Black hole tariffs and endogenous policy theory

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Political economy in general equilibrium

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With love to our parents:

Lawrence and Edna Magee
William and Margaret Brock
Yee Fong and Lowe Soo Yee Young

Contents

Preface

> Warren G. Harding was President when the highly protectionist Fordney–McCumber Tariff Act was passed in 1922. He told an amazed reporter that "the United States should adopt a protective tariff of such a character as will help the struggling industries of Europe to get on their feet." (Boller 1981, p. 231)

We have tariffs and other economic policy distortions because they are efficient – that is, they are politically efficient. Because they are politically optimal, they are not aberrations, but a necessary part of any reasonable political equilibrium. We have regressive policies because income inequality is politically efficient; we have lobbies giving funds to parties because that is politically efficient; and we have politicians using these funds to educate voters who are underinformed, and this is politically efficient. For decades, economists have been stuck on the concept of economic efficiency, but this concept is too narrow to provide a proper understanding of economic policy formation. In this book we define and illustrate the concept of *political efficiency*. An action is politically efficient if it increases the chances of election of one of the political parties.

Each voter is such a tiny fraction of the electorate that he or she has no effect on the outcome. Thus, it is rational for individual voters to gather no information about candidates and issues. Thus the paradox: If individuals are rational, they will be ignorant about political issues. Even U.S. presidents (e.g., Warren G. Harding) have missed the basic economic principle that American tariffs hurt foreign industries. Information is a public good and it is underprovided.

Unfortunately, spatial voting theory, the mainstream view in contemporary political science, assumes that voters are so well informed that they are not influenced by campaign contributions. Furthermore, this theory frequently comes up with two conclusions, neither of which is very insightful:

First, that there are an infinity of possible tariff rates on auto imports; second, that politicians will choose free trade.

This book merges economics and political science to advance a new approach: *endogenous policy theory*. This replaces the spatial voting model with the probabilistic voting model of endogenous policy theory developed by Brock and Magee (1974), described in detail in Brock and Magee (1975, 1978, 1980), and expanded to general equilibrium by Young and Magee (1982, 1984, 1986).

There are many contributors to endogenous theory; a partial list appears in Chapter 2, and the theory is described in Chapter 3. All of the results presented in the book are summarized in Chapter 1.

We began working on this book in 1972. It has taken sixteen years to finish. It is true that the last 20% of any job does take 80% of the time. In the fall of 1972, I taught Monday through Wednesday at the University of Chicago and commuted to Washington to work Thursday and Friday for the Nixon White House staff. None of my Monday through Wednesday academic theories could describe the goings-on in Washington on Thursday and Friday. I felt the need for a rigorous special-interest theory that would relate these events to academics.

We develop here a Texas school of political economy approach. This is a general equilibrium version of the Stigler–Virginia public choice theory that government policies are the outgrowth of predatory and parasitic redistributive behavior. That view coincides with Justice Frankfurter's: "There are two things which you do not want to see being made: laws and sausage." This book is about the former.

In early 1973, Buz Brock and I collaborated to produce our first paper on endogenous tariff theory, which we presented to George Stigler's industrial organization workshop at the University of Chicago in January 1974 (Brock and Magee 1974). It appeared as a Chicago working paper in 1975; in May 1978 a verbal summary was published in the *American Economic Review,* and the mathematics appeared in Brock and Magee (1980). Brock and I had great fun pillorying Chicago politicians over beers in a South Side bar called Jimmy's. In the late 1970s I went to Texas and Brock went to Wisconsin, so the wisdom of Jimmy's began to fade.

At this point, we should define "endogenous policy theory." First, we did not invent this title. Others placed the label "endogenous tariff theory" on our work, so we are stuck with it. An exogenous policy is one that is unexplained. *Webster's* says that "endogenous" means "growing from the inside." For us, "endogenous policies" are those that result from all of the actors pursuing their narrow self-interest. If we followed our theory, we would have named the book "androgynous policy theory."

In 1980, Leslie Young and I began collaborating on economics and politics in general equilibrium. Our working papers started appearing in 1982, just after Leslie came to the University of Texas. He and I published our first general equilibrium version of our endogenous tariff theory in the *Review of Economic Studies* (Young and Magee, 1986, pp. 407–19). The lessons of political economy in general equilibrium are best summarized by my uncle, Stephen L. Brock, now a retired rancher in Roy, New Mexico: "When you have an economy, you have goods and services. When you have politics, you have laws and statesmen. However, when you put the two together, you ain't got nothin'." Upon this intellectual foundation is founded the model of black hole tariffs described in Part II of the book. We turn now to a nontechnical overview of this special interest approach to economic policy.

Laws reflect the special interests of this generation; the bureaucracy represents the special interests of the preceding generation; and the Constitution reflects the special interests of previous generations. While this book is not about bureaucracies or constitutions, it is about how laws get passed on special-interest issues such as trade restrictions.

Politically efficient trade restrictions reduce economic efficiency. A political economy will not be in equilibrium until it reaches the production possibility curve along which political efficiency cannot increase without lowering economic efficiency. We describe in this book the politically efficient equilibrium (see Figure 3.1 for a discussion). In cooperative interactions, the welfare of both parties is improved. In selfish interactions, the welfare of the selfish party increases whereas the welfare of the other is worsened. Redistributive trade restrictions are inherently selfish, since some gain while others lose. There are parallels in nature. In nature's redistributive games, predators and parasites increase their welfares at the expense of their victims. Most interspecies relationships in nature are redistributive (e.g., carnivores eat herbivores and herbivores eat herbs). The symbiotic shark and pilot fish relationship is rare.

The pyramid of nature model dominates the Coase theorem in predator–prey relationships. (Figure 3.2 describes our construction of the Stackelberg-leadership pyramid in the endogenous policy model.) Collective welfare maximization and special interests do not fit. Special-interest behavior demonstrates the Darwinian superiority of some groups. Special interests do not lose sleep over violations of Pareto optimality and other welfare criteria. One of the superrich put it to me this way: "We don't give a *&!! about the poor."

This book is a formal analysis of economic predation as it operates through democratic political systems. The biological analogy is instructive. With predation, the prey is terminated; with parasitism, the host survives. The economic parallel is that economic predation consumes the prey's *stock* of wealth whereas economic parasitism captures part of the *flow* of the prey's income. Tariffs and trade restrictions are examples of flow redistributions. The purchasing power of many small consumers is transferred annually to more concentrated members of protectionist lobbies through the political sytem. As with biological parasitism, the parasites do not destroy the host; they simply reduce its welfare. In order to simplify the terminology, we refer in this book to both predatory and parasitic behavior as "predatory."

Pareto optimality occurs when one's welfare cannot be improved without lowering someone else's. If someone gains more than another loses, there is a potential move toward Pareto optimality, if compensation schemes were to be devised. Throughout this book we talk about potential Pareto policies of this sort; for simplicity of exposition, we refer to them as "Pareto policies."

Power is relative. There is a great joke about a lawyer and an accountant who were fishing in a stream in Alaska and saw a grizzly bear enter the water. The fishermen ran out of the stream. When they got to the bank, the lawyer stopped to take off his wading boots. The accountant said, "You can't outrun that bear, even with your boots off." The lawyer replied "No, but I can outrun you."

There is a naive view among economists that "we need to change this or that policy in order to improve economic welfare." We show here why this is impossible. The current values of policies reflect a delicate political equilibrium that balances all of society's conflicting interests. The current negative views of economists on the policy have aleady been embodied in its equilibrium value. The policy is endogenous and is outside the control of any group, including the politicians: They are merely the agents balancing all of the conflicting interests.

Part of the frustration we all experience when viewing the slow grind of government is due to insufficient political competition. A two-party country such as the United States is parallel to a duopolistic industry in economics. When there are only two firms in an industry, performance can be less than specular.

Democracy is just one party away from a dictatorship; a duopoly is just one firm away from a monopoly. There are similarities between a dictatorship and a democracy that would make the results in this book apply to a dictatorship. A dictatorship also has two major set of actors: one group in power and a revolutionary group out of power, just as U.S. Democrats wait to "overthrow" the Republicans in the next election. Special interests in both dictatorships and democracies must decide on whether to throw their funds and support to the incumbents or to the insurgents.

The commonly held view that the government is a ship of fools might be replaced with government as an island covered with pirates. The island is not economically efficient because the pirates compromise each other's objectives; but it is politically efficient because the outcomes take everything into account, particularly the underlying power structure. This is the endogenous political equilibrium.

Because most power structures are invisible, we have what an economist would call the "invisible foot" and the waste of nations described in Chapter

8. The degree of invisibility is even endogenous – witness, in Chapter 18, the optimal amount of obfuscation that parties employ. Discretionary policy and economic regulation are examples of political obfuscation.

Ideology performs many functions in endogenous policy theory. Among others, it obscures the redistributive process from voters (e.g., protection is "good" because it creates jobs, albeit lousy ones) and puts a straitjacket on politicians to keep them from deviating from the desires of their partys' underlying special interests.

The book is structured as follows: Chapters 3–8 develop endogenous policy theory in partial equilibrium. This means we describe the explicit behavior of rationally ignorant voters, two lobbies, and two political parties; however, the structure of the economy is not explained. In terms of endogenous tariff theory, this corresponds to a theory of the industry structure of tariffs: that is, why protection for steel is greater than that for shoes.

If Chapters 3–8 are a theory of why the steel industry has more political influence than the shoe industry, Chapters 9–16 explain why some countries have higher tariffs than others. There we add the maximizing behavior of the actors in two goods and two factor markets to that of the two lobbies, two political parties, and the rationally ignorant voters.

By "endogenous tariff theory" we mean protection generally, since all trade restrictions must be reduced to a tariff equivalent for meaningful measurement. We started not to include the empirical work, because much of it is preliminary; however, it emphasizes the relevance of this type of research. We encourage others to criticize and test our theory. In effect, we develop the microfoundations of national economic policies, with the tariff chosen to illustrate the theory. The results here describe any form of restriction on imports; the theory describes any government policy motivated by special interests.

This book has been fun. We particularly enjoyed devising the titles for Chapters 8 and 18. The basic distribution of labor on the book is that Magee wrote the text whereas Brock and Young wrote the Appendixes. The latter were as time consuming as the text.

We are grateful for the response of both political scientists and economists to our endogenous tariff theory. We thank the many scholars who have contributed directly or indirectly to this work (see the References for a complete list). We are especially indebted to Bob Baldwin for his kind words and encouragement, beginning in the early 1970s.

We are most grateful for the the contributions made by our parents, to whom we have dedicated this book.

January 1989 Steve Magee

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List of results

This book shows how the outmoded spatial voting model can be replaced by the probabilistic voting model of endogenous policy theory.

Endogenous policy theory merges economics and politics to construct the microfoundations of economic policy in a full political–economic general equilibrium. The results from our theory are listed below by chapter.

3. the probabilistic voting model
   endogenous policies in general equilibrium
   political efficiency defined
   the trade-off between economic and political efficiency
   policies as prices in political markets
   powerless politicians
4. the contribution specialization theorem
5. the rationality of policies
   the reverse-slope theorem
   the reverse-shift theorem
6. endogenous lobbying theory
   the power function model of endogenous lobbying
   the industry lobby as a noncooperative *n*-person game
   endogenous political jurisdictions
   estimating the free-rider effect
7. a specific-factor model of short-run lobbying in the United States
8. the invisible foot and the waste of nations
   lawyers as negative externalities
   evidence of slower GNP growth with more lawyers
   the paradox of rising GNP with more lawyering
9. endogenous redistribution theory
   the $2 \times 2 \times 2 \times 2$ model
   redistribution as a negative externality
   political power as the probability of election
   political parties necessarily as Stackelberg leaders

10. Prisoner's Dilemma tariffs
redistributive policies being due to uninformed voters
the Leontief general equilibrium model of endogenous policies
11. the compensation effect
multiple equilibrium traps
the progressivity of endogenous politics
the passageway thesis of no equilibrium
political schizophrenia
endogenous policies as implicit insurance
12. increasing returns to politics
clout reversals and economic development
symmetric exploitation by capital and labor
unstable country capital endowments
polarization of world capital
Brazilian vitality
the Indian disease
13. isoprotection curves
Republican protectionism
the macroeconomic by-product theory
endogenous protection in the United States
14. the factor endowment theory of policies
domestic politics being independent of world prices
the magnification paradox – lobbying up, tariffs down
the Cobb–Douglas general equilibrium model of endogenous policies
policy bifurcation – tariffs up, export subsidies down
15. economic black holes
16. evidence for the endowment theory of tariffs
evidence of nontariff barrier protection
17. the senile-industry argument for protection
economics dominating politics in explaining protection
tariffs being U-shaped on GNP per capita
endogenous industrial policy
18. the politically efficient policy
the voter information paradox
optimal obfuscation
the theory of the second worst