Strategic Trade Policy and Mercantilist Trade Rivalries

Author(s): Douglas A. Irwin

Source: The American Economic Review, May, 1992, Vol. 82, No. 2, Papers and Proceedings of the Hundred and Fourth Annual Meeting of the American Economic Association (May, 1992), pp. 134-139

Published by: American Economic Association

Stable URL: https://www.jstor.org/stable/2117389

REFERENCES

Linked references are available on JSTOR for this article: https://www.jstor.org/stable/2117389?seq=1&cid=pdfreference#references_tab_contents You may need to log in to JSTOR to access the linked references.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at $\rm https://about.jstor.org/terms$



is collaborating with JSTOR to digitize, preserve and extend access to $\mathit{The American Economic Review}$

Strategic Trade Policy and Mercantilist Trade Rivalries

By Douglas A. Irwin*

The application of game theory and oligopoly models to the theory of international trade and commercial policy in recent vears has drawn attention to strategic aspects of international competition (for an overview, see Elhanan Helpman and Paul R. Krugman [1989]). Some of this work suggests that optimal use of trade policy can, in principle, capture rents arising from imperfect competition at the expense of other nations. While dubious as a guide for the design and conduct of current-day commercial policy, the theory of strategic trade policy may provide insight into the international trade rivalries of the 17th century, the classic period of mercantilism. Long-distance trade from Europe at this time was undertaken chiefly by state-chartered monopoly trading companies formed in a select number of advanced countries. Competition for the profits on lucrative new trade routes could take the form of a game in which government policy could be strategically employed to shift a noncooperative equilibrium among the trading companies to an outcome more advantageous to one country's firm. In this paper, I hope to show how recent work on trade policy under oligopoly can enhance understanding of both the economic doctrine propounded by mercantilist writers and the commercial policies pursued by various European states during the mercantilist period.

I. Trade Policy in Mercantilist Doctrine

Aside from the monetary aspect of encouraging balance-of-trade surpluses to sustain inflows of specie, 17th-century English mercantilist trade doctrine disparaged most imports as wasteful and held that the gains from trade arose from exporting domestic production to foreign markets and shipping goods between markets. Most early writers on trade glorified foreign trade as a tremendous source of wealth and riches but believed it difficult to increase a country's exports because the total volume of world commerce was taken to be fixed. The idea that "there is but a certain proportion of trade in the World" led easily to William Petty's (1690 p. 82) conclusion that "the Wealth of every Nation consist[s] chiefly in the share which they have in the Foreign Trade with the whole Commercial World." A fixed volume of trade meant that the fixed gains from trade had to be distributed among participating countries, making international trade equivalent to a zero-sum game. As trade was set along certain "channels" that could not accommodate more traffic, entry was possible only by displacing existing merchants. This led to attitudes well expressed by Josiah Child (1693 p. 160), who argued that trade should be managed by government to ensure "that other Nations who are in competition with us for the same, may not wrest it from us, but that ours may continue and increase, to the diminution of theirs."

Mercantilist writers concluded that export-promotion policies aimed ultimately at increasing profits and employment were essential to preserve and augment national welfare. Lewes Roberts (1641 pp. 30-1), for example, argued in favor of export subsidies; experience had shown that "great sums of monies have been lent gratis, or upon easy rates and security, to skillful merchants, out of the sovereign, or common Treasury, which hath also found such good success, as that the customs of that Prince have been thereby much increased, the kingdom enriched, the poor set to work, and the native Commodities thereof, vented to all parts of the world thereby." Competi-

^{*}Graduate School of Business, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. I am indebted to Andrew Dick, Stanley Engerman, Adam Klug, Randy Kroszner, and Eric Leeper for helpful comments.

tion over existing export markets was certain to be fierce if every government tried to capture an ever larger share of world trade for its own merchants. Indeed, in some cases 17th-century competition in international trade fostered commercial rivalries that extended beyond the market place, even spilling over into military conflict, as the frequent hostilities over trade during the period attest.

Recent models that consider strategic interactions between firms and governments in international trade may set out a framework similar to that crudely envisioned by mercantilist writers. In one prominent analvsis of strategic trade policy, James A. Brander and Barbara J. Spencer (1985) use a Cournot duopoly model to examine competition between a domestic and a foreign firm exporting to a third market. Under certain conditions, a government export subsidy enables the domestic firm to commit to a higher level of output. As the profitmaximizing response for the foreign firm is to contract output, the subsidy allows domestic production and profits to increase at the expense of the foreign firm. Such a profit-shifting policy is beneficial because the additional profits of the domestic firm exceed the cost of the government subsidy. Similar models have been used to explore the deterrence of foreign entry into profitable markets, the extraction of rents from foreign monopolists, and various related situations.

The mercantilist conception of international trade bears a striking resemblance to the perspective presented by the literature on strategic trade policy. Both suggest that substantial rents arising from imperfect competition are a prominent feature of international trade, that capturing these rents for one's own country at the expense of rivals by displacing or preempting them from the market is desirable, and that government can or should assist in this task by actively promoting domestic firms engaged in international competition. One key difference is that there appears to have been little explicit recognition in the mercantilist period that, if all governments undertake such policies, the resulting Nash equilibrium is inefficient and the welfare of all countries could be higher in the absence of such subsidies.

At least since Adam Smith, many economists have criticized the mercantilist conclusion that international trade should be viewed as a zero-sum game requiring government intervention on behalf of domestic firms. Yet to the extent that imperfect competition with strategic interactions between firms was a feature of 17th-century trade, recent findings suggest that the policies advocated by mercantilist writers stood a chance of being beneficial to their own countries. As the next section illustrates, although strategic competition was a feature of several prominent trade routes during the mercantilist period, trade policy was also subject to significant shortcomings in implementation, and the benefits of particular policies were often uncertain or unrealized.

II. Oligopolistic Trade Rivalries during the Mercantilist Period

The European explorations in Asia. Africa, and the Americas during the 16th century helped set the stage for the great expansion of world commerce in the 17th century. As already noted, state-chartered monopoly trading companies were formed in the few countries that were able to consolidate the capital and expertise required for long-distance overseas trade. Thus, in several instances, a relatively small number of firms were competing over the same, potentially lucrative trade routes. For entrepôt countries such as Holland and (to a lesser extent) England, a primary purpose of trade was to maximize profits from reexporting to Europe the goods of distant markets. Recognition that the international distribution of profits from such trade could be altered by commercial policies gave monarchs and statesmen a clear incentive to adopt measures to capture these rents for one's own country.

A classic example of the strategic interactions between firms during this period is the Anglo-Dutch rivalry for the East India trade. The economic structure of this rivalry conforms well to the standard analysis of trade policy in a Cournot duopoly, as described in Irwin (1991). The English East India Company and the Dutch United East India Company, chartered in 1600 and 1602 (respectively) were given exclusive trading privileges with India and Southeast Asia by their governments. The companies shipped low-bulk, high-value spices to European markets, bringing substantial rates of return: English profits (including shipping losses) exceeded 200 percent on several early vovages. Neither company possessed an initial inherent advantage in the East India trade; both firms just tapped into the already extensive commerce within the Indian Ocean by sending ships to acquire goods at various marketing ports in the region and then return to Europe.

Yet the Dutch emerged to dominate the trade and assume something like a Stackelberg leadership role against the English by the 1620's. The Dutch company owed its superiority not to government subsidies, but to a managerial incentive scheme that was institutionalized in the monopoly charter. Dutch managers were compensated on the basis of both the firm's revenue and its profits, thus giving them a direct financial interest in increasing the turnover of the company when determining its shipping schedule. This scheme committed the firm to a higher trading volume than it would have chosen under a scheme that linked managers' salaries only to profits. Without a credible commitment mechanism, the optimal, profit-maximizing response of the English was to reduce their output and, hence, their profits. Consequently, with constant costs and one price in Europe for the homogeneous goods, the Dutch company actually earned higher profits from the government's choice of managerial incentives.

This episode illustrates the discussion by Chaim Fershtman and Kenneth L. Judd (1987) and others about how, in a Cournot duopoly setting, contracts and incentives for managers to deviate from pure profit-maximization can benefit the firm for strategic reasons. The owners of the English company failed to undertake a similar commitment because they were loath either to allow the government to dictate its objectives or to relinquish control of the company to agents. This failure may not have been short-sighted and underscores the role for government policy as a commitment device: stockholders may have received a lower return even as the firm earned higher profits if profits net of revenue payments to managers were lower. Indeed, Dutch stockholders complained bitterly about the terms that the government had written into the monopoly charter and lobbied (with eventual success) to have the provision changed.

Yet even if government mercantilist policies were successful in attaining their shortrun objectives, unintended and unforeseen consequences of these policies sometimes tarnished these achievements. Their triumph in driving the English out of Indonesia, for example, left the Dutch in control of the spice trade, which was of declining profitability. Forced to shift their trade toward India, the English were unwittingly well-positioned to dominate what was to become an exceedingly profitable trade in cotton textiles.

The Dutch were also adept at preemptive strategies to deter other rivals from impinging on their trade routes and reducing their profits. Eager to share in the booty from trade with Asia. France chartered an East India Company in 1604. When the Dutch government responded by refusing to sell or provide ships and warned its experienced sailors and nationals against serving for the firm, the French company collapsed in 1609, without ever having dispatched a ship to the east. Entry by the Compagnia Genovese delle Indie Orientali was stymied in 1647 after even more aggressive Dutch retaliation. The Dutch also recognized that one strategy to exercise market power in European markets was to possess exclusive control over sources of supply in the distant markets. The Dutch sought monopoly contracts, enforced by coercion if necessary, with various leaders in Southeast Asia to foreclose English access to the spice market. Arming ships and establishing forts also facilitated the exclusion of rivals and the acquisition of direct or indirect control over sources of supply. Not surprisingly, mercantilist doctrine stressed the complementarity between "power and plenty": military power furthered economic gain, and vice versa.

The rise of territorial control as a preemption device meant that the capture of rents in trade required rather drastic strategies, such as the use of military force to eject rivals from a region. The Company of Roval Adventurers to Africa was chartered in 1660 as the English challenge to the monopoly of the Dutch West Indies Company in the slave trade. The slave trade was a rapidly expanding venture owing to the increasing demand for African labor in the sugar plantations of the West Indies. The early slave trade was reputed to be lucrative: from 1651 to 1675, on average, a laborer purchased for £2.68 in West Africa would fetch £23.12 in Jamaica, although substantial transportation costs and other losses and expenses make uncertain any precise calculation of profit (Stanley L. Engerman, 1972 p. 438).

In an effort to capture this trade for England. Charles II in 1663 authorized the seizure of Dutch forts on the Guinean coast of West Africa. By ousting the Dutch, the primary source of slaves would be under English control, and all profits would accrue to them. While this was initially accomplished, the Dutch quickly retook what had been lost, pushing the English firm into dire financial straits. The English government responded in turn by seizing New Amsterdam (renamed New York), thus opening the second of three Anglo-Dutch wars during the 17th century. The Anglo-Dutch commercial wars, mainly fought off the northwestern coast of Europe, were instigated by the English in an effort to increase their market share in trade by capturing or destroying Dutch shipping. One could also view these wars as a way of establishing a credible reputation in a repeated game to secure a permanent change in the behavior of a rival.

Rivalries between other trading companies in different regions offer similar examples of strategic competition, adopted to local conditions. Hudson's Bay Company was formed in 1670 to consolidate English resources against the French domination of beaver-fur exports from Canada, and French merchants were united under the Compagnie de la Baie d'Hudson in 1684 to counter the growing English presence. Each company employed various strategies to improve its position in the market, ranging from the choice of fort location to the securing of alliances with and the sale of arms to the Indians. The economic stakes were potentially large as the Canadian fur trade was lucrative during certain periods. As E. E. Rich (1961 p. 238) noted, "Despite the loss of its posts, the political uncertainty, the glut of beavers, the challenge of interlopers and French opposition, the [Hudson's Bay] Company declared a dividend of fifty percent in 1688, a further twenty-five percent in 1689, and in 1690 it trebled its stock and then declared a dividend of twenty-five percent on the increased stock after a long debate as to whether it might not well rise to thirty percent."

Joint-stock companies were also formed to exercise market power in lieu of direct taxes on trade, much like the export cartels for terms-of-trade gains discussed in Brander and Spencer (1984). In the early 17th century. Sweden found itself with close to a monopoly position in copper and pinetar (essential for shipping in this period). The government chartered joint-stock companies to be the sole exporters of these goods in an effort to reap a financial windfall by restricting sales. Unfortunately for the Swedes, both firms were financial failures. Dependent on Dutch merchants for credit, the pine-tar company also faced countervailing monopsonistic power from pine-tar agents in Amsterdam who helped undetermine Swedish efforts to raise prices (see P. W. Klein, 1978).

The view of mercantilism as rent-seeking by the nation-state for profits arising in international commerce may be useful for interpreting certain aspects of the mercantilist period. Yet this is not to argue that commercial policies were always formulated or guided by considerations of rent-shifting in world markets. The chronic failure of new ventures sponsored by governments suggests that attention should be paid to the political economy of trade policy in the mercantilist period. Indeed, Robert B. Ekelund and Robert D. Tollison (1981) describe how government behavior during this period can often be explained by the domestic rentseeking and lobbying activities of guilds and merchants.

In the early 17th century, for example, England was a major exporter of undved cloth to Europe, where it would be further processed before final sale. Aware that Dutch dveing accounted for roughly 75 percent of value added in final cloth sales, a conniving merchant instigated James I to launch the Cockavne Project in 1614, banning the sale of unfinished cloth, to force the completion of all manufacturing in England and appropriate the profits from the extra value added. The policy was ill-conceived from the start because England lacked the technical knowledge of the dveing process possessed by continental merchants. The Dutch retaliated by prohibiting imports of all finished cloth, and when unemployment and stocks of unsold cloth mounted in England, James capitulated and again permitted the export of unworked cloth-without getting the Dutch to eliminate their ban. The venture soured relations with the Dutch and set the tone for commercial relations for much of the century.

Thus, government policies could prove far from wise even if certain trade routes of this period provided an environment conducive for profit-shifting polices. In many cases, exclusive grants of monopoly privileges led not to the careful shifting of rents from competitors, but to abysmal economic failure. The French Compagnie des Indes Orientales, formed in 1664 by Jean Baptiste Colbert, relied on the government treasury for half its funds but lost more than twothirds of its capital in its first 20 years of operation despite these vast subsidies (Earl J. Hamilton, 1948 p. 46). An exaggerated view of the profitability of many trade routes by mercantilists may have been one reason for such failures. Few competitors on a particular trading route need not imply excess profits worthy of capture; transportation costs and risk may have conspired to make only a few firms viable. The few firms operating in the West Indies, for example, found it difficult to muster a large profit because economic conditions were deceptively competitive, with entry by various interlopers ensuring only a competitive rate of return.

III. Conclusion

The 16th-century voyages for discovery opened up many profitable opportunities for trade, setting the stage for voyages for commerce in the 17th century and, in certain instances, creating conditions amenable to profit-shifting policies. The scope for such policies, however, was probably diminishing with time. The expansion of potential entrants and alternative sources of supply allowed competition to become more pervasive, leading to a much greater integration of world markets and consequently fewer profits to be shifted by jealous rivals.

Still, the role of the state in 17th-century international competition needs further examination: how did governments directly gain from forming monopoly trading companies and what determined the particular incentives adopted in the monopoly charters? Jonathan Israel (1989 pp. 411-14) describes the "crucial role" of the Dutch state in advancing and protecting its trade in the 17th century, yet the period is also littered with government-supported firms that failed miserably. One task for research is to determine how the state, along with capital market institutions and new forms of business organization, contributed to the success or failure of the various chartered trading companies.

REFERENCES

- Brander, James A. and Spencer, Barbara J., "Trade Warfare: Tariffs and Cartels," *Journal of International Economics*, May 1984, 16, 227–42.
- and _____, "Export Subsidies and International Market Share Rivalry," *Journal of International Economics*, February 1985, *18*, 83–100.
- Child, Josiah, A New Discourse of Trade, London: Everingham, 1693.
- Ekelund, Robert B., Jr. and Robert D. Tollison, Mercantilism as a Rent-Seeking Society,

College Station: Texas A&M Press, 1981.

- Engerman, Stanley L., "The Slave Trade and British Capital Formation in the Eighteenth Century: A Comment on the Williams Thesis," Business History Review, Winter 1972, 46, 430-43.
- Fershtman, Chaim and Judd, Kenneth L., "Equilibrium Incentives in Oligopoly," *American Economic Review*, December 1987, 77, 927–40.
- Hamilton, Earl J., "The Role of Monopoly in the Overseas Expansion and Colonial Trade of Europe before 1800," American Economic Review, May 1948 (Papers and Proceedings), 38, 33-53.
- Helpman, Elhanan and Krugman, Paul R., Trade Policy and Market Structure, Cambridge, MA: MIT Press, 1989.

Irwin, Douglas A., "Mercantilism as Strategic

Trade Policy: The Anglo-Dutch Rivalry for the East India Trade," *Journal of Political Economy*, December 1991, 99, 1296-1314.

- Israel, Jonathan, Dutch Primacy in World Trade, 1585-1740, Oxford: Clarendon, 1989.
- Klein, P. W., "A 17th Century Monopoly Game: The Swedish-Dutch Trade in Tar and Pitch," in J. Schneider, Wirtschaftskräfte und Wirtschaftswege, Vol. 2, Wirtschaftskräfte der Europäischen Expansion, Nürnberg: Klett-Cotta, 1978.
- Petty, William, Political Arithmetick, London: Clavel, 1690.
- Rich, E. E., Hudson's Bay Company, Vol. 1, 1670-1870, New York: Macmillan, 1961.
- Roberts, Lewes, *The Treasure of Traffic*, London: Bourne, 1641.