Democracy and Trade Policy in Developing Countries: 
Particularism and Domestic Politics with a Case Study of India¹

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Abstract: What explains the variation in trade policy among democracies in developing countries? Why have some liberalized trade more than others? We analyze the impact of political particularism – defined as the degree of party discipline and the incentives for politicians to cultivate a personal vote – on trade protection. We present theoretical results from a model of particularism and its effects on tariffs; we present quantitative evidence to test the model; and then we develop a case study of India to illuminate it. Our model analyzes how an increase in particularism (that is, a shift from a party-centered to a more candidate-centered system) interacts with the degree of inter-industry occupational mobility of labor and the asset-specificity of industries to influence trade policies in developing democracies. Our model suggests that an increase in particularism induces leaders from the ruling and opposition parties to shift trade policy in equilibrium to the median voter’s optimal preference, who in a developing society is a worker; and this means a reduction in trade barriers when labor mobility is high. Our data strongly support this conclusion. Our case study of India shows how the dynamics of a party-centered system operate to maintain higher trade barriers.

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The last three decades of the twentieth century witnessed two global trends in the developing world. The first was the rise of new democratic regimes in developing countries which was defined by Huntington (1991) as the “third wave of democratization.” The other global trend was the “rush to free trade” in the developing countries that gathered momentum from the mid-1980s. Since trade policy affects economic growth and thus the welfare of citizens in the developing world, understanding the determinants of trade reform in developing countries has become an important area of research (Tornell 1998; Bhagwati and Srinivasan 1999; Rodrik 1999; Milner and Kubota 2005; Ozden and Reinhardt 2005). More specifically, the concurrent liberalization of trade policy and the movement toward democracy in many developing states has encouraged exploration of the link between democracy and trade policy in developing and developed countries (e.g. Milner and Kubota 2005; Frye and Mansfield 2004; Eichengreen and Leblang 2008; Kono 2006; Tavares 2008).

The emergence of democracy and trade liberalization in developing countries has led some researchers and policy-makers to infer that democracy and free-trade may be mutually compatible (Thacker 2007; Doyle 2009). Recent studies find that trade protection in democracies is lower than autocracies in developing states and use this finding to infer that democratization reduces trade barriers in the developing world (Milner and Kubota 2005; Frye and Mansfield 2004; Tavares 2008). While we believe that democratization leads to trade reforms in developing countries, a closer look at trade barriers across democracies in the developing world shows that the relationship between democracy and trade protection is more nuanced.

To see this, consider the map in figure 1. This figure classifies the average import duty coverage ratio (in percentage terms) into four categories ranging from low to high protection for all developing states in our data that are observed as democracies, according to the Przeworski et al
In contrast to the vast literature on trade politics in advanced industrial democracies, only a handful of papers attempt to explain why trade barriers vary across democracies in the developing world. These papers primarily focus on how government partisanship and factor endowments affect tariffs in developing countries (e.g. Dutt and Mitra 2005, 2006; Olpner 2007). These variables may matter for trade policy in developing states and we account for them in our empirical analysis. In this paper, we focus on how political particularism – defined as the degree of party discipline and the incentives for politicians to cultivate a personal vote – affects trade protection in developing country democracies. We answer two related questions: First, how does an increase in political particularism, i.e. a shift to a more candidate-centered (and thus weak party) system, affect strategic interaction between politicians and the two productive groups in society – labor and capital – in the context of trade policy? Second, under what conditions does particularism lead (if at all) to a reduction of tariffs in developing democracies?

Two reasons explain why we focus on studying the relationship between political particularism and trade barriers in democracies across the developing world. First, a number of studies have shown that political particularism plays a critical role in influencing trade barriers in advanced industrial democracies (e.g. McGillivray 1997, 2004; Hankla 2006; Park and Jensen 2007). A key objective of our paper is to build on this research and assess whether and how particularism affects both trade politics and trade policy outcomes in developing democracies. IN

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2 Przeworski et al’s (2000) criteria for a democracy are as follows: (i) the chief executive and legislature must be directly elected; (ii) there must be more than one party in the legislature and (iii) incumbents must allow a lawful alternation of office if defeated in elections.
addition, many of these studies argue the opposite of what we do: they claim that party-centered systems are less protectionist than systems with weak parties. The central claim they advance is that in weak party systems leaders have to buy party votes in the legislature through grants of protections to favored industries. We propose an alternative theory that suggests why candidate-led systems are less vulnerable to special interest pressures. The contrast between politics in developed and developing democracies is interesting. Second, a growing body of research in comparative politics suggests that intra-party dynamics, including the extent of political particularism and thus party unity, may be especially important for the process of economic reform and fiscal policy outcomes in developing country democracies (Haggard and Kauffman 1995; Shugart and Haggard 1997; Eaton 2002; Hallerberg and Marier 2004; Hicken and Simmons 2008). Yet, to the best of our knowledge, we do not know of any research that systematically analyzes how political dynamics generated by different levels of particularism in developing democracies may affect trade barriers. Thus, the studies mentioned motivate us to study the potential causal link between particularism, factor mobility and trade protection.

In our book manuscript, we present a full-fledged game-theoretic model that addresses these two questions. The model analyzes how the extent of political particularism shapes strategic interaction between the four sets of players – labor, capital (the owners), and leaders from the ruling and the opposition political parties – and subsequently affects trade protection in developing democracies. It incorporates three key features of political particularism and competition in developing democracies that have been highlighted: the shift from a party-centered (low particularism) to a candidate-centered system (high particularism), the lack (or existence) of intra-party unity in candidate-centered (party-centered) democracies where political particularism is high (low), and finally the presence of electoral competition. In addition, the model introduces factor mobility by focusing on the degree of inter-industry occupational mobility of workers and the
asset-specificity of the industries run by the owners. The mobility of labor and capital indicate the preferences of the two groups toward trade; high mobility makes both groups more favorable to trade liberalization. We thus link the demand for protection with the supply of it provided by political institutions.

Our model suggests that an increase in particularism—which captures the shift to a candidate-centered system—induces leaders from the ruling and opposition parties to shift trade policy (tariffs and NTBs) in equilibrium to the median voter’s optimal preference. Ruling and opposition political party leaders in candidate-centered systems where the degree of political particularism is high will propose trade barriers that favor the trade policy interests of the median voter, which in a developing society is, by definition, a worker. The shift in the proposed level of trade barriers to the median voter’s optimal preference leads to a decline in tariffs and NTBs if the degree of the inter-industry occupational mobility of workers is high or increases. It also dissuades the owners of capital from providing contributions to political parties to increase protection. In contrast, when political particularism decreases and the system becomes more party-centered, leaders from the ruling and opposition parties have incentives to obtain contributions from the owners of industries, who favor trade protection. This is because contributions provide a vital financial resource to maintain and strengthen intra-party unity for leaders in such systems. The owners rationally respond to the party leaders’ demand for contributions by providing contributions and lobbying for more trade protection; the politicians, in turn, strategically respond to the contributions offered by the owners by maintaining higher trade barriers.

Results from a comprehensive time-series-cross-sectional (TSCS) dataset provide support for the key predictions from our model. Additionally, we briefly discuss the politics of trade protection in India during the last 2 to 3 decades. The India case study supports our causal claim that politicians in party-centered democracies are susceptible to protectionist lobbying by the
owners of asset-specific industries and that these democracies are typically associated with higher trade barriers.

This paper has four sections below. We first present the theoretical results from our model that explains how political particularism affects trade protection in developing democracies. Then we present quantitative data to examine the key theoretical result. Next is a case study of India to illuminate the political logic of how party-centered systems (i.e., systems with low levels of particularism) affect trade policy. We conclude with observations on the political economy of trade in developing countries and the world trading system.

Theoretical Claims about Particularism and Trade Protection

We are interested in analyzing how an increase in the level of political particularism, that is the extent to which a democracy in the developing world is candidate-centered, affects trade barriers. To understand the link between particularism and trade barriers, we present a game-theoretic model of trade politics in developing country democracies in detail in our book manuscript, “Globalization, Democracy and Trade Policy in Developing States.” Here we report its main results. We briefly describe below the model’s basic structure, which includes a description of the players in the model, their preferences and strategies, and the model’s main political features. We summarize its main comparative static results that provide concrete predictions on how and when political particularism combines with particular labor-market conditions to affect trade policy in developing democracies.

To start with, the model analyzes how strategic interaction during elections between the following key actors in society – labor (i.e., workers) and capital (owners of industries) whose trade policy preferences are determined by their relative factor mobility – and the two political parties, the opposition and the ruling parties, affect tariffs and campaign contributions. The

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3 The complete formal details of the model are presented in the appendix of chapter 5 in the book.
model that we construct builds on but also substantially expands Feenstra (1984) and Grossman and Helpman’s (1994, 2002) work.⁴ Our model examines how political parties rationally design trade policies in response to the (i) median voter’s (who is a worker in a developing country)⁵ optimal trade policy preference and the (ii) campaign contributions provided by capital, particularly the owners of more asset-specific industries who favor trade protection.

Following recent studies which suggest that the inter-industry occupational mobility of workers critically influences their attitudes toward trade openness in developing countries, the trade policy preference of labor, including the median voter, is given by the extent to which they are occupationally mobile across industries in the economy.⁶ The trade policy preferences of capital owners, as suggested by Alt et al (1998) and Hiscox (1999), are determined by the degree of asset-specificity of their respective industry. We assume that workers who are more (less) occupationally mobile tend to favor (oppose) trade liberalization as they benefit (lose) from openness.⁷ In contrast, the owners of asset-specific industries are more likely to not only support higher trade barriers but also have incentives to lobby politicians for more trade protection.⁸ The trade policy preferences of labor and the owners of industries are common knowledge to all the players, including the political parties. We assume that the political parties are primarily interested in maximizing their probability of winning the election and retaining office.

Our model also incorporates four key political features that help us to assess how political particularism affects trade protection in developing country democracies. First, we incorporate

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⁴ A more general objective of our model is to “marry” the Feenstra (2004) and the Grossman and Helpman (2002) approach into one unified model to study how the relative factor mobility (where factor mobility is conceptualized as a continuous variable) of labor and capital affects the trade policy decision of parties in new democratic regimes.

⁵ Since workers constitute the vast majority of the electorate in developing countries, the “median voter” is likely to be a worker rather than an owner of industries. This is also assumed in formal models of trade politics in developing countries; see Dutt and Mitra 2002, 2005; Rama and Tabellini 1998.


⁷ Facchini and Willmann 2001; Rama 1994; Matschke 2004; Cameron et al 2007

elections in the model since they are central to all democracies. In the election, the median voter and the workers’ – who constitute the electoral majority – strategy is to either re-elect or vote the incumbent out of office. The voters attempt to influence the parties’ trade policies by either re-electing the incumbent or voting the opposition into office. Although the owners of industries can also vote, their main strategy is to provide contributions to parties and collectively lobby them to influence the level of trade protection; their incentives to do so is driven by the degree of asset-specificity of their industries. The parties’ strategy is to optimally set tariff policy so as to not only maximize their likelihood of winning the election but to also extract contributions from the owners.

Second, scholars in comparative politics conceptualize the degree of political particularism as a continuum that varies from party-centered (low political particularism) to candidate-centered systems (high political particularism). We formalize this continuum in by introducing a parameter which shows that an increase in particularism means a shift from a party-centered (low particularism) to a candidate-centered system (high particularism). Our model incorporates the idea that intra-party unity is low or absent in candidate-centered systems, but is higher in party-centered democracies. Fourth, it formalizes the well known claim that the incentives for political candidates to cultivate their personal vote rather than promote the party’s agenda increase when particularism increases (Carey and Shugart 1995, 1998; Hicken 2009).

Our model provides three main results. First, as political particularism increases and thus intra-party unity declines, leaders from the ruling and opposition parties can no longer rely on their respective rank-and-file party members to mobilize electoral support. This is because an increase in particularism creates incentives for individual rank-and-file party members to cultivate their

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9 Since developing countries are labor-abundant, we assume – as done in existing studies (Milner and Kubota 2005; Dutt and Mitra 2002) – that workers constitute the electoral majority in developing states.

10 For example, in their “personalist vote index,” Carey and Shugart (1995) operationalize political particularism as ranging from party-centered to candidate-centered systems. This particular continuum of political particularism is also adopted by Wallack et al (2003) and other scholars including Hallerberg and Marier 2004; Hicken and Simmons 2008; Garland and Biglaiser 2009.
personal vote rather than mobilize support for their party’s trade policy position. Since party
leaders cannot rely on their party members to garner support to win the elections, they have
incentives to set the equilibrium level of trade barriers at the median voter’s optimal trade policy
preference. Shifting the equilibrium trade policy proposal toward the median voter’s optimal
choice maximizes the party leaders’ vote share and thus likelihood of winning the election.

Anecdotal evidence provides preliminary empirical support for the causal claims proposed
above. For instance, the result described above reflects Schaffer’s (2004) claim who suggests that
even though rank and file party members have incentives to cater to the interests of narrow
constituencies in developing democracies that are candidate-centered, party leaders in these
democracies tend to seek the median voter’s support to enhance their electoral prospects.\textsuperscript{11} In fact,
studies of the politics of economic reform in candidate-centered developing democracies like
Brazil, Philippines and Taiwan, for example, claim that the executive in these countries often
directly sought the support from voters’ for their economic reform proposals.\textsuperscript{12} Weyland (2002:
134), for instance, emphasizes that successive incumbents in a candidate-centered system like
Brazil (where particularism is substantial) “sought popular support and used populist tactics (to)
facilitate the launching of profound structural reforms that dismantled the inward-looking, state-
interventionist model, and gave market-forces free-rein”.

What is the effect of locating the equilibrium tariff policy at the median voter’s optimal
tariff policy preference in candidate-centered systems characterized by high levels of particularism?
First, it leads to a pro-labor bias in trade policy since the median voter in developing country
democracies is a worker. It also leads to a situation where the ruling party leaders’ decision to

\textsuperscript{11} In fact, studies by Schaffer 2003 and Speck and Abramo 2001 reveal that party leaders in candidate-
centered developing democracies like Brazil and the Philippines make direct appeals to the median voter in the electorate.

\textsuperscript{12} For the Brazil case see Ames 2002; Samuels 1999; Hagopian 2008; Hagopian et al 2009. For the
Philippines example, see Eaton 2002; Casper 1995 and Montinola 1999. And, finally for Taiwan see Sheng
decrease or increase trade barriers is critically determined by the degree of the inter-industry occupational mobility of workers because, as mentioned above, the median voter is a worker. A more occupationally mobile median voter is more receptive to trade liberalization. Consequently, party leaders in democracies with higher levels of particularism optimally set trade policy according to the preferences of the median voter and will rationally choose to decrease trade barriers when the median voter is more occupationally mobile. Hence, our first testable hypothesis is

**Hypothesis 1:** An increase in the level of political particularism in developing democracies—i.e. when the party system is more candidate-centered—has a negative effect on tariffs as the degree of the inter-industry occupational mobility of workers increases.

Building on this logic, our second result predicts that lobbying and contributions for trade protection from the capital owners decrease when particularism increases. The intuition underlying this result is two-fold. First, an increase in particularism implies low intra-party unity which forces party leaders to appeal to the median voter; this means there will be less need for them to obtain the political support of the owners of industries who favor trade protection. In fact, as party leaders rely more on the median voter to obtain electoral support, they will be increasingly reluctant to associate themselves with “special interests,” such as capital owners.

In equilibrium, the owners will observe that the lack of intra-party unity induces party leaders to favor the interests of labor by shifting trade policy toward the median voter’s optimal choice. As a result, capital owners will learn in candidate-centered systems that their political leverage is weak and that they may fail to elicit a policy response after lobbying the candidates. This dissuades them from providing contributions to the political candidates to influence trade policy in such systems.

Second, party leaders in democracies with higher levels of particularism cannot credibly commit themselves *ex ante* to pursue the trade policy interests of capital owners because of their political incentive to favor the median voter. Since the incumbent party leaders cannot credibly
commit, the capital owners have no incentives to lobby the candidates. This commitment problem also generates uncertainty *ex ante* among the owners about their ability to influence trade policy *ex post* even after providing contributions to the political candidates. This makes it risky *ex ante* for the owners to offer contributions to the candidates. Thus the capital owners of asset-specific industries will rationally respond to the commitment problem by reducing their lobbying and the contributions they provide to the candidates in systems that are more candidate-centered.

What happens to the politics of trade policy and the optimal level of contributions when particularism decreases and the polity shifts to a more party-centered system? Comparative statics reveal that a decline in particularism and the shift to a more party-centered system leads to the following two results:

**Corollary to Hypothesis 1:** (a) Party-centered systems encourage lobbying for protection by capital owners who favor more protection from import-competition. As a result, campaign contributions provided by capital owners increase in party-centered systems.

(b) When political particularism decreases—that is, the system becomes more party-centered—the trade policy decisions of party leaders are biased toward the preferences of capital owners who favor trade protection. This generates higher trade barriers in party-centered democracies.

The intuition here suggests that even when political particularism decreases in developing democracies, party leaders may be uncertain *ex ante* about the durability of their respective party’s unity. As result, when designing trade policies, the strategic behavior of party leaders in party-centered systems is influenced by their objective to maintain party unity. Unlike candidate-centered systems, strengthening intra-party unity in systems with low political particularism is a critical priority since party leaders rely on party unity to implement economic policies and mobilize electoral support (Eaton 2002; Mainwaring and Scully 1995; Boylan 1999). Sustaining intra-party

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13 This finding from the model is not new. Indeed, recent research on party systems in emerging and established democracies in the developing world reveals that party leaders in these countries are often concerned about the potential for intra-party fractionalization and defections from party members even when prevailing level of party cohesion/unity is high. For this claim, see Kitschelt 2003; Kitschelt et al 2003 and Lomax 1995.
unity allows the ruling party to credibly compete against the opposition. Hence, party leaders attempt to exert more control of the political behavior of party members. They do so not by using coercion but by buying the loyalty of individual party members by providing them with side-payments.¹⁴

To finance these side-payments, party leaders need to successfully solicit and obtain contributions from capital owners. The political parties can successfully extract contributions from the owners only if they can credibly commit themselves \textit{ex ante} to implement policies that are compatible with the trade policy preferences of the owners of industries. Therefore, to make their commitment credible, party leaders in systems with low levels of particularism optimally design trade policies such that it weighs the trade policy preferences of the owners more than the workers’ preferences. In other words, when particularism decreases, party leaders in equilibrium will rationally propose policy that is biased toward the preferences of capital.

First, this bias sends a credible signal of their promise to favor the owners’ trade policy interests when implementing trade policy. Second, it induces the owners in equilibrium to invest more effort toward lobbying for protection and provide more contributions to the candidates, as posited in the second part of Proposition 2. Since party leaders need a constant supply of patronage to ensure intraparty unity in party-centered systems, they \textit{politically value} the contributions offered by capital owners. Consequently, in equilibrium, they will accept larger amounts of contributions. Third, the parties will rationally respond to the contributions they receive from the owners by setting trade policy so it is compatible with the protectionist policy preferences of these owners. This implies that the incumbent in party-centered democracies will increase and/or maintain higher tariffs. We turn below to statistically evaluate the prediction in hypothesis 1 and the claim about trade barriers in party-centered systems in part (b) of the corollary posited above.

¹⁴ Using coercion is counter-productive as it will provoke rank-and-file party members to defect or break-away from the party. This will weaken rather than strengthen intraparty unity and cohesion.
We then briefly examine the India case to assess our claim about the politics of trade protection in party-centered systems.

**Quantitative Results for Particularism and Tariffs**

*Sample, Dependent Variable and Statistical Methodology*

The theoretical arguments predict that in democracies across the developing world, political particularism interacts with inter-industry labor mobility to affect both the extent of trade protection and the contributions that the owners of industries provide to political parties. We cannot statistically evaluate our claims about the amount of contributions since cross-national data on contributions is not available for developing states. We do examine our prediction about how particularism affects trade protection.

We compiled a time-series cross-sectional (TSCS) sample of 91 developing countries that are observed as democracies – according to the Przeworski *et al* (2000) criteria (described below) – anytime during the 1972 to 2005 period. The democracies in our sample satisfy Przeworski *et al*’s (2000) criteria which are: (i) the chief executive and legislature must be directly elected; (ii) there must be more than one party in the legislature, and (iii) incumbents must allow alternation of office if defeated in elections.15 The 91 developing countries in the sample are listed in Table 1. The size and temporal range of our sample is comprehensive as it includes all democracies in the developing world observed during the 1972 to 2005 period for which data to operationalize the dependent and independent variables are available.

<<Insert Table 1 about here>>

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15 The results reported below remain robust if countries are coded as democracies when their Polity score is +6 or greater than +6 in the -10 (full autocracy) to +10 (full democracy scale). Numerous scholars in IPE such as Mansfield *et al* (2000) and Hankla (2006) have used is criterion from the Polity index to operationalize countries as democratic regimes. To conserve space, however, we focus on reporting the results that we obtain from our country-year sample of developing democracies that satisfy Przeworski *et al*’s (2000) criteria for a democracy which is described in the text.
The dependent variable of interest is tariffs. We use a measure of tariffs called the import duty coverage ratio, which is labeled as *import duties*. For each country, the import duty coverage ratio is defined as the total value of a country’s import duties divided by the total value of its imports in a given year and is expressed as a percentage. The data sources from which the *import duties* is drawn from are listed in table 2.

Because we use a TSCS dataset as well as continuous measures for the dependent variables (*import duties*), we estimate TSCS regression models with panel-corrected standard errors (PCSE’s) that are adjusted to correct for heteroskedasticity and contemporaneous correlation (Beck and Katz 1995). We include country fixed effects in each empirical model to account for country-specific heterogeneity.\(^{16}\) To correct for serial correlation, we also include the lag of the relevant dependent variable in the empirical models (Beck & Katz 1995).

**Independent and Control Variables**

Hypothesis 1 posits an interactive effect since it suggests that an increase in the degree of political particularism (a move to a more candidate-centered system) has a negative effect on tariffs and NTBs *when* the inter-industry occupational mobility of workers is high or increases. We therefore need to interact two variables to test this hypothesis: an index for political particularism for developing democracies and a continuous measure that operationalizes the inter-industry occupational mobility of workers for each democratic country-year. We describe below the operationalization of the index of political particularism. We then discuss how we operationalize our main measures of inter-industry labor mobility.

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\(^{16}\) We initially included dummies for each year in the specification, but dropped these as F-tests indicate that the temporal dummies are jointly insignificant.
We rely on the data and coding scheme developed by Wallack et al. (2003) and Johnson and Wallack (2006) to operationalize the index of political particularism which—based on Carey and Shugart’s (1995)—definition operationalizes the extent to which the political setting places a premium on cultivating a personal vote by politicians and are thus more candidate-centered. The index has three components: (i) ballot, (ii) pool, and (iii) vote. Each component is coded on a 0, 1, or 2 scale, where higher values denote greater incentives to cultivate a personal vote and therefore higher levels of particularism. More specifically, *Ballot* describes the ease with which someone could get her name on the ballot in a position that makes winning a seat likely. Closed-list systems where parties determine the candidates as well as their order on the ballot make this access difficult and are therefore scored as 0. Systems where party nominations are required for a viable candidacy, but where voters can determine the order of candidates on the party’s list, are scored as 1. Electoral systems where party nomination is not required for a successful campaign, thus making access the easiest are scored as 2.

*Pool* measures the extent to which a candidate can benefit from the votes of other candidates from her own party. The assumption is that candidates who do not expect to receive “spillover” votes from co-partisans will try harder to build personal reputations. A score of 0 means that “a vote for any candidate of a given party is counted first as a vote for the whole party list for the purpose of determining how many seats are to be allocated to the list” (Carey and Shugart 1995: 421). A score of 1 indicates that votes are pooled across candidates or factions in the same party, and systems where votes accrue only to individual candidates and where no pooling occurs at all are scored as 2. Lastly, *Vote* measures whether

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17 Following Hix (2004) and Carey and Shugart (1995), closed list systems include the following type of electoral systems: closed-list proportional representation (PR), ordered-list PR, single-member-simple-plurality (that is, first-past-the-post), and double-ballot (i.e. single-member-alternative-vote) systems.
voters cast votes primarily for candidates or parties. Systems where voters can only choose among parties are scored as 0. Systems where voters can express preferences for multiple candidates either within party lists, across parties, or through a two-stage election (i.e., primaries or run-offs) are scored as 1. Finally, systems where voters cast only one vote, either for a candidate or a party faction, are scored as 2.\footnote{Wallack et al (2003) and Johnson and Wallack (2006) disagree with Carey and Shugart regarding how to code single-member districts (SMDs). Carey and Shugart propose that SMDs are essentially closed-list systems in particularly small districts and they suggest coding Ballot as 0 in the presence of SMD systems. They also propose coding Pool as equal to zero in the case of SMD systems. They argue that in the presence of a “list” of one candidate, votes are pooled across the entire list. Wallack and her coauthors disagree with both suggestions. Instead, they code SMD systems 0 for Ballot only where the majority of districts are multimember, closed-list, and proportional. Otherwise, they assign SMD systems a score of 1 in the Ballot variable. With respect to Pool they code “single member districts as two on the Pool scale because they do not receive additional electoral support if other candidates from their party are successful in other districts”.

\footnote{Apart from calculating the average of Ballot, Pool and Vote to develop their index of particularism, Wallack et al (2003) and Johnson and Wallack (2006) have also developed an alternative index of particularism by coding the Ballot, Pool and Vote variable as the “weighted averages…for each group of legislators that is elected under a different set of rules” (Wallack et al 2003: 13). We obtain similar results if we use the particularism index described in the text or the alternative index of particularism described in this footnote. To save space, we only report here the results from using the particularism index which is described above in the text.}}

Wallack et al (2003) and Johnson and Wallack (2006) average the scores of these three variables to create a summary index of particularism.\footnote{A close examination of both these measures, however, shows that the country-year measure of political particularism across both the Wallack et al (2003) and Johnson and Wallack (2006) index matches almost exactly.} In unicameral systems this summary index corresponds to the whole legislature, in bicameral systems to each house, and in mixed systems to each subset of legislators. Each house is given a weight of 0.5, regardless of the relative numbers of seats. Within each house, each group of legislators chosen under similar rules is given a weight according to its proportion of total legislators in that house.

Based on this procedure, Wallack et al (2003) and Johnson and Wallack (2006) have built an ordinal index of political particularism that ranges from 0 (low particularism) to 13 (high particularism) for as many as 158 countries between 1978 and 2005.\footnote{However, using their}
index of political particularism data, which is labeled as *particularism*, curtails the temporal range of our sample since their data is available from 1978 to 2005.

We require a measure for the inter-industry occupational mobility of workers to test hypothesis 1. Measuring inter-industry labor mobility is notoriously difficult. We use one drawn from Wacziarg and Wallack (2004) and Hiscox and Rickard (2002), that focuses on the occupational mobility of labor from industry to industry across 32 industries at the 3-digit International Standard of Industrial Classification (ISIC) level, as classified by the ILO and UNIDO.\(^{21}\) We focus on the inter-industry occupational mobility of workers across these 32 industries – which are listed in table 3 – because the comprehensive data that is required to operationalize the inter-industry labor mobility measure is available only for these 32 industries at the 3-digit ISIC level.\(^{22}\) The measure of inter-industry labor mobility, labeled *labor mobility*, focuses on the occupational mobility of labor from industry to industry within the economy. This measure is computed for each country-year by isolating the fraction of jobs that move from one industry to another independent of overall employment gains or losses. Let \( E'_{j,i} \) denote employment in industry \( j \) in country \( i \) at time \( t \). Hence

\[
\text{labor mobility} = \frac{\sum_{j=1}^{N} |E'_{j,i} - E'^{-\delta}_{j,i}| - \sum_{j=1}^{N} E'_{j,i} - \sum_{j=1}^{N} E'^{-\delta}_{j,i}}{\frac{1}{2} \sum_{j=1}^{N} (E'_{j,i} + E'^{-\delta}_{j,i})}
\]

where the summation \( \sum_{j=1}^{N} \) is over all \( N=32 \) industries at the 3-digit ISIC level.

The difference between the term on the left and the term on the right in the numerator in equation 4.1 gives the employment changes that result from the pure shifts of jobs across different

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\(^{21}\) ILO denotes International Labor Organization while UNIDO stands for United Nations Industrial Development Organization.

\(^{22}\) This implies that our measure of labor mobility provides the maximum coverage that is possible for operationalizing the inter-industry occupational mobility of workers in each country.
industries. The denominator in labor mobility computes the average of total employment for the industries in consideration between \( t \) and \( t-\delta \). We let \( \delta = 2 \) years to capture meaningful shifts in inter-industry labor mobility and to minimize the effects of business cycle shocks. Setting \( \delta = 1 \) or 3 years did not alter the results reported for this measure below. The labor mobility measure is a continuous variable that ranges from low to high inter-industry occupational mobility.

Because hypothesis 1 predicts that the effect of political particularism on trade protection is conditional on the degree of the inter-industry occupational mobility of workers, we interact the particularism variable with labor mobility. Following hypothesis 1, we expect that the coefficient of particularism \( \times \) labor mobility will be negative.

CONTROL VARIABLES

We include a set of economic and political control variables. The economic controls are common in the IPE literature on trade protection (see, for e.g., Milner and Kubota 2005; Ozden and Reinhardt 2005; Henisz and Mansfield 2006; Kono 2006). For the sake of brevity, we do not describe these control variables and the data sources used to code these controls. Rather we merely list these control variables below:

- real GDP per capita
- economic crisis
- Balance-of-payments (bop) crisis
- Capital account openness
- AGC (Adjusted geographic concentration) index
- log capital-labor ratio
- IMF program

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23 The term on the left of labor mobility refers to the number of job changes between \( t \) and \( t - \delta \) while the term on its right refers to the number of job losses or gains not offset by a gain or loss in other sectors.
• log population

These economic controls and the data sources are listed in table 3. Apart from the economic controls, we incorporate a set of political controls as well. To start with, we include the GATT/WTO dummy in each specification. Additionally, we follow Milner and Judkins (2004) by including presidential which is a dummy representing countries with a presidential system. We also include partisanship coded on a 0-2 scale with 0 representing right governments and 2 left governments. Data for presidential and partisanship are from the World Bank’s (2008) Database of Political Institutions (DPI). Milner and Judkins (2004) claim that the presidential system is more favorable to free trade, while left governments are more protectionist. We expect the coefficient of presidential to be negative, but partisanship is likely to be positive. Although the literature is divided over the issue of whether or not more veto players in government leads to higher trade protection (see, Milner et al. 2007; Henisz and Mansfield 2006), we include veto players using data from the World Bank’s (2008) DPI. Numerous researchers suggest that district magnitude may affect the level of trade protection in democracies (Rogowski 1989; Hankla 2006). We therefore control for average district magnitude taken from the World Bank’s (2008) DPI. We conducted a series of specification robustness tests by including additional control variables.

Results for Particularism and Trade Protection

Models 1 through 3 in Table 3 report the estimates from testing hypothesis 1. These first two models are estimated with a lagged dependent variable, PCSE’s and fixed effects. The coefficient of the interaction term particularism x labor mobility is negative and statistically significant in all models. This statistically corroborates the prediction for tariffs in hypothesis 1, which posits that in developing democracies, higher particularism (that is, a shift to a more candidate-centered system) reduces tariffs conditional on the degree of inter-industry labor mobility.
To understand the impact of **particularism x labor mobility** on **import duties**, we analyze its substantive effect by using the estimates in model 1 and the standard formula for computing the effect of interaction terms.\textsuperscript{24} We illustrate the substantive effect of **particularism x labor mobility** on **import duties** from model 1 in Figure 2, which displays the marginal effect and statistical significance of the **labor mobility** variable over the range of values of the **particularism** variable. Higher levels of particularism significantly (as indicated by the pink color of the hyperplane) decrease import duties, but only at higher levels of labor mobility; this can be seen on the front left wall of the cube. Import duties are relatively higher in systems with higher levels of particularism when labor mobility is low (this is shown in the front right wall). Finally, when particularism is low, import duties are much higher even if labor mobility is high (see back left wall). Thus the substantive effect corroborates hypothesis 1, which posits that the shift to a more candidate-centered system has a statistically negative effect on tariffs when the mobility of labor increases.

Second, in figure 3 the solid downward sloping line indicates how the value of the estimated causal effect of particularism on tariffs changes across the full range of the relevant modifying variable, labor mobility. These conditional coefficients are statistically significant when the 95 per cent confidence intervals (i.e., the dashed lines) are both above or below the zero line. One can see from this figure that particularism has a statistically negative effect on import duties in developing country democracies only when labor mobility rises above a certain

\textsuperscript{24} We can \textemdash according to Brambor \textit{et al} (2006) \textemdash compute the substantive effect of **particularism x labor mobility** by using the standard formula: let $\hat{y} = \beta_0 + \beta_1 p + \beta_2 l + \beta_3 p l$ (where $l = \text{labor mobility}$, $p = \text{particularism}$ and subscript it is dropped for notational convenience). Thus $\frac{\partial \hat{y}}{\partial p} = \beta_1 + \beta_3 (l)$ with 

$\hat{\sigma}_{\hat{y}/\hat{p}} = \sqrt{\text{var}(\beta_1) + p^2 (\beta_3^2) + 2l \text{cov}(\beta_1, \beta_3)}$. 


threshold (i.e. 1.5), thus corroborating our theoretical prediction. However, when labor mobility is low (but higher than 0), the estimated causal effect of particularism on import duties is often statistically indistinguishable from zero.

<<Insert Figure 3 about here>>

We also conduct a series of robustness tests. For the first robustness test, we evaluate whether the results we obtained for tariffs remain robust when we include the following additional controls to the specification where import duties is the dependent variable: exchange rate, log GDP and welfare spending (as % of gdp).  

We include these additional controls as extant studies suggest that these variables may also affect the level of trade protection in developing countries. Model 2 in table 3 reports the results from expanded empirical model in which we included the three additional control variables mentioned above. We find that the coefficient of particularism x labor mobility remains negative and significant, indicating that statistical support for hypothesis 1 remains robust when we include additional variables.

In addition to specification robustness tests, we checked whether our main results remain robust when we account for the possibility of endogeneity. It is plausible that our independent variables of interest (particularism and labor mobility) may be endogenous to our measures of tariffs. As done in the previous chapter, we implemented Hurlin and Venet’s (2003) granger causality test for panel data to assess the potential endogenous relationship between the dependent variable for tariffs, import duties and each of the two independent variables: particularism and labor mobility. F-statistics from the Hurlin and Venet (2003) tests conducted in our sample indicates that import duties does not statistically influence particularism and labor mobility. This indicates that the dependent variable for tariffs is not endogenous to the independent variables.

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25 Data for exchange rate, welfare spending (as a percent of GDP) and log GDP is drawn from the IMF's 2008 Government Financial Statistics [GFS], the World Bank’s 2008 World Development Indicators and Easterly 2001.
We address the possibility of endogeneity by testing hypothesis 1 via a “system GMM” model that combines a regression in first-differences and a regression in levels; estimating the two equations (levels and differences) in a single system leads to consistent and efficient estimates (Blundell and Bond 1998). The results from the system-GMM model, which are reported in model 3 (in table 3), confirm our main findings about the interactive effect of particularism and labor mobility on import duties.

What about the results for the control variables? Unlike the strong statistical support for hypothesis 1, we find relatively weak support for the remaining political and economic control variables. For example, the economic control variables, IMF program, bop crisis, economic crisis, log population and AGC index are each consistently insignificant. The estimate of real GDP per capita has the predicted negative sign but is significant at just the 10% level. The estimated results for the political controls vary as well across the models. For example, the coefficient of average district magnitude, veto players and partisanship are consistently insignificant, while the estimate of the presidential democracy dummy is positive and significant. The lag of the dependent variable is positive and significant at the 1% level which is not surprising. The results reported in models 1 through 3 also pass all diagnostic checks.\(^\text{26}\)

**Case-Study: Particularism and Trade Protection in India**

The causal story predicts that in developing country democracies, party-centered systems encourage the owners of industries who have incentives to seek protection to provide contributions to parties and lobby for higher levels of trade protection. Consequently, the

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\(^\text{26}\) The largest and mean VIF value in the models is less than 10 and greater than 1 respectively; thus multicollinearity is not a problem. To assess for serial correlation, we first plotted the correlograms and partial correlograms of the residuals from each estimated model; we also checked the p-values of the autocorrelation function and partial autocorrelation function for first lag as well as several additional lags of the residuals from of each estimated model. Results from this exercise reveal that the residuals do not suffer from serial correlation. Furthermore, the Breusch-Godfrey LM test failed to reject the null of no serial correlation in the outcome and selection equations respectively. The RESET test shows that there is no omitted variable bias problem; the Jarque-Bera test shows that the residuals are distributed normally.
trade policy decisions of party leaders in party-centered democracies are biased toward the protectionist interests of the owners. This in turn generates higher levels of trade barriers in democracies that are party-centered rather than candidate-centered. The quantitative evidence shows that candidate-centered systems (i.e., higher levels of particularism) are associated with less protection, while party-centered democracies (i.e. low levels of particularism) have relatively higher levels of protection.

Although encouraging, the quantitative evidence suggests that there is a statistical association between the main variables of interest. But it does not establish causal links between the independent and dependent variables. Are the causal predictions about the link between party-centered systems and trade protection valid? Providing a precise answer to this question is difficult given that actions taken by industry owners such as offering contributions and lobbying are typically not observable. In this section, we attempt to answer the question by examining the political economy of trade protection in a prominent democracy in the developing world: India.

The rationale for focusing on India is two-fold. First, India is a party-centered democracy. Thus it provides an opportunity to check the empirical validity of our causal logic on how particularism affects trade politics in developing country democracies. Hankla (2006a and b), for instance, has argued that party-centered systems are less likely to raise trade barriers, but he also notes in another paper that India has been an outlier to this. There he posits that elected leaders opt for economic regulation to generate patronage that can be used to maintain their political positions. Leaders are most tempted to take this approach when their political parties are not stably linked to sources of electoral support since then governing parties will have very short time horizons and be less concerned with the potential future damage that a patronage-based policy may inflict on the national economy. We seek to show
that our argument differs from his, since we expect business pressure on government to have a major impact.\textsuperscript{27} Second, similar to other prominent developing democracies like Brazil, the degree of inter-industry occupational mobility of labor has steadily increased in India during the last two decades. But trade policies in India prior to 1991 and in the latter half of the 1990s have been strongly influenced by the trade policy preferences of capital owners who favored trade protection. To show how the India case supports our causal story, we provide a brief background of India’s electoral system to show that the country is a party-centered democracy. We then employ both historical evidence and quantitative analysis of within-country data from India to assess the effect that the country’s party-centered system has had on the level of trade barriers in the country.

\textit{India’s party-centered system and labor mobility}

India has been a democracy since its independence in 1947. Key democratic institutions, including separation of powers as well as the occurrence of regular elections at both the national and state level, are firmly entrenched (Kohli 2001; Ganguly \textit{et al} 2007). Political particularism in India is low, and the county is a party-centered democracy (Sridharan 1999, 2009; Chibber 2009; Yadav 2005, 2010). Three institutional features of India’s democracy ensure that the country is a party-centered rather than a candidate-centered system. First, representatives to the Indian parliament are elected via a single member district (SMD), plurality electoral system. As stated by Hix (2004: 197), in SMD systems that employ plurality rule, rank and file party members have no incentives to cultivate their personal vote since these systems, “do not allow candidates to make direct appeals against rival candidates from their own party…[Rather] the personalities of party leaderships has a significant impact on the

\textsuperscript{27} Hankla (2008) agrees that after 1969 and certainly after 1975 India has had a strong party-centered system.
electoral fortunes of the candidates in each constituency…[Thus] candidates have incentives to support their parties’ positions.”

Because the behavior of party leaders in SMD plurality systems have a significant impact on the electoral fortunes of the candidates in each constituency, it promotes intra-party unity and allows party leaders to exert a high degree of control over their rank and file party members (Carey and Shugart 1995; Hix 2004; Carey 2007). Therefore, the SMD plurality system that is used in India leads to a party-centered democracy.

Second, legislative rules in India regarding the introduction of bills and amendments, committee recommendations for bills, and questions and answers on the legislative floor provide party-leaders with additional leverage to control individual members within their own party. This is pointed out by Yadav (2005: 23) who states that in India “the procedural flow of legislation on the floor and through committees, recognition of members for introducing bills, for urgent and zero hour questions, are all at the discretion of the leadership of the party controlling this chamber. Parties not in the ruling coalition have no formal say in the flow of legislative business. Any consultations are conducted at the level of party leaders and rank and file members have no say in these consultations. Individual members must go through party leaders to gain any personal considerations on policy or legislation.” Since procedural matters on the legislative floor in India increase the control that party leaders have over their rank and file party members, it generates a party-centered system where individual party members lack the power to develop their own personal vote in the electorate.

Third, in February 1985, the government of India implemented the Anti-Defection Act. This Act constitutionally bans defections of individual party members from one party to another during elections and immediately after elections (Sridharan 1999; Manor 1988). This “sharpened party boundaries,…strengthened party leadership and...the centralization of candidate selection for
elections by party leaders” (Sridharan 1999: 1206). In other words, the Anti-Defection Act in India also fosters a party-centered system since it deters individual party members from cultivating their personal vote and consequently fosters intra-party unity.

These features of India’s political institutions indicate clearly that compared to other developing democracies that are candidate-centered and have weak political parties (e.g. Brazil), India is a party-centered democracy with relatively strong and centralized parties. This means that the level of political particularism in India is low.

What about the country’s labor market, and more specifically, the degree of inter-industry labor mobility? While researchers debate the extent to which the occupational mobility of workers has grown in India over time, they tend to agree that the inter-industry occupational mobility of workers in India has increased in the last three decades or so. In fact, computation of the Wacziarg-Wallack index of inter-industry occupational mobility on an annual basis across 29 3-digit ISIC industries reveals that the moving average of the level of inter-industry occupational mobility of workers has increased from 1.4 in 1980 to 2 in 1988. Furthermore, the moving average of labor mobility in India increased from 2.1 in 1991 to 2.5 in 2000. What effect did increasing inter-industry labor mobility have on trade policy in a party-centered democracy like India? To what extent did governments in India weigh the preferences of capital owners who sought trade protection versus workers when designing trade policy?

Protectionist Business groups and trade protection in India

From 1951 to 1991, Indian policy-makers followed an “import-substitution-industrialization” (ISI) model of development, which was accompanied by extensive regulatory controls over the economy (Wadhva 1994; Sinha 2007). Successive governments in India

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28 As mentioned earlier, ISIC stands for International Standard of Industrial Classification.
29 It ranges from 0 (low labor mobility) to 5 (high labor mobility). We focus on computing the inter-industry labor mobility measure for just 29 industries as data is only available for these industries.
assiduously implemented ISI policies and in fact by the 1980s, India became, according to the IMF, the archetypical import substituting regime with “one of the highest level of trade barriers in the world” (IMF 1998: 26). The IMF’s (1998) claim is not exaggerated since some basic calculations suggest that the moving average of the unweighted tariff rate in India from the mid-1970s to 1990 was an astoundingly high 130 percent.

Why was the average level of trade barriers so high in India? A systematic analysis of the relevant historical evidence shows, as predicted by our theoretical story, that the party-centered nature of India’s democracy encouraged Indian policy-makers to favor the interests of industry-owners who preferred trade protection between the mid-1970s and 1990 when designing trade policies. They did so even though the inter-industry occupational mobility of labor increased during this period. Recall our argument that in a party-centered system like India, party leaders need to provide financial side-payments to rank-and-file party members to “buy” their loyalty and maintain intra-party unity. Providing these financial side-payments is costly. The daily political expenses borne by party leaders which involves offering such side-payments requires a substantial amount of financial resources. This is emphasized by Kumar (2002: 228) who suggests that:

State funding of elections will not eliminate the need for money, black or white, to run Indian politics in its present form. In the interviews with politicians it became clear that they need funds everyday and not just when elections come…Since state funding cannot match the needs of the political parties….the political parties will continue to supplement funds through other means.

In fact, to finance the side-payments mentioned above, party leaders actively solicit contributions, particularly from the owners of industries that have access to large amounts of capital. As suggested by Kumar (2002: 144),

By and large, political leaders admitted to having a nexus with big business, local industry and trade associations. They get money and help in kind from them not only for elections but also for day to day running. They admit to a quid-pro-quo for the help.
The key question that emerges from Kumar’s (2002) insightful analysis is which industries constitute the “big business” that have a mutually symbiotic relationship with the political parties in India? As an answer to this question, Mazumdar (2008) suggests that large privately-owned business houses, which includes owners of manufacturing industries such as automobiles and motorcycles, for example—who have consistently favored trade protection from the 1950s—constitute the most influential “big business” group which shares a close relationship with political parties. Mazumdar (2008:18) concludes that during the 1970s and 1980s, “a narrow group of large businesses have acquired significant influence with the State, and are able to secure major benefits through such influence.” He also points out that the symbiotic relationship between large (industry-based) business houses and successive governments in India was “the direct result of cronyism in the economic domain—the control and influence of large business houses…and the deliberate manipulation by large business houses of the licensing mechanism” (Majumdar 2008: 18). These claims are not surprising. Extensive research on business-government relations in India has shown that “crony-capitalist” relationships existed between parties and protectionist business groups since the 1950s (Kochanek 1974; Yadav 2010; Hardgrave and Kochanek 2007; Sinha 2007).

What were the consequences of this crony-capitalist relationship between big business groups and political parties with respect to trade policy? An immediate consequence was that the protectionist interests of big business groups were prioritized above the interests and welfare of the public, particularly in the area of trade policy (Goyal 1979; Kochanek 1996a). The second consequence of the crony-capitalist relationship is that it not only allowed business groups to intervene in the policy-making process but also gave them an opportunity to influence the content of trade policies (Kochanek 1996a). Studies of business-government relations in India suggest that
trade policies in India before 1991 were often held hostage to the interests of big business houses as successive governments obliged their policy demands (Kochanek 1996a; Mazumdar 2008).

The possibility that government leaders in a party-centered system like India prioritized the protectionist interests of certain business groups and gave these groups unfettered access to the process of trade policy-making had a dual impact. For one, it not only encouraged successive governments in India during the 1970s and 1980s to solicit contributions from these business groups, but also induced these groups to provide substantial contributions to parties to influence policy (Sinha 2007; Kochanek 1985, 1987; Jenkins 1999). Second, despite some half-hearted steps taken toward trade liberalization by Prime Ministers Indira Gandhi and Rajiv Gandhi in the 1980s, policy-makers acquiesced to the protectionist demands of business groups in both the 1970s and the 80s (Harris 1987; Wadhva 1994). Hence, the average tariff rate in India before 1990-91 was extremely high. While there is little doubt that lobbying by private industrial houses in India encouraged successive governments in India to maintain high trade barriers, it would be inaccurate to claim that high trade barriers were driven solely by industry-based lobbying for protection. Rather political elites were influenced by the idea – which was predominant in many developing states from the 1950s to the early 1980s – that protecting infant industries via high tariff barriers was vital to the country’s economic growth.

The “rush to trade reforms” in India in the early 1990s is surprising given that political parties in a party-centered democracy like India are susceptible to protectionist pressures from industry-based interest groups. Why did Indian policy-makers adopt trade reforms by drastically cutting trade barriers in 1991? In India’s case, it was neither political factors related to its domestic institutions nor economic factors such as the inter-industry occupational mobility of labor that led to trade liberalization.
For example, throughout 1980s, 1990s and beyond, India remained a democracy with a party-centered system (Kohli 2001; Ganguly et al 2007). Therefore, it is not plausible to suggest that a change in domestic political institutions engendered trade reforms in India. Moreover, the incumbent at the time, Prime Minister Narasimha Rao, headed a minority government which theoretically made it harder for the executive to adopt economic and trade reforms (Jalan 1991; Sachs et al 1991). Finally, the level of inter-industry labor mobility in India increased in the 1980s but remained virtually flat from 1990 to 1993. Thus we cannot attribute the adoption of trade reforms in India to rising labor mobility. What then explains India’s sudden enthusiasm for trade reforms in 1991?

India launched its trade reforms in 1991 under the pressure of twin economic crises (Sachs et al 1991; Jalan 1991; Wadhva 1994; Joshi and Little 1997). These crises were reflected through an unmanageable balance of payments and a socially intolerable rate of inflation that reached its peak in 1990-91. The current account deficit as a percentage of GDP peaked at a high of 3.1 percent compared to an average of 1.4 percent during the 1980s. The inflation rate (as measured by point-to-point changes in the Wholesale Price Index) had also climbed to the politically dangerous double-digit level, hitting 12.1 percent in 1990-91. The central government’s fiscal deficit alone peaked at 7.9 percent as a percentage of GDP in 1989-90, which was unsustainable. Last but not the least, foreign-exchange reserves dwindled to a low of US$2.2 billion with less than 15 days’ coverage against annual imports. India stared bankruptcy in the face as it struggled to meet external debt obligations.

With a balance of payments loan from the International Monetary Fund, the Indian government in 1991 chose to solve the twin economic crises by launching economic, including trade, reforms (Sachs et al 1991; Joshi and Little 1997). The Rao government did so because it recognized in 1991 that it could promote investment and growth in India by reducing trade
barriers (Joshi and Little 1997; Rajan and Sen 2002; Sally 2008). Hence, the Indian government dramatically reduced trade barriers between 1991 and 1994.

After launching the relatively rapid trade reforms, however, the Rao government was soon confronted with the political reality of raising funds to finance the ruling Congress party’s campaign for the 1994 state elections (Kochanek 1995, 1996a; Pedersen 2000). To raise the funds for the state-level elections and to sustain the loyalty of rank and file party members, the Rao government in a party-centered system like India turned to business groups, particularly to large industrial houses, for financial support (1995, 1996a; Jenkins 1999; Hardgrave and Kochanek 2007). Business groups in India, including the owners of industries such as automobiles, motorcycles and chemicals, reacted to the government’s request for financial support in two ways.

First, they formed an organization called the “Bombay Club” to voice their concerns against trade reforms (Kochanek 1995, 1996a; Jenkins 1999; Hardgrave and Kochanek 2007). The “Bombay club” consisted of a group of prominent Indian industries such as Bajaj industries, the Birla group, the Tatas and Reliance Industries. Second, the Bombay club asked the Rao government for a reversal of trade reforms and more protection of their industries from import competition. As stated by Hardgrave and Kochanek (2007: 463)

…the reforms have not enjoyed the unified support of the business elite or India’s apex business associations. While most industrialists and associations welcomes the move toward deregulations and deregulation of the domestic private sector, they were far less enthusiastic about reducing tariff protection for Indian industry, the opening of the Indian economy to foreign trade, and investment and globalization of the Indian economy. Business resistance to trade reform crystallized in late 1993 as the immediate economic crisis began to ease. The initial attack came from members of the Bombay Club, which demanded a level playing field.

How did the Rao government respond to the Bombay Club’s request for trade protection and a reversal of trade reforms? As predicted by our theory, the government in a party-centered democracy like India responded favorably to the preferences and demands of the owners of industries that were resisting trade reforms. First, both the Rao government and its successor (the
Deve Gowda and the BJP government) stalled and significantly slowed down trade reforms between the mid-1990s to the late 1990s. Tariff rates for numerous industries which requested more trade protection were increased during the mid and late-1990s. Consequently, the average tariff rate increased by 3.7% from 1995 to 2000. Furthermore, the Rao government *publicly* declared that slowing down trade reforms and increasing trade barriers was necessary to give Indian industry a “level playing field” to compete against imported goods (Venkatesan 1999; Dhar 2003). Thus the anecdotal evidence from India supports the causal claim which suggests that parties in party-centered democracies tend to be biased toward the protectionist interests of capital owners.

If governments in party-centered democracies are more receptive to the interests of business, then the protectionist demands of these business groups should positively influence tariffs. Likewise, if governments in party-centered systems pay less attention to the preferences of labor, then the inter-industry occupational mobility of workers, which determines their trade policy preferences, should have a negligible impact. Are these two implications consistent with the data?

*Analyzing some data from India*

We gathered a panel dataset of industry-year tariffs on an annual basis from 1978 to 2003 for the number of industries (i.e., 29) for which tariff data is available at the 3-digit ISIC level in India. The industry-year tariff rate for India, which is labeled as *tariff-India*, serves as the dependent variable. The first key explanatory variable is an annual measure of inter-industry labor mobility (labeled as ILM) for India. We used the formula in equation (1) to calculate the occupational mobility of workers between the 29 different industries on an annual basis from 1978 to 2003. Second, to assess whether tariff policies implemented by the government are receptive to the protectionist interests of capital owners, we need a measure that operationalizes
their “protectionist interests”. Following economists who have statistically analyzed within-country data on trade barriers, we use the import penetration ratio across the same 29 industries in India as a proxy to capture the protectionist interests of industry owners.

The import penetration ratio provides an “intuitively appealing way to categorize industries facing significant foreign competition” (Kletzer 2002: 21). As import penetration increases, they are more likely to lobby their government for protection (Grossman and Helpman 1994, 2002; Goldberg and Maggi 1999). We think the import penetration ratio provides a good proxy for the protectionist interests of industries. Specifically, the import penetration ratio, labeled import penetration ratio, is calculated per year by dividing industry imports by the sum of industry outputs plus imports (the denominator is industry supply) across the 29 3-digit ISIC industries.30

We follow extant studies on trade protection in India31 and add the following variables to the specification: capital-output ratio, investment-output ratio, log GDP32, and the lag of the dependent variable. We add the dummy variable, balance-of-payments crisis (bop crisis) which, following Milner and Kubota (2001), is coded as 1 if the level of forex reserves (in India) falls to less than the equivalent of three months’ worth of imports; it is coded as 0 otherwise. Finally, we include a time trend in the specification. Since ILM and import penetration ratio may be endogenous to the dependent variable (tariff-India), we estimated the specification via a “system GMM” model that combines a regression in first-differences and a regression in levels; estimating the two equations (levels and differences) in a single system leads to consistent and efficient estimates (Blundell

32 Data for India’s capital-output ratio, investment-output ratio, and log GDP is taken from (i) UNIDO Industrial Statistics Database (various years for India); (ii) World Bank’s (2004, 2006) World Development Indicators; (iii) Ministry of Finance, Government of India, Economic Survey (various years) and (iv) IMF (2008) International Finance Statistics.
This approach corrects for potential endogeneity by using moment conditions to derive a set of valid instruments for the potentially endogenous explanatory variables. It also corrects for serial correlation, controls for country fixed effects and accounts for heteroskedasticity via White’s heteroskedasticity robust standard errors. We follow Blundell and Bond’s (1998) advice and estimate what they term a “system GMM” model that involves estimation of a single system that combines a regression in first-differences and a regression in levels. The instruments for the regression in first-differences are lagged levels (dated $t-2$) of the endogenous explanatory variables, while the instruments for the regression in levels are the lagged differences of the endogenous explanatory variables. Model 4 in table 4 reports the results from estimating the effect of ILM and import penetration ratio on the dependent variable, $\text{tariff-India}$. 

<<Insert Table 4 about here>>

The estimated effect of $bop$ crisis is negative and highly significant at the 1 percent level in model 4. This is not surprising given that a serious balance of payments crisis engendered a dramatic reduction in trade barriers in India in 1991. In contrast, the estimate of ILM is negative and statistically insignificant. The insignificant effect of inter-industry labor mobility suggests that in a party-centered system like India incumbents are less likely to be receptive to the trade policy preferences of labor, which are determined by their occupational mobility.

In sharp contrast, the estimate of import penetration ratio is positive and highly significant in model 4. Figure 4, which is drawn from the estimates in model 4, shows that the slope of the marginal effect of import penetration ratio on $\text{tariff-India}$ is positive and statistically significant at the 95 percent confidence level during the 1978 to 2003 period. Hence, the coefficient of import penetration ratio and the marginal effect in figure 4 statistically corroborates a key implication from

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33 Blundell and Bond (1998) show that estimating the two equations (levels and differences) in a single system reduces the potential bias and imprecision associated with just the first-difference GMM estimator.
our causal argument, which suggests that in a party-centered system such as India, trade barriers will be strongly influenced by the interests of protectionist business groups.

In short, the qualitative evidence shows that the party-centered nature of India’s democracy affects business-government relationships and thus influences trade politics. The quantitative evidence from within-country data on tariffs from India reveals that the protectionist interests of the owners of industries also influences trade policy outcomes.

**Conclusion**

Recent studies on the politics of international trade have examined how political regimes, partisanship, the number of veto players and district magnitude affects trade protection in developed and developing democracies (Rogowski 1987b; Milner and Judkins 2004; Henisz and Mansfield 2006; McGillivray 2004; Hankla 2006; Kono 2006). The theoretical analysis in this paper has built on this tradition by exploring how political particularism affects tariffs and campaign contributions in democracies across the developing world. This paper has presented quantitative evidence that corroborates our claims about political particularism and trade protection in developing country democracies. In particular, the statistical estimates support the prediction that an increase in the level of political particularism has a statistically negative effect on tariffs conditional on high or increasing levels of mobility for workers. This result is the opposite of that usually found for developed country democracies (e.g., Hankla 2006a) where party-centered systems are associated with less need for legislative logrolls that produce protectionism. However, an increase in the inter-industry occupational mobility of workers does not have a negative effect when the level of political particularism is low, as shown in the India case.

We also assessed our causal story that explains how party-centered systems affect trade protection. In particular, our causal argument posits that the trade policy decisions of parties in...
party-centered countries will be biased toward the trade policy interests of industry owners (who favor trade protection) rather than the preferences of workers. This in turn generates higher trade barriers. In this paper, we used both qualitative evidence and statistical analysis of some within-country data from India – an important party-centered developing country democracy – to assess this causal claim. A concise analysis of the India case provides some support for the causal argument.

The theoretical and empirical results have two main implications. First, key democratic developing countries, such as India, Indonesia and South Africa, have blocked multilateral trade reform efforts at the Doha and Cancun round of trade negotiations conducted under the auspices of the WTO (Narlikar and Tussie 2004; Cho 2004). Numerous policy-analysts and journalists have suggested that the Doha and Cancun round of multilateral trade negotiations collapsed owing to the “intransigence” of trade negotiators from some large developing democracies. Yet these analysts and reporters do not systematically explain why certain developing democracies would want to block multilateral trade reform efforts.

Our analysis suggests that domestic institutional characteristics of developing states – especially their level of political particularism – has had a crucial impact in influencing the governments of certain developing democracies to adopt a more rigid bargaining position when negotiating a reduction in trade barriers with developed nations at the WTO. A closer examination of the Cancun and Doha round of trade talks reveals that two main party-centered democracies in the developing world – namely, India and South Africa – have been at the forefront of blocking multilateral trade reform efforts and encouraging other nations to oppose the trade liberalization goals set by the WTO (Narlikar and Tussie 2004).

Second, labor market conditions, particularly the degree of occupational mobility of workers across industries, strongly influences trade politics and the trade policy choices of governments in
many developing democracies. Politicians in certain democratic institutional settings – specifically candidate-centered systems – strongly favored trade liberalization and reduced trade barriers when the inter-industry occupational mobility of workers increased beyond a certain threshold. However, politicians in party-centered democracies tended to favor the interest of protectionist industries and sustained relatively higher levels of trade barriers, even when the inter-industry occupational mobility of workers was high. Our analysis thus suggests that the institutional context matters significantly for both trade politics and trade policy outcomes in developing country democracies.

While the analysis provides some useful insights, it also opens at least two avenues for future research. First, our theoretical framework concentrates on analyzing trade policy-making in the domestic arena which is determined by domestic political institutions and the preferences of the main productive groups in society. Yet, in reality, we know that the trade policy choices of governments in developing democracies are also influenced by strategic interaction with other states at the international system-level. Thus to develop comprehensive two level game theory of the political determinants of trade policy, we need to construct a unified theoretical model that examines how domestic political institutions and international politics at the system-level shape the trade policy decisions of policy-makers in developing democracies (Milner 1997). Second, we examined situations as if the degree of inter-industry labor mobility was given exogenously. While this is a common assumption in models of trade policy that focus on labor market conditions,\(^{34}\) we know that in reality inter-industry labor mobility may be affected by politics. Incorporating these dynamics into our theoretical framework will be an important step forward.

\(^{34}\) See Hamermesh 1993; Moscarini 2001; Winters 2002 and Matschke 2004
## Table 1: List of democratic country-years in sample

<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>Country</th>
<th>Period</th>
<th>Country</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belarus</td>
<td>1990</td>
<td>Honduras</td>
<td>1982-2005</td>
<td>Romania</td>
<td>1990-2005</td>
</tr>
<tr>
<td>Estonia</td>
<td>1990-2005</td>
<td>Nicaragua</td>
<td>1990-2005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** The time period in the columns indicate the years in which each country is observed as a democracy according to the Przeworski et al (2000) criteria for a democratic regime.
**Table 2: Data sources for some key variables**

<table>
<thead>
<tr>
<th>List of variables</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>presidential</td>
<td>World Bank 2008b <em>Database of Political Institutions</em></td>
</tr>
<tr>
<td>partisanship</td>
<td>World Bank 2008b <em>Database of Political Institutions</em></td>
</tr>
<tr>
<td>veto players</td>
<td>World Bank 2008b <em>Database of Political Institutions</em></td>
</tr>
</tbody>
</table>
Table 3: Particularism, inter-industry labor mobility and trade restrictions

<table>
<thead>
<tr>
<th></th>
<th>PCSE-FE</th>
<th>System-GMM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1</strong></td>
<td><strong>Model 2</strong></td>
<td><strong>Model 3</strong></td>
</tr>
<tr>
<td>lag dependent variable</td>
<td>.672*** (.041)</td>
<td>.601*** (.048)</td>
</tr>
<tr>
<td>real GDP per capita</td>
<td>.001*** (.000)</td>
<td>.002*** (.002)</td>
</tr>
<tr>
<td>labor mobility</td>
<td>1.87 (3.01)</td>
<td>-.229 (3.02)</td>
</tr>
<tr>
<td>bop crisis</td>
<td>-.849* (.461)</td>
<td>-1.21** (.512)</td>
</tr>
<tr>
<td>economic crisis</td>
<td>.114* (.573)</td>
<td>-.107 (.574)</td>
</tr>
<tr>
<td>particularism</td>
<td>5.08** (2.18)</td>
<td>6.33*** (2.17)</td>
</tr>
<tr>
<td>particularism x labor mobility</td>
<td>-5.51*** (1.96)</td>
<td>-6.151*** (1.92)</td>
</tr>
<tr>
<td>IMF program</td>
<td>-.896* (.462)</td>
<td>-1.09 (.478)</td>
</tr>
<tr>
<td>log population</td>
<td>-.738*** (2.33)</td>
<td>-19.39*** (5.50)</td>
</tr>
<tr>
<td>exchange rate</td>
<td>3.23e-06 (4.28e-06)</td>
<td>2.29e-06 (5.51e-06)</td>
</tr>
<tr>
<td>log capital-labor ratio</td>
<td>-14.44*** (3.50)</td>
<td>-23.25 (4.34)</td>
</tr>
<tr>
<td>log gdp</td>
<td></td>
<td>5.47*** (1.55)</td>
</tr>
<tr>
<td>GATT/WTO</td>
<td>.925 (.838)</td>
<td>.769 (.814)</td>
</tr>
<tr>
<td>AGC index</td>
<td>4.25 (4.85)</td>
<td>-5.60 (5.72)</td>
</tr>
<tr>
<td>capital acct. open</td>
<td>.099 (.234)</td>
<td>-.109 (.238)</td>
</tr>
<tr>
<td>Model</td>
<td>avg district magnitude</td>
<td>veto players</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>1</td>
<td>.015 (.023)</td>
<td>.003 (.148)</td>
</tr>
<tr>
<td>2</td>
<td>.023 (.024)</td>
<td>.058 (.152)</td>
</tr>
<tr>
<td></td>
<td>-.005 (.026)</td>
<td>-.026 (.085)</td>
</tr>
</tbody>
</table>

Notes: ***, ** and * denotes significance at the 1%, 5% and 10% level, respectively. PCSE’s reported in parentheses for models 1 and 2. Each model in the table is estimated with country-specific fixed effects that are not reported to save space. The results reported for the system-GMM models are from the 1-step estimation except the Sargan test and AR1 as well as the AR2 tests, which are taken from the 2nd-step estimation. Note from Blundell and Bond (1998) that a negative and statistically significant AR(1) term plus a statistically insignificant AR(2) term indicates no serial correlation.
### Table 4: System-GMM results for tariffs in India

<table>
<thead>
<tr>
<th>Model 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lag dep variable</strong></td>
<td>.712***</td>
</tr>
<tr>
<td></td>
<td>(.067)</td>
</tr>
<tr>
<td><strong>ILM</strong></td>
<td>-.183</td>
</tr>
<tr>
<td></td>
<td>(.803)</td>
</tr>
<tr>
<td><strong>Import penetration ratio</strong></td>
<td>.272**</td>
</tr>
<tr>
<td></td>
<td>(.078)</td>
</tr>
<tr>
<td><strong>Log GDP</strong></td>
<td>-.054</td>
</tr>
<tr>
<td></td>
<td>(.156)</td>
</tr>
<tr>
<td><strong>Capital-output ratio</strong></td>
<td>.178</td>
</tr>
<tr>
<td></td>
<td>(.279)</td>
</tr>
<tr>
<td><strong>Investment-output ratio</strong></td>
<td>.454</td>
</tr>
<tr>
<td></td>
<td>(.503)</td>
</tr>
<tr>
<td><strong>Bop crisis</strong></td>
<td>-.073***</td>
</tr>
<tr>
<td></td>
<td>(.015)</td>
</tr>
<tr>
<td><strong>Time trend</strong></td>
<td>-.018</td>
</tr>
<tr>
<td></td>
<td>(.021)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>-1.35***</td>
</tr>
<tr>
<td></td>
<td>(.358)</td>
</tr>
<tr>
<td><strong>Sargan test</strong></td>
<td>0.20</td>
</tr>
<tr>
<td><strong>AR (1)</strong></td>
<td>-1.78**</td>
</tr>
<tr>
<td><strong>AR (2)</strong></td>
<td>-.421</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>536</td>
</tr>
</tbody>
</table>

**Notes:** ***,** and * denotes significance at the 1%, 5% and 10% level respectively. The results reported for the system-GMM models are from the 1-step estimation except the Sargan test and the AR1 as well as the AR2 tests, which are taken from the 2nd-step estimation. A negative and statistically significant AR(1) term plus a statistically insignificant AR(2) term indicates no serial correlation (Blundell and Bond 1998).
Figures

Figure 1: Import Duty Coverage Ratio in Developing Democracies

Note: Map based on calculating the average import duty coverage ratio (in % terms) for developing countries observed as democracies (according to the Przeworski et al 2000 criteria) anytime during the 1972 to 2005 period. Data sources used to compute the mean of import duties are listed in the text.
Figure 2: The Substantive Effect of particularism interacted with labor mobility on import duties
Figure 3: Estimated marginal effect of particularism on changes in tariffs conditional on labor mobility
Figure 4: Effect of Import Penetration Ratio on industry-year tariffs in India
References


Hagopian, F., C. Gervasoni, and J.A. Moraes. 2009. From Patronage to Program: The Emergence of Party-Oriented Legislators in Brazil” (with Carlos Gervasoni and Juan Andres Moraes), Comparative Political Studies 42, 3.


51