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BOOK REVIEW

Chicken Wars as Prisoners' Dilemma: What's in a Game?

TRADE WARS: THE THEORY AND PRACTICE OF INTERNATIONAL COMMERCIAL RIVALRY. By *John A.C. Conybeare*. Columbia University Press, 1987.

*Jonathan R. Macey**

I. Introduction

Few events in peacetime galvanize the public's emotions and focus the energy and attention of private and public officials as do trade wars, where states restrict the free flow of goods and services into their economies in order to achieve political or economic objectives.¹ For the public, trade wars, particularly retaliatory trade wars, inspire nationalistic sentiment as people are called upon to sacrifice current consumption in order to discipline an uncooperative trading partner.² For the economist, trade wars generally are considered irrational from an aggregate perspective. Such wars have been explained in the rent-seeking literature³ as mechanisms by which special interest groups (such as trade unions or the auto industry) can obtain wealth transfers from the population at large.⁴ Thus, the public's persistent loyalty to their own country's position during most trade wars is mysterious to economists.

In *Trade Wars*, Professor John A.C. Conybeare, a political scientist, employs a game-theory approach in an attempt to formalize a predictive theory for when trade wars will occur.⁵ While Conybeare praises the rent-seeking literature⁶ for rendering trade wars "more theoretically and empirically understandable," he finds the interest group explanation

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1 In his book, Professor Conybeare restricts the definition of "trade wars" to those conflicts where economic means (particularly the imposition of restrictions on the free flow of goods or services) are used to obtain economic objectives. In so doing, Professor Conybeare excludes two categories of state action that might be included within the term "trade war." First, of course, he excludes *actual wars* whose purpose relates to economic objectives in general or to trade in particular. Next, he excludes cases where states restrict the free flow of goods and services to its economy in order to achieve *political*, as opposed to economic, objectives. J. CONYBEARE, *TRADE WARS: THE THEORY AND PRACTICE OF INTERNATIONAL COMMERCIAL RIVALRY* 3-4 (1987) [hereinafter *TRADE WARS*].

2 President Carter's ban on wheat exports to the Soviet Union in the wake of that nation's invasion of Afghanistan is an example of an attempt to employ such an objective.

3 See *infra* note 6.

4 Mayer, *Endogenous Tariff Formation*, 74 AM. ECON. REV. 970 (1984); Brock & Magee, *The Economics of Special Interest Politics: The Case of the Tariff*, 68 AM. ECON. REV. 246 (1978); Pincus, *Pressure Groups and the Pattern of Tariffs*, 83 J. POL. ECON. 757 (1975).

5 *TRADE WARS*, *supra* note 1, at 5, 8.

6 "Rent seeking" refers to the process of trying to obtain economic rents, which are payments for the use of an asset in excess of the economic value of that object, as measured by its opportunity cost. The general strategy employed by rent seekers is to garner such rents by obtaining the help of the government. A classic example of rent seeking occurs where a trade association attempts to obtain a trade barrier against the import of foreign-made goods. If the trade association can combine this trade barrier with barriers to domestic entry in the form of licensing, it will be able to enjoy

conveyed in that literature to be incomplete because it "has largely been confined to examining the interindustry structure of protection within countries and, with a few exceptions, has not made international comparisons."⁷ In other words, Conybeare takes the position that, while interest groups may set the internal political agenda within a particular country, no interest group explanation of trade wars can be complete without an understanding of the constraints facing that country due to its bargaining power vis-à-vis other nations.⁸

This is a promising approach to developing a richer model for understanding trade wars. Combining the rent-seeking model with a game-theory approach to international trade is likely to yield far richer insights than either model alone could bring. Unfortunately, Professor Conybeare does not fully appreciate the power of the rent-seeking approach. Under the rent-seeking model, one should look at the nature of the interest group dynamic within a particular nation in order to determine that nation's preferences regarding its trade policy. Having understood the internal goals of a nation's trade policy, one then could employ game theory to model the strategic relationship of that nation within the international order to see how those goals are likely to be implemented.

Instead of doing this, however, Conybeare begins with the assumption that nations are rational, welfare-maximizing states.⁹ Only when this assumption is "insufficient to explain outcomes" does he turn to "other factors" to "supplement the economic game model."¹⁰ Only at this "second level of analysis" does Conybeare employ the lessons of rent seeking to determine whether interest groups within a country are attempting to use trade as a method for advancing their own ends at the expense of other groups within the nation.

This two-tiered approach deprives Conybeare's model of any real predictive capacity. In order to determine when to employ the second, rent-seeking tier, Conybeare looks at the goals being pursued in a particular trade war. But the goals of a trade war are either: (1) to benefit an interest group or (2) to further some national interest, economic or otherwise. As Conybeare appears to acknowledge,¹¹ it is hard to imagine any *economic* goal for a trade war besides the goal of obtaining wealth transfers for interest groups. But, since Conybeare limits his discussion to situations where trade is used to accomplish economic objectives, it is hard to imagine why he bothers with the first tier of his two-tiered analysis. A better approach, and one more consistent with the rent-seeking model, would be to ignore the national interest altogether, and focus on the political support maximizing solution from the perspective of the interest groups within a particular country. This approach is far more

economic rents. Thus, rent seeking is generally synonymous with governmental lobbying by interest groups for economic advantage.

7 *TRADE WARS*, *supra* note 1, at 8.

8 *Id.* at 11.

9 *Id.* at 13-14.

10 *Id.* at 14.

11 *Id.* at 7 (describing most general economic explanations of how trade wars can improve an economy's overall welfare as "irrational").

likely to yield useful results than an approach that quixotically attempts to derive implications on the basis of some vaguely defined "national policy." Professor Conybeare recognizes this to some extent since he admits on occasion that the goals of the state, as reflected by the agendas of elected officials, often are indistinguishable from the goals of discrete interest groups. Where this is his approach, the results are highly useful.

II. Game Theory

Three basic types of game-theory models can be used to describe the relationship of two trading nations: the prisoners' dilemma, the game of chicken, and the stag hunt game. The prisoners' dilemma describes the situation where two parties, incapable of coordinating their responses to a common situation, systematically are unable to reach a solution that maximizes their aggregate welfare.¹² In the case of foreign trade, a prisoners' dilemma arises where the wealth maximizing strategy from the standpoint of the aggregate interests of both countries would be to end the mutually destructive cycle of retaliation, while the worst strategy from the perspective of the individual countries would be for one of them to adopt a free trade policy that was met with trade barriers from the other country. In such a situation the dominant strategy for the two countries is to refuse to cooperate regardless of their prediction about the behavior of the other country. Only by not cooperating can each country be assured both of obtaining the best possible outcome (a country retains its barriers while the other abandons its barriers) and of avoiding the worst possible outcome (a country abandons its barriers while the other retains its barriers).

The second type of basic game structure is chicken, a game in which one country will cooperate if it thinks another country will not cooperate, and fail to cooperate if it thinks the other will cooperate. As its name suggests, the idea of chicken is that if two cars are travelling towards each other on a narrow path, and the object of the game is to stay on the path while avoiding collision, the driver of one car will swerve (cooperate) if he thinks the other will not. However, he will stay on the path (defect) if he thinks the other car will swerve. Clearly, under such a strategy, it pays to have the other party think you are stubborn and obstinate, so that he rather than you will veer from the path.¹³ In the international trade area,

¹² The optimal tariff war between two large countries provides an example of such a prisoners' dilemma. Imagine the situation where Country X imports wheat from Country Y. Further imagine that the availability of close substitutes for wheat, or the tastes and preferences of the consumer in Country X, are such that they exhibit a highly elastic demand curve for wheat. As such, if the price of wheat rises slightly, Country Y will face a strong drop in demand for its wheat from X. Finally, suppose that the supply of wheat from Y to X is rather inelastic, perhaps because the soil on which its wheat is grown cannot easily sustain alternative crops.

Under these sets of assumptions, Country X may, in the short term, improve its position by imposing an ad valorem tariff (one determined by a percentage of the price of the goods) on the import of wheat. Although consumers of wheat in X are harmed by the increased price of wheat, the tariff income to Country X goes up by more due to the elasticities described above, which force Y to bear most of the costs of the tariff. As such, Country X may derive net income gains from imposing taxes on its foreign trade. Country Y, however, may retaliate by imposing trade barriers of its own, thereby causing a trade war.

¹³ C. GOETZ, *CASES AND MATERIALS ON LAW AND ECONOMICS* 16-17 (1984).

cooperative chicken games seldom serve as useful models. One situation in which a cooperative chicken strategy dominates is where a small country discovers that it will be better off if it cannot retaliate against a much larger country that imposes a trade barrier because retaliation might lead to counter-retaliation, making the smaller country even worse off.¹⁴

Finally, the stag hunt game is described by Conybeare as "fundamental to the pure theory of international trade."¹⁵ In stag hunt, all parties desire cooperation because the gains from cooperating are greater than the gains from not cooperating. The example Conybeare employs is one in which several countries engaged in trade each specializes its production according to its comparative advantage thereby raising its standard of living as well as overall production.

However, the inability of these pure game-theory models to take account of rent seeking renders them virtually useless for predicting trade policy. This is because political actors will not be primarily concerned with developing a trade strategy that maximizes aggregate national wealth in a political economy characterized by rent seeking. Take, for example, the prisoners' dilemma in which national income can be raised by imposing an import tax. From an interest group perspective, the relevant questions are: (1) who receives the benefits from the import tax once the proceeds of the tax are distributed, and (2) who bears the burden of the import tax. The question of the relative size of the benefits and the burdens is largely irrelevant. In the rent-seeking model, even if the cost of the tariff (which comes in the form of higher prices for consumers) is greater than the revenue received from the tax, the tax still may be imposed if the beneficiaries of the tax are more politically powerful than the parties who must pay the higher price for the imported commodity.

Similarly, under the interest group oriented rent-seeking model, the elasticities of supply and demand for products are less important for predicting a trade war than the relative political strength of the relevant interest groups within the polity. Conybeare believes that a country is less likely to impose a tariff where consumers have a low elasticity of demand than where the country's consumers have a high elasticity of demand.¹⁶ This is because, according to the author, a country's consumers will absorb an import tariff where there is low elasticity of demand. Where the demand curve is highly elastic, consumers respond to higher prices caused by tariffs by lowering their demand for the import and increasing their consumption of some other product. However, Professor Conybeare's explanation for why a country would have little to gain from imposing an import tariff where demand is inelastic is unclear, if not simply false. The more inelastic the demand for a product, the greater the revenues to the state from imposing the tariff because consumers will not stop purchasing the product when the tariff is imposed. The revenues

14 TRADE WARS, *supra* note 1, at 34.

15 *Id.*

16 *Id.* at 287 n.1.

received by the state could then be used to make wealth transfers to still more powerful groups.

The rent-seeking model predicts that the revenue to the state is less important in determining whether a tariff will be implemented than the relative political power of the domestic suppliers of the product. If, for example, the domestic suppliers produce a product that is a close substitute for a particular import, and if the demand for the import is highly elastic, a rent-seeking model would predict a tariff on that import because such a tariff would induce consumers to switch from the import to the domestically produced product. Similarly, if no domestic producer produces the imported product or a close substitute, then a very high tariff might be imposed if demand is highly inelastic because the tariff, if high enough, may shift consumers' demand to locally produced products. But, a very high tariff on a product for which consumer demand is highly inelastic would be likely to cause consumers to revolt. Thus, where consumer demand is highly inelastic, the domestic producers will have to be extremely powerful and well-organized in order to succeed in obtaining a tariff. As the above discussion illustrates, contrary to the supposition of Professor Conybeare, the rent-seeking approach to trade wars and the game-theory approach are rivals, not complements. A rent-seeking approach undermines many of the game-theory predictions of the author.¹⁷

III. The Real World

Another problem with Professor Conybeare's predictions is that they are stated at such a high level of generality that it is impossible to test them, even on the basis of anecdotal evidence. For example, Professor Conybeare claims that a bilateral trade war between two large countries will resemble a prisoners' dilemma.¹⁸ In such a game, each party's dominant strategy will be to defect (not cooperate) unless the game is iterated (repeated), in which case the capacity of the other side to engage in contingent retaliation should induce cooperation.¹⁹ But, in the very next chapter, we learn that the large numbers of actors involved in international trade "reduce cooperation," a phenomenon that "will not be corrected by iteration of the game."²⁰

The author also claims that a policy of granting Most Favored Nation status to certain countries can alter this outcome, but he offers no explanation of how countries determine which trading partners will be favored, or how such agreements can be enforced without triggering a trade war. In addition, it is not obvious whether a policy of granting Most Favored Nation status to certain other nations is the best solution to the large numbers problem that the author suggests it is. Clearly, the best solution would be to have completely free trade with all nations.

¹⁷ *Id.* at 44-45 (describing the predictions the author makes on basis of his game-theory approach).

¹⁸ *Id.* at 44.

¹⁹ *Id.*

²⁰ *Id.* at 71.

The cost of the trade barriers to the nations that are not on the most favored list is not analyzed or discussed. Indeed, at times, the author concedes that his own work provides "illustrations of some of the many obstacles that may reduce the social value of repetition."²¹

But, the most vexing aspect of the book is its author's failure, despite almost overwhelming evidence, to accord proper respect for the rent-seeking literature. The overwhelming evidence exists both in the current trade policy of the United States²² and in Professor Conybeare's own case histories. For instance, Professor Conybeare fails to employ well-known lessons from the rent-seeking literature in Chapter Four. There, he discusses the trade patterns evident in the ancient and feudal worlds, observing that this era was remarkably free of trade wars. Professor Conybeare explains this phenomenon by invoking his game-theory framework which presumes that countries set their trade policies consistent with a public interest, rather than an interest group, perspective. Professor Conybeare asserts that the ancient economies "were analogous to small countries in [the] trade-bargaining model, since they exhibited highly complementary trade patterns that resulted in low elasticities of demand for traded goods."²³ These low elasticities of demand for imports lower the gains from a tariff since the cost of the trade war falls on consumers. Countries with such consumers are hurt by a tariff war.²⁴

Professor Conybeare's position assumes that trade in ancient times "tended to be complementary exchanges of essential commodities, such as food and raw materials."²⁵ Perhaps this is true over a certain range of commodities; but, by the time countries began to actively trade with one another, they were already somewhat sufficient in their manufacture of food and raw materials. Trading in ancient times, as now, involved luxury goods as well as essential commodities. The demand curve for these luxury goods does not fit into Professor Conybeare's model.

Mancur Olson in his now classic work, *The Rise and Decline of Nations*,²⁶ offers an alternative, and more satisfying, explanation for the predominance of free trade during ancient times. Taking a far more interest group oriented approach than Professor Conybeare, Olson observes that as a society becomes more stable and develops fixed boundaries, distributional coalitions inevitably emerge. It is these distributional coalitions that lead to trade wars. As the stabilization process continues, these coalitions proliferate and organize for collective action.²⁷ These special interest coalitions set their sights at restraining competition for the

21 *Id.* at 101.

22 In terms of the current trade policy of the United States, interest group pressures have led to antidumping laws, which bar consumers from access to subsidized imports, to regulations on the importation of steel and textiles and to "voluntary" quotas on Japanese automobiles. In addition, concerted pressure from the tobacco industry has led the State Department to pressure foreign countries to permit local manufacturers to import United States cigarettes despite the obvious health hazards posed by such products.

23 TRADE WARS, *supra* note 1, at 73.

24 *Id.* at 77.

25 *Id.* at 76.

26 M. OLSON, *THE RISE AND DECLINE OF NATIONS: ECONOMIC GROWTH, STAGFLATION AND THE SOCIAL RIGIDITIES* (1982).

27 *Id.* at 38-41.

products they sell or the services they offer. Raising tariffs and occupational licensing are the standard weapons in the interest groups' arsenals.²⁸ Thus, the better explanation for why trade barriers did not exist during ancient times is that, although communication and transportation had developed to an extent that states could trade with relative ease, interest group coalitions had not become entrenched enough within these societies to erect effective barriers to trade. By medieval times, though, guilds had become entrenched, and tariffs were commonplace.

Two-thirds of Professor Conybeare's book describes particular trade wars throughout history to illustrate his hypotheses about international trade. These tales are fascinating to the uninitiated and well worth reading from a purely historical perspective.

In Chapter Five, he looks at the Anglo-Hanse trade wars to test his assertion that bilateral trade wars between large trading units will result in a prisoners' dilemma that will evolve into a cooperative equilibrium as the two sides learn to employ contingent retaliation. Unfortunately, four hundred years worth of trade—a sufficient time span to produce iterative opportunities for even the most exacting game theoretician—did not produce cooperation. By the author's own admission this was because “domestic rent-seeking in conjunction with a severe public good problem in the use of the tit-for-tat strategy of retaliation” caused “outbreaks of conflict to escalate.”²⁹

In Chapter Six, Professor Conybeare describes the Anglo-French trade wars beginning in 1664. These trade wars are used to illustrate the author's hypothesis that trade wars between two large countries should evolve into a cooperative interaction after some initial defection because such wars resemble iterative prisoners' dilemmas.³⁰ Contrary to Professor Conybeare's general hypothesis, the trade wars lasted for over two hundred years and did not evolve into a cooperative equilibrium at the pace his model predicts. As with the Anglo-Hanse trade wars, the author is forced to admit that his own example “illustrates the ease with which the effects of iteration may be disrupted.”³¹ Once again, the cause of a protracted trade war can be traced to domestic rent seeking.³²

28 *Id.* at 226.

29 TRADE WARS, *supra* note 1, at 99.

30 *Id.* at 129.

31 *Id.* at 157.

32 *Id.* at 157. Professor Conybeare lists four factors—perceptions of the gains from trade, linkages to military games, intragovernmental politics, and domestic rent seeking—as causes of the problem. *Id.* The first factor he lists is highly unsatisfying, because it is simply a theory that the British stupidly misperceived the likelihood of French retaliation in a trade war. While “stupidity explanations” are rarely satisfying, since they can rescue any hypothesis, they are particularly suspect when they attempt to explain long-lived behavior. Similarly, blaming the failure of two countries to reach a mutually beneficial cooperative outcome on “intragovernmental politics” is so vague and amorphous that it can be used to rescue any sinking hypothesis. For example, Professor Conybeare claims that “the Whigs became the first modern political party in England, dominated English politics during the eighteenth century, and gave a firm protectionist direction to English commercial policy.” *Id.* at 159. This conclusory description does not explain *why* the Whigs adopted the policy they did. Blaming the trade problems between England and France on the fact that a state of war at times existed between the states is not very satisfying since all wars are, at least in part, trade wars. Professor Conybeare also does not explain why the wars erupted in the first place, except to suggest that rent seeking provides much of the explanation. See *id.* at 146. Rent seeking is by far the most

Professor Conybeare's description of the industrial rent seeking that fueled the Anglo-French trade wars between 1600 and 1750 is among the best and most interesting passages of his very readable book.³³ The description bolsters Mancur Olson's arguments that the ability of interest groups to dominate the political process grows as society develops and becomes more stable. As Professor Conybeare concludes, much of the period was "notable for the official recognition of protection as a motive for trade taxes."³⁴

Conybeare's description refers to a proposed free trade treaty which called for France to reduce its tariff on English woolens (then taxed at fifty percent) and for England to reduce its tax on French silks (five percent). This treaty, which would have benefitted consumers of both countries, was jettisoned due to interest group pressure, despite support from England's Charles II:

Woolen exporters, who had previously favored a treaty, were now in opposition, both because the French excluded woolens from the treaty and because they feared Portuguese retaliation against English woolens if the tariff on French wines were reduced to that paid by Portugal. The East India Company also opposed the treaty because it did not remove a French prohibition . . . on its products Opposition also came from the import-competing producers mentioned above: silk and linen weavers, brandy distillers, and makers of gold and silver thread Tory backbenchers were increasingly intimidated by the force of the opposition, and gradually gave up supporting the bill.³⁵

Thus, the best explanation for the persistence of the Anglo-French trade wars was that "industrial protection had plainly arrived and been recognized."³⁶ Consistent with the rent-seeking model, the role of powerful special interests is just as useful at explaining those periods of free trade as it is at explaining those periods where trade barriers were the dominant features of trade policy. As Professor Conybeare recognizes, most of the support for free trade came from "the narrow self-interest of their proponents."³⁷ In particular, English industries wanted the French to lower their tariffs, and recognized that they would have to lower their own tariffs to achieve their objective. As Gary Anderson and Robert Tollison have explained, cotton textile manufacturers, a powerful interest group opposed to regulation in general, led the opposition to the Corn Laws.³⁸ The rent-seeking model explains the attitude of the French as well as the attitude of the British.³⁹ Professor Conybeare's depiction of the interest group dynamic in the Anglo-French trade wars is enormously satisfying if not wholly original. It is unfortunate that Professor

persuasive of the four factors that Professor Conybeare offers to explain why the Anglo-French trade wars lasted so long.

33 *Id.* at 152-57.

34 *Id.* at 153.

35 *Id.* (citations omitted).

36 Davis, *The Rise of Protectionism in England, 1689-1786*, 19 *ECON. HIST. REV.* 306, 313 (1966).

37 *TRADE WARS*, *supra* note 1, at 155.

38 Anderson & Tollison, *Ideology, Interest Groups, and the Repeal of the Corn Laws*, 141 *J. INST'L & THEOR. ECON.* 197 (1985).

39 *TRADE WARS*, *supra* note 1, at 155.

Conybeare does not explicitly recognize the primacy of this explanation and remains satisfied with his multi-causal explanation.

By Chapter Seven, Professor Conybeare's exposition on the "Chicken War" which was fought over trade restrictions initiated by the European Economic Community (EEC) against the United States, one wonders whether any of his numerous anecdotes will support the predictive models he develops early in the book. As one who generally cheers for the underdog at football games, I felt a disappointment upon reading Chapter Seven, despite my general skepticism about the predictive power of his models. Professor Conybeare is forced to concede:

Since the two powers were both large and roughly equal in size, the theoretical framework presented in chapter 2 would suggest that one may safely predict a Prisoners' Dilemma game structure. The EEC should have expected to make welfare gains by taxing imports from the United States, as should the United States have expected to gain from taxing imports from the EEC. . . . [O]ne may also expect that strategies of contingent retaliation should have pushed the game back toward mutual cooperation. This did not occur; both chose to defect and maintain their strategies of noncooperation with each other.⁴⁰

The flaw in Professor Conybeare's model evident in this chapter is the same flaw that plagues his approach throughout the book. His models assume that the goal of countries involved in international trade is to improve the overall welfare of their citizens. The rent-seeking approach rejects this claim, and acknowledges the fact that the government officials who make trade policy may be more interested in diverting wealth to powerful interest groups than in improving the overall GNP. Furthermore, when we move from examining the trade policy of individual nations to examining the attempts of several nations to set a unified trade policy through formation of an organization like the EEC, the gulf between reality and Professor Conybeare's model becomes fantastic. The author's assumption that member countries of the EEC will pursue trade policies that enrich members of the group at the expense of the interests of their own constituents cannot be sustained.

The Chicken Wars began because of Regulation 22, promulgated in July, 1962, which curbed the export of frozen chickens into EEC countries. The Chicken Wars brought the powerful agricultural lobby in France into direct conflict with the powerful agricultural lobby in the United States. Not surprisingly, France, the largest poultry producer in the EEC, was unwilling to embrace a free trade policy whose benefits would be spread among consumers throughout Europe. The benefits of protectionism were concentrated in France and the costs were borne by consumers throughout Europe. Indeed, the stakes were sufficiently high that France might have quit the EEC had not French agricultural interests been appeased.⁴¹

40 *Id.* at 160.

41 R. TALBOT, *THE CHICKEN WAR: AN INTERNATIONAL TRADE CONFLICT BETWEEN THE UNITED STATES AND THE EUROPEAN ECONOMIC COMMUNITY, 1961-64*, 133 (1978).

The power of agricultural special interest groups has led to national trade policy that goes beyond mere trade wars. Today, the national governments of the United States, France, and other countries are subsidizing farm exports.⁴² Clearly, the national income of a country does not increase when its government embarks upon a program of agricultural subsidies. The subsidies artificially increase demand for the products, and raise prices for local consumers. The explanation for such subsidies is that agricultural interest groups are more effective than local consumers in controlling national policy. These subsidies illustrate that interest groups can prompt a country to trade freely when such a policy is contrary to the national interest just as such groups can induce a country to engage in a trade war.⁴³

Professor Conybeare's model predicts different outcomes in trade wars depending on whether the war is symmetric or asymmetric. An asymmetric trade war is a war between countries of unequal economic prowess, as evidenced by size or national income. Professor Conybeare observes that the nineteenth century does not deserve the credit it receives as an era of global free trade. Rather, "the more powerful countries raised their tariffs, while attempting to force weaker countries to keep their own domestic markets open, which is precisely what we should expect hegemonic powers to do."⁴⁴ Professor Conybeare elegantly proves his point with three examples—the Franco-Italian trade war of 1886-1898, the Franco-Swiss trade war of 1892-1895, and the Russo-German tariff war of 1893-1894.

Little about this material is surprising. The small countries described generally had undiversified portfolios of domestically produced goods, and a "high degree of commodity and geographic concentration of trade."⁴⁵ It is hardly surprising that a larger, more powerful, trading partner which supplies staples to a smaller country will win a trade war with the smaller country. The interesting question raised by these trade wars, as Professor Conybeare points out, is why they so often are begun by a smaller power that seems destined to emerge the loser. In all three of Professor Conybeare's examples of asymmetric trade wars, the smaller country provoked a trade war that it ultimately lost. Not surprisingly, in all three cases, special interest groups played a large role in inducing the smaller country to start the trade war, which ultimately resulted in concessions to the larger country, and sizeable losses. Of course, the benefits of the trade war inured to the special interest group within the country initiating the war, while the costs of the ultimate retaliation and concessions were spread throughout the population of that country.

The first of these trade wars was between Italy and France. Consistent with Mancur Olson's thesis,⁴⁶ following the reunification of Italy in

42 TRADE WARS, *supra* note 1, at 173-74.

43 An even more striking example is the willingness of England and Norway to continue trade with Nazi Germany almost to the eve of World War II. In particular, Norway's steel exports to Germany enabled the country to construct the very tanks and ships later used in the occupation.

44 TRADE WARS, *supra* note 1, at 181.

45 *Id.* at 180.

46 See OLSON, *supra* note 26.

1861, Italy entered an era of trade protectionism. An important component of this protectionist trade policy was a tariff on textiles, the main French import to Italy.⁴⁷ Steel, apparently, was the major Italian product that stood to benefit from the erection of trade barriers. As with other conflicts, this was a war that Italy did not win. The British observed that "Italy has been much more severely wounded" and the French reported that they "suffered no serious inconvenience."⁴⁸ Apparently, industrial interests stood to benefit from the trade war while it lasted, while the retaliation by the French "hit other sectors (viz. agriculture)."⁴⁹

In 1892, the Swiss apparently took their turn at provoking a tariff war with the French. At that time, a new schedule of high rate tariffs on imported goods was approved by referendum. As with the Italians, the Swiss did not fare well. Silk was the largest Swiss export to France, and the silk industry in France, which was politically powerful, wasted no time in retaliation.⁵⁰ This retaliation was also caused by the French wine industry which was "a politically influential agrarian industry that could exert pressure to punish Switzerland for reducing its market."⁵¹ As is usually the case, it was the (Swiss) consumer who suffered.

The Russo-German tariff war of 1893-1894 was begun by Russia, and resulted in disaster for that country. During this time, Germany exported manufactured goods to Russia, and Russia exported agricultural goods and raw materials to Germany. Professor Conybeare's conclusion that the trade war resulted from a "ghastly misperception" by Russia is not credible given the fact that feudal Russia was organized so that powerful land owners had easy access to the halls of power, and that the benefits of protectionism would be highly concentrated within this powerful group.

The portion of the book on bilateral asymmetric trade wars brings us back to Professor Conybeare's annoying habit of blaming trade wars that contradict his model on the stupidity of the participants. He does this with all three examples in this chapter. Miscalculation is the only explanation he gives for Russia's decision to embark upon a trade war with Germany in the late nineteenth century.⁵² Professor Conybeare's continued reliance on the irrationality of the governments involved in trade wars threatens to undermine his entire approach to the trade wars. After all, his model employs a game-theory approach that presumes that the relevant actors (1) have sufficient information and (2) make rational choices among the available options. Throughout this Review I have criticized Professor Conybeare for assuming that the rational decision makers within a country inevitably will choose the strategy that improves overall national wealth. Interest group pressures prevent the decision makers from adopting that strategy. Even so, if as the case illustrations suggest, decision-makers systematically err in predicting the socially de-

47 TRADE WARS, *supra* note 1, at 183.

48 *Id.* at 185 (quoting GREAT BRITAIN, PARLIAMENTARY PAPERS 16 (1904)).

49 *Id.* at 186.

50 *Id.* at 191.

51 *Id.* at 191.

52 *Id.* at 195-6.

sirable outcomes, there is no reason to believe that Professor Conybeare's models will have any predictive power.

In Chapter Nine, Professor Conybeare moves the discussion from bilateral asymmetric trade wars to multilateral asymmetric trade wars. Professor Conybeare's sole example comes from the world steel trade. Despite the enormous complexity of the steel games, the story is one of virtually pure public choice. In Japan, the steel industry is organized as a strict cartel;⁵³ in Europe, the steel industry has been cartelized since before World War II, and, in recent decades, has held steel imports to below ten percent of its market.⁵⁴ The United States steel industry has been the beneficiary of state protection since 1861 when tariffs on steel helped the infant industry. But, when the industry began to decline in the 1950's, the industry's efforts to obtain protection from Congress rose to new levels.⁵⁵

The most interesting aspect of the steel wars regards the role of developing countries. As soon as developing nations began to export cheap steel to the United States and to the EEC, they were met with sharp restrictions. The United States restricted imports to 18.5 percent of its market, while the EEC imposed minimum prices in addition to fixed quotas.⁵⁶ Developing nations are particularly susceptible to the imposition of quotas and tariffs because they are unable to retaliate effectively against the more powerful developed countries. Developing nations tend to import a higher proportion of staples than developed nations, and quotas on these goods would simply harm the nation's consumers without imposing a significant cost on the developed country.

The penultimate chapter on the Smoot-Hawley tariff wars, which lasted from 1919 until 1940, is as far reaching in its scope as it is vague in its orientation. In these wars, the United States was pitted against the rest of the world in an attempt to impose barriers on imports while enjoying few constraints on its ability to export. Not only did the United States' larger trading partners retaliate, but certain countries, notably France, Germany and Italy, offered to subsidize the retaliation of certain smaller states.⁵⁷ Japan retaliated first by territorial expansion, and later militarily.

Professor Conybeare realizes that the Smoot-Hawley tariff wars do not fit comfortably into his model, but he summarily rejects the rent-seeking model because he does not believe it is sufficiently "well specified."⁵⁸ He does, however, concede the ability of the rent-seeking model

⁵³ *Id.* at 208.

⁵⁴ *Id.*

⁵⁵ As Professor Conybeare points out, the ability of the United States steel industry to obtain protectionist legislation is bolstered by the fact that the nine largest steel producing states have 225 out of 270 electoral votes.

⁵⁶ TRADE WARS, *supra* note 1, at 212-13. Surprisingly, in light of its reputation as a protectionist nation, Japan has not been notably successful at restricting imports. But this is probably due to the fact that the Japanese steel industry is focused on technologically high grades of steel while developing nations primarily sell lower grades.

⁵⁷ *Id.* at 247.

⁵⁸ *Id.* at 259.

to predict the pattern of trade policy that emerged after World War II.⁵⁹ In fact, the rent-seeking model appears just as capable of explaining the pattern before the war, when domestic interest groups attempted to protect their markets at the expense of less organized domestic consumers and foreign producers. Domestic interest groups were in a form of a prisoners' dilemma in that they might have been better off as a group by promoting free trade. The presence of certain groups pressing for a protectionist trade policy required all groups to press for such a policy.

IV. Conclusion

Professor Conybeare's book is a good one because it is well reasoned, thoroughly researched and closely argued. It is a very good book because, unlike many political scientists, he explicitly recognizes the value of a rent-seeking perspective when examining the creation of national policy. In my view, however, Professor Conybeare has not produced a great book because he has failed to acknowledge fully the major role played by rent seeking. In his conclusion, he concedes that rent seeking "was evident in all games,"⁶⁰ but he sees it as only one of a number of factors that pushes state actors towards noncooperative stances. In fact, rent seeking can push state actors towards more cooperative stances, as well as less cooperative stances, and explains far more about trade wars than Professor Conybeare is willing to concede.

For me the book was enormously useful to my understanding of trade wars. Its historical depiction was enlightening, and its game-theory approach was of value as well. This game-theory approach forced me to rethink my position on trade barriers. Prior to reading this book, it had been my impression that trade barriers were purely a function of interest group pressures within a country. But Professor Conybeare has convinced me that game-theory constraints strongly influence the ability of interest groups to transfer wealth to themselves through trade barriers.⁶¹ Professor Conybeare has also inadvertently convinced me that interest groups may acquiesce or even support trade barriers under certain circumstances hoping for retaliation.⁶²

In a nutshell, if Professor Conybeare merely had increased the rent-seeking component of his trade war story, and abandoned his assumption that political actors pursue the national interest, he would have produced an intellectual *tour de force*, and not merely a well documented, interesting set of stories. As it is, he has greatly increased our understanding of international commercial rivalry.

59 *Id.*

60 *Id.* at 275.

61 For example, if producers in a country manufacture products for which the demand is highly elastic, they are likely to be particularly adverse to the beginning of a trade war because retaliation by the other country would result either in a severe diminution in demand for their product, or in the manufacturers having to absorb the burden of the tariffs. Similarly, if manufacturers believe the demand for their product is inelastic, they will be inclined to favor a trade war since they will be almost immune from the effects of retaliation.

62 For example, wheat growers in Argentina might hope that the United States will impose heavy tariffs on the importation of steel in the hopes that Argentina will reply with a ban on the importation of American wheat.

