON NAFTA

FIML Estimation

	Marginal Effects	Actual Coefficients	Means
NAFTA Voting Probit Equation			
CONSTANT	0.22401	0.69595	1.00000
AFL	0.00059	0.00182	53.24000
COC	-0.00498	-0.01547	54.66000
UNION	-0.05434	-0.16881***	9.95600
EXPRATIO	0.58209	1.80840**	1.27097
LABCON	-0.00264	-0.00819**	152.82650
BUSCON	0.00066	0.00205**	785.83670
NOHSDEG	0.04664	0.14489	0.23716
TEXTILES	-14.94992	-46.44591	0.00646
Baseline Probability	0.7438		
Labor Contributions Linear regression			
CONSTANT	18.79925	18.79925	1.00000
AFL	2.51195	2.51195**	53.24000
LABCON	74.77921	74.77921***	0.17000
TERMS	-13.44269	-13.44269	2.53000
DEMOCRAT	37.13333	37.13333	0.56000
Business Contributions Linear regression			
CONSTANT	-113.94015	-113.94015	1.00000
COC	10.09527	10.09527**	54.66000
FINANCE	273.60579	273.60579***	0.17000
TERMS	44.61163	44.61163	2.53000
DEMOCRAT	340.45346	340.45346	0.56000

Log Likelihood = -1341; Number of observations = 99
*,**,*** indicates significance at the 10%, 5% and 1% levels, respectively

Table 3 (Continued)

SENATE VOTE ON GATT/WTO

FIML Estimation

	Marginal Effects	Actual Coefficients	State Means for Variables
GATT/WTO Voting Probit Equation			
CONSTANT	0.17687	1.02587	1.00000
ACU	-0.02184	-0.12665**	43.01860
AFL	-0.00843	-0.04892**	53.24000
COC	0.01573	0.09126**	54.66000
UNION	0.00739	0.0428	49.95600
EXPRATIO	0.05316	0.30834	1.27097
LABCON	-0.00031	-0.00178	152.82650
BUSCON	0.00002	0.000137	85.83670
NOHSDEG	2.20612	12.79584**	0.23716
TEXTILES	-9.38114	-54.41213**	0.00646
Baseline probability	0.903557		

Labor Contributions Linear regression			
CONSTANT	19.536427	19.536427	1.00000
AFL	2.309791	2.309791***	58.743410
LABCON	75.548665	75.548665***	0.091127
TERMS	-12.959957	-12.959957	5.009592
DAM	54.455111	54.455111	0.594724

Business Contributions Linear regression			
CONSTANT	-385.576511	-385.576511	1.00000
COC	13.073760	13.073760**	59.525180
FINANCE	349.972666	349.97267***	0.088729
TERMS	40.742668	40.742668	5.009592
DAM	554.844641	554.844641**	0.594724

Log likelihood -1327; Number of observations 99

Table 3 (Continued)

SENATE VOTE ON MFN FOR CHINA

FIML Estimation

	Marginal Effects	Actual Coefficient	Means
China MFN Probit equation			
CONSTANT	4.15140	6.73503**	1.00000
AFL	0.07548	0.12245**	53.24000
COC	-0.01503	-0.02439	54.66000
UNION	-0.38994	-0.63262***	9.95600
EXPRATIO	0.11495	0.18648	1.27097
LABCON	0.00026	0.00043	152.82650
BUSCON	0.00084	0.00137**	785.83670
NOHSDEG	-13.44874	-21.81861*	0.23716
TEXTILES	-21.24817	-34.47204	0.00646
Baseline Probability	0.9455		
Labor Contributions Linear regression			
CONSTANT	19.10475	19.10475	1.00000
AFL	2.54240	2.54240**	53.24000
LABCON	74.58393	74.58393***	0.17000
TERMS	-13.65618	-13.65618	2.53000
DEMOCRAT	34.62875	34.62875	0.56000
Business Contributions Linear regression			
CONSTANT	-251.11454	-251.11454	1.00000
COC	12.07864	12.07864***	54.66000
FINANCE	325.49530	325.49530***	0.17000
TERMS	29.82356	29.82356	2.53000
DEMOCRAT	454.87677	454.87677	0.56000

Log Likelihood = -1303
Number of observations = 100