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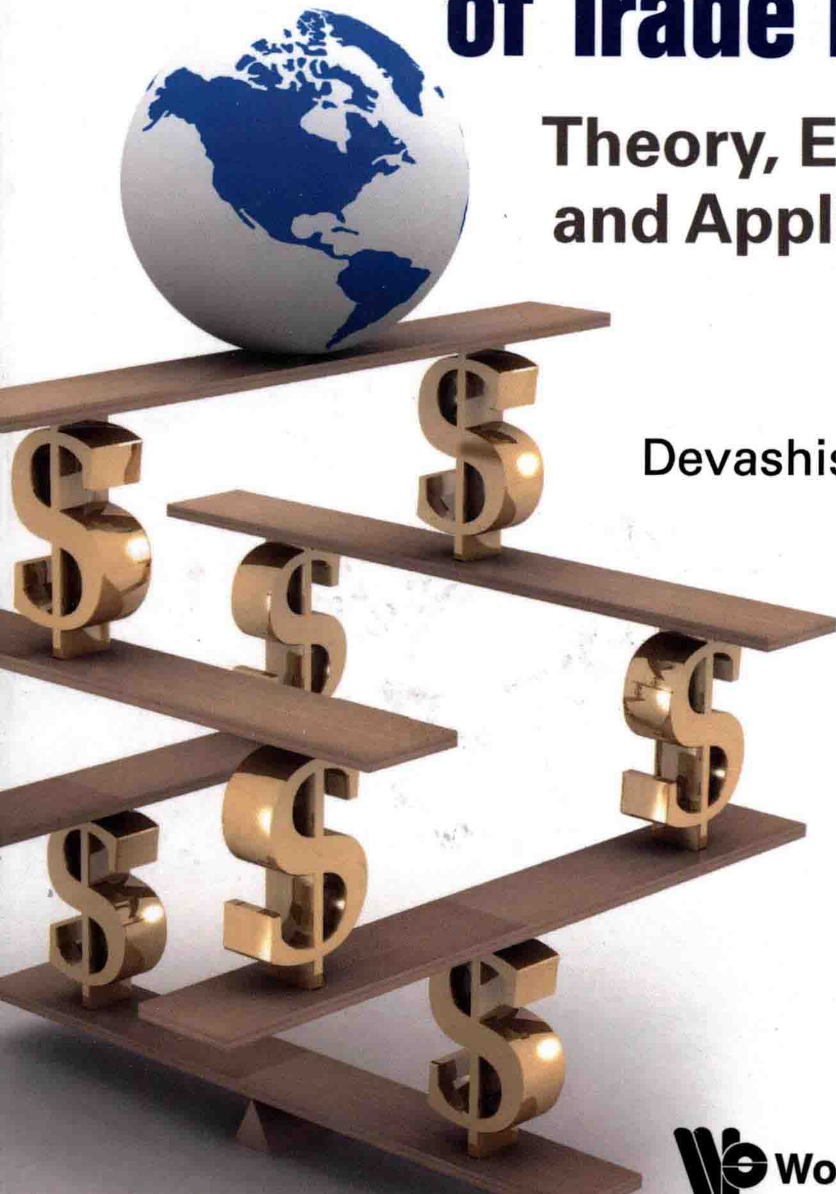
The Political Economy of Trade Policy

Theory, Evidence and Applications



Devashish Mitra

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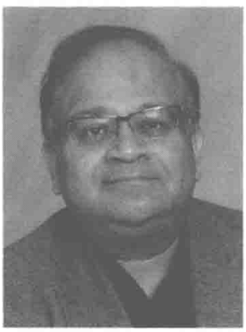

Devashish Mitra is Professor of Economics and Cramer Professor of Global Affairs at the Maxwell School of Citizenship & Public Affairs, Syracuse University. He was the Chair of the Economics Department at Syracuse University from 2006 to 2010. He is coeditor of *Economics and Politics* (2006–present) and *Indian Growth and Development Review* (2014–present). In addition, he is/has been associate editor of the *European Economic Review* (2012–2015), *Journal of Development Economics* (2010–present), *Journal of International Economics* (2006–2015), *International Journal of Business and Economics* (2004–present) *and International Review of Economics and Finance* (2004–present) and an editorial board member of other journals including the *Review of International Economics* (2009–present). Professor Mitra is also a member of the trade program of the International Growth Centre, UK based at the LSE and Oxford, a fellow of the CESifo network, a research professor at the Ifo Institute, Munich and a research fellow at the IZA, Bonn.

Professor Mitra's research and teaching interests are in International Trade, Political Economy and Development Economics. More specifically, he has worked on the role of politics in the determination of trade policy and on the impact of trade on productivity and labor market outcomes. He is currently working on the impact of trade on employment, labor shares and unionization. His work has been published in well-known journals like *American Economic Review, Review of Economics & Statistics, Economic Journal, Journal of International Economics* and *Journal of Development Economics*. He holds a Ph.D. in Economics from Columbia University.

Preface

This volume is a collection of my coauthored as well as solo-authored papers on the political economy of trade policy, written over more than a decade. On this broad topic I have had long and very fruitful collaborations with my coauthors, Pushan Dutt (INSEAD), Pravin Krishna (SAIS, Johns Hopkins University), Dimitrios D. Thomakos (University of Peloponese) and Mehmet A. Ulubasoglu (Deakin University). Without these interactions, these papers would not have been possible. I thank my coauthors as well as the original publishers of these papers for giving me permission to reprint them in this volume.

My work on the political economy of trade policy started during my doctoral dissertation days at Columbia University. In fact, the title of my PhD dissertation was *Essays in the Political Economy of Trade Policy.* I owe my interest in the field of international trade to my three teachers and advisors at Columbia, namely Jagdish Bhagwati, Ronald Findlay and Dani Rodrik. I was lucky to have been a student of these three giants of the field. I thank all of them for their very helpful guidance when I was a doctoral student and Dani in particular for getting me started on this topic of political economy.

My research agenda in the political economy of trade policy, that started at Columbia, continued when I became a faculty member at Florida International University and then at Syracuse University. I am indebted to all three institutions for their support and for providing me with the right intellectual environment for my research.

The publishers, who presently have the copyrights for the published articles reprinted in this volume, have granted permission to include them in this volume. In alphabetical order, they are the American Economic Association (Chapter 1), Elsevier (Chapters 2, 3, 4, 6 and 8), MIT Press

(Chapters 5 and 9), John Wiley & Sons (Chapters 10, 11 and 12), Palgrave Macmillan (Chapter 13) and Emerald Group Publishing (Chapter 15).

Finally, I would like to thank the late Bob Stern, who invited me to put together this volume. I consider this invitation a great honor.

Devashish Mitra
Syracuse, New York, USA
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Political Economy of Trade Policy: An Introduction

We are all familiar with the gains from trade, arising from exchange and specialization, greater variety of goods consumed or used as inputs into production and greater market competition. Since we understand well the benefits of free trade, we need to explain departures from it in the real world. The last three decades have seen the emergence of the political economy models in international trade that try to explain the existence and the extent of the anti-trade bias in trade policy. Some of these models also try to explain why more efficient policy instruments have not been used. While this literature started out as primarily theoretical, the last decade and a half has seen an explosion of empirical work in this area, which has been able to uncover industry-specific and country-specific determinants of protection.

Part I. Endogenous Lobby Formation: Implications for Endogenous Trade Policy

I started working in this area more than a couple of decades ago as a doctoral student at Columbia University. My interest in this line of research began after reading an initial draft of a handbook chapter by Dani Rodrik on this topic. Dani, who was then a professor at Columbia, brought to my attention a major weakness of the existing literature: who gets to lobby the government was predetermined in all political economy models of trade policy. He suggested that addressing this issue could be an important contribution, and I immediately started working on this idea. In other words, I worked on a model of endogenous trade policy where lobby formation was also endogenous, i.e., whether a sector is politically organized or not is endogenously determined. The subject of this idea is Chapter 1 in this collection of my solo-authored and coauthored papers.

The initial version of Chapter 1, which was part of my doctoral dissertation, only had the case with symmetric sectors. This meant that while nothing could be said about the specific distinguishing characteristics of a sector that would make it more likely to be politically organized than another sector, the model did throw light on the equilibrium proportion of sectors that would be politically organized or would form lobbies as a function of country-level characteristics such as the government's responsiveness to political lobbies and the degree of asset inequality in a country. This would also be an additional channel through which these country characteristics would determine the overall nature of trade policy. My dissertation version of this paper used a very simple political support function framework, where the government maximized a weighted sum of welfare levels of the various factor owners, with the politically organized ones getting higher weights.

The final version of this paper, which was published in the *American Economic Review*, is what is included in this collection (Chapter 1). It is different from the initial version in two main respects. It incorporates the Grossman and Helpman (1994) "Protection for Sale" framework (with menu auctions) more explicitly. Thus, with the government's objective function being a weighted sum political contributions and aggregate welfare, political contributions now get factored into the lobby formation decision. At the same time, it has a section that is devoted to an extension to asymmetric industries. Through this asymmetry I am able to shed some light on which type of industries get politically organized in equilibrium.

The main results of this study are (1) free trade can not only be a consequence of aggregate welfare maximization but also of aggregate political contributions maximization by the government; (2) greater asset inequality leads to an increase in the formation of lobbies and at the same time greater trade protection; and (3) industries facing relatively inelastic demand, with high levels of capital stock, with fewer capitalists and that are geographically less dispersed, are the ones more likely to get politically organized in equilibrium.

The next two chapters look at the theoretical applications of this idea of lobby formation or political organization. Chapter 2 applies this idea to trade agreements, while Chapter 3 (coauthored with Pravin Krishna) shows how unilateral trade liberalization by one country can induce reciprocity by its trading partner. In Chapter 2, there is an import-competing sector whose capitalists decide whether they should incur the costs of political organization. If they do decide to incur these costs then they are represented by a lobby that bargains with the government over an import tariff and political contributions. In this bargaining, the contributions will at the very least compensate the government for the welfare loss arising out of the tariff. In many cases they will not cover the costs associated with resources lost during the process of political organization. Thus, prior to the political organization decision the government might have an incentive to commit to a free trade agreement. Whether the government will want to sign such an agreement or not will depend on the size of the political organization costs, the bargaining power of the government relative to the import-competing lobby and the government's weight on aggregate welfare relative political contributions.

The idea is similar to that of Maggi and Rodriguez-Clare (1997) in that in both models there is a cost incurred prior to the lobbying taking place. In their model, capitalists decide which sector (import-competing or export) to put their capital in. This investment is made by factoring in the possibility of protection to the import-competing sector down the road. This leads to a distortion in resource allocation and has welfare costs for which the lobby does not compensate the government during their bargaining as those costs are sunk in that they already have been incurred prior to the bargaining. In my model, there is no capital mobility. In fact, capital is used only in the import-competing sector. Similar to the Maggi and Rodriguez-Clare framework there are costs (those in political organization) in my model that are incurred prior to lobbying.

Chapter 3 (which is coauthored with Pravin Krishna) looks at the question of "reciprocated unilateralism," once again using the idea of lobby formation. There is a pre-existing import-competing lobby in the foreign country, but the specific factor owners in the export sector there are not politically organized to begin with. When the home country liberalizes its trade policy (reduces the tariff on its imports) it increases demand for the foreign country's exports. This expands the potential market for the foreign country's exports. This leads to the formation of an export lobby in the foreign country that neutralizes the import-competing lobby there and brings about trade liberalization in the foreign country. Therefore, if we take into account possible lobby formation or political organization effects we can see that trade liberalization in one country, by creating export lobbies in its trading partners, will lead to the reciprocation of that liberalization, i.e., there will also be trade liberalization in the foreign country.

Part II. Majority Voting and Ideology: Implications for Endogenous Trade Policy

There are two main approaches used to the modeling of endogenous trade policy. One is the lobbying approach that we discussed above. The other uses the median-voter approach. Let's say voters differ from each other (are heterogeneous) along one dimension (a single individual characteristic). Let's also assume that an individual's most preferred trade policy is an increasing function of the variable describing this characteristic. If we rank individuals in increasing or decreasing order of this characteristic, then the median individual's most preferred policy, say the level of import protection that maximizes the welfare of this median individual, cannot be beaten by any other level of protection under majority voting. This also would be the trade policy in a Nash equilibrium under political competition between two parties, whose sole objective is to win elections. This approach was used within a two-sector, two-factor Heckscher-Ohlin framework by Mayer (1984). In this framework, if the two factors of production are labor and capital, both fully mobile between the two sectors, then trade or trade protection benefits one factor and hurts the other. While protection benefits the scarce factor and hurts the abundant factor, trade openness benefits the abundant factor and hurts the scare factor. This comes straight from the well-known Stolper-Samuelson theorem. Thus trade protection benefits labor in capital-abundant (rich) countries, while it hurts labor in labor-abundant countries.

In all countries, the majority are mainly owners of their labor, so most of their income is labor income. This means that there is inequality in every country. As a result, with the application of the median-voter approach in the presence of inequality, we should see positive import protection in equilibrium in rich countries but negative import protection in poor or labor-abundant countries. While this prediction of the model is consistent with what we observe in rich countries, it is not consistent with what we observe in labor abundant countries. In that case, is the median-voter approach totally useless? Or is the Heckscher-Ohlin framework, with its assumption of perfect mobility of factors between sector, not capturing important aspects of the real world?

There are many possible and plausible reasons for a positive level of protection seen everywhere. One of them arises from terms-of-trade effects, which has recently been captured within a median-voter, Heckscher-Ohlin framework by Dhingra (2014). In Chapter 4 (coauthored with

Pushan Dutt), we take the view that while the exact level and orientation of trade protection might not be predicted by Mayer's median-voter, Heckscher-Ohlin model, it might be able to explain variations in trade policies across countries and over time. Greater asset inequality would lead to a greater demand for redistribution towards labor as the median voter derives most of her income from her labor. This means that greater inequality should lead to higher protection in capital-abundant countries and lower protection in capital-scarce countries. This is the hypothesis we test in Chapter 4 (with Pushan Dutt) using cross-country data and find considerable evidence in support of it.

While a prolabor redistribution comes from majority voting since asset inequality is unequal in all countries, it can also come from a left-wing government in power. A right-wing government, on the other hand, would redistribute less towards labor. Thus, trade policy will depend on the ideological orientation or the political valence of the party in power. This arises either because who the constituents of a political party are depends on its ideology or the ideology itself determines where the trade-off between equity and efficiency needs to be resolved. Marrying the Stolper-Samuelson theorem with this idea of ideology, moving left in the political ideology spectrum of the government in power should lead to an increase in trade protection in capital-abundant countries while it is expected to lead to a reduction in trade protection in capital-scarce countries. This is what we empirically study in Chapter 5 (coauthored with Pushan Dutt) using cross-country data and find considerable support for our hypothesis.

In Chapter 6 (also with Pushan Dutt), we look at a model that encompasses both the above ideology hypothesis as well as the inequality (median-voter) hypothesis. Using cross-national data, we find that both ideology of the government as well as the degree of inequality are important determinants of trade policy.

In Chapter 7 (again coauthored with Pushan Dutt), we extend our ideology and inequality hypotheses to agricultural protection, adding to them the possibility of sector specificity of factors of production, lobbying and public finance considerations. Once again both ideology and inequality turn out to be important. However, here we find support for the sector-specificity of labor. Interestingly, while lobbying is found to be more important in developed countries, the public finance consideration of raising revenues turns out to be more important in the case developing countries.

The final chapter (coauthored with Pravin Krishna) in this section, Chapter 8, is a different application of the majority voting approach.

It is a completely theoretical paper that once again looks at the issue of "reciprocated unilateralism," studied in Chapter 3, through a completely different lens. In this paper we show that a unilateral trade reform in a partner country, by shifting the terms of trade in favor of the home country, creates a higher relative wage in favor of the export sector at home, leading to an expansion of that sector. As a result, the popular support for reform at home increases. In a two-country framework, we also find the possibility of multiple majority voting equilibria — protection in both countries or free trade in both countries. Thus unilateral trade liberalization by one country can move the equilibrium to the one with free trade in both countries.

Part III. Political Contributions Approach to Endogenous Trade Policy: Empirics

There are two chapters in this section, Chapters 9 and 10 that are both coauthored with Dimitrios Thomakos and Mehmet Ulubasoglu. They are both on the empirical investigation of the Grossman and Helpman (1994) "Protection for Sale" model, which takes the political contributions approach to modeling trade policy. The government maximizes a weighted average of aggregate welfare and political contributions, while each lobby maximizes its own welfare net of its contributions. The lobbies first present their respective contribution schedules, each of which is a function of the tariff vector. In the next stage, taking these contribution schedules as given, the government maximizes its objective function. The political equilibrium tariff on the imports of a good is inversely related to its import demand elasticity and the import penetration ratio in the case of a politically organized sector. Other things equal, a politically organized sector gets greater import protection (import tariff) than an unorganized sector. Also, the import protection given to a politically organized sector decreases with the proportion of the country's population that is politically organized and the weight the government attaches to aggregate welfare in its objective function. The above results (with respect to industry characteristics and country characteristics) for unorganized sectors go in the opposite direction. We test these predictions in Chapter 9 using three-digit industry-level data for Turkey for multiple years spanning democratic and dictatorial regimes. Note here that Turkey is truly a small open economy, an assumption of the Grossman-Helpman model.

As found in the case of the US, the estimated weight on aggregate welfare is many times the weight on contributions. In our case, it is

60–100 times depending on the specification and year. Also, the weight attached to aggregate welfare turns out to be higher in the democratic regime relative to the dictatorial regime. Another result, that is similar to the result for the US, is that a very large proportion, in the range of around 60–90 percent, of the overall population is politically organized.

The extremely high weight on welfare and the high proportion of the population politically organized do not seem plausible and are mutually inconsistent as the first result means there is limited incentive for lobby formation. Chapter 10 deals exactly with this issue for both US and Turkey. Several changes to specification, such as treating all sectors as organized, restricting focus to net importing sectors, making adjustment to the import-demand elasticity measures, etc., are carried out. These modifications give us possible estimated parameter combinations that look much more plausible than what was there in the earlier empirical literature. It is important to note here that our tests favor treating all sectors as organized.

Part IV. Endogenous Choice of Policy Instruments: Theory and Empirics

Chapters 11 (solo-authored) and 12 (coauthored with Dimitrios Thomakos and Mehmet Ulubasoglu) deal with the issue of the choice of policy instruments. If the government redistributes income to its favored groups, then why does it use trade policy to do so? There are other policies, such as direct subsidies, which are much more efficient in that they can result in a given amount of redistribution causing a smaller loss in aggregate welfare. Rodrik (1986) showed that this welfare ranking can be reversed when we compare endogenous tariffs with endogenous subsidies, since there is a free rider problem associated with lobbying for tariffs as it protects all firms in a particular import-competing industry. Subsidies, on the other hand, can, in principle, be firm specific. In Chapter 11, I argue that even the capitalists in an import-competing industry might prefer tariffs to subsidies. Since subsidies come from a common pool of government revenues (and there are costs to raising additional revenues), lobbying for a firm-specific subsidy by one firm leads to negative, congestion externality on other firms. Thus there is too much lobbying and a higher than optimal level of subsidies overall for the capitalists as a group. In the case of lobbying for a tariff its general nature (as opposed to the firm-specific nature of the subsidy) creates a positive externality in lobbying when lobbying is done by individual firms (rather than through an industry lobby). In addition, there is still the possibility of a congestion externality because the cost to the government of providing these concessions is increasing and convex in aggregate concessions provided. Given that these are offsetting externalities, lobbying for tariff might lead to an optimal amount of protection for capitalists in the industry as a group. Thus, the capitalists might prefer tariffs to subsidies due to several reasons. Even when there is an industry association, it is possible to coordinate lobbying for a tariff but in the case of a subsidy additional lobbying on the side (for which there turn out to be incentives) by individual firms cannot be prevented by the industry association.

From theory in Chapter 11 we move to the empirics of the choice of instruments in Chapter 12 (coauthored with Dimitrios Thomakos and Mehmet Ulubasoglu). Our empirical investigation about the mix of protection (import tariff) and promotion (production subsidy) is guided by the theoretical literature on this question. As in the case of our investigation of the Grossman and Helpman (1994) "Protection for Sale" model, we again use Turkish three-digit industry-level data from 1983 to 1990. The ratio of protection to promotion is inversely related to the ratio of import-demand elasticity to the output supply elasticity and to the import penetration ratio and positively related to the degree of concentration within an industry. This means the ratio of protection to promotion is inversely related to the ratio of their respective marginal welfare costs and to the degree of free rider problem in lobbying. The more concentrated an industry is, the less severe is the free-rider problem in lobbying expected to be.

Part V. Political Economy of Trade Policy: Surveys of the Literature with Applications

Chapters 13 and 14 are literature surveys. While Chapter 13 is solo-authored, Chapter 14 is coauthored with Pravin Krishna. Chapter 13 was an entry for the second edition of the *New Palgrave Dictionary of Economics*. It surveys the two main approaches to the political economy of trade policy, namely the median-voter approach and the special-interest approach. The applications of these two approaches to policy issues such as trade agreements, unilateralism versus reciprocity, regionalism versus unilateralism, hysteresis in trade policy, choice of policy instruments, etc., are discussed. The empirical literature is discussed, with an emphasis on the new "structural" approach.