# Why the Move to Free Trade? Democracy and Trade Policy in the Developing Countries.

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Abstract: Rising international trade flows are a primary component of globalization. The liberalization of trade policy in many developing countries has helped foster the growth of these flows. Preceding and concurrent with this move to free trade, there has been a global movement toward democracy. We argue that these two trends are related: democratization of the political system reduces the ability of governments to use trade barriers as a strategy for building political support. Political leaders in labor rich countries may prefer lower trade barriers as democracy increases. Empirical evidence supports our claim about the developing countries from 1970-1999. Regime change toward democracy is associated with trade liberalization, controlling for many factors. Conventional explanations of economic reform, such as economic crises and external pressures, seem less salient. Democratization may have fostered globalization in this period.

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### I. Introduction.

Since the 1970s, globalization has advanced broadly. Some four billion people, roughly two-thirds of the world's population, have joined the world economy over the past twenty-five years as part of the increasing integration of ever more countries into the world trading system. Declining trade barriers have contributed significantly to this expansion of world trade. Countries across the globe--ones as diverse as the Philippines, Zambia, Mexico, Poland, Chile, Bangladesh, Ghana, Korea, and Morocco-- have all chosen to liberalize unilaterally their trade policies. In the developing countries, this "rush to free trade" gathered momentum in the mid-1980s. As the IMF pointed out in 1992, "[s]ince the mid-1980s, there has been a marked shift in the orientation of the trade and industrial policies of most developing countries away from a heavy reliance on direct intervention and inward-looking industrial policies toward less controlled and more export-oriented trade regimes." More recent studies show that this change in policy has occurred in most regions and continued throughout the 1990s. Countries have chosen to integrate their economies into a global one by dismantling protectionist barriers.

This substantial change in trade policy is surprising. Over the years, many scholars have emphasized the durability of the status quo in economic policy.<sup>3</sup> In trade policy the status quo bias is viewed as even more significant since the benefits of protectionism are highly concentrated while its costs are diffuse.<sup>4</sup> Vested interests in protectionist sectors can be tenacious pressure groups with preferred access to policy makers. Any change in the protectionist status quo is thus unexpected. For the less

<sup>&</sup>lt;sup>1</sup>. This term was coined by Rodrik 1994.

<sup>&</sup>lt;sup>2</sup> Little et al. 1993; Andriamanjara and Nash 1997; Sharer 1998; Subramanian 2000.

<sup>&</sup>lt;sup>3</sup>. For example, Fernandez and Rodrik 1991.

<sup>&</sup>lt;sup>4</sup> . A status quo bias exists if trade liberalization is welfare enhancing but policy change is not made because the political costs of liberalization outweigh the economic benefits to be gained from it.

developed countries to abandon their protectionist, import-substituting industrialization (ISI) strategy was surprising given existing models of the political economy of trade policy.<sup>5</sup>

Explanations for this change have emphasized three factors. Some scholars claim that economic crises have forced countries to reform and liberalize. Others have claimed that external pressures from the US, Western countries in general, or international institutions, such as the WTO, IMF and World Bank, are responsible. Finally, the spread of neoliberal policy ideas is often credited with bringing economic liberalization. We examine these claims with respect to trade policy and introduce another factor which we think is important and underappreciated.

Beginning prior to this move to free trade has been a global movement toward democracy. In 1975 there were approximately 30 democracies in the world; by 1992 this number had grown to about 89, which was roughly half the total number of independent countries in the world.<sup>6</sup> By 2002 this figure had risen to 140 countries.<sup>7</sup> Are these two trends in economic and political reform related? Are democracies more likely to initiate trade liberalizing reforms than autocracies?

Many different claims about how political institutions affect trade policy exist, but systematic theory and data are lacking. Rodrik argues that any change in political regime is likely to induce trade reforms. "Historically sharp changes in trade policy have almost always been preceded (or accompanied) by changes in the political regime. Not all political transformations result in trade reform, but sharp changes in trade policy are

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As Rodrik 1994 notes.
 Diamond and Plattner 1993.

<sup>&</sup>lt;sup>7</sup>. UNDP 2002. 14.

typically the result of such transformations." The conventional wisdom, however, has been that democracy is not propitious for economic reform, and indeed that nondemocratic countries should be more likely to liberalize, as Chile in the 1970s suggests. As Geddes summarizes, "[u]ntil recently, it was widely accepted that democracies, especially fragile, uninstitutionalized new democracies have difficulty carrying out economic liberalization because its costs make it unpopular and hence politically suicidal to elected officials. Consequently, it was argued, authoritarian governments should be more capable of initiating and sustaining major economic reforms."

Other scholars have argued that regime type makes little difference for economic reform. <sup>10</sup> Finally, Haggard and Kaufmann argue that differences within regime types (i.e., among democracies and among autocracies) are likely to have more effect than is regime type itself. <sup>11</sup> A few systematic studies of the impact of democracy on trade liberalization exist. <sup>12</sup> But only recently some have claimed that democracy might make economic reform more likely. <sup>13</sup> In sum, the systematic investigation of the impact of political institutions on the decision to liberalize trade merits greater attention.

In the political economy literature, the question is approached from the opposite end: what determines trade policy? A vast literature explores this issue. We point out several contributions that lay the groundwork for our argument focusing on the

<sup>&</sup>lt;sup>8</sup>. Rodrik 1994, 69.

<sup>&</sup>lt;sup>9</sup>. Geddes 1995, 59.

<sup>&</sup>lt;sup>10</sup>. For example, Nelson 1990 and Remmer 1990.

Haggard and Kaufmann 1995.

<sup>&</sup>lt;sup>12</sup>. For example, Mansfield, Milner and Rosendorff 2000.

<sup>&</sup>lt;sup>13</sup> . See Geddes 1995.

Heckscher-Ohlin and Stopler-Samuelson theorems.<sup>14</sup> Mayer explores the dependence of tariff rates on the distribution of factor ownership, the costs of voting, and the degree of factor mobility and industry diversification in the economy. 15 His median voter model using the Heckscher-Ohlin framework (two factors and two sectors) has produced interesting findings about the political economy of trade. In a series of papers, for instance, Dutt and Mitra have shown that in such a framework an increase in inequality raises trade barriers in capital rich countries and lowers them in capital scarce ones, and that left-wing governments adopt more protectionist policies in capital rich countries but more free trade policies in labor rich economies than do right wing governments.<sup>16</sup>

These cross sectional findings are evidence that Heckscher-Ohlin models may describe the politics of trade policy well. Others using them have also been able to explain important political outcomes.<sup>17</sup> But these models have not been used often to explain change in policy over time, such as in the recent move to free trade. 18 This trade liberalization process is especially anomalous in light of the well-known tendency of countries to resist reform. 19 However, many agree that an economy in crisis should facilitate reform.<sup>20</sup> Few systematic tests of these hypotheses exist, and we will control for these factors in our empirical analysis.

<sup>&</sup>lt;sup>14</sup>. The main alternative to this political economy model is the Ricardo-Viner, or specific factors, model. It postulates that sectors of the economy, not factors of production, gain or lose from trade. The more mobile agents are, the more Heckscher-Ohlin models apply (For example Hiscox 2002).

 <sup>15 .</sup> Mayer 1984.
 16 . Dutt and Mitra 2002a, b.

<sup>17.</sup> For example, Rogowski 1987; Balistreri 1997; Beaulieu 2002; Scheve and Slaughter 2001.

<sup>18.</sup> Using a very different model of trade policy, Grossman and Helpman (1994) analyze how interest groups bid for protection with their campaign support. These works show how changes in political participation, especially among interest groups, affect trade policy outcomes. These theories seem less capable of explaining how developing countries around the world were suddenly able to liberalize their trade policies.

<sup>&</sup>lt;sup>19</sup>. As discussed by Fernandez and Rodrik 1991, Drazen 1996, Alesina and Drazen 1991, and Nelson 1994a among others.

<sup>&</sup>lt;sup>20</sup> . For example, Nelson 1994a, 11.

The three main arguments explaining economic reform in the LDCs focus on external pressures, political leaders and their ideas, and economic crisis. Many scholars have argued that a variety of pressures external to the LDCs have forced them to change their policies and join the global economy. Some arguments focus on US hegemony associated with the end of the Cold War, others on the role of private investors and countries' desire for foreign investment, and others on pressures from international institutions, such as the IMF, World Bank and WTO.<sup>21</sup>

Some scholars attribute economic reform to changes either in political leaders or in the ideas that leaders hold about economic development.<sup>22</sup> For them, economic failure (both absolute and relative) prompted leaders to give up on import-substituting industrialization (ISI) and move toward more market-friendly economic policies; reform came from new leaders with different ideas and/or from old leaders with new ideas.

Other scholars emphasize economic crisis as the spur to reform.<sup>23</sup> Crises underscore the failure of old policies and create an environment in which radical, new policies can be tried. They also increase countries' reliance on external benefactors, such as private investors or the IMF. The crisis argument is related to external pressures, as well as the claims about new ideas and wars-of-attrition. In order to show that regime type also plays a role, we must try to control for these factors.

The paper is divided into five sections. In the next section, we present some facts about trade policy and democratization in the LDCs over the past thirty years. Then in section three, we outline how democracy may be related to trade liberalization. In section

 $<sup>^{21}</sup>$  . For example, Kahler 1986 & 1989; Stallings and Kaufman 1989; Haggard and Kaufman 1992; Nelson 1990 & 1994a; Stallings 1995.

<sup>&</sup>lt;sup>22</sup>. Edwards 1995, Bierstecker 1995, Krueger 1997 and Sikkink 1997.

<sup>&</sup>lt;sup>23</sup>. For example, Stallings and Kaufman 1989; Nelson 1990 & 1994a; Haggard and Kaufmann 1995; Edwards 1995; Drazen and Grilli 1993; Tornell 1998; Drazen and Easterly 2001.

four, we present econometric evidence covering over 100 LDCs from 1970-1999. Section five concludes by arguing that regime type and changes in it matter for trade policy, even when controlling for many other factors. Since the late 1970s, democracies and democratization have led to lower levels of trade barriers, ceteris paribus.

## II. Data on Trade Liberalization and Democracy.

In 1960s and 1970s, many LDCs had trade regimes marked by extensive, overlapping, and often prohibitive trade restrictions; ISI was the policy regime of choice. Groups that gained from these policies tended to be powerful supporters of the political leaders, and changing trade policies, it was believed, would inflict severe costs on the regime's main backers. Many scholars agree that in large parts of Latin America, Africa and Asia the groups that gained from ISI were urban owners of industry (i.e., capitalists) and urban, higher skilled and often unionized workers (more capital endowed workers); the losers tended to be less skilled, poorer workers, generally rural ones.<sup>24</sup>

Even the debt crisis of the early 1980s was unable to shake this coalition from its economically inefficient policies. Many scholars report that protection increased in the wake of the debt crisis, especially in Latin America. As Haggard and Webb point out, "if the interest group configuration does not change, it is unclear how the status quo (protection) could ever be transcended."<sup>25</sup> The status quo bias against liberalization is thus a key issue; something must change so that this bias can be overcome.

Beginning in the mid-1980s the status quo was overturned. As the African Development Bank notes, "a series of reform and liberalization efforts undertaken by

<sup>&</sup>lt;sup>24</sup> . For example, Edwards 1995; Weyland 2000; Bates 1981: 121; Collier and Gunning 1999:68-9; Kotwal and Ramaswami 1999.

<sup>&</sup>lt;sup>25</sup> . Haggard and Webb 1994, 16.

developing countries in the past decade and a half represents an effective shift in development strategy from an inward-oriented, import-substituting framework... to an outward-oriented export promoting framework."<sup>26</sup> The data we have collected on the LDCs demonstrates a massive change from 1970 to 1999 for five different measures of trade policy. First, a dramatic decline of about 60% from 1982 to 1999 in the average tariff level for about 40 LDCs occurred; statutory tariff rates fell from an average of about 30% in the early 1980s to around 12% in 1999.<sup>27</sup> Tariff duties collected as a percent of imports have also fallen for a large number of LDCs. Available for about 85-90 countries over the 1973 to 1997 period, this data shows that duties peaked in 1973 at 21% of imports, and then fell almost 53%, ending at about 10% of the value of imports.<sup>28</sup> This is very consistent with the statutory tariff rate data; by the late 1990s, both series show that tariff rates had dropped in the LDCs to around 10%.

More evidence of trade liberalization comes from non-tariff barriers (NTBs). While coverage is very limited (on average 30 LDCs are sampled every few years), the data show that beginning in 1984 at around 38% average NTB coverage ratios declined to around 17% in 1998, or about a 55% decrease.<sup>29</sup> Falling tariffs were not compensated for by rising NTBs.

Another measure of trade policy is the dichotomous categorization of countries into open and closed trade regimes constructed by Sachs and Warner and updated by Horn and Wacziarg. <sup>30</sup> According to this data which covers 90 LDCs per year from 1970

<sup>&</sup>lt;sup>26</sup> . African Development Bank 2003, 157.

<sup>&</sup>lt;sup>27</sup> . World Bank 2001.

<sup>&</sup>lt;sup>28</sup> . IMF GFS; and World Bank WDI.

<sup>&</sup>lt;sup>29</sup> . UNCTAD 1994, 2000.

<sup>&</sup>lt;sup>30</sup>. Sachs and Warner (1995) define an economy as closed if any one of the following is true: NTBs cover 40% or more of trade; average tariff rates are 40% or more; the black market exchange rate depreciated by 20% or more relative to the official exchange rate during the 1970s or 1980s; a socialist economy existed as

to 1999, the percentage of LDCs scored as open rises from 15% in the early 1970s to 64% in 1999, with the biggest changes beginning in the mid 1980s.

Finally, using an outcome measure, trade dependence (exports + imports as a percent of GDP), liberalization has been associated with real changes in the developing economies' exposure to international competition. From 1970, trade as a percentage of the domestic economy rose from an average of 55% to nearly 85% in 1999, or a 55% increase.<sup>31</sup> All five measures of trade policy underscore the same message: since the mid 1980s, countries across the globe have decided to dramatically reduce their trade barriers and move toward freer trade.

Our central question then is what disturbed the historical equilibrium involving interest groups and political leaders around protectionism? Why did political leaders in many developing countries choose to lower their trade barriers? As noted before, standard political economy models predict that vested interest groups with concentrated gains from protection will strongly resist any such reduction in barriers; furthermore, the gains from freer trade will be diffuse and thus present collective action problems for groups desiring lower levels of protection. For some reason, however, political leaders decided to alter this status quo by lowering average trade barriers significantly.<sup>32</sup>

We argue that the movement toward democracy in developing countries can provide part of the answer. Democratization opened up new avenues of support for freer trade. Leaders recognized that groups that had been previously disenfranchised became

defined by Kornai (1992); or there was a state monopoly on exports. Updated by Horn and Wacziarg (2002).

<sup>31 .</sup> World Bank WDI.

<sup>32.</sup> We have data on average barriers. These aggregate across many sectors of the economy. Within the overall average decline, it is probable that some interest groups succeeded in maintaining protection but many seem to have failed to do so.

part of the voting public; as we show later, these new groups benefited more from trade liberalization than continued high protectionism. Needing the support of these new groups in a democratic setting, leaders saw their ability to use trade barriers as a strategy for garnering political support had declined. Democratic political competition meant that leaders were likely to liberalize trade to appeal to these new groups in order to ensure their political survival. We agree that "democracies possess greater capacities for promoting change and breaking free of unholy interest group coalitions than generally thought." Democratic leaders in a number of developing countries chose trade liberalization as a means of gaining broader political support. In no country were trade barriers reduced to zero, and thus we are not arguing that protectionist interest groups no longer mattered. But in democratizing countries they mattered less than before and thus leaders could liberalize more than previously.

Evidence of democratization among the LDCs is plentiful. Beginning prior to the move to free trade, a global movement toward democracy erupted. To measure regime type, we use the 21-point Polity index constructed by Gurr et al., Jaggers and Gurr, and Marshall and Jaggers, ranging from -10 for a highly autocratic state to 10 for a highly democratic one. Using data from Polity IV, the average regime score for about 110 LDCs fell from -3.4 in 1970 to a nadir of -4.71 in 1977 and then rose to a high of 1.8 in 1999. Similarly, the dichotomous regime classification from Alvarez, et al. shows how the number of democracies has increased over time. Starting from about 16% in the early 1970s, the percent of democracies falls to a low of 14% among 110 LDCs in 1977,

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<sup>&</sup>lt;sup>33</sup> . Jenkins 1999, 15.

<sup>34 .</sup> Gurr et al. 1989, Jaggers and Gurr 1995, and Marshall and Jaggers 2001.

<sup>35 .</sup> For more discussion see pp. 17-18.

<sup>&</sup>lt;sup>36</sup>. Alvarez, et al. (1996) and Przeworski, et al. (2000) developed a dichotomous measure that codes a regime as democratic if and only if high political offices are chosen through contested elections.

but then rises to 49% in 1999. Similar to the Polity data, this series shows that the percentage of democratic countries was falling in the 1970s, but began a vigorous rise after 1977. Importantly, both figures show that the process of democratization among the LDCs began in the late 1970s, almost a decade before widespread trade liberalization got underway. The wave of democratization preceded the trade liberalization one.

A number of cases illustrate our claim. For instance, in 1982 Bolivia began a democratic transition. Shortly after this, the new government launched an economic reform program called the "New Economic Policy" in 1985, which eliminated all quantitative restrictions (QRs) and lowered tariffs.<sup>37</sup> Argentina shows a similar picture. There the democratic transition began in 1983 and substantial trade reform followed in 1988; it included tariff reductions and the elimination of import licensing.<sup>38</sup>

In other parts of the world this pattern has been repeated. For instance, in the Philippines the first parliamentary elections occurred in 1984 and were followed by presidential ones in 1986 after the ouster of the dictator Marcos. After this political change (1986-88), the new leaders led by Corazine Aquino began changing economic policy, replacing QRs with tariffs and then reducing tariffs. As the Wall Street Journal reported in 1986, "economic decline felled Ferdinand Marcos and unless Mrs. Aquino can turn the Philippine economy around, she will find it difficult to lay the foundations for enduring democracy. ... What really will matter will be how much economic reform Mrs. Aquino can push through the Philippine political system. ... Economic recovery still depends, however, on whether the Philippines can throw off decades of importsubstitution and cronyism, and start selling its wares in the world marketplace.... For

<sup>&</sup>lt;sup>37</sup>. Haggard and Kaufman 1995; Rodrik 1994; Munoz 1994.

<sup>38 .</sup> Rodrik 1994; Haggard and Kaufman 1995; Munoz 1994.

<sup>&</sup>lt;sup>39</sup> . Haggard 1990; IMF 1992.

months, Mrs. Aquino has been gamely chipping away at monumental domestic trade barriers, which routinely include effective protection rates of 80% and 90%. Predictably, this liberalization is drawing sharp protests from entrenched, protected industries. ... Mrs. Aguino is not giving up on this grueling liberalization process."40

South Korea also shows a similar pattern. A democratic transition occurred during 1987-88, and the new government followed this with an economic reform program beginning in 1989 that lowered trade barriers very significantly by 1992. 41 Bangladesh is another interesting case. Between 1986 and 1992 the country underwent a democratic transition; beginning in 1987, Hussain Muhammad Ershad's government introduced a slow liberalization process that only became substantial after the early 1990s when the political situation stabilized. Tariffs fell from roughly 90% in 1990 to 20% by 1996. 42 The democratization of many East Central European countries, such as Poland and Hungary, was followed by economic reform, including massive trade liberalization.<sup>43</sup>

Recently democratization in Africa has lent an impetus to trade liberalization.<sup>44</sup> Zambia is a telling example. In 1991 a democratic transition occurred when Frederick Chiluba and his Movement for Multiparty Democracy party (MMD) overwhelmed Kenneth Kaunda in the presidential election. Chiluba's MMD campaigned for a radical change in economic policy, and this was one factor in his victory over Kaunda, who had run the country since its independence. In 1992 Chiluba then launched a massive economic reform program which featured trade liberalization; tariffs were lowered from

Wall Street Journal 1986, September 18, p.1.
 WTO 1996.

<sup>&</sup>lt;sup>42</sup> WTO 2000.

<sup>43 .</sup> Nelson 1994b.

<sup>44 .</sup> Subramanian 2000.

30% in the late 1980s to 13% by 1996.<sup>45</sup> These cases among others suggest that changes in regime type may have an influence on changes in trade policy. Trade liberalization followed a change in regime type, in particular democratization. Why did leaders choose to liberalize trade in the face of protectionist vested interests?

# III. Trade Liberalization and Democratization: An Argument.

How might democracy contribute to trade liberalization? Democratization means a movement toward majority rule with universal suffrage in contested elections. We call the group of actors who participate in the selection of political leaders "the selectorate," following the terminology of Bueno de Mesquita, et al. 46 In a democracy, the selectorate is the part of the population that is eligible to vote. In a non-democracy, the selectorate is that subset of the population upon whose political support leaders could potentially rely to remain in office. The winning coalition is the minimal set of individuals in the selectorate whose support an incumbent needs to remain in office. In a democracy, this may be a simple majority of voters, whereas in an autocracy it may be more complex. Increasing the selectorate tends to imply an increase in the size of the winning coalition; in a majority voting situation, this means a change in the median voter.

Democratization is a process involving an expansion of the selectorate.

Democracies choose political leaders through popular elections, while autocrats maintain their position with the backing of small groups, such as the military elite, large landowners, or heavy industrialists. Democratization implies an expansion of the selectorate and the winning coalition, which changes the optimal policies that leaders will

<sup>&</sup>lt;sup>45</sup> . WTO 1996

<sup>&</sup>lt;sup>46</sup> . Bueno de Mesquita, et al. 1999.

choose. This expansion implies a change in the composition of the selectorate, and hence a change in its preferred policies. To retain office, leaders must adjust their policies to be responsive to the preferences of the expanded selectorate.

With democratization, leaders can build new coalitions in favor of different policies because they can appeal for support to newly enfranchised groups. As Bienen and Herbst point out, "political liberalization may change constituencies and therefore promote economic reform...Democratization would alter processes of economic decision-making and the nature of economic policies... A regime that has to take account of voters who have not previously had influence may well shift the allocation and distribution of resources."

Democratization is important for trade policy: the optimal level of protectionism for political leaders is a declining function of the size of the winning coalition. Even if the same political leaders remain in office, an expansion of the winning coalition reduces the amount of protection that is optimal for them. We expect that, as democratization occurs, political leaders will alter their trade policies—with or without public urging—in order to gain the support of this larger selectorate.

Our argument follows the logic of the Heckscher-Ohlin and Stopler-Samuelson theorems as they have been advanced by Mayer and Yang. In a Heckscher-Ohlin world, the Stopler-Samuelson theorem shows how individuals benefit or lose from changes in trade policy given their endowments of capital and labor. Mayer and Yang each connect this to politics by showing how political leaders respond to voters' preferences vis-à-vis trade policy. Developing counties by definition possess relatively

<sup>&</sup>lt;sup>47</sup> . Bienen and Herbst 1996, 34.

<sup>&</sup>lt;sup>48</sup>. See Mayer 1984 and Yang 1995. An alternative would be a specific factors model in which sectors of the economy (import-competing versus export-oriented firms), rather than factors of production like capital and labor, form the major coalitions. It is much debated which of these provides a better account of the political economy of LDCs.

less capital than labor. 49 Since the vast majority of their trade is with rich developed countries, their import-competing sectors tend to be capital-intensive, and therefore protectionism will benefit those individuals well endowed with the relatively scarce factor, capital. Liberalizing trade policy in the LDCs results in a gain in income for, and a reduction in the prices of imported goods bought by, those well endowed with the relatively abundant factor, i.e., labor, in these economies.

In developing countries, workers and the poor tend to gain from trade liberalization through increases in their income and reductions in the prices they must pay (especially of import-competing goods). As an economist notes, "the protection of capital-intensive industries affected [Latin America's] ability to create employment...In developing countries more-open trade regimes result in higher employment and in a more even distribution of income than protectionist regimes...Export-able industries tend to be significantly more labor intensive than import-competing sectors[;]...and the removal of external sector distortions tends to strengthen the process of employment creation in most developing countries."<sup>50</sup> Democratization will thus enfranchise a new group of voters with preferences for lower levels of protectionism.

As noted above, in non-democratic countries those eligible to determine who the leaders are part of a very restricted selectorate. In many autocracies either the voting that takes place does not affect the choice of leadership, or voting does not occur at all. However, even dictators must earn the support of some "majority" of the populace that has the right to determine the leadership. In many autocracies, this selectorate consists of

<sup>&</sup>lt;sup>49</sup> . Almost all developing countries trade mostly with developed ones. Over 80% of LDC trade is with the OECD countries (Markusen and Wiggle 1990). Of total world trade, only about 6% is between LDCs. Hence it makes sense to consider all LDCs relatively well-endowed with labor given their primary trading partners, the OECD countries. <sup>50</sup> . Edwards 1995, 118.

the richest individuals, and hence those who own the most capital. Those with "voting" rights in autocracies thus own above average levels of capital, and they benefit the most from high levels of protection. In Latin America, for example, "the protective system generated large benefits to local industrialists...and urban workers. This, of course, was achieved at the cost of depressing the earnings and incomes of rural workers." The Philippines under the autocrat Marcos was another glaring example of this.

Democratization changes which groups political leaders must garner support from; political competition within democracies induces leaders to appeal to new coalitions of voters and hence offer new policies to win their support. As a country democratizes, the selectorate grows and the preferences of the enlarged selectorate will differ from before. As democracy advances to include those who own less and less capital (i.e., workers and the rural poor), the median voter's capital ownership will decline, and her most preferred tariff rate decreases as well. Hence political leaders in a democracy can appeal to these groups who are less well endowed with capital and whose interests may be better served by less protectionism. Leaders in this setting have new sources of support and ones that prefer lower trade barriers.

As Weyland suggests, "democratization reduces the political clout of the vested interests that benefited the most from the old development model, such as protectionist business sectors and the military. At the same time, it enhances the role of the electorate, including the large mass of poor people who received meager benefits under the old development model ... Democratization weakens politically some prime beneficiaries of state interventionism ...[It] creates new cleavages that diminish the political power of

<sup>&</sup>lt;sup>51</sup>. Edwards 1995, 119.

<sup>52 .</sup> See Milner and Kubota 2001 for a formal model demonstrating this result.

business associations, which were once dominated by protectionist sectors."53 This seems to have been the case in countries like Bolivia, the Philippines, Bangladesh, and Zambia where democratization preceded and helped leaders initiate trade liberalization.

In sum, in developing countries where autocratic governments depend on support from a small selectorate and thus are not responsive to the overall population, they can employ extensive protectionism. Democratization, however, may break down the old coalition supporting protectionism, and can thus lead to change in the status quo. As the selectorate grows, leaders may find it in their political interests to modify their trade policies. As the democratic selectorate in developing countries become less well endowed with capital, high levels of trade barriers no longer compensate them for their loss of income from and the higher costs imposed by protectionism. Thus, as the political regime becomes more democratic and leaders build new coalitions of support, political competition may induce leaders to make their trade policies less restrictive. Leaders may reason that by lowering barriers, they can increase the incomes of workers and garner more of their support in future elections. Protectionist interest groups may remain powerful in these democracies, but they will be less influential than before since leaders now have new sources of support they can turn to.

Is it realistic to assume that workers and the poor gain from trade liberalization? Don't they lose from it and thus oppose it? It is important to separate trade liberalization from the other economic reforms. Different economic reforms have different distributional consequences. Many reforms, such as privatization, pension reform, and labor market flexibility, may have significant negative effects (at least in the short-term)

<sup>&</sup>lt;sup>53</sup>. Weyland 2002, 60.

for workers, and are often bitterly opposed by them.<sup>54</sup> In contrast, the distributional consequences of trade liberalization may not hurt workers or the rural poor. Evidence shows that in the same countries where opposition to other reforms has been high, trade liberalization has often been supported, or at least not opposed, by workers and their organizations, as Murillo shows in Mexico, Argentina and Venezuela. 55 Weyland notes that public support for market reform including trade liberalization was actually strong in a large number of Latin American countries, and Fishlow shows that these reforms have not been visibly opposed most of the time. <sup>56</sup> Baker provides systematic evidence that trade liberalization was and has remained very popular in Latin America. As he notes, "aggregate support for free trade is much higher than support for privatization, indicating that positive orientations toward free trade are not simply a vague expression of support for economic liberalization. Instead, many citizens favorably single out free trade from the list of Latin America's recent market reforms."<sup>57</sup> In Africa, Van de Walle also points out that although limited, trade policy reform has not been opposed by social groups either.58

Others point out that voters may support governments even when times turn bad because they think bad times now are a signal of good times to come. As Stokes et al. show for a wide variety of countries, "Our most startling result is that in every country people sometimes reacted to economic deterioration by supporting the government and its economic program more strongly."59 Polls in Mexico show that voters strongly

 <sup>54 .</sup> For instance, Naim 1993; Murillo 2000.
 55 . Murillo 2000.

<sup>&</sup>lt;sup>56</sup>. Weyland 2002: 21-2, 35, 94; and Fishlow 1990.

<sup>&</sup>lt;sup>57</sup>. Baker 2003, 428. He has a different explanation for this continued support than we do for the initial liberalization.

 <sup>58 .</sup> Van de Walle 2001, 168-70.
 59 . Stokes et al. 2001, 25.

favored trade liberalization via NAFTA and thought it would mean more jobs and higher wages for them. Similarly, research on the transition economies in East-Central Europe shows that in most of these countries public support for trade liberalization was strong and never wavered. Political leaders do not seem to have lost support by pursuing trade liberalization; publics often are willing to keep supporting regimes that liberalize trade even if the economy slows in the short-term in the hope of future gains.

As for whether trade liberalization actually benefits workers in LDCs, the data are mixed. Some studies show that increased openness leads to faster economic growth, which benefits workers;<sup>63</sup> others cast doubt claims relating trade policy to growth.<sup>64</sup> At the microeconomic level scholars have shown surprisingly that trade liberalization may not have very important positive or negative effects for firms or workers.<sup>65</sup> Theoretically, Heckscher-Ohlin (and Stolper-Samuelson) models suggest that workers should gain from trade liberalization in LDCs; and empirically the extant data do not reject this claim.

### IV. Empirical Analysis.

According to our argument, democracies should be more free trade-oriented than non-democracies and an increase in the degree of democracy should induce a move to liberalize trade. Many theories describe the relationship between political and economic reforms, but little systematic empirical work exists on trade liberalization. Part of the reason is that both political and trade regimes are difficult to measure. We test our

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<sup>60 .</sup> Cordoba 1994, 265.

<sup>61 .</sup> For example, Aslund, Boone and Johnson 1996; Frye and Mansfield 2001.

<sup>62 .</sup> Baker 2003

<sup>&</sup>lt;sup>63</sup>. Dollar 1992; Harrison 1996; Edwards 1992, 1995, & 1998; Frankel and Romer 1999; Barro 2001.

<sup>&</sup>lt;sup>64</sup> . For example, Rodriguez and Rodrik 2001.

<sup>65.</sup> For example, Harrison 1994; Tybout and Westbrook 1995; Levinsohn 1999; Seddon and Wacziarg 2001.

argument while also trying to control for the leading contending propositions, relating to economic crises, changes in leaders and ideas, and external pressures. Our dataset is a time-series cross-section (TSCS) one, containing 179 developing countries, territories, and dependencies from 1970-1999.<sup>66</sup> Our central hypothesis is that more democratic countries should have fewer trade barriers, ceteris paribus; an increase in democracy should prompt a reduction in trade barriers.

Our central independent variable is the type of political regime in place in a country at time t. The political regime variable comes from Polity III and Polity IV, which collected data on the political characteristics of 177 countries between 1800 and 1999.<sup>67</sup> To measure each state's regime type, we employ the widely-used index constructed by Gurr et al. and Jaggers and Gurr. 68 This index combines data on five factors that capture the institutional differences between democracies and autocracies: 1.) the competitiveness of the process for selecting a country's chief executive, 2.) the openness of this process, 3.) the extent to which institutional constraints limit a chief executive's decision-making authority, 4.) the competitiveness of political participation within a country, and 5.) the degree to which binding rules govern political participation within it. Each of these five measures is directly related to our emphasis on political competition and the size of the selectorate.

Following Gurr et al. and Jaggers and Gurr, these data are used to create an 11point index of each state's democratic characteristics (DEMOC) and an 11-point index of

<sup>&</sup>lt;sup>66</sup>. In the analysis, we have only about 100 countries represented; most small countries, territories and dependencies are missing data.

<sup>67 .</sup> Gurr and Jaggers 1995; Marshall and Jaggers 2001.
68 . Gurr et al. 1989 and Jaggers and Gurr 1995.

its autocratic characteristics (AUTOC). 69 The difference between these indices, REGIME = DEMOC - AUTOC, yields a summary measure of regime type that takes on values ranging from -10 for a highly autocratic state to 10 for a highly democratic one. This measure captures both the variation within democracies and among autocracies. For instance, not all autocracies are the same. Some autocracies have a more expansive selectorate than others. Mexico, for example, is usually seen as more democratic than Saudi Arabia or China; Polity catches these differences: for instance, in 1980, Mexico scores a -3, while Saudi Arabia gets -10 and China, -7. Polity's scoring of autocracies correlates highly with a categorization of autocracies created by Geddes; countries she codes as single party regimes, then military ones and then personalistic ones represent a declining scale of democracy, which correlates at roughly the 0.6 level with REGIME.<sup>70</sup> Similarly, differences among relatively democratic countries can be discerned. Summary statistics for REGIME, as well as our other variables (and their sources) are listed in Table 1. We use a lagged version of REGIME (from one to three periods) in the regressions to mitigate endogenity issues.

To increase the robustness of our analysis, we use two other measures of regime type. First, from Geddes' data on autocracies we construct a variable ranging from 1 to 8, where 8 is most democratic. Since well over two-thirds of the regimes here are autocracies, it is interesting to see if their differences matter. Polity does this one way, and Geddes does it another. Geddes argues that certain autocracies are longer-lived because of their internal characteristics; she sometimes equates these differences with the

<sup>&</sup>lt;sup>69</sup> . Ibid. <sup>70</sup> . Geddes 2002.

nature and extent of the groups that support the autocrat. 71 We interpret this as arguing that autocracies vary in the size of their selectorate and winning coalition. She claims that single party systems have the broadest selectorates, followed by military-run governments and then personalist regimes. "In personalist regimes, one individual dominates the military, state apparatus, and the ruling party if there is one. Because so much power is concentrated in the hands of one individual in personalist regimes, he generally controls the coalition-building agenda. ... In contrast to single-party regimes, the leader's faction in a personalist regime may actually increase benefits to itself by excluding the rival faction from participation. Where the main benefits of participation in the government come from access to rents and illicit profit opportunities, benefits to individual members of the ruling group may be higher if they need not be shared too widely."<sup>72</sup> We code as most autocratic regimes with personalist elements, then those with military involvement and least of all those with a single party. This variable called DICTATOR is supplemented with data from Przeworski, et al. (2000) to add a code for democracy. Thence all countries not classified as autocracies by either Geddes or Alvarez, et al. for which Alvarez, et al. have data are coded as democratic.<sup>74</sup> Note that this measure is blunter than Polity since it does not discern among democracies. We use both a lagged version of the DICTATOR variable and dummy variables for each category.

<sup>&</sup>lt;sup>71</sup> . Geddes 1999.

<sup>&</sup>lt;sup>72</sup> . Geddes 1999, 12-14.

<sup>&</sup>lt;sup>73</sup>. Przeworski, et al. 2000.

<sup>&</sup>lt;sup>74</sup>. DICTATOR is coded as 1= personalist regimes; 2= mixed regimes with some personalist element; 3=personalist mixed with military; 4=personalist mixed with single party; 5=military; 6=military mixed with single party; 7=single party; 8=democracy. All countries coded as autocracies by ACLP but missing in Geddes are coded as mixed (=2).

Our third measure of regime type is the dichotomous categorization created by Alvarez, et al. and Przeworski, et al.<sup>75</sup> Their measure codes a regime as democratic if and only if high political offices are chosen through fair and free contested elections where alternation of leaders occurs. This measure is quite blunt since it assumes that the democratic transition occurs completely in one year; it has been criticized.<sup>76</sup> It makes no distinction between types of autocracies or levels of democracy. But it is highly correlated with the other two measures (r=.80 with REGIME and r=.70 with DICTATOR). We use ACLP in lagged form.

Our central dependent variable measures a country's trade policy in year t. We want to predict the extent of protectionism, or conversely openness, of the trade regime. This is notoriously difficult to measure.<sup>77</sup> Pritchett, for instance, finds little correlation among different measures of openness in the literature.<sup>78</sup> We, therefore, follow Edwards and use a variety of measures.<sup>79</sup> However, we face a difficult challenge in finding timeseries as well as cross-sectional data since we are interested in how openness changes over time. We use two alternative ways of measuring trade policy.

Our first measure is a country's (unweighted) average statutory tariff rate (TARIFF).<sup>80</sup> This is the most appropriate measure for our model, which predicts a decline in tariff rates in response to the shift toward democracy. But it is poorly measured. Various countries were sampled several times in the 1980s and then almost yearly from 1992 to 1999, giving 907 total observations.

<sup>&</sup>lt;sup>75</sup>. Alvarez, et al. 1996 and Przeworski, et al. 2000.

<sup>&</sup>lt;sup>76</sup> . For example, Elkins 2000; Collier and Adcock 1999.

<sup>&</sup>lt;sup>77</sup>. For example, Leamer 1988.

<sup>&</sup>lt;sup>78</sup> . Pritchett 1996.

<sup>&</sup>lt;sup>79</sup> . Edwards 1992 & 1998.

<sup>&</sup>lt;sup>80</sup> . World Bank 2001.

Our second measure of trade liberalization is a dichotomous classification of trade regimes into open and closed ones. 81 Sachs-Warner code a country as closed (SW=0) if any one of the following is true: NTBs cover 40% or more of trade; average tariff rates are 40% or more; the black market exchange rate depreciated by 20% or more relative to the official exchange rate during the 1970s or 1980s; a socialist economy existed as defined by Kornai; or there was a state monopoly on exports.<sup>82</sup> This measure is very useful since it considers many forms of protectionism; it is much broader than tariff rates and thus more comprehensive. Others have used it, and it seems highly correlated with more precise data on trade liberalization episodes. 83 It is correlated with statutory tariff rates at -0.49. Our regressions using this variable are logistic since it is dichotomous. Since trade policy is hard to measure and comes in a variety of forms, using both measures gives us a broader picture of how trade policy is changing over time and across countries. If both show that democracy is related to trade liberalization, then confidence in our claims should be enhanced.

Changes in trade policy may also be due to factors other than changes in the political regime, and we need to control for these. Conventional wisdom as well as scholarly work suggests that three sets of factors should be included. First, we need to control for several economic variables.<sup>84</sup> It is often argued that small countries tend to be more open than large ones.<sup>85</sup> We thus measure a country's size by its population, using the lagged value of the natural log of population as our control (LNPOP). A country's level of economic development is also likely to affect its trade policy; more developed

 $<sup>^{81}</sup>$  . Sachs-Warner 1995; which has been updated by Horn and Wacziarg 2002.  $^{82}$  . Kornai 1992.

<sup>83 .</sup> See Seddon and Wacziarg 2000.

<sup>84 .</sup> All economic data comes from World Bank, World Development Indicators (WDI).

<sup>&</sup>lt;sup>85</sup> . For example, Katzenstein 1985; Easterly and Rebelo 1993; Rodrik 1997.

countries tend to have smaller trade barriers.<sup>86</sup> Hence we add the lagged value of per capita real GDP as a control (GDP PC).

The second set of control variables relates to both internal and external political factors that might affect trade policy. First among these is economic crisis. As noted above, the war of attrition models of economic reform often point out that the greater the distortions caused by the policy, the more likely reform is; economic crisis is one way to measure these distortions. Tornell among others claims that countries are likely to liberalize their trade regimes after economic crisis because crisis generates conflict among the powerful.<sup>87</sup> He defines a country as being in crisis if either its inflation rate is skyrocketing or real income is plummeting. We use a very similar definition. Crises are either occurring or not; they are not long continuing events by definition and they are extreme events, not yearly changes in economic variables.

One important difficulty with this variable is defining what constitutes a crisis. Different economic problems may be more important in different countries, and different levels of those problems may trigger different evaluations of whether a crisis exists. We use two different notions of economic crisis, both of which stress that crises are unusual and extreme shocks. One from Tornell deems a crisis to exist if one of two conditions holds: either the country's inflation rate was 40% or more and it increased by 25% or more from the year before, or per capita GDP fell by 15% or more from the previous year (ECRISIS=1). Our second form of crisis involves the balance of payments. Here a crisis exists (BPC=1) if a country's level of international reserves falls to less than the equivalent of three months' worth of imports. This second notion of crisis relates to a

 $<sup>^{86}</sup>$  . Rodrik 1995; Easterly and Rebelo 1993.  $^{87}$  . Tornell 1998.

country's debt and capital flight problems. <sup>88</sup> Interestingly, there is practically no correlation (r = 0.012, not significant at 0.10) between these two forms of crisis, yet both are cited as reasons for economic reform. We include each of these in lagged form.

A second factor seen as responsible for trade liberalization in the LDCs is external pressure from the various international financial institutions (IFIs) that provide funds to LDCs (such as the IMF or World Bank) or the world's hegemon, the US. In particular, the claim is that around periods of economic crisis LDCs are especially vulnerable to external pressure, and that in exchange for loans or aid countries have been forced to liberalizing their trade regimes—so called conditionality. The counterfactual is that they would never have made these changes without overwhelming external pressure. To control for these external forces, we include a variable indicating whether the country has just signed an IMF agreement to help bail it out of a crisis. Such a signing should represent a period of high external pressure since the country is claiming an inability to fund its own needs; IMF loans are intended to provide help for countries experiencing severe balance of payments or reserves crises. SIGNED created by Przeworski and Vreeland is equal to one if an IMF agreement has been signed in that year; it is lagged in the models.<sup>89</sup> More external pressure of any sort should be related to lower trade barriers.90

<sup>&</sup>lt;sup>88</sup>. Although balance of payments crises tend to most affect countries with fixed exchange rates, most of the countries here had some form of fixed exchange rate or managed rate for the period. Over 60% of our total observations are for countries with fixed or managed rates. Even though countries are increasingly using more flexible rates, by the 1990s only 20% of our observations were for country-years with pure floating rates, and over 60% had some form of fixed or managed exchange rates.

<sup>&</sup>lt;sup>89</sup>. Przeworski and Vreeland 2000; they also have another variables called UNDER, which shows whether a country is subject to an IMF agreement that year. We use both, although we think the former is a superior measure of the magnitude of external pressure. In addition, we also look at the amount of total foreign aid that a country receives as a percent of its central government budget (AID). This measures the dependence of the government on foreign sources of (non-private) capital.

<sup>&</sup>lt;sup>90</sup>. For example, Nelson 1990; Kahler 1986.

We include several variables designed to capture the impact of other external pressures. A measure of US hegemony captures the widespread claim that American power is responsible for economic reform. Given our interest in trade, hegemony (USHEG) is measured as the sum of American exports and imports as a percent of world trade. 91 If Hegemonic Stability Theory is correct, greater American influence should induce trade liberalization.<sup>92</sup>

We also examine the impact of the GATT/WTO. Joining GATT/WTO should induce countries to lower their trade barriers. Recent work by Rose, however, suggests that it might have no impact; moreover, given the exceptions that LDCs were allowed in the GATT regime it may be that GATT membership had a negative impact on them. 93 Recent research suggests that the Generalized System of Preferences (GSP) in the GATT may also have induced developing country members to maintain higher trade barriers than otherwise. 94 We include a lagged variable indicating whether a country is in GATT/WTO (=1) or not.

Finally, some scholars argue that competitive pressures among states may drive policy changes around the world. 95 In order to control for this we create a variable that indicates the average tariff level for all LDCs in that year (AVTARIFF) and the average level of openness (according to Sachs-Warner) for all countries in that year (AVOPEN). We use the lagged version of these to test for strategic competition among LDCs.

A third factor involves the ideas that leaders possess about the best policies available to them. Many claim that the turnabout in trade policy was caused by a change

 <sup>91 .</sup> As Mansfield and Bronson 1997, among others, do.
 92 . For example Krasner 1976.

<sup>93 .</sup> Rose 2002a, b.

<sup>94 .</sup> Ozden and Reinhardt 2003.

<sup>95 .</sup> For example, Simmons 2000.

in the ideas that leaders held about the policies that would best promote economic development. Whether these new ideas resulted from policy failure or external pressure is debated. But the claim is that in their search for better development strategies, leaders decided that an open trade regime was preferred to the ISI one. It is difficult to find measures of such ideational change, and the measures we use are not ideal. One measure we employ is the number of years a government has been in office (OFFICE). A new government might indicate a change in leadership and hence a change in ideas. Others have examined whether governments in their first year of office are more likely to reform; we considered this (FIRST=1 if OFFICE<2; 0 otherwise), but it was never significant in the regressions.<sup>96</sup>

Finding measures of how policy ideas have changed throughout the world is very difficult. Quinn has developed an indicator of changing global ideas about economic policy. 97 He uses a measure of the degree to which the top five advanced industrial countries have opened their capital markets (FIVEOP) to suggest how changes in ideas globally about the ideal set of foreign economic policies are evolving. Increases in this measure indicate that anti-capitalist sentiment is waning worldwide. This variable captures both changes in ideas about optimal policies and the potential contagion of those ideas from powerful developed states to the LDCs. This measure has many problems, and if it is not related to our outcomes it can hardly be seen as a fair test of the idea claims. We include it some models in order to try to control for all of the main alternative explanations for trade liberalization in the LDCs.

 $<sup>^{96}</sup>$  . For example, Abiad and Mody 2002.  $^{97}$  . Quinn 2001.

The basic equation estimating the relationship between democracy and trade policy is:

$$\begin{split} tradepolicy_{i,t} &= \beta_0 + \beta_1 REGIME_{i,t-1} + \beta_2 SIGNED_{i,t-1} \\ &+ \beta_3 OFFICE_{i,t-1} + \beta_4 GDPPC_{i,t-1} + \beta_5 LNPOP_{i,t-1} + \beta_6 ECRISIS_{i,t-1} \\ &+ \beta_7 BPC_{i,t-1} + \beta_8 AVOPEN_{\sim i,t-1} + u_i + \varepsilon_{i,t} \end{split}$$

We also include USHEG, GATT, and FIVEOP in some equations to check for robustness. TSCS data have numerous problems that violate the standard assumptions necessary for OLS to be unbiased and efficient. We try to correct for these in the standard ways. We use panel corrected standard errors to mitigate problems caused by various forms of heteroskedasticity, as recommended by Beck and Katz. <sup>98</sup> We include country fixed effects and a time trend (DATE) or decade fixed effects to deal with problems of omitted variable bias. The use of a time trend allows us to address concerns about whether the relationship between democracy and trade policy is solely related to their both trending in one direction over time.

The use of country fixed effects is particularly interesting in this model.<sup>99</sup> The fixed effects--or "within"-- estimator exploits the time series component of the data around the country averages. The within estimator examines variation over time and thus addresses the question of the impact on trade policy of a change in regime type. We address problems of serial correlation by using an AR1 correction. In the logistic model, we estimate a natural spline function with three knots; we use the count variable and

<sup>&</sup>lt;sup>98</sup> . Beck and Katz 1995.

<sup>&</sup>lt;sup>99</sup> In all the regressions, a Hausman test rejects the suitability of using random effects, not surprisingly. Results for REGIME are even stronger if we omit the country fixed effects.

three splines generated by this procedure to handle temporal dependence, as recommended by Beck, Katz, and Tucker. <sup>100</sup>

Regime Type. In almost all of the regressions, regime type is correctly signed and significant. The regressions on tariff rates are the most direct test of our argument. As table 3 shows, more democratic regimes tend to have lower tariff rates. Setting all the other variables at their means in equation (3), a one standard deviation increase in democracy from its mean leads to a 12.2% decrease in tariff rates. Tariff rates drop from about 19% to about 16.5%. Moving from an absolute autocracy (-10) to a perfect democracy (10) induces a 31% decline in tariffs. Rates fall from close to 22% to about 15%. These results are robust to a wide variety of controls.

Table 3 also shows that using other measures of regime type does not undermine our result. The DICTATOR variable is negative and quite significant, indicating again that systems with larger selectorates tend to have lower trade barriers. An increase in DICTATOR by one standard deviation from its mean leads to roughly a 17% reduction of tariff rates, from about 16% to roughly 13%. The dichotomous ACLP variable is also negative, but it is not significant at conventional levels.

When we include the REGIME variable from Polity with dummy variables for the three major types of autocracies, the type of autocracy matters, even when controlling for overall regime type. More democratic countries still tend to have lower barriers. But now compared to personalistic regimes, single party ones are much less prone to protectionism. This finding also supports our argument since we expect that selectorates will be much larger in single party autocracies than in personalistic ones. This suggests

 $<sup>^{100}</sup>$  . Beck, Katz, and Tucker 1998.

that variations within both democracies and autocracies may help explain choice of trade policy. <sup>101</sup>

Table 5 shows that increasing democracy also increases the likelihood of a country opening its trade regime. A one unit increase in democracy in equation (1) raises the probability of a change to openness by 0.523. Equivalently, holding all other variables constant, each additional unit of increase in democracy multiplies the log odds of openness occurring by 1.69. Using alternative measures of regime type yields similar results. As above, we created a dichotomous version of Polity's REGIME score, with countries at or above 6 scoring as democracy. This variable is also positive and very significantly related to trade liberalization. The DICTATOR variable is also positive and statistically significantly related to trade policy liberalization. The same is true for the dichotomous ACLP variable. More democratic countries are more likely to liberalize their trade policies. As before, we get interesting results as well when using both the Polity measure and dummy variables for autocratic regimes types. The regime measures are all jointly significant (p>.05) with REGIME still having a positive relationship. The broad Sachs-Warner measure of trade policy yields similar results to the narrower tariff measure. For the two different measures of trade policy, movement toward democracy is positively associated with a more openness, even when we account for many other influences.

To test the robustness of our results, we address concerns about multicollinearity and endogenity. (The use of panel corrected standard errors helps assuage problems with

<sup>&</sup>lt;sup>101</sup> . We also turned Polity's REGIME variable into a dichotomous variable with countries scoring below 6 as autocracies (=0) and those at or above 6 as democracies (=1). Using equation 3 in table 3, we found that once again the regime coefficient is negative and very significant; more democratic countries have lower trade barriers.

various types of heteroskedasticity; and the inclusion of country fixed effects, decade fixed effects and a time trend should address concerns about omitted variable biases.) In tables 4 and 6, we lag the regime variable by two and then three periods. This did not affect our results greatly. The regime variable either by itself or jointly with all of the lags was correctly signed and significant for all the tariff regressions, although the measures for the openness regressions were less significant. We also lagged the main alternatives to our argument: the crisis variables (ECRISIS and BPC) and the external pressure variables (SIGNED) for two and three periods for both dependent variables. They were never significant and did not affect the REGIME variable. This suggests that multicollinearity (at least among the main alternative hypotheses) is not driving these results. Moreover, it suggests that the effect of REGIME on trade policy is fairly long lasting. We also dropped the outliers from equation 3 in table 3 and reran the regressions, which did not change the REGIME variable's sign or significance. 102

To explore whether trade policy itself promotes regime change, we regressed all the RHS variables in equation 1 of table 3 including the two trade policy measures lagged (each independently) and excluding the average level of tariffs in the world on our measure of regime type. None of the variables, except GDP per capita, the time trend and the log of population, were near statistical significance, implying again that collinearity is not a major problem. The trade policy measures never reached conventional levels of significance, suggesting that they are not causing regime change.

In addition, several tests examined endogenity problems with the regime variable. First, following Wooldridge, we took the residuals from two fixed effects regressions of

 $<sup>^{102}</sup>$  . This entailed dropping observations whose residuals were more than 2, 3, or 5 standard deviations from the mean.

our RHS variables on REGIME and included them in regressions identical to those in table 3, equation 3 and table 5, equation 1.<sup>103</sup> We then checked whether the coefficients on the residuals were significant; they were not at the 0.10 level. This test indicates that endogenity is not acute.

Another way to deal with endogenity is to instrument for the variable in question. Finding useful instruments for regime type is not a trivial matter. In our case, they must be measures that predict regime type well and are not related to either trade policy or the errors. We used two instruments for regime: the average age of the party system in a country year (PTYAGE from Beck et al.) and the level of secondary school completion among the population over 15 years (SSCHOOL from Barro and Lee). We expect both variables to be positively related to democracy. Using these two instruments, we estimated the impact of regime on statutory tariff rates in table 7. The regime variable remains negative and quite significant. These results give some confidence that even correcting for possible endogenity, regime type still affects trade policy.

The Political Control Variables. Our first set of control variables explored the impact of economic crisis on a country's decision to liberalize. We included two distinct variables, ECRISIS and BPC, to capture the pressures from such crises. These variables do not seem to matter significantly, either independently or jointly. Countries may respond differently to crises, sometimes raising trade barriers and other times lowering them. These results are not unexpected. Many claims about the role of crises come from

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<sup>&</sup>lt;sup>103</sup> . Wooldridge 2002, 118-22.

<sup>&</sup>lt;sup>104</sup>. Beck et al. 2001. Barro and Lee 2001.

<sup>&</sup>lt;sup>105</sup>. A test devised by Davidson and MacKinnon (1993), which is similar to the (Durbin-Wu-)Hausman test, reveals that the null hypothesis that an OLS version of the same equation would be consistent can be rejected at the 0.01 level, suggesting that the instrumental variables are useful. A Sargan-like test for overidentification does not allow rejecting the null hypothesis that the instruments are useful and uncorrelated with the error term at the 0.05 level.

case studies that often select on the dependent variable; that is, they explore cases of economic reform and often find that crises (of varying types) existed as well. But they rarely look at the cases where counties experienced crises and did not reform. <sup>106</sup> As noted earlier, the debt crisis of the early 1980s did not lead to trade liberalization, but to greater closure. The effect of crises may be highly contingent on the environment. Sorting through the myriad types of economic crises and their various political effects is an important area for future research.

The second set of external political factors involves external pressures. The main way we measured this was to look at whether countries had signed an agreement with the IMF in the previous period (we explored up to three lags). This variable was never significant. Increases in external pressure via the IMF have little measurable effect on trade policy, and when they do (in the regressions on Sachs-Warner openness) it is to increase the closure of the economy, not to open it. We also tried using whether a country was under any IMF agreement (in 1 to 3 previous periods), and this was never significant either. These results may not be that surprising given the findings of Przeworski and Vreeland and Vreeland, among others, which show that countries do not receive IMF loans when they are most vulnerable and in crisis and that conditionality rarely seems to have much impact on policy. 107 We also employed a variable measuring the amount of foreign aid a country received relative to its government budget. While this measure has many fewer observations, it was not significant either. We concur with Weyland who

<sup>&</sup>lt;sup>106</sup>. A simple cross-tabulation of our data show that in 3% of the cases, liberalization according to Sachs-Warner occurred just after a bout of economic crisis: in 3% of cases, such crises occurred with no trade liberalization; and in 30% of them liberalization occurred with no crisis beforehand. For balance of payments crises, 40% of the cases had crises but no trade policy reform, compared to 16% with crises preceding the reforms.

107 . Przeworski and Vreeland 2000 and Vreeland 2003.

argues that "economic-structural arguments alone cannot provide a complete explanation for the enactment of market reform...'Markets' and 'leverage' did not determine governmental decisions; political leaders retained a margin of choice."<sup>108</sup>

Other measures of external influence show greater impact. Whether a country is in GATT/WTO has a significant influence on both tariff rates and on Sachs-Warner openness. But the relationship is surprising. Being a member keeps one's tariff rates higher than otherwise and lowers the probability that a country opens its trading regime. This finding is consistent with recent research by Rose, which shows that being a member of GATT/WTO does not increase a country's trade flows nor does it lead them to reduce their trade barriers. 109 Many countries, it seems, choose to reduce their barriers before they enter the GATT or even if they have no plans for entering it. Furthermore, countries that are already in the international organization are much less likely to become more open, ceteris paribus. In part, this results from the myriad exceptions in GATT rules (some tightened by the WTO) to reducing barriers. Among these exceptions the Generalized Special Preference Scheme (GSP) was very important for the LDCs; it allowed them to maintain their barriers while still gaining access to developed countries' markets. Moreover, it is very consistent with Ozden and Reinhardt who show that the GSP system in the GATT encouraged many LDCs to maintain higher trade barriers than otherwise. 110 In part, this finding may reflect the fact that many of these countries decided to lower their trade barriers unilaterally before joining GATT/WTO. Once in the

 $<sup>^{\</sup>rm 108}$  . Weyland 2002, 20.

<sup>109</sup> Rose 2002a & b. Subramanian and Wei 2003 also show that for the LDCs the GATT/WTO has not mattered much.

<sup>110 .</sup> Ozden and Reinhardt 2002. See also Subramanian and Wei 2003.

organization, further liberalization might be quite slow given the glacial pace of recent multilateral trade negotiations.

Our final political control looked at the change in ideas around the globe. Our measures are weak indicators for this factor; hence, our results should be interpreted cautiously. We examined governments' tenure in office to see whether new governments were more likely to undertake trade policy reform. This variable was only significant in the case of tariff rates, and here the findings were surprising. The longer governments had been in office, the lower were their tariff rates, ceteris paribus. Trade policy reform may require political stability and a government with a firm hold on power. A variable for whether the government was in its first year or not was never significant, suggesting that in general new governments either did have new ideas about trade policy or could not implement them. Existing data do not allow us to conclude much about the role of ideas in the change in trade policy. We have tried to control for them simply to give greater credibility to our claim about democracy. But our research should not be interpreted as concluding that the spread of new ideas about trade policy did not matter.

We looked at several other, less obvious factors that might affect economic reform. We included a variable for a government's relative political capacity. This measures a government's ability to extract resources from its society. One might expect a more capable government to need to use trade taxes less and hence be more likely to liberalize. It was not significant in regressions on either dependent variable (equation 3 in table 3 and equation 1 in table 5) and did not affect the sign or significance of the

<sup>111 .</sup> For example, Bermeo 1994.

Our measure of the global spread of pro-capitalist ideas, FIVEOP, has weak and inconsistent results. This measure is a poor substitute for more direct evidence about the global spread of ideas, but few alternatives exist.

<sup>113 .</sup> Feng, Kugler and Zak 2000.

REGIME variable. We also included a variable indicating whether a country was involved in a war that year or previously. 114 War is expected to make protectionism more likely and reduce the chances of trade liberalization. Its effect on tariff rates was positive but not near conventional levels of significance. Its effect on liberalization was negative, as expected, and significant in some cases. It did not alter the sign or significance of the REGIME variable, however. In addition, we employed a variable intended to show the similarity between the foreign policy interests of an LDC and the US by measuring the overlap in UN voting. 115 Such similarity should be associated with a more open economy and hence lower trade barriers. This variable had no statistically significant impact on Sachs-Warner liberalization, but it sometimes had a modestly negative impact on tariff rates. It did not materially affect the REGIME variable. Finally, we added data on inequality. 116 These data are few and of low quality (some are imputed) so results should be regarded with low confidence. But for neither dependent variable was inequality near conventional levels of significance, nor did it affect the sign or significance of the REGIME variable.

The Economic Factors. We included several obvious economic controls for trade policy. Our variable measuring country size, LOGPOP, is always significant but not as expected. Big countries tend to have higher tariff rates, as often suggested, but they tend to be more likely to liberalize, ceteris paribus. The level of economic development (GDP PC) seems to matter at times. But among the LDCs more developed countries have more restrictive trade regimes, ceteris paribus. Finally, we looked at a country's flows of direct

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<sup>114.</sup> WAR was coded from the latest Correlates of War dataset and includes all three types of war.

 $<sup>^{\</sup>rm 115}$  . Gartzke and Jo 2002.

<sup>116.</sup> Feng, Kugler and Zak 2000.

foreign investment as a percent of GNP.<sup>117</sup> For the tariff variable, these were always positive and significant, indicating that foreign investment flows earlier may have built up a constituency for continued protection of the host market.

We looked at a number of other economic factors that might have some relationship to trade policy. First, we controlled for countries with heavy dependence on oil and fuel exports. Unfortunately, given the use of country fixed effects and that the oil-producers change little over time, we were unable to address this point. Second, we included a measure of a country's exchange rate regime measured along a continuum of fixed to floating. This variable had no statistically significant relationship to tariff rates, a mildly negative impact on trade liberalization à la Sachs-Warner; its inclusion did not affect the sign or significance of REGIME. Finally, we also looked at (lagged) yearly changes in GNP per capita, GDP, exchange rates and inflation. These variables had no statistically significant relationship to tariff rates, sometimes a positive impact on the Sachs-Warner measure of trade liberalization, and no effect on the sign or significance of REGIME.

In sum, these results support our claim that the democratization is one force that leads to a more open trade regime. This finding was robust to three different measures of regime type; it also withstands a variety of robustness checks. Moreover, this influence was never negligible, even when controlling for many alternative explanations.

Conventional wisdom about economic reform depending on crises and external pressures is not supported here, while the impact of regime change appears more important than thought.

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<sup>&</sup>lt;sup>117</sup>. Global Development Finance 2000.

Levy-Yeyati and Sturzenegger 2002.

<sup>119 .</sup> Data from World Bank, World Development Indicators and Penn World tables.

## **V. Conclusions:**

Why countries that long pursued protectionism should suddenly liberalize their trade regimes is an important and underexplored question. While economists have long preached the benefits of free trade, developing countries have only recently begun to heed their advice. Indeed much of the extant literature argues that economic reforms, like trade liberalization, rarely occur. However, many developing countries began liberalizing trade in the mid 1980s, and the move to free trade since has been remarkable.

Our argument is that a change in the political regime toward more democracy should be followed by a move to liberalize trade. Autocratic political leaders in LDCs can cater to the capital-rich segment of the population because the "selectorate" that picks them is limited. Trade barriers are then imposed on capital-intensive imports so that wealth is redistributed from those who are not part of the selectorate to those who are. Democratization, which implies an increase in the selectorate's size, changes the calculations of political leaders about the optimal level of trade barriers; it induces the adoption of trade policies that better promote the welfare of consumers/voters at large, which implies trade liberalization in this context. While protectionist interest groups remain important in developing democracies, other groups preferring lower trade barriers become more important for political leaders since they are now part of the selectorate upon which leaders can depend for their political survival.

We think that future research should try to disaggregate regime type further. Our data suggest that autocracies may vary in the likelihood of choosing economic reform, with single party and military controlled systems being more likely than personalistic ones. The two former types of regimes rely on a broader selectorate and are not as able to

use protectionism to garner political support. The likelihood of reform may also depend on the type of democratic institutions in place. Examining the impact of different political institutions on trade policy is an unexplored area of great potential interest.

We view democratization as exogenous. However, trade policy could exert an impact on political regimes. Although we lag all of our independent variables (from one to three periods) and include tests for endogeneity, this could be a much longer-term effect. Most models predicting regime type, however, do not include trade policy or even the extent of openness of the economy as a predictor. Moreover, we found no evidence of such an impact in our data; trade policy did not predict democracy. Even after instrumenting for democracy, regime type still played an important role in explaining the move to free trade. Democracies choose lower levels of trade barriers, even when holding many other factors constant.

Our results cast some doubt on the leading alternative theories of trade policy reform. Although much discussion of the role of economic crises, external pressures and the role of ideas on economic reform exists, little systematic research has done. To the extent that our measures adequately control for these factors, they did not seem to play a consistent role in explaining trade policy. Neither crises, nor international pressures, nor new leaders seem to account very well for the move to free trade. We concur with Jenkins who points out that "the existence of a crisis is no guarantee that a government will respond, and more importantly, that it will be successful in convincing interest groups that 'something must be done.'" Moreover, international institutions which were supposed to foster trade liberalization, such as the GATT/WTO and the IMF, do not

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<sup>&</sup>lt;sup>120</sup>. For example Przeworski et al. 2000; Barro 1997.

<sup>&</sup>lt;sup>121</sup> . Jenkins 1999, 29.

appear to be playing that role. As Rose has argued, the GATT does not seem to promote a more liberal trade policy for most countries; and as Ozden and Reinhardt show, the GSP in the WTO has slowed down liberalization in LDCs. Our research certainly does not rule out any of these factors, especially the spread of neoliberal ideas. Our measures of the rise of new ideas are very crude, and better research into this topic requires more and different data.

Our argument does not explain all cases or all pressures for liberalization. No single variable can possibly account for the dramatic change in economic policies in the LDCs during the past twenty years. Changes in domestic political institutions, however, have been an underappreciated factor. Hence we highlight their role. Additionally, we cannot explain all countries. India, for instance, remains a puzzle; long a democracy, the government has only recently chosen to lower trade barriers. Although a large number of cases seem to fit our claim, as discussed in section two, no single variable can possibly account for this move to free trade in all countries.

In general, more democratic countries are more willing to open their markets to the international economy, even when holding many other factors constant.

Democratization thus may have promoted the globalization of the past two decades. As we show vis-à-vis trade and as Quinn shows relative to capital controls, democracies in

the late twentieth century may have been more likely to join the global economy by eliminating the barriers protecting their markets. Democratization may have fostered the increasing globalization of the past two decades. Whether the new democracies in the

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<sup>122 .</sup> Rose 2002a, b; Ozden and Reinhardt 2002; Subramanian and Wei 2003.

<sup>123 .</sup> Quinn 2001.

developing world will survive and thrive in a globalized world is separate issue that should command future research.

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**TABLE 1: SUMMARY STATISTICS** 

Summary Statistics					
Variable	Obs	Mean	Std. Dev.	Min.	Max.
TARIFF	907	20.54	15.06	0	102.2
SW OPEN	2790	0.31	0.46	0	1
DATE	5370	1984	8.66	1970	1999
REGIME	3367	-2.07	6.95	-10	10
ACLP	4187	0.30	0.46	0	1
DICTATOR	4213	4.74	2.81	1	8
SP	5370	0.20	0.40	0	1
MILITARY	5370	0.11	0.32	0	1
PERSONAL	5370	0.17	0.37	0	1
GDP PC	3691	2885.51	4645.60	0	44164.5
LN POP	4880	15.11	2.00	10.57	20.95
EC CRISIS	3403	0.06	0.24	0	1
BPC	2636	0.59	0.49	0	1
OFFICE	3009	8.43	8.12	0	44
IMF	4008	0.15	0.35	0	1
GATT	5034	0.41	0.49	0	1
FDI	3076	1.90	5.29	-27.24	184.56
US HEG	5370	0.27	0.02	0.24	0.31
AV TARIFF	5370	14.91	11.53	0	30.52
AV OPEN	5370	0.31	0.20	0.14	0.67
FIVE OPEN	5012	12.03	0.99	10.2	13.2

**TABLE 2: TARIFF RATES** 

Dependent	Tariff	newtar				
Variable:	Rates					
	(1)	(2)	(3)	(4)	(5)	(6)
POLITY	-0.264***	-0.247**	-0.262***	-0.262***	-0.251***	-0.249***
	(0.096)	(0.096)	(0.101)	(0.096)	(0.096)	(0.096)
GDP PC	0.000**	0.001***	0.001***	0.000**	0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
LN POP	36.24***	32.50***	34.99***	36.37***	36.61***	36.72***
	(5.106)	(5.433)	(6.222)	(5.162)	(4.976)	(5.084)
EC CRISIS		-0.777				
		(0.670)				
BPC			0.709			
			(0.672)			
OFFICE						
IMF				0.248		
				(0.375)		
GATT						
US HEG					21.515	
					(15.769)	
FIVE OPEN						-1.646
						(1.523)
Constant	2,781***	2,762***	2,821***	2,798***	2,830***	2,581***
	(203.9)	(194.9)	(239.2)	(209.3)	(195.7)	(304.3)
Obs	774	765	738	765	774	734
Countries	101	100	98	101	101	101
R2	0.79	0.79	0.79	0.79	0.79	0.80
Wald chi2	3724	4996	1312	1454	635	767
Prob > chi2	0.00	0.00	0.00	0.00	0.00	0.00

OLS with panel corrected standard errors in parentheses. Country fixed effects, AR1 correction, time trend included, but not shown. All RHS variables lagged one period. Two tailed tests: \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

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**TABLE 3: TARIFF RATES** 

Dependent	Tariff	newtar				
Variable:	Rates					
	(1)	(2)	(3)	(4)	(5)	(6)
REGIME	-0.328***	-0.317***	-0.331***			-0.302***
	(0.108)	(0.108)	(0.110)			(0.117)
ACLP				-1.402		
				(1.374)		
DICTATOR					-0.886***	
					(0.245)	
SP						-4.629**
						(2.020)
MILITARY						1.740
						(1.571)
LN POP	33.97***	35.02***	31.75***	25.60***	26.19***	32.37***
-	(6.543)	(6.447)	(7.255)	(7.189)	(6.953)	(7.120)
GDP PC	0.001**	0.001***	0.002***	0.002***	0.002***	0.002***
	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.001)
EC CRISIS	-0.638	-0.469	-0.688	-0.657	-0.660	-0.703
	(0.676)	(0.688)	(0.755)	(0.710)	(0.719)	(0.744)
BPC	0.821	0.775	0.434	0.660	0.566	0.436
	(0.717)	(0.719)	(0.710)	(0.702)	(0.672)	(0.704)
IMF	0.139	0.140	0.141	-0.016	-0.155	0.131
	(0.372)	(0.372)	(0.393)	(0.402)	(0.392)	(0.388)
OFFICE	-0.180***	-0.183***	-0.199***	-0.133**	-0.207***	-0.179***
	(0.057)	(0.057)	(0.061)	(0.061)	(0.060)	(0.061)
AV TARIFF	2.131*		0.128***	0.130***	0.110**	0.123***
	(1.140)		(0.047)	(0.047)	(0.047)	(0.047)
GATT		2.275**	2.395**	2.549**	2.086*	2.424**
		(1.159)	(1.174)	(1.096)	(1.096)	(1.163)
FDI			0.418**	0.416**	0.404**	0.400**
			(0.175)	(0.174)	(0.169)	(0.173)
FIVE OPEN		-1.566				
		(1.585)				
US HEG		22.537				
		(18.177)				
Constant	2,819***	2,665***	2,902***	2,943***	2,891***	3,007***
	(258.5)	(338.3)	(315.6)	(286.9)	(279.3)	(306.9)
Obs	694	694	649	681	681	649
country	97	97	89	98	98	89
R2	0.80	0.80	0.80	0.79	0.80	0.80
Wald chi2	25255	791	4255	1829	654	783
Prob > chi2	0.00	0.00	0.00	0.00	0.00	0.00

OLS with panel corrected standard errors in parentheses. Country fixed effects, AR1 correction, time trend included but not shown. All RHS variables lagged one period. Two-tailed tests: \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.
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**TABLE 4: TARIFF RATES** 

Dependent	Tariff Rates	newtar		
Variable:				
		(1)	(2)	(3)
REGIME L1	-0.331***			-0.071^^^
	(0.110)			(0.158)
REGIME L2		-0.339***		-0.297^^^
		(0.106)		(0.186)
REGIME L3			-0.191**	-0.097^^^
			(0.083)	(0.136)
LN POP	31.75***	28.396***	27.037***	34.719***
	(7.255)	(6.924)	(6.901)	(5.945)
GDP PC	0.002***	0.002***	0.002***	0.002***
	(0.001)	(0.001)	(0.001)	(0.000)
EC CRISIS	-0.688	-0.652	-0.744	-0.859
	(0.755)	(0.735)	(0.759)	(0.792)
BPC	0.434	0.773	0.673	0.511
	(0.710)	(0.740)	(0.709)	(0.732)
IMF	0.141	-0.136	-0.155	-0.115
	(0.393)	(0.393)	(0.403)	(0.374)
OFFICE	-0.199***	-0.244***	-0.158**	-0.267***
	(0.061)	(0.066)	(0.062)	(0.067)
AV TARIFF	0.128***	0.122***	0.160***	0.119**
	(0.047)	(0.046)	(0.045)	(0.047)
GATT	2.395**	2.791**	2.992***	2.720**
	(1.174)	(1.148)	(1.096)	(1.138)
FDI	0.418**	0.383**	0.431**	0.396**
	(0.175)	(0.174)	(0.176)	(0.179)
Constant	2,902***	2,936***	2,928***	2,987***
	(315.6)	(283.0)	(271.7)	(238.3)
Obs	649	646	644	626
countries	89	90	90	89
R2	0.80	0.80	0.79	0.81
Wald chi2	4255	5463	1384	740
Prob > chi2	0.00	0.00	0.00	0.00

OLS with panel corrected standard errors in parentheses. Country fixed effects, AR1 correction, time trend included but not shown. All RHS variables lagged one period, except in equations 2 and 3 where REGIME is lagged two and three periods. Two-tailed tests: \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%. ^^^ jointly significant at 1%.

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**TABLE 5: SACHS-WARNER TRADE LIBERALIZATION** 

Dependent	Sachs-Warner	dopen wacz2		
Variable:	Openness			
	(1)	(2)	(3)	(4)
REGIME	0.332***	0.332***	0.367***	0.521***
	(0.104)	(0.118)	(0.129)	(0.147)
LN POP	43.425***	49.808***	69.062***	29.559**
	(8.802)	(10.545)	(15.040)	(14.293)
GDP PC	-0.000	-0.001	-0.000	-0.004*
	(0.001)	(0.002)	(0.002)	(0.003)
EC CRISIS	-0.652	-0.496	-0.531	-1.563
	(0.987)	(1.050)	(1.108)	(1.423)
BPC	-0.271	-0.395	-0.019	-0.505
	(0.653)	(0.715)	(0.775)	(0.957)
IMF		-0.465	-0.780	-0.197
		(0.614)	(0.641)	(0.773)
OFFICE		-0.078	-0.083	-0.050
		(0.105)	(0.102)	(0.095)
GATT		-4.771***	-4.900***	-5.111***
		(1.675)	(1.650)	(1.746)
US HEG			-55.151**	-18.073
			(24.594)	(28.659)
AV OPEN				39.132***
				(14.251)
FDI				-0.038
				(0.408)
FIVE OPEN			-2.632	
			(1.826)	
Obs	982	872	872	829
LR Chi2	955.05	861.66	868.88	833.69
Prob > chi2	0.00	0.00	0.00	0.00
Log likelihood	-43.85	-37.93	-34.33	-27.74

Conditional logit with country fixed effects & decade fixed effects. A natural spline function with three knots was estimated as was the time since last opening occurred; all these were used to correct for serial dependence. All RHS variables are lagged one period. Two-tailed tests with asymptotic z-statistics in parentheses: \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

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TABLE 5: SACHS-WARNER TRADE LIBERALIZATION

	Sachs-Warner			
Dependent Variable:		dopen_wacz2		
variable.	Openness	(2)	(2)	(4)
DECIME	(1) 0.523***	(2)	(3)	(4) 0.558***
REGIME				
7.01 D	(0.143)	5.820***		(0.156)
ACLP				
D.T.O.T.I.T.O.D.		(1.579)	0.064111	
DICTATOR			0.864***	
			(0.259)	
SP				-11.271
				(174)
MILITARY				2.268
				(2.030)
LN POP	27.296**	31.539**	25.071**	31.671**
	(11.563)	(13.183)	(12.465)	(12.759)
GDP PC	-0.001	-0.002	-0.002	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)
EC CRISIS	-1.639	-2.847**	-2.518**	-1.386
	(1.411)	(1.339)	(1.265)	(1.371)
BPC	-0.309	-0.955	-0.974	-0.123
	(0.905)	(0.988)	(0.966)	(0.891)
IMF	-0.016	-0.806	-0.732	0.090
	(0.740)	(0.724)	(0.698)	(0.750)
OFFICE	-0.062	-0.082	-0.068	-0.088
	(0.103)	(0.079)	(0.076)	(0.139)
GATT	-5.060***	-6.950***	-6.623***	-5.246***
	(1.661)	(1.948)	(1.888)	(1.731)
AV OPEN	38.688***	41.083***	40.566***	35.492***
	(12.093)	(12.324)	(12.381)	(12.237)
	, ,		,	,
Obs	872	913	913	872
LR Chi2	879.09	930.50	926.93	880.48
Prob > chi2	0.00	0.00	0.00	0.00
Log likelihood	-29.22	-29.84	-31.63	-28.52

Conditional logit with country fixed effects & decade fixed effects. A natural spline function with three knots was estimated, as was the time since last opening occurred; all these were used to correct for serial dependence. All RHS variables are lagged one period. Two-tailed tests with asymptotic z-statistics in parentheses: \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

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TABLE 6: SACHS WARNER

Dependent	Sachs-Warner	dopen_wacz2		
Variable:	Openness			
	(1)	(2)	(3)	(4)
REGIME L1	0.523***			0.632***
	(0.143)			(0.193)
REGIME L2		0.228		-0.048^^^
		(0.139)		(0.165)
REGIME L3			0.097	0.073^^^
			(0.102)	(0.112)
LN POP	27.296**	20.843*	21.652*	17.953
	(11.563)	(11.989)	(11.292)	(14.018)
GDP PC	-0.001	-0.001	-0.001	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)
EC CRISIS	-1.639	-1.432	-1.166	-1.443
	(1.411)	(1.297)	(1.225)	(1.453)
BPC	-0.309	-0.700	-0.496	-0.693
	(0.905)	(0.884)	(0.853)	(1.008)
IMF	-0.016	-0.691	-0.880	-0.166
	(0.740)	(0.672)	(0.685)	(0.815)
OFFICE	-0.062	-0.046	-0.065	-0.050
	(0.103)	(0.076)	(0.074)	(0.097)
GATT	-5.060***	-4.779***	-4.775***	-4.834***
	(1.661)	(1.644)	(1.640)	(1.635)
AV OPEN	38.688***	32.388***	28.670***	43.892***
	(12.093)	(10.447)	(9.713)	(14.136)
Obs	872	873	873	842
LR Chi2	879.09	870.19	866.85	835.65
Prob > chi2	0.00	0.00	0.00	0.00
Log likelihood	-29.22	-33.92	-35.19	-27.02

Conditional logit with country fixed effects & decade fixed effects. A natural spline function with three knots was estimated as was the time since last opening occurred; all these were used to correct for serial dependence. All RHS variables are lagged one period, except REGIME in equations 2 and which is lagged two and three periods, respectively. Two-tailed tests with asymptotic z-statistics in parentheses: \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%; ^^^ jointly significant at 1%.

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TABLE 7: INSTRUMENTAL VARIABLE: TARIFF RATES

Dependent Variable:	Statutory Tariff Rates
REGIME	-3.606**
	(1.698)
LN POP	9.644
	(19.232)
GDP PC	-0.000
	(0.001)
EC CRISIS	-0.027
	(2.210)
BPC	1.884
	(1.927)
IMF	0.044
	(1.438)
OFFICE	-1.383**
	(0.553)
GATT	-2.073
	(3.641)
AV TARIFF	0.404**
	(0.183)
Constant	-94.176
	(1,675)
Observations	466
R2	0.85
Wald chi2	1862.99
Prob > chi2	0.00

Two-stage least squares (xtivreg) estimates with country fixed effects, time trend, all variables lagged one period. Instruments for REGIME are percent competing secondary school and average age of political parties in system, lagged. Uncentered R2 reported. Asymptotic z statistics in parentheses; two tailed tests:\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%. 9/28/03 newtarIV