

Trade Policy, Economic Interests and Party Politics in a Developing Country: The Political Economy of CAFTA

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Abstract

Developing countries have increasingly opened their economies to trade. Research about trade policy in developed countries focuses on a bottom-up process by identifying economic preferences of domestic groups. We know less about developing countries. We analyze how economic and political variables influenced Costa Rican voters in a referendum on CAFTA, an international trade agreement. We find little support for Stolper-Samuelson models of economic preferences, but more support for specific factor models. We also isolate the effects of political parties on the referendum, controlling for many economic factors; we document how at least one party influenced voters and this made the difference for CAFTA passage. Politics, namely parties using their organizational strength to cue and frame messages for voters, influenced this important trade policy decision. Theories about trade policy need to take into account top-down political factors along with economic interests.

* The online appendix for this paper and datasets are available at <http://hdl.handle.net/1902.1/19349>. A previous version of this paper was presented at IPES 2008 and APSA 2009. We would like to thank numerous reviewers, and David Francis and Torben Behmer for research assistance.

I. Introduction

In October 2007, Costa Rica held the first public referendum on a trade agreement in a developing country to decide the fate of the Central American-Dominican Republic Free Trade Agreement (CAFTA-DR), the agreement signed in 2004 between the five Central American Common Market countries (Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua), the Dominican Republic, and the United States. The referendum passed by a razor-thin margin, 51.56% to 48.44%, with a turnout of 59.2% of the eligible population.¹ Unlike portrayals of the legislative vote on CAFTA in the US (Guisinger, 2009), the issue was highly salient and politicized in Costa Rica.

Existing arguments about individual trade policy preferences focus largely on public opinion surveys (Beaulieu et al., 2005, Guisinger, 2009, Scheve and Slaughter, 2001), elections with trade as one key issue (Johnston et al., 1996), or legislative voting (Beaulieu, 2002, Beaulieu, 2002, Ladewig, 2006), all of which are indirect measures of public preferences. In none of these cases does the public directly control the outcome of a trade policy initiative. In this referendum, voters decided whether Costa Rica would accept or reject the trade agreement. The referendum provides a unique opportunity to consider the role of domestic politics in shaping how voters form preferences over trade policy.

There exist three contrasting models of trade policy preference formation. Bottom-up models assume that individuals form preferences based on their particular circumstances. A common type of bottom-up model in international and comparative political economy assumes

¹ Turnout was roughly the same as for the combined presidential and legislative elections of 2006. On January 1st, 2009, following a series of legal challenges, CAFTA-DR went into effect in Costa Rica.

that voters calculate the economic consequences of policy and vote based on the personal economic consequences of a policy change (Baker, 2005, Scheve and Slaughter, 2001). In contrast, more recent research on individual preferences suggests that voters respond to issues like CAFTA based upon their views on non-economic factors, like socialization, ethnocentrism or nationalism (Hainmueller and Hiscox, 2006, Mansfield and Mutz, 2009). These bottom-up models leave little room for political actors to effect policy changes, and the more recent work argues that economic factors do not play an important role in shaping individual preferences. Top-down approaches, however, suggest that voters are often uncertain about their preferences or can be swayed by political elites who, because of their public position, resources, and information, have the capacity to influence public opinion (Baker, 2008, Berinsky, 2007, Brody, 1991, Oldendick and Bardes, 1982, Zaller, 1992). Of course, both processes may occur simultaneously, which may be why disentangling elite and public influence is so difficult (e.g., (Baker, 2008, Canes-Wrone, 2006, Erikson et al., 2002, Gabel and Scheve, 2007).

We utilize new data and a variety of methods to investigate who supported and opposed CAFTA. We contrast predictions made by the two main economic models of trade policy preferences, and show that specific factors models provide a much better fit than do Stolper-Samuelson ones. Controlling for a variety of different economic preferences, we argue that politics, especially party politics, played a substantial role in affecting how the public voted in the referendum. We show that parties use knowledge about the distributive consequences of policy to frame the debate for different audiences. We thus combine an explanation focusing on the trade policy preferences of the public (so called “bottom-up” approaches) with a top-down model that elites (here, government leaders and parties) can shape public preferences. While voters are likely to act on their economic self-interest, there is room for politicians to influence how voters see agreements affecting their economic interests. Economic agreements such as

CAFTA are complex and have varying distributional consequences. Politicians can emphasize different consequences of policy to different audiences to build, or erode, support for the agreement. Thus, we argue that both bottom-up and top-down forces shape policy preferences.

Our paper first provides background on the CAFTA-DR agreement. Second, we discuss bottom-up and top-down arguments in detail. We examine the two central models of trade policy preferences derived from economic theory, contrasting predictions made by the Heckscher-Ohlin (HO) and Stolper-Samuelson (SS) models of trade to those made by the specific factor model of Ricardo-Viner (RV). The specific factor model predicts that export-oriented industries are more likely to support CAFTA-DR. We then formulate hypotheses about voter preferences for CAFTA and the role of political elites, using theories about the ways parties use cues and frames (Christin et al., 2002, Hobolt, 2006, Lau and Redlawsk, 2001, Lupia and McCubbins, 1998). Many political actors can cue and frame messages for voters, but they may only be successful if they are well organized enough to present their message effectively and broadly. Finally, we combine the top-down and bottom-up approaches to focus on *how* political elites will frame their message.

We examine our hypotheses using three different sources of data. Initially, we quantitatively test our hypotheses about support and opposition to CAFTA-DR in Costa Rica using district-level referendum vote returns. Controlling for economic characteristics at the lowest level of geographic aggregation possible, we show how well-organized parties are better able to use cueing and framing to influence voters than less organized parties. The differential impact of the main parties on the referendum results, given their different organizational capacities for influence, is a key factor in identifying their effects. Next, we present individual-level survey analyses, which are less susceptible to the ecological inference problem. Finally, qualitative evidence about how political parties and other social actors framed their message

suggests support for the causal mechanisms we hypothesize. Identifying the causal effects of political parties is difficult and thus we draw on a variety of evidence including fixed-effects models to control for omitted variables and survey evidence. We provide the most systematic analysis to date of this unique window into mass politics around trade policy. Our inferences extend beyond Costa Rica, especially since a wave of developing nations has undergone both democratization and trade liberalization since the 1980s (Milner and Kubota, 2005).

II. CAFTA-DR Background

In 2002, the United States began trade negotiations with five Central American countries (Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua) plus the Dominican Republic. Of the countries involved in CAFTA-DR, the United States is by far Costa Rica's largest trading partner, as 45% of Costa Rican exports go to the US and 45% of imports are from the US. In contrast, about 16% of Costa Rican exports go to, and less than 5% of imports are from, Central America. Also, the investment, labor, intellectual property rights, and telecommunications provisions of the agreement—to which its critics were most vociferously opposed—were included at the insistence of the US. Thus, in Costa Rican eyes, CAFTA-DR was largely an agreement with the capital-abundant United States (the supplementary materials have more detail on CAFTA-DR's effect on trade restrictions between Costa Rica and the US).

Negotiations began in 2003 under President Abel Pacheco of the Social Christian Unity Party (PUSC), but involved representatives from the major political parties and various business and civil society interests in Costa Rica (McElhinny, 2004). This followed the 2002 elections, which did not feature debates about the trade agreement. The agreement was signed in August 2004. By the end of 2005, Costa Rica was the only country which had not ratified it. By 2006 new presidential elections were in full swing, and CAFTA-DR became an issue in the Presidential campaign (Economist, 2006). Oscar Arias of the left-leaning National Liberation

Party (PLN), with traditional mass support from poorer sections of Costa Rican society, vigorously supported the agreement, arguing that CAFTA-DR was necessary for Costa Rica's future economic development, while Otton Solís of the relatively new Citizens' Action Party (PAC) opposed it, calling for a complete renegotiation of the agreement (Economist, 2006, Wilson, 2007).² ³Thus even prior to the 2007 CAFTA-DR referendum, parties competed for voters by taking different positions on CAFTA-DR. But the 2006 election was about more than just CAFTA. The personalities and histories of the two presidential contenders were important

² The main PLN competitor, the PUSC, had been decimated by corruption scandals and played a minor role in the 2006 elections. Unlike the PLN, surveys showed more PAC support from wealthier individuals possibly due to their more urban roots.

³ As a left party early PLN rhetoric and policy favored state intervention and economic redistribution Booth, John A. (2007) Political Parties in Costa Rica. In *Party Politics in New Democracies*, edited by Paul Webb and Stephen White, pp. 305-44. Oxford: Oxford University Press.. During the 1980's and 1990's, however, the PLN supported trade liberalization and other neoliberal reforms. In 1982 Costa Rica experienced a serious financial crisis and received help from the IMF, and in return the PLN agreed to a policy program involving fiscal austerity, privatization and liberalization Booth. Political Parties in Costa Rica, Wilson, Bruce M. (1999) Leftist Parties, Neoliberal Policies, and Reelection Strategies: The Case of the Pln in Costa Rica. *Comparative Political Studies* 32:752, ———. (1994) When Social Democrats Choose Neoliberal Economic Policies: The Case of Costa Rica. *Comparative Politics* 26:149-68.. The PLN later adopted a series of compensation measures enabling it to maintain its social democratic label in its competition with the more conservative PUSC.

(Wilson 2007). Arias of the PLN had been president before and had to have the constitution changed so that he could run again. This change was highly contested. It appears to help explain why the 2006 presidential election turned out so close (only 18,000 votes difference). And it also is related to the fact that wide differences existed in the PLN and PACs presidential vote share versus their legislative vote shares. Solís of the newly formed PAC got 14.5% more of the vote than did his legislative party (Wilson 2007: 715). Voters were focused on more than just CAFTA in this election.

Arias barely won the 2006 presidential election; and his party alone did not have enough votes to control the legislative assembly. Opponents of CAFTA delayed the vote on the agreement. Because there was a deadline for its ratification, the opponents hoped to kill the agreement this way (Martí, 2008). But amid this contestation, the Costa Rican Supreme Court announced that a public referendum might be possible. The PLN government chose this route to avoid the delaying tactics and began an intense campaign for public support. The PAC maintained its opposition. The PAC collected many different groups under its umbrella, those opposing Arias' second term, those opposed to CAFTA, those opposed to privatization of major government-run industries (such as electricity and telecommunications), and those opposed to general neoliberal policies such as fiscal austerity (Wilson, 2007). The PAC then had a hard time mobilizing a united front against CAFTA. Because "significant CAFTA opponents did not necessarily share a common agenda, their demands were seldom expressed in a unitary action platform" (Finley-Brook and Hoyt, 2009, Rosenberg and Solís, 2007, pg. 89). Nevertheless, the nationwide referendum was held on October 7th, 2007, and passed with just 51.56% of the vote.⁴

⁴ Non-political groups undoubtedly played a key role in influencing the *closeness* of the referendum Butler, David, and Austin Ranney. (1994) *Referendums around the World: The*

Combining the 2007 referendum results with election data and surveys about the agreement before the referendum provides the most direct data for determining how voters form preferences over trade policy.

III. Theories about Trade Preferences: Bottom-Up and Top-Down

Bottom-Up Preferences: Stolper-Samuelson versus Ricardo-Viner Model

Bottom-up preference models assume that there are distributive consequences of trade policy and the public votes based on their perception of how it will affect them, their family, or, more broadly, their country (Balistreri, 1997, Beaulieu, et al., 2005, Mayda and Rodrik, 2005, Scheve and Slaughter, 2001). Standard arguments about the role of economic interests in determining trade policy preferences tend to draw on the Heckscher-Ohlin (HO) theorem and its related Stolper-Samuelson (SS) one (Beaulieu, et al., 2005, Scheve and Slaughter, 2001). The theorems suggest that owners of relatively scarce factors lose from trade liberalization, whereas owners of abundant factors gain. The US is the primary trade partner of Costa Rica, and compared to the U.S., Costa Rica is labor-abundant and capital-scarce. Costa Rica's GDP per capita in constant dollars was only 12% that of the United States in 2005 (\$37,084 for the US compared to \$4504 for Costa Rica), and while 87% of the US population aged 25 to 34 have a high school diploma, in Costa Rica, only 57% of the Costa Rican population aged 20 to 29 had at least a 9th grade education (as of 2000). Given these relative endowments, the Stolper-Samuelson theorem predicts that trade liberalization will lead to increasing returns to unskilled labor and decreasing returns to capital (especially high skilled, human capital) in Costa Rica. Thus, the SS

Growing Use of Democracy? Washington DC: AEI Press.. Our data and focus suggests that the active support of a political party, the PLN, was necessary for *ratification* of CAFTA-DR.

model predicts high-skilled labor will oppose the agreement and low-skilled workers will support it.

Recent models and data suggest that the SS view of trade and its distributional consequences may not be applicable in developing countries (Acemoglu, 2003, Epifani and Gancia, 2008, Ethier, 2008, Feenstra and Hanson, 1996, Wood, 2002). Many developing countries which have liberalized their trade have experienced gains for higher skilled workers and losses for lower skilled ones (Anderson, 2005, Goldberg and Pavcnik, 2007, Wood, 2002). The main alternative specification of bottom-up trade preferences comes from the so-called Ricardo-Viner (RV) model. This model assumes that factors of production may not be mobile, hence its name as the specific factor model. One factor of production at least is usually assumed to be tied to an industry, implying that its returns depend on that industry's fortunes. For factors that are specific to the export-oriented sector(s) trade liberalization produces gains and thus they should favor it. For factors that are specific to the import-competing industries they should face losses from trade liberalization and hence oppose it. The preferences of more mobile factors will depend on their consumption patterns, which in developing countries are often weighted more toward import-competing ones. Based on the RV model, we expect export-oriented sectors to benefit most from CAFTA and thus be strong supporters. These industries tend to also employ the most high-skilled workers (Hanson, 2009, pg. 2).

Indeed, scholars have claimed that exports in Costa Rica benefit higher skill sectors. Costa Rica's exports to the US have shifted in recent years so that technology-intensive products are more important than either labor-intensive or primary goods (Mosley, 2008, Rodríguez-Clare, 2001). This has increased the demand for high skill jobs and their wages (Robbins and Gindling, 1999), a pattern observed by other scholars (Murillo et al., forthcoming). With CAFTA securing the access of these exports to the US, its impact is likely to be further export growth and

increasing high skill wages. If RV models are correct, one would expect export-oriented sectors to benefit most from CAFTA and thus be strong supporters. These industries tend to also employ the most high-skilled workers. Hence the RV model leads to contrary predictions from the SS model. In the next section, we discuss top-down models and then describe how the two can be combined.

Top-down influences: Political Actors and Social Elites

Even if Costa Rican voters based their decisions on economic self-interest, there is still room for political elites to influence voters.⁵ Like most trade agreements, CAFTA-DR, which was over 340 pages not including the tariff schedules, was complex and could have many different effects. Uncertainty about these effects opens up opportunities for elite influence.

We focus on political elites, namely parties and the government, as the actors most able to cue and frame debates. This is not to say that social actors were unimportant. As others have stressed, social actors (e.g., labor unions, student and academic groups, religious organizations) played a very active role in the debate (Martí, 2008). The anti-CAFTA, or “No”, campaign depended largely on social actors to deliver its message. The political party opposed to the agreement, the PAC, let this grass-roots social movement play the primary role against it. While some claim that the behind-the-scenes approach of the PAC and divisions within the PLN meant

⁵ Johnston et al. (1996) observe top-down influence in the Canadian elections of 1988 noting that “[public] opinion shifts on the FTA responded to parties’ rhetorical initiatives.” Johnston, Richard, Andre´ Blais, Elisabeth Gidengil, and Neil Nevitte. (1996) *The Challenge of Direct Democracy: The 1992 Canadian Referendum*. Montreal: McGill-Queen’s University Press.. See Baker Baker, Andy. (2008) *The Market and the Masses in Latin America: Policy Reform and Consumption in Liberalizing Economies*. Cambridge University Press. also.

that parties played little role in the referendum campaign (Martí, 2008), our conclusions differ. The PAC played a lesser role because it was a new party with limited organizational capacity and embraced many groups with different concerns. The well-established PLN and its governmental elites played a more significant role. In our empirical analysis we estimate the effects of parties controlling for economic variables that could influence preferences. Our qualitative section analyses mechanisms of cueing, framing, and organizational differences.

The literature on party influence identifies a number of mechanisms that parties and other elites use to shape voters' preferences. Key concepts are cueing and framing. With *cueing*, parties provide shortcuts to party members as to how to vote (Hobolt, 2006, Lau and Redlawsk, 2001, Lupia and McCubbins, 1998). Cues serve a heuristic role, giving voters information about how to vote on a complex policy choice, such as a referendum (Christin, et al., 2002). Such cueing is likely to be important because of the complexity of the CAFTA-DR agreement, where the economic 'winners' and 'losers' might not be clearly defined.

Framing refers to the way in which a message is presented, with certain features emphasized over others, which causes voters to evaluate the merits of the choice in specific ways (Chong and Druckman, 2007). For the CAFTA referendum, framing implies that political elites should emphasize particular aspects of the lengthy agreement in order to induce public support or opposition, given what they knew about their constituents' values. Parties should also cast a policy proposal as being close to the position of the median voter, while casting the reversion point (i.e., a rejection of the referendum) as representing an extreme position (Hobolt, 2006). One way parties can employ both cueing and framing, parties should 1) publicize their position on the policy; 2) frame the policy as being efficiency enhancing (better for the country as a whole) and its rejection as costly for the country, and 3) frame the policy in particular ways tailored to appeal to particular groups of people. Opposing parties are expected to argue the

opposite of 2, while still tailoring their messages. Of course, there are other goals that cueing and framing might be used for, such as appeals for equality or stability. Both cueing and framing emphasize an information-based model of trade preference formation (Murillo, et al., forthcoming). Specifically, we argue that politicians understand the economic distributive consequences of policy and tailor their messages accordingly. When speaking to audiences from export-oriented regions, pro-CAFTA elites will emphasize the job benefits of voting for CAFTA and the job costs of voting against CAFTA. When speaking to audiences from import-competing areas, whose jobs may be lost because of CAFTA, pro-CAFTA elites will emphasize the overall benefits to the country rather than job-related benefits.

In addition, the organizational strength of political parties may influence how well they can affect voters. First, better organized groups might be more effective in cueing and framing since they can present such messages more broadly and professionally. Second, national parties with extensive geographic coverage can pressure local party officials who can then directly cue and frame the issues to their constituents. Third, parties with extensive national organizations may be able to reach and mobilize undecided voters, who are often the least informed. The effectiveness of cueing and framing should be a function of the organizational strengths of parties.

Our discussion of bottom-up and top-down sources of preferences leads to four main hypotheses.

Bottom-Up Economic Theories

HYPOTHEIS 1a (SS model): Voters with lower skill levels should be more likely to support CAFTA-DR than high skill voters.

HYPOTHESIS 1b (RV model): Voters in export-oriented industries should be most likely to support CAFTA-DR.

Top-Down Political Theories

HYPOTHESIS 2 (party differences): Controlling for economic factors, the more a party supports (opposes) CAFTA, the more likely voters for that party will be to support (oppose) CAFTA.

HYPOTHESIS 3 (organizational power of parties): Controlling for economic factors, the more organized PLN will be better able to get their message out and will therefore have a larger influence on voter preferences than less well organized parties like the PAC.

IV. Empirical Evidence

We use several new data sets and qualitative information to test our hypotheses. This data is unique in that it involved citizens making choices directly on trade policy. Numerous problems remain with establishing the causal influence of economic and political variables on the public, including measurement error and omitted variable bias that can result in endogeneity (Gabel and Scheve, 2007, pg. 1014). We employ a number of strategies to deal with these problems, including using fixed effects to deal with endogeneity and omitted variables, survey analysis of individuals, and qualitative evidence on the role of parties. None of these methods alone is perfect, but together they suggest that political elites and parties had an important influence on public preferences for CAFTA-DR. We first present results based on district-level referendum returns, then discuss evidence from public opinion surveys in order to address concerns about ecological inference problems, and finally discuss qualitative information that explores the causal story in our hypotheses.

District-Level Referendum Results

What impact did economically-derived and politically-motivated preferences have on voting for the CAFTA-DR referendum? Using referendum results for 473 Costa Rican administrative districts in 2007, we calculated the percentage of votes cast in favor of CAFTA-DR (*perc_yes*) for each district, which forms our dependent variable for this section. Costa Rica has 7 provinces divided into 81 cantons and 473 administrative districts, which are further

subdivided into 1955 electoral districts, or polling places for voters. We attempted to collect all data at the most disaggregated level possible, and we examine analyses at the administrative and electoral district levels in order to reduce any ecological inference problems. To examine our hypotheses, we link these referendum results to data collected from the 2000 Costa Rican census and electoral data from the 2006 legislative elections to see whether district-level referendum vote returns in 2007 correlate with district-level political and demographic characteristics.⁶ We examine how voting in the 2007 referendum was affected by a party's vote share in earlier elections to explore the role of top-down political pressures.

Our approach to explaining referendum voting as a function of previous party voting and economic variables is very similar to research on referendums in other contexts. Research on referendums within Europe, for example, use party returns in the last election as well as measures of cleavages, which include economic characteristics such as percentage of primary sector workers, occupational skill level, and education level (Markowski and Tucker, 2005, Midtbo and Hines, 1998, Pettersen et al., 1996).

Analysis & Results

Economic Variables

Our first two hypotheses predict that individuals form preferences about trade policy based on their economic interests. For SS models, we expect that low skill voters should favor, and high skill ones oppose, CAFTA-DR. We map district-level Census occupational data onto a proxy measure for skill levels. Existing work classifies particular industries onto an 'International Social Economic Index' (ISEI), which measures "the attributes of occupations that convert a person's education into income" (Ganzeboom et al., 1992, pg. 212). We scored each

⁶ Because of redistricting between the 2000 census and the 2006 elections and 2007 referendum, there are only 459 observations available for the quantitative analysis.

occupational category according to the ISEI, with higher scores having higher skill levels. Next, we calculated the *percentage* of workers in each district that fell into a “low” ISEI occupation, defined as occupations below the national mean minus one standard deviation. This ISEI-based measure (*LowSocEcon%*) is our main economic independent variable; it measures the skill level of each district.

To test alternative theoretical expectations derived from the RV model, we constructed a variable that identifies the most export-oriented sectors; these industries are the largest Costa Rican exporters and correspond to relatively high skill manufacturing industries.⁷ Then using our Census employment data, we calculated district-level employment in these export-oriented manufacturing industries as a percentage of total employment, *Export%*. Because there is no trade data at the district level for constructing a district-level measure of exports, this measure is the best one available.⁸ This variable should positively influence support for CAFTA since groups in export-oriented should be most supportive of trade.

To get closer to a district-level measure, we also identified the location of every district that had a Free Trade Zone business designation, using data from resources provided by Costa Rica’s investment promotion agency (CINDE). This variable (*FTZ*) also measures the presence of export-oriented industries and should positively influence CAFTA voting in an RV model. But these zones are not the only places that contain industries that export in Costa Rica so this

⁷ These industries were optical, photographic, cinematographic, measuring, checking, precision, medical supplies (Harmonized system 90), machinery and mechanical appliances (HS 84), and electrical machinery and equipment and parts thereof (HS 85).

⁸ Conversation with former director of Unit of the Ministry of Foreign Trade, 10/9/10.

measure is also partial; using both measures of export-orientation should provide more confidence in our results.

We thus try to control for the most important bottom-up influences on trade preferences at the district level, which is critical for our identification of top-down political effects. Our data enables the most systematic accounting for economic effects to date in a developing country analysis of trade preferences.⁹ These controls are all district level and hence face ecological inference problems. Our analysis assumes that these variables tap sociotropic concerns (Mansfield and Mutz, 2009), but also reflect on average individual-level considerations. For example, an individual living in a district with a FTZ is more likely affected by the FTZ than an individual living in a district without a FTZ. Controlling for the most prominent factors that might generate bottom-up support for CAFTA means that our analysis of the role of parties is much less likely to suffer from omitted economic variables.

We include as control variables a canton-level measure of the percent of the workforce that was unemployed, *%Unemploy*, a district-level measure of employment in the public sector, *PubEmp%*, as interviews with several country experts suggested public versus private sector

⁹ We calculated the Ricardo-Viner measures used by Broz Broz, J. Lawrence. (2005) Congressional Politics of International Financial Rescues. *American Journal of Political Science* 49:479-96.; they did not fit the data well, due to the high amount of intra-industry trade. We also examined several sectors that have an export presence but that have different attachments to the global economy. We collected similar measures of employment in the main agricultural sectors (fruit, coffee, and rubber, *Agric%*) and the lower skilled textile industry (*Textile%*) which faced more mixed prospects from CAFTA. Including these variables does not change our results.

divisions, and an additional measure of development as the percentage of households with a television, *%TV*.

Table 1 presents models regressing the percentage of pro-CAFTA votes (*perc_yes*) in the 2007 referendum on economic and political variables. Models 1 and 3 do not include canton-level fixed effects, whereas the remaining models include fixed effects in order to deal with potential omitted variables. Models 1-4 use the larger administrative district unit of analysis; models 5, 6, and 7 show that at the more disaggregated level of the electoral district we find similar results. We estimate models using a complete battery of economic models. Because unemployment data is only available at the canton level, it cannot be included in the fixed effects models. Model 7 uses district level fixed effects and so none of our controls can be used.

The use of canton-level fixed effects is important. There are roughly 5-6 districts per canton. Using fixed effects helps us deal with any endogeneity caused by potential omitted variables. If individual preferences about trade, rather than a party's cueing and framing, lead voters to choose a party that supports CAFTA—i.e., if endogeneity is present—then the problem involves a failure to include a variable that captures what creates these preferences about trade in the first place. Since we include all of the most important economic variables at the district level that might lead to this preference, there must be some other omitted variable. Since observations are at the district level, we include canton-level fixed effects to address this. These identify the influence of the explanatory variables as the district's deviations from the canton means (or district means in model 7). This controls for any variables constant at the canton level. There is no evidence that major political or economic factors vary across districts; rather provinces or cantons are the site of the most important cleavages. If there is a canton-level (or province-level) omitted variable, such as differences in “political culture” that we cannot measure, these fixed effects will capture the influence of these omitted variables. They also deal with the problem of

unobserved economic variables that are constant within a canton (or province) but might be correlated with our partisan or other economic variables.

The results consistently show that the SS theorem does not fit this data, while the RV model does. The coefficient on the *LowSocEcon%* variable is consistently negative and significant. Districts with a high percentage of low skill workers are significantly less likely to vote in favor of CAFTA-DR. Similarly, districts with a higher percentage of university educated individuals were more supportive of CAFTA-DR (*LowSocEcon%* has a negative effect whether or not we also control for education). In contrast, the RV theory better fits the economic preferences we observe. The measures of a district's export-orientation that we use are positively related to support for CAFTA. Districts containing the most export-oriented industries, *Export%*, are strongly favorable to CAFTA in all of our regressions. Increasing this variable by one standard deviation increases yes votes in a district by 1-2%, an important amount given the referendum passed by only 1.5%. Districts with a free trade zone, *FTZ*, also are more supportive of CAFTA. In model 2, an FTZ increases yes votes in a district by 2%. These results support hypothesis 1b, and not 1a.

Political Variables

Do political variables explain additional variation in the referendum returns once we control for economic preferences? For our main political variables, we use electoral returns of the four main Costa Rican parties from the 2006 legislative assembly elections and presidential elections, operationalized as the percentage of the vote received by each party in each district. We also present results using the percentage change in vote share from the respective 2002 election $((2006 \text{ vote share} - 2002 \text{ vote share}) / 2002 \text{ vote share})$. In the 2006 presidential elections, the two main parties were competing for voters by differentiating their stances in part on CAFTA and in part on other issues such as Arias' reelection. Political elites in the PLN supported

CAFTA, while the PAC largely opposed it for a wide variety of reasons. Thus it is important to include the economic control variables. Controlling for the economic reasons voters might support a party or the referendum, were political elites able to induce voters who supported them in 2006 to vote the party line on CAFTA in 2007? Remember that the referendum barely passed; despite being tied or behind in the polls in late 2007, the Yes vote eked out a victory by 1.6%. Could the PLN have helped swing the vote?

If hypothesis 2 is correct, then voters supporting pro-CAFTA (anti-CAFTA) parties in 2006, like the PLN (the PAC), should be more likely to support (oppose) the referendum in 2007. Thus *%PAC06* should be negatively related to the referendum, and *%PLN06* should be positively related. Also, the PLN was a well-established party that had alternated in power since democratization, while the PAC was founded only in 2001, included many disparate groups with different objections to CAFTA, and was consequently not as well-organized (Wilson, 2007). If hypothesis 3 is correct, then voters supporting the PLN should be more likely to support the referendum. Parties—whether pro- or anti-CAFTA—lacking organizational strength should have less influence on voters in 2007. Hence the PAC vote share, *%PAC06*, should be negative but less in significance and magnitude than the PLN.

Models that use changes in vote share between 2002 and 2006 show similar results. Models 3, 4, and 6 display these results using vote changes as a percentage of the 2002 vote for each party. These models in effect explore the changes in party vote share before the treatment (i.e., CAFTA is introduced) and after it has been introduced (i.e., by 2006). Conditional on the controls and fixed effects, these models of vote changes show a strong influence of the PLN but not the PAC. We also collected election return data at a level lower than available for economic data: the electoral district. These electoral districts are within the 473 administrative districts and hence are less aggregated. We present these results in models 5, 6, and 7, and include the

economic variables and canton or administrative district fixed effects. Our results show an important influence of the PLN, but not the PAC. The supplementary materials show results using Presidential election data, which paint a similar story.

The results largely support our predictions.¹⁰ We find a positive and significant coefficient for the PLN in every model. The coefficient for the PAC was negative but insignificant in all but models 2, 5, and 7 where it was negative and significant. This evidence is partially supportive of hypotheses 2 and 3: these parties should have opposite influences on voters, but the PLN should have a greater influence due to its stronger organizational ability. In models 5 and 7 the PAC coefficient is half of the size of the PLN. In model 2 the marginal effects of the PAC are similar in size to the PLN, their effects overall are quite different since the mean and variance of the PAC and PLN variables are so different. The PLN has a much greater effect with a coefficient of the same size since its mean is much larger. But in both cases, we show in the supplementary materials that the magnitude of the PLN effect was much greater. The distribution of the PAC and PLN variables amplifies the differences between the effect of the PLN and the PAC. At the mean value of PLN vote share, the yes vote would increase by 11% while at the mean vote share of the PAC, the yes vote would decline by about 6%. Since the difference between the yes and no share in the referendum was only 3%, the difference between the PLN and the PAC effect represents the difference between the referendum succeeding or failing. In the supplementary materials, we show that this relationship holds at any objective comparison of the PLN and PAC (e.g., at the 25th or 75th percentile).

¹⁰ Consistent with hypothesis 2, the coefficients on the pro-CAFTA-DR PUSC and Libertarian parties were positive though not as robust as the PLN.

The differential effect of the PLN, and thus support for hypothesis 3, is consistent with a Universidad de Costa Rica's survey taken in October after the referendum asked respondents what factor most influenced their vote in the referendum. As shown in the supplementary materials, more than twice as many pro-CAFTA voters gave a political source, such as parties, for their decision as did anti-CAFTA voters. Anti-CAFTA voters were more likely, however, to say that specialists or members of the University community were the most influential. This data provides additional evidence that the anti-CAFTA-DR campaign depended less on political party influence compared to the pro- campaign. Furthermore, in the 2008 Latin American Public Opinion Project survey, a greater percentage of people said they made up their minds on CAFTA 2 months or less prior to the referendum if they were pro-voters (58% vs. 49%, $p < .05$). This suggests a greater potential role of active persuasion rather than pre-existing, economic or cultural, preferences.

The potential for omitted variable bias is important. Our fixed effects strategy gives us more confidence in our results. In particular, the relationship between economic or social characteristics and party affiliation could bias our estimate of partisan effects if there is an omitted variable which is also correlated with partisanship and voting. For example, if we do not control for our skill variable, the effects of the PAC becomes much larger. With canton fixed-effects if this variable is constant within a canton, then such omitted variables are controlled for, as well as variables that vary at higher geographic levels like provinces, which capture different government administrative regions. While there could always be omitted variables that vary at the district level, our comprehensive collection of variables at the district level—suggested by theory to be important—helps to guard against this possibility within our fixed-effects specifications. Concerns about our results should be predicated on claims about specific omitted variables that vary at the district level and not the canton level. The fixed-effects are also likely

to pick up any cultural variation that others suggest might influence trade policy preferences (such as ethnocentrism). The fact that our economic variables remain substantively important and significant suggests, as others have (Murillo, et al., forthcoming), that economic explanations should not be dismissed.¹¹

A final concern is that we make inferences about individuals through aggregated data, known as an *ecological inference* problem. To increase confidence in our results, we do two things. First, using King and Roberts (2012) method, we estimate the percentage of PLN voters in the 2006 election who voted yes on the referenda (King, 1997). We find that about 75% of PLN voters voted yes compared to only 34% of non-PLN voters.¹²

Second, we analyzed individual-level survey data from the Universidad de Costa Rica in our supplemental materials. Individual-level survey data does not face an ecological inference problem. Several results stand out. Results using income or education as skill proxies were not supportive of SS predictions. The poor fit of the education measure suggests some pause in accepting socialization based accounts of preference formation (Hainmueller and Hiscox, 2006).

¹¹ We conducted additional econometrics checks, including the use of pruned regressions Ho, Daniel E., Kosuke Imai, Gary King, and Elizabeth Stuart. (2007) Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference. *Political Analysis* 15:199–236. in order to avoid extrapolation bias.

¹² We also used the method of bounds King, Gary, Ori Rosen, and Martin A. Tanner. (2004) *Ecological Inference: New Methodological Strategies*. New York: Cambridge University Press. which produced wide estimates of the PLN vote in the 2006 legislative elections and the yes vote in the referendum, reflecting the closeness of both the referendum and the 2006 legislative election.

Unfortunately the surveys did not contain industry-level affiliations or other cultural variables, which are uncommon even in many US surveys.

Lacking detailed industry membership, we test the RV predictions by comparing support by individuals in districts with free trade zones and those without. Using data from the 2008 Latin American Public Opinion Project (LAPOP) surveys, which included district-level indicators (the UCR data had no geographic information on respondents), we merged in the FTZ data. Individuals in districts with a FTZ were significantly more likely to be CAFTA supporters. For example, in the 2008 survey individuals were asked how they voted on CAFTA. In districts with a FTZ 73% said they had compared to 61% in districts without a FTZ ($t=1.8$). We also find a strong influence of parties across the surveys, as shown in the appendix. In sum, individual-level data support our claims that economic motivations described by RV and party politics were important explanatory factors in the CAFTA referendum vote.

As mentioned before, yes voters were more likely to attribute PLN leadership advocacy for their vote than the PAC. In multivariate regressions reported in the supplementary materials on vote-intention and vote-choice, PLN and PAC voters sorted more clearly into supporting or opposing positions than voters that did not support one of the major parties. Unfortunately, as discussed in the supplementary materials, we cannot clearly distinguish whether there is a differential PLN effect, although there is suggestive evidence with respect to actual vote choice in the election. Overall, then, micro-level evidence which does not suffer from ecological inference problems provides some support for hypotheses 2 and 3.

Qualitative Evidence

Qualitative evidence shows that political parties and elites, especially from the PLN, had substantial organizational power, enabling them to mobilize voters and frame their message to different audiences. This organizational ability was a key difference between the PLN and PAC.

The PLN had been always been one of two major parties since the 1950s, while the PAC was a new party. These features of parties help explain the effects captured in our quantitative section.¹³ We first discuss the organizational capacity of the PLN and its ability to engage in targeted framing strategies and then contrast it with the PAC. We also discuss the salience of economic arguments, showing their importance. Appeals to cultural factors, like ethnocentrism (Mansfield and Mutz, 2009), were present but played only a small role.

Party Organization

Well-organized parties can reach and mobilize voters, as well as help frame the considerations voters use in evaluating policies. Key planks of the Yes campaign's strategy were the formalized involvement of the PLN and a mass media campaign (Chacon and Chacon, 2007). This reflected an appreciation of the importance that an organized political party can play. The importance of organizational abilities could be most salient in rural areas where voters are least informed, dispersed, and harder to reach. While both the pro- and anti-CAFTA campaigns were active in urban areas, the pro-CAFTA campaign was more active in rural areas. Indeed, scholars have remarked on the extensive and developed organization of the PLN throughout the country (Booth, 2007, pg. 321). The pro campaign led by the PLN set up 50 "casas del sí" to serve as

¹³ Little evidence exists that the parties differed on policy or cultural dimensions in ways beyond CAFTA. The country is not known for having any major cleavages that the parties incorporate Lehoucq, Fabrice. (2008) *Proceso De Politicas, Partidos E Instituciones En La Costa Rica Democratica*. In *Democracia Fuerte Alcanza? Analisis De Gobernabilidad En Costa Rica*: Inter-American Development Bank..

informational centers in rural areas (Lara, 2007).¹⁴ The PLN organized a massive operation to bus voters to polling places, using over 20,000 vehicles, especially in rural areas. Turning to local party officials, those most likely to have a local impact, during legislative recesses in May and September 2007, 25 PLN deputies promised to return to their regions to campaign for a Yes vote on CAFTA-DR and to designate local leaders who would act as “multipliers” to get out Yes votes (Venegas, 2007, Vizcaino, 2007). Even direct pressure on canton-level mayors was suggested. The PLN’s organizational abilities allowed them to reach voters, which as we discuss next allowed them to deploy cueing and framing strategies to a greater variety of potential voters.

Party Cueing/Framing

With greater organizational abilities, the PLN was able to target appeals tailored to different economic groups through cueing and framing. The PLN government, led by Arias, provided clear cues to supporters by encouraging CAFTA’s adoption and tailoring their message of support to different audiences. The Alianza Ciudadana por el Sí, an umbrella campaign whose executive committee included PLN, PUSC, and Partido Unión Nacional members, produced different materials for different audiences (Martí, 2008). In sum the Yes side was aware of voter differences and tailored information accordingly.

Examples of these tailored appeals drew on the type of RV preferences we observed in the quantitative section. Pro-CAFTA-DR rallies were held at particular industrial parks and messages were tailored to these populations, often stressing the role of DFI in providing their jobs (Morales-Mateluna, 2007, Valverde, 2007). At the opening of the Cartago Industrial Park, Arias stressed the wealth-generating effects of CAFTA, famously stating “que vienen en

¹⁴ Analysis using a list of cantons involved showed that districts in cantons with casas de sí’s had higher turnout and pro-CAFTA voting on average.

bicicleta, con el TLC vendrán en motocicleta BMW, y los que vienen en un Hyundai, vendrán en un Mercedes Benz”.¹⁵ At the same time, Arias stressed the potential negative consequences of not passing the referendum, arguing that people would have more difficulty finding a job if CAFTA failed to pass.¹⁶

When Arias campaigned in rural areas, which some observers argue was key in deciding CAFTA (Arino, 2010), Arias tried to reassure agricultural workers about their jobs. He stressed that the exporting industries would benefit from the agreement (Valverde, 2007, Valverde, 2007), supporting not only the Ricardo-Viner model, but our own attempt to combine top-down and bottom-up preferences given the substantial uncertainty faced by agricultural sectors. Arias also underlined during his rural tour the job creation CAFTA would provide to the country as a whole and the beneficial effect the trade agreement would have on consumer prices. Appealing directly to consumers,¹⁷ Arias said that CAFTA would lower prices and expand selection of consumer goods (Valverde, 2007, Villalobos, 2007). This is consistent with Baker’s findings

¹⁵ Translated as “Those that come to work by bicycle will come on a BMW motorcycle under CAFTA and those that arrive in a Hyundai will drive a Mercedes Benz.”

<http://laverdaddeoscararias.blogspot.com/2007/05/arias-enfatiza-campana-del-si-al-tlc-en.html>

¹⁶ “(a) 63-year-old former truck driver, said he planned to vote 'yes' because "I have children who are studying and one even works for Intel, and if they took it away, what would my children do?" AssociatedPress. (2007) Costa Rica Votes in Referendum on U.S. Free Trade Deal. *International Herald Tribune* October 7..

¹⁷ In the original quotation, Arias refers directly to “las amas de casa.”

(Baker, 2008, Baker, 2005).¹⁸ The PLN also emphasized that CAFTA would not reduce social spending (Canal6, 2007).

More broadly, the activities of the PLN were consistent with previous work suggesting that influential parties will also cue and frame referenda efforts as in the interests of the median voter, while emphasizing the negative effects of rejecting the agreement and portraying opponents as extreme (Hobolt, 2006). The Arias government and many in the PLN repeatedly argued that rejecting CAFTA-DR would lead to negative consequences for the country because of its deleterious effects on exports and DFI in Costa Rica. In a television interview in late September, President Arias rejected the demands of some actors on the No side for a renegotiation of the agreement, stating that it would be impossible, “an opium dream,” thus framing the referendum as a take-it-or-leave-it opportunity for a trade agreement with the US and hence the high costs of rejecting the agreement (Al Dia, 2007). Pro-CAFTA politicians reinforced the image of an extreme opposition by suggesting the No campaign was under the control of Hugo Chavez and Fidel Castro. These efforts were designed to counter the emotional appeals of activist groups opposed to CAFTA (Martí, 2008), by framing the severe economic consequences of rejection.

¹⁸ “We are going to decide the fate of the homemakers that take care of every aspect of their family and who need trade openness more than anybody, because each new PTA we sign signifies better, more abundant, and cheaper products in small grocery stores, from vendors, and at the super market” Arias, Oscar. (2007) National Television Address. *Accessed via:* http://www.nacion.com/ln_ee/2007/septiembre/25/pais1254868.html Arias razona por qué votará *SÍ al TLC, La Nacion..*

In contrast, the PAC had very little organization, especially in the country's rural areas. Solon, head of the PAC in March 2006, recognized the important role of organization and territorial reach, saying, "We did not see with crystal-clarity that our great weakness was in the outlying areas.... We lacked an organizational force and this is decisive.... We need to greatly improve in territorial structure" (Murillo, 2006). In contrast to the PLN's transportation ability the PAC contribution paled in comparison (Fallas, 2007). Outside of urban areas anti-CAFTA-DR flags on cars and houses, graffiti, and bumper stickers were "few and far between" (Wilson, 2008). Neither the PAC nor the social groups dedicated to stopping CAFTA¹⁹ had a strong

¹⁹ The No campaign seemed either a large group of patriotic organizations Trejos, Eugenio. (2008) *Décimo Cuarto Informe Sobre El Estado De La Nación: Una Visión Del Movimiento Patriótico Del No Acerca Del Proceso De Referéndum Sobre El Tlc*. Accessed via: <http://www.estadonacion.or.cr/index.php/biblioteca-virtual/informes-costarica/ponencias/aspectos-politicos/informe-xiv/ponencia-7>. September 18, 2009. or a group intent on distorting the contents of the agreement Martí, Miguel. (2008) *Décimo Cuarto Informe Sobre El Estado De La Nación: La Alianza Ciudadan Por El Sí*. Accessed via: <http://www.estadonacion.or.cr/index.php/biblioteca-virtual/informes-costarica/ponencias/aspectos-politicos/informe-xiv/ponencia-5>. September 18, 2009.. A grass-roots based movement, they utilized alternative media (internet, alternative newspapers and radio) and word-of-mouth. Their campaign included such groups as the 140 "Comités Patrióticos", who were leaders in marches and discussions Paniagua, Gerardo Fumero. (2008) *Cafta: Primer Referéndum En Costa Rica (I)*. *Agencia de Información Fray Tito para América Latina*; www.adital.com.br 07.11.08., labor unions, teacher unions Murillo, Álvaro. 2007 *Sindicato Gestionaría Recursos En El Extranjero*. *La Nación*., university groups Fallas, Hassel. 2007

presence in rural areas. Instead, the No campaign was concentrated in urban areas and with a smaller partisan role.

In contrast to the PLN, the PAC largely relied on social groups to spread its message. These social groups were active, drew on a broad cross-section of groups, and relied on messages related to national sovereignty and Costa Rican national welfare. The role of political parties was less salient for the No side. While these social groups had an important impact on the vote, the PAC took a less active role compared to the PLN. One way to see this difference is from the survey evidence discussed previously, showing that a greater percentage of Yes voters cited political sources as influencing their votes than did No voters. An explanation of this consistent with our theory focuses on the greater organizational ability, and hence greater ability to mobilize voters and frame issues, of the PLN.

Both qualitative and quantitative evidence show that while economic self-interest influences trade policy preferences, top-down, political pressures can also shape trade policy preferences. The PLN engaged in an organized informational campaign, while the PAC played a smaller role, as it was less organized and gave voters more ambiguous cues about where they stood on trade liberalization.²⁰ Overall, the PLN was a more organized party, issued a clearer

Grupos Del 'No' Planean Más Manifestaciones. La Nacion., and the Catholic Church Ávalos, Ángela. 2007 Iglesia Llama a Votar En Referendo Sobre El Tlc. La Nacion, Oviedo, Esteban. 2007 Roce En Iglesia Tras Manifiesto De Curas. La Nacion..

²⁰ Without controlling for bottom-up factors, some suggest that the PLN had little success in shaping preferences and that the social actors in the No campaign were much more successful Estado de la Nación en Desarrollo Humano Sostenible. (2008) Décimo Cuarto Informe Sobre El Estado De La Nación. Accessed via: <http://www.estadonacion.or.cr> September 18, 2009, Martí.

cue, and framed CAFTA-DR in many of the ways scholars of political influence have suggested (Hobolt, 2006).

Discourse on the agreement included a heavy economic component, with appeals to both sectoral interests (as predicted by hypotheses 1a, b), but also to broader benefits such as consumer prices (Baker, 2008, Baker, 2005). Political parties tried to influence trade policy outcomes by framing the messages so they complemented the economic consequences of the policy. While social groups in the No campaign emphasized anti-Americanism or anti-capitalist sentiments, less evidence exists that voters on the Yes side (i.e., the majority of voters that passed the referendum) were compelled by cultural motivations like non-ethnocentrism (Mansfield and Mutz, 2009), “learned” preferences via an economics education (Hainmueller and Hiscox, 2006), or equity considerations in determinants of trade preferences (Lu et al., 2012). The extent to which these non-economic rationales appeal to voters in developing countries may be more limited.

V. Conclusion

The CAFTA-DR referendum in Costa Rica was the first direct public vote on a trade agreement in the developing world. It barely passed and we think that one factor which aided passage at the end was the political cueing and framing done by the leading party, the PLN. Our micro-level study of trade policy in a developing country produces two new results. First, the

Décimo Cuarto Informe Sobre El Estado De La Nación: La Alianza Ciudadan Por El Sí. because over time the No campaign narrowed the gap in favor of accepting the agreement. In all but two opinion polls that we found, the Yes campaign never had a substantial majority. And higher rates of absenteeism in rural areas where the PLN had traditionally been strong are best attributed to baseline difference compared to suburban and urban areas.

economic bases of support for trade liberalization may be different than many scholars have assumed. We find little support for the standard Stolper-Samuelson model (H1a), which suggests that in developing countries, unskilled labor, which is most abundant, will be more favorable toward trade (Dutt and Mitra, 2006, Mayda and Rodrik, 2005). Individuals with lower levels of human capital, and districts with high concentrations of low skilled workers, were not more likely to support CAFTA-DR. Instead, we find the economic bases of support for CAFTA-DR fit the Ricardo-Viner specific factor model of trade better. Industries with a strong orientation toward exports were more supportive of CAFTA. This result may arise because globalization of the international economy means that foreign investment is now tightly linked to export industries and high skilled workers in firms' global production chains.

Second, because of the uncertainty surrounding trade policy and the complexity of trade agreements, political elites can have an important impact on public attitudes toward trade. Political elites can use various strategies involving both communication and organizational resources to reinforce the link between voters' positions and their economic interests or to persuade voters to adopt positions that might be at odds with their economic interests (Baker, 2008, Gabel and Scheve, 2007, Ray, 2003). Such elite, or top-down, preference formation processes have been little studied in the political economy of trade. The role of elites might help resolve debates in the literature on the primacy of cultural or economic factors. The relative role of each depends on how elites frame the debate (Fordham, 2008, Hainmueller and Hiscox, 2006, Mansfield and Mutz, 2009).

We used a variety of quantitative and qualitative data and empirical methods to bolster confidence in our results. Controlling for the most well-known economic variables, the association between previous voting for the PLN and the vote for CAFTA-DR in 2007 strongly suggests that well-organized parties can use their rhetorical and political resources to shape

individuals' policy preferences. But parties are less able to convert voters to their positions when they are not well organized, as evidence about the PAC shows. An important concern is that omitted economic or cultural variables are correlated with political variables, inducing endogeneity. We have presented a wide variety of analyses to mitigate these problems, including the use of canton-level fixed effects. Unless there are specific omitted variables at the district-level that can be adduced to explain both trade preferences and party identification, then these strategies should reassure readers about our claims. We have found no discussion of major political or economic factors that vary at the district level in Costa Rica; and hence we feel that canton-level fixed effects are strong measures to rule out endogeneity. Individual survey analysis, which resolves ecological inference problems, and qualitative evidence also support our claims. Finally, while others have stressed the importance of different characteristics of individuals for their receptiveness to elite communication (Baker, 2008, Gabel and Scheve, 2007, Ray, 2003), we focus on the internal characteristics of parties to explain their differential success. Our work extends the identification of the conditions under which we expect political elites to be able to influence voters (Chong and Druckman, 2007).

Our findings about Costa Rica have more general implications. Baker's research (2008) on Latin American countries underscores our results; he does not find much support for Stolper-Samuelson models of individual preferences, instead finding evidence of top-down, political pressures on trade preferences. Our results suggest that top-down political pressures, especially from parties and their messages, have been overlooked in studies of trade policy since little data, especially cross-national, exists to analyze their effects. Finally, the politics of trade policy in developing countries are not the mirror image of those in developed countries, as models like Stolper-Samuelson would predict. Instead the economic cleavages look similar to those in developed countries, with high skill individuals in export-oriented sectors supporting trade and

low skill in import-competing ones opposing it. Other variables, such as cultural attitudes, appear less salient in this case where citizens were asked to vote directly on a trade policy. Political cleavages around trade and globalization generally may follow more of a specific factors (RV) logic than a Stolper-Samuelson one in the developing world.

The role of parties and political elites may be of great importance in shaping the policies of developing countries toward the world economy. In the CAFTA case, the PLN's support was essential for the referendum's success. By providing clear cues and frames for voters, especially in the closing days of the referendum, the Arias government and its long-standing, well-organized party, the PLN, counterbalanced the emotional appeals of the No campaign led by social groups. Political elites in developing countries may have greater ability to shape debates and policies toward trade than previously acknowledged.

Table 1: % of Referendum Votes Pro-CAFTA

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
%PLN06	0.38** (0.11)	0.28** (0.08)			0.35** (0.05)		0.33** (0.04)
%PAC06	-0.04 (0.15)	-0.25** (0.09)			-0.17** (0.05)		-0.15** (0.04)
%PUSC06	0.48** (0.17)	0.33* (0.14)			0.19* (0.07)		0.00 (0.07)
%Libert06	0.30+ (0.17)	0.20 (0.23)			0.35** (0.11)		0.37** (0.10)
PLN-%Change			0.11** (0.02)	0.08** (0.03)		0.02** (0.00)	
PAC-%Change			0.00 (0.01)	-0.01 (0.01)		-0.00 (0.00)	
PUSC-%Change			0.18** (0.05)	0.16** (0.04)		0.02 (0.02)	
LIB-%Change			0.01** (0.00)	0.01+ (0.00)		0.00** (0.00)	
Export%	3.38** (1.21)	1.99* (0.91)	3.24** (1.16)	2.37* (1.00)	2.14* (1.00)	1.37 (1.32)	
FTZ	0.03* (0.01)	0.02* (0.01)	0.02 (0.01)	0.02+ (0.01)	0.03** (0.01)	0.03** (0.01)	
LowSocEcon%	-0.23** (0.05)	-0.18** (0.05)	-0.22** (0.05)	-0.18** (0.04)	-0.23** (0.04)	-0.30** (0.05)	
%Unempl	0.01* (0.00)		0.01** (0.00)				
%PubEmpl	-0.60** (0.11)	-0.32** (0.10)	-0.61** (0.12)	-0.45** (0.10)	-0.71** (0.11)	-0.79** (0.12)	
TV%	0.28** (0.05)	0.17* (0.07)	0.22** (0.05)	0.12+ (0.06)	0.24** (0.03)	0.08 (0.06)	
Constant	0.13 (0.10)	0.33** (0.09)	0.46** (0.07)	0.58** (0.06)	0.28** (0.05)	0.60** (0.05)	0.35** (0.03)
Observations	459	459	458	458	1761	1563	1787
<i>Level</i>	<i>District</i>	<i>District</i>	<i>District</i>	<i>District</i>	<i>Electoral district</i>	<i>Electoral district</i>	<i>Electoral district</i>
<i>Fixed effects</i>	<i>None</i>	<i>Canton</i>	<i>None</i>	<i>Canton</i>	<i>Canton</i>	<i>Canton</i>	<i>District</i>
BIC	-908.97	-1254.37	-904.22	-1217.80	-2370.92	-1966.26	-3358.76
R-squared	0.50	0.31	0.49	0.26	0.41	0.32	0.65
Between R2		0.58		0.55			

+ p<.1, * p<.05, ** p<.01; Standard errors, clustered at canton level, in parentheses. The number of observations in the change models varies because not all parties received votes in all administrative or electoral districts. Redistricting between the 2000 census and the 2006 elections also means a few observations of districts were lost.

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