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COUNTERVAILING DUTY LAW: AN ECONOMIC PERSPECTIVE

*Alan O. Sykes**

INTRODUCTION

Popular rhetoric holds that American companies can compete successfully against foreign companies on a "level playing field," but cannot hope to compete effectively against foreign companies that receive unfair competitive advantages from their governments. This proposition is put forward to justify, among other things, the countervailing duty laws of the United States. Under those laws, if a foreign government provides a "subsidy" to a company that exports its products to the United States, those exports may become subject to additional customs duties that ostensibly eliminate the competitive advantage attributable to the subsidy. Such duties are termed "countervailing duties," and are imposed to offset the "countervailable benefits" of foreign subsidy practices.

The authority for the imposition of countervailing duties under United States law has existed since the Tariff Act of 1897.¹ Prior to 1974, however, only fifty-eight countervailing duties were imposed

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1. See Ch. 11, § 5, 30 Stat. 151, 205. Originally, countervailing duties were applied only to imports of beet sugar from Europe, a response to the introduction of export subsidies by certain European nations. See 30 Cong. Rec. 2203 (1897) (remarks of Sen. Gray) (discussing Wilson Bill of 1894). In 1897, the countervailing duty law was modified to apply to all products. See *id.* at 2202 (reprinting Senate Finance Committee bill).

The policy debate surrounding this modification of the countervailing duty laws was quite thin, but two arguments for the use of countervailing duties were advanced. First, supporters claimed that countervailing duties were necessary to preserve the level of protection afforded by existing tariffs. That is, if the tariff on some good was, say, 20% *ad valorem*, and an export subsidy of 10% *ad valorem* on that good was introduced abroad, the level of protection afforded by the 20% tariff would be reduced by (roughly) one-half. A countervailing duty of 10% *ad valorem* was suggested as the appropriate response. See *id.* at 2224 (remarks of Sen. Chandler). A second argument for countervailing duties was the claim that subsidies create an "artificial" advantage, which if left uncorrected would distort the pattern of trade and destroy the industry of the importing nation—"natural advantages possessed by one country ought not to be offset by artificial aids afforded by another." *Id.* at 2225-26 (remarks of Sen. Caffery).

by the United States.² But changes to the law in the Trade Act of 1974³ and the Trade Agreements Act of 1979⁴ considerably increased the probability that a petition for countervailing duties would be successful within a reasonable period of time.⁵ As a result, the number of countervailing duty cases has risen substantially, with hundreds of countervailing duty petitions filed since 1980.⁶ These petitions have resulted in countervailing duties on a wide range of products, as well as a number of "settlements" in which the U.S. petitioners withdrew their petition following the negotiation of alternative trade restrictions.⁷ Beyond question, therefore, countervailing duties are an increasingly important tool of U.S. trade policy, and recent developments suggest no end to that trend.⁸

This Article questions the growing, *unilateral*⁹ use of countervailing duties by the United States. Although enforceable multilateral covenants prohibiting inefficient subsidy practices may well be in the mutual

2. See Cooper, U.S. Policies and Practices on Subsidies in International Trade, in *International Trade and Industrial Policies* 106, 114 (S. Warnecke ed. 1978).

3. Pub. L. No. 93-618, § 331, 88 Stat. 1978, 2049-53 (codified as amended at 19 U.S.C. § 1303 (1982)).

4. Pub. L. No. 96-39, §§ 101-107, 93 Stat. 144, 150-93 (codified as amended at 19 U.S.C. §§ 1671-1677 (1982)).

5. The Omnibus Trade and Competitiveness Act of 1988, Pub. L. No. 100-418, 102 Stat. 1107 (Aug. 23, 1988), contains a number of minor amendments to the countervailing duty laws, which do not affect the analysis to follow.

6. The International Trade Commission participates only in countervailing duty investigations that include an injury test. See *infra* notes 39-54 and accompanying text. At the close of fiscal year 1987, the Commission had completed at least the preliminary investigations in 289 cases filed pursuant to the Trade Agreements Act of 1979. See U.S. International Trade Commission Ann. Rep. 39 (1987).

7. Perhaps the single most important settlement resulted from the recent investigation of Canadian softwood lumber products. The U.S. petitioners withdrew their petition after Canada agreed to impose a 15% tax on its exports to the United States—a volume of exports in excess of \$2 billion annually. See [Jan.-June] 4 *Int'l Trade Rep. Current Rep.* (BNA) 6 (Jan. 7, 1987). The export tax was later lifted after the Canadian government agreed to raise the prices charged for the right to harvest timber on government lands. *Id.* at 1586 (Dec. 23, 1987).

8. Many countervailing duty petitions covering steel products from various countries were withdrawn after the Reagan Administration negotiated voluntary restraint agreements with major foreign steel suppliers. E.g., [Jan.-June] 2 *Int'l Trade Rep. Current Rep.* (BNA) 757-58 (June 5, 1985). Negotiating leverage was provided by a number of affirmative countervailing duty determinations, as well as by affirmative antidumping determinations and an affirmative determination under the "escape clause." See [July-Dec.] 1 *Int'l Trade Rep. Current Rep.* (BNA) 67-68 (July 18, 1984).

9. The Trade and Tariff Act of 1984 expanded the reach of the countervailing duty laws to encompass "upstream subsidies"—subsidies paid to the producers of inputs to merchandise exported to the United States. 19 U.S.C. § 1677-1 (Supp. III 1985). The recent decision of the United States Court of International Trade in *Cabot Corp. v. United States*, 620 F. Supp. 722, 730-32 (Ct. Int'l Trade 1985), substantially increased the likelihood that foreign government suppliers of natural resources will be found to confer a "subsidy." See *Certain Softwood Lumber Prods. from Can.*, 51 Fed. Reg. 37,453 (1986); *Carbon Black from Mex.*, 51 Fed. Reg. 13,269 (1986).

9. See *infra* notes 13-19 and accompanying text.

interest of participating nations,¹⁰ the unilateral imposition of countervailing duties on "subsidized" imports does not systematically promote national economic welfare, and existing law is poorly tailored to identify the cases in which countervailing duties are arguably beneficial. Instead, the duties are imposed mechanistically under conditions that may often produce a considerable net welfare loss to the U.S. economy. As a consequence, duties under existing law will enhance national economic welfare only by chance. Because the need for any type of countervailing duty policy is questionable, abolition of the countervailing duty laws might best serve the national economic interest.¹¹ Short of such a complete reversal of policy, there are several possible directions for reform in the law that would enhance national economic welfare by imposing additional limitations upon the use of countervailing duties.¹²

Part I explains existing U.S. countervailing duty law. Part II contrasts economic efficiency and distributional concerns as possible goals for U.S. trade policy in general, and countervailing duty policy in particular. Part III examines the economic consequences of countervailing duties under conditions of perfect competition. Part IV examines circumstances that create departures from perfect competition in the labor market. Part V considers circumstances in which the product

10. Thus, for example, the analysis in this Article should not be taken as an attack upon efforts by the United States to secure international agreement regarding the elimination of agricultural subsidies.

11. Similar suggestions have been advanced with respect to the antidumping laws. See, e.g., Barcelo, *The Antidumping Law: Repeal It or Revise It*, in *Antidumping Law: Policy and Implementation* 53, 77 (J. Jackson ed. 1979); Ordover, Sykes & Willig, *Unfair International Trade Practices*, 15 N.Y.U. J. Int'l L. & Pol. 323, 337 (1983).

Unlike the countervailing duty laws, the antidumping laws address purely private conduct—either international price discrimination or sales below (roughly) long-run average cost. Many writers have suggested that subsidies raise more subtle issues than dumping that may warrant some policy response. See *infra* notes 12, 127, 210 & 218.

12. The law and economics literature on countervailing duties is sparse. Schwartz and Harper argue that useful efforts to discipline trade-distorting subsidies require an international standard for the identification of such subsidies, yet they find it impossible to formulate a workable standard. Schwartz & Harper, *The Regulation of Subsidies Affecting International Trade*, 70 Mich. L. Rev. 831, 851-54 (1972). This view is developed further in Schwartz, *Zenith Radio Corp. v. United States: Countervailing Duties and the Regulation of International Trade*, 1978 Sup. Ct. Rev. 297, 304-08, which argues generally against the use of countervailing duties. Barcelo, by contrast, finds considerable merit in the use of countervailing duties to counteract export subsidies, as well as targeted domestic subsidies that cause injury to an import-competing industry and that cannot be justified as a means to correct market failures. See Barcelo, *Subsidies and Countervailing Duties—Analysis and a Proposal*, 9 Law & Pol. Int'l Bus. 779, 799-801 (1977). Bryan reaches a similar conclusion. See G. Bryan, *Taxing Unfair International Trade Practices* 279 (1980). Finally, Goetz, Granet & Schwartz posit that the countervailing duty laws are not intended to promote efficiency, but instead provide domestic producers with an entitlement to protection against injury due to foreign subsidies. They argue from this premise for reform of the way in which duties are calculated. See Goetz, Granet & Schwartz, *The Meaning of 'Subsidy' and 'Injury' in the Countervailing Duty Law*, 6 Int'l Rev. L. & Econ. 17, 26-29 (1986).

market is in one way or another imperfectly competitive. Finally, Part VI considers whether countervailing duties might be justified as part of a broader multilateral system for the discouragement of trade-distorting subsidy practices or the facilitation of trade liberalization.

I. COUNTERVAILING DUTIES UNDER EXISTING LAW

Like most Western developed countries, the United States is a signatory to the General Agreement on Tariffs and Trade (GATT).¹³ It is also a signatory to the GATT "Subsidies Code," which was negotiated in the late 1970s.¹⁴ Both the GATT and the Subsidies Code permit signatories to apply countervailing duties to "subsidized" imports, but do not require their application.¹⁵ Thus, at present, countervailing duties are a tool of "unilateral" trade policy.¹⁶ The United States is free to use them, or not, subject only to limited restrictions contained in Article VI of the GATT and in the Subsidies Code.¹⁷ Moreover, the United States has been the only major trading nation to use countervailing duties extensively.¹⁸ With very few exceptions, other importing countries do not impose countervailing duties on the subsidized products that become subject to countervailing duties in the United States. Therefore, U.S. countervailing duty policy is genuinely unilateral—both *de jure* and *de facto*.¹⁹

Countervailing duty actions under U.S. law begin with the filing of a petition for duties by representatives of a U.S. industry (a firm, union, or trade association, for example) that competes with the allegedly subsidized imports.²⁰ Depending upon the country of origin of the imports under investigation and several other factors, the case then proceeds under section 303 of the Tariff Act of 1930²¹ or section 701

13. General Agreement on Tariffs and Trade (GATT), Oct. 30, 1947, 61 Stat. pts. 5-6, T.I.A.S. No. 1700, 55 U.N.T.S. 194; J. Jackson & W. Davey, *Legal Problems of International Economic Relations* 298 (2d ed. 1986).

14. Agreement on Interpretation and Application of Articles VI, XVI, and XXIII of the General Agreement on Tariffs and Trade, GATT Basic Instruments and Selected Documents 56-83 (26th Supp. 1980) [hereinafter *Subsidies Code*]; J. Jackson & W. Davey, *supra* note 13, at 752.

15. Of course, GATT obligations do not constrain U.S. policy with respect to non-signatories absent some bilateral agreement with a nonsignatory to extend the protections of the GATT to its exports.

16. Multilateral policies respecting subsidies raise rather different analytical issues, which are discussed briefly at *infra* notes 216-17 and accompanying text.

17. See *infra* notes 24 & 41.

18. The European Community and Japan almost never impose countervailing duties; Canada and Australia use them infrequently. The only other nation to use them with any regularity is Chile. See J. Jackson & W. Davey, *supra* note 13, at 727. To some extent, however, the European Community uses "dumping" duties in lieu of countervailing duties.

19. This fact alone may raise serious doubt about the wisdom of U.S. policy.

20. The Department of Commerce can also initiate countervailing duty investigations. 19 U.S.C. § 1671(a) (1982).

21. *Id.* § 1303.

of the Act, which was added by the Trade Agreements Act of 1979 ("1979 Act").²² Both statutes require the International Trade Administration (ITA), an arm of the Department of Commerce, to determine whether a countervailable subsidy has been provided to the producers of the imports in question.²³ Only the 1979 Act, however, requires an "injury test" in all investigations.²⁴ The injury test precludes the imposition of countervailing duties solely upon a finding that a subsidy has been bestowed, and requires a further determination by the International Trade Commission (ITC) that subsidized imports are causing or threatening to cause "injury" to U.S. producers of competing products.

A. *The Analysis of Subsidization*

Like the GATT and the GATT Subsidies Code, U.S. law distinguishes "export" subsidies from "domestic" subsidies.²⁵ An "export" subsidy may be defined (quite roughly) as any government program or practice that increases the profitability of export sales but does not similarly increase the profitability of sales for domestic consumption.²⁶ Examples include government payments to manufacturers that are contingent upon export volume, the manipulation of market-determined exchange rates to favor export sales or production for export, the provision of goods or services by the government for use in the production of exports on more favorable terms than for use in the production of goods for domestic consumption, and a variety of other

22. 19 U.S.C.A. §§ 1671-1677 (West 1980 & Supp. 4 Dec. 1988).

23. The standards for this determination are the same under section 303 and section 701. The Tariff Act of 1930 provides for the imposition of countervailing duties to offset any "bounty or grant" paid or bestowed upon the imports under investigation, although nowhere is the phrase "bounty or grant" defined. 19 U.S.C. § 1303 (1982). The Trade Agreements Act of 1979 provides for the imposition of countervailing duties to offset any "subsidy" to the producers of the imports under investigation and proceeds to define the concept of "subsidy" with reference to the term "bounty or grant" in the 1930 Act. 19 U.S.C.A. § 1677(5) (West 1980 & Supp. 4 Dec. 1988). Consequently, the determination whether a particular foreign government practice is countervailable does not depend upon which statutory provision governs. See *Certain Fresh Cut Flowers from Mex.*, 49 Fed. Reg. 15,007, 15,010 (1984); *Certain Steel Products from Belg.*, 47 Fed. Reg. 39,304, 39,328 (1982).

24. The GATT Subsidies Code requires the United States and other signatories to utilize an injury test in countervailing duty investigations involving imports from other Code signatories. See Subsidies Code, *supra* note 14, art. 4(4). The United States also applies the injury test to imports from countries that have assumed obligations toward the United States that are substantially equivalent to those of the Subsidies Code, to imports from countries that are entitled to the injury test by virtue of most-favored nation clauses in bilateral agreements with the United States, and to all duty-free imports regardless of the country of origin. See 19 U.S.C. § 1671(b) (1982); *id.* § 1303(a)(2).

25. 19 U.S.C.A. § 1677(5) (West 1980 & Supp. 4 Dec. 1988).

26. The identification of export subsidies may prove quite troublesome in practice. See generally G. Hufbauer & J. Erb, *Subsidies in International Trade* 45-88 (1984) (identifying and describing types of export duties).

practices.²⁷

Government practices that cannot be characterized as export subsidies are countervailable under U.S. law only if they fall within the statutory definition of a "domestic" subsidy.²⁸ Virtually any type of government program can confer a domestic subsidy if it meets two criteria: it must be sufficiently targeted "to a specific enterprise or industry, or group of enterprises or industries," and, roughly, it must provide some opportunity or advantage to the targeted producers that would not otherwise be available to them in the marketplace.²⁹

The targeting criterion—commonly known as the "specificity test" or the "general availability test"—ensures that many of the familiar activities of governments are not characterized as "subsidies." For example, public education, government-financed highway and railway systems, national telecommunications networks, and even national defense activities provide economic benefits to domestic producers, but these benefits ordinarily accrue to a wide range of industries. Thus, such activities usually are not countervailable. In contrast, a special program to educate workers in the semiconductor industry or a special rail rate for the coal industry might well be countervailable. In practice, the targeting criterion can be quite difficult to apply. The countervailing duty laws provide no guidance as to what constitutes more than a "group" of enterprises or industries, thus leaving the ITA with considerable latitude in the assessment of targeting.³⁰

27. Annex A to the Subsidies Code is an "Illustrative List of Export Subsidies." Subsidies Code, *supra* note 14, at 80–82. United States law includes within the term "subsidy" any practice described in this illustrative list. 19 U.S.C.A. § 1677(5)(A) (West 1980 & Supp. 4 Dec. 1988).

28. 19 U.S.C.A. § 1677(5) (West 1980 & Supp. 4 Dec. 1988).

29. *Id.* § 1677(5)(B).

30. For example, the agricultural sector has been found to constitute more than a "group" of industries, and thus an irrigation project to benefit all farmers within the jurisdiction of the government that finances the project is not countervailable. See *Fresh Asparagus from Mex.*, 48 Fed. Reg. 21,618, 21,621–22 (1983). If a national government finances a program to assist all agricultural and manufacturing industries in a depressed region of the country, however, the program is "regionally" targeted and thus countervailable. See, e.g., *Lamb Meat from N.Z.*, 50 Fed. Reg. 37,708, 37,710–11 (1985). And if the national government establishes a program to provide aid to all farmers in the country who require aid in the judgment of an administrative agency, and that agency indeed provides aid to producers of a number of agricultural commodities (but not all agricultural commodities), the aid is potentially countervailable. See *Live Swine and Fresh, Chilled and Frozen Pork Prods. from Can.*, 50 Fed. Reg. 25,097, 25,101 (1985).

As another example, the ITA held at one time that the sale of rights to harvest softwood timber could not confer countervailable benefits because such rights were used by the lumber, paper, furniture, veneer, turpentine, charcoal, food additive, and other industries. See *Softwood Lumber Prods. from Can.*, 48 Fed. Reg. 24,159, 24,167 (1983). Following the decision in *Cabot Corp. v. United States*, 620 F. Supp. 722 (Ct. Int'l Trade 1985), which required the ITA to consider whether benefits are targeted "de facto" even though nominally available to many industries, the ITA later reversed itself because most of the rights were used by the lumber and paper industries. See *Certain*

The second criterion in the definition of domestic subsidies—an opportunity or advantage not otherwise available in the marketplace³¹—serves both to identify and to quantify the subsidy. If a government makes a loan at prevailing market rates, for example, no subsidy exists even if the loan program is highly targeted. But if the targeted loan program provides funds below the prevailing market rate, a subsidy exists, and the value of the subsidy is calculated on the basis of the differential between the actual rate and the market rate.³² The value of the subsidy is measured with reference to the benefit conferred upon the targeted industry, rather than the cost of the subsidy to the government.³³

Finally, U.S. law allows only a few adjustments to the subsidy calculation to reflect taxes or other charges paid to the government by the beneficiaries of the subsidy program. Offsets are allowed for application fees, deposits, or similar charges in connection with the subsidy program itself.³⁴ But the countervailing duty laws will not look beyond the government program under investigation to calculate net benefits—foreign producers cannot argue that the benefits of one program are

Softwood Lumber Prods. from Can., 51 Fed. Reg. 37,453, 37,455 (1986) (preliminary determination).

31. The statute does not use this phrase. Instead, it provides the following, nonexhaustive list of possible domestic subsidy practices:

- (I) The provision of capital, loans, or loan guarantees on terms inconsistent with commercial considerations.
- (II) The provision of goods or services at preferential rates.
- (III) The grant of funds or forgiveness of debt to cover operating losses sustained by a specific industry.
- (IV) The assumption of any costs or expenses of manufacture, production, or distribution.

19 U.S.C.A. § 1677(5)(A)(ii)(I)–(IV) (West 1980 & Supp. 4 Dec. 1988).

32. The statute is somewhat schizophrenic in its use of market benchmarks for the valuation of subsidies. As suggested in the text, the benchmark for ascertaining the existence and magnitude of any subsidy under a loan program is the market interest rate. But if the government program involves the provision of goods or services, the statute looks not to the prevailing market price of those goods and services, but to the existence of “preferential rates” in the government pricing structure. *Id.* § 1677(5)(A)(ii)(II).

For example, if a national government sells oil to all domestic users at \$10/barrel below the world market price, no subsidy is present because no buyer receives a preferential price. If the government charges the world market price to all industries except the widget industry, however, a subsidy to that industry exists in the amount of the price differential. See *id.*

The analysis changes if the commodity that is sold by the government is consumed by only a single “group” of industries—for example, a petroleum by-product with limited end uses. Then, a subsidy may be found even if the government does not offer a preferential price to particular purchasers. Depending upon the circumstances, the value of the subsidy may once again be calculated with reference to market benchmarks. See *Carbon Black from Mex.*, 51 Fed. Reg. 13,269, 13,272–73 (1986) (Preferentiality Appendix).

33. *Certain Textile Mill Prods. from Mex.*, 50 Fed. Reg. 10,824 (1985).

34. 19 U.S.C. § 1677(6) (1982).

offset by the costs of another, for example, or by excise, sales or other tax payments that are unrelated to the program under investigation.³⁵

If the ITA determines that an export or a domestic subsidy exists, it calculates a countervailing duty to offset the subsidy.³⁶ The duty will equal the aggregate amount of all subsidy payments divided by the value (*ad valorem* duty) or volume (specific duty)³⁷ of the production that benefited from the subsidy.³⁸

B. *The Analysis of Injury*

A considerable percentage of countervailing duty cases include an injury analysis by the ITC.³⁹ The injury test requires the ITC to deter-

35. The definition of "net subsidy" under U.S. law omits any allowances for such adjustments. 19 U.S.C.A. § 1677b (West 1980 & Supp. 4 Dec. 1988).

36. See 19 U.S.C. § 1671e(a)(1) (1982).

37. Most countervailing duties are *ad valorem*; specific duties are sometimes used for administrative convenience when the imports in question are already subject to specific duties under the U.S. tariff schedules.

38. This calculation ordinarily relies upon data for the last complete fiscal year of the subsidy program. To illustrate, suppose that in fiscal 1986 the widget producers of Timbuktu receive \$10 from the government for every widget that they produce, for a total of \$1 million in payments on \$10 million worth of production. The specific countervailing duty would equal \$10 per widget. The *ad valorem* countervailing duty would equal 10%. Any duties ultimately paid on the basis of this calculation are provisional: after a year or two, the ITA will conduct an "administrative review" to ascertain the export subsidies actually received during the period covered by the review, and recompute the countervailing duty. Any overpayment is refunded, and the importer of record is liable for any underpayment. See 19 U.S.C.A. §§ 1671e, 1675 (West 1980 & Supp. 4 Dec. 1988).

The duty calculation may be considerably more difficult than it sounds. A government grant for capital construction, for example, provides benefits that are deemed to extend over the life of the capital equipment. Thus, the "value" of a subsidy during the fiscal year that is used as the basis for the duty calculation will depend upon the method that is chosen to allocate benefits over time. The ITA has developed elaborate rules to determine when to allocate benefits over time and how to do so when required. See Cold-Rolled Carbon Steel Flat-Rolled Prods. from Argen., 49 Fed. Reg. 18,006, 18,016-20 (1984) (Subsidies Appendix).

39. Procedurally, the injury investigation has two stages. See 19 U.S.C.A. §§ 1671b, 1671d (West 1980 & Supp. 4 Dec. 1988). The "preliminary" investigation, which occurs before the investigation of subsidization by the ITA, entails a determination by the ITC "whether there is a reasonable indication that . . . an industry in the United States is . . . materially injured . . . or . . . threatened with material injury . . . by reason of imports of the merchandise" under investigation. 19 U.S.C. § 1671b(a) (1982 & Supp. IV 1986). The "reasonable indication" standard is understood to establish a fairly low threshold for an affirmative determination, and most preliminary injury determinations are affirmative. See *American Lamb Co. v. United States*, 785 F.2d 994, 999-1001 (Fed. Cir. 1986). The rare negative determination, however, terminates the investigation at both agencies. See 19 U.S.C. § 1671b(a) (1982 & Supp. IV 1986).

The "final" injury investigation occurs subsequent to the investigation of subsidization by the ITA. *Id.* § 1671d(b)(2)-(3). This final investigation is, of course, unnecessary if the ITA has determined that the imports in question are not subsidized. But if the ITA determination is affirmative, the ITC must determine whether a domestic industry is "materially injured, or is threatened with material injury" due to the subsidized

mine whether the domestic industry that competes with the imports at issue is "materially injured or . . . is threatened with material injury . . . by reason of" the imports that were found to be subsidized by the ITA.⁴⁰ One might interpret this language to require the ITC to determine whether foreign government subsidy practices have provided imports with a significant competitive advantage in the U.S. market—that is, whether a causal link exists between foreign subsidies and some "material" decline in the condition of U.S. producers.⁴¹ But the language of the statute arguably does not require such inquiry. It refers to injury "by reason of imports," not by reason of countervailable subsidies, and has consequently been interpreted not to require a causal link between injury and countervailable subsidy practices for an affirmative injury determination, only a causal link between injury and the "subsidized imports."⁴²

Some ITC Commissioners nonetheless embrace an approach to injury analysis that does search for a link between subsidization and injury.⁴³ In particular, they assess the impact of "subsidized imports" on the U.S. industry by supposing counterfactually that the subsidies were

imports. *Id.* § 1671d(b)(1). The absence of the "reasonable indication" language here is understood to create a higher threshold for an affirmative determination. See *American Lamb*, 785 F.2d at 999.

40. 19 U.S.C. § 1671d(b)(1) (1982 & Supp. IV 1986). Injury also exists if "the establishment of an industry in the United States is materially retarded," *id.* § 1671d(b)(1)(B), but such a finding is only rarely the basis for an affirmative injury determination. See, e.g., *Certain Commuter Airplanes from Fr. and Italy*, USITC Pub. 1269, Inv. No. 701-TA-174, 4 Int'l Trade Rep. Dec. (BNA) 1366, 1369-71 (July 1982).

41. Such a test appears to be contemplated by article VI of the GATT: "No contracting party shall levy any . . . countervailing duty . . . unless it determines that the effect of the . . . subsidization . . . is such as to cause or threaten material injury . . ." GATT, *supra* note 13, art. VI(5). The U.S. countervailing duty law was grandfathered under the GATT, however, and so need not comply with article VI. The Subsidies Code, by contrast, with which U.S. law purports to comply, is arguably ambiguous on the need for a causal link between the subsidy and the injury. See Subsidies Code, *supra* note 14, art. 6.

42. See, e.g., *Certain Carbon Steel Prods. from Spain*, USITC Pub. 1331, Inv. No. 701-TA-155, 4 Int'l Trade Rep. Dec. (BNA) 2030, 2035-36 (Jan. 1983) (prevailing views of Chairman Eckes and Commissioner Haggart); *Carbon Steel Wire Rod from Braz., Belg., Fr. and Venez.*, USITC Pub. 1230, Inv. No. 701-TA-148, 3 Int'l Trade Rep. Dec. (BNA) 1976, 1985-88 (Mar. 1982) (views of Commissioner Stern). The Court of International Trade has recently agreed that the ITC need not search for a causal link between injury and the subsidies under investigation. More precisely, it has held that the size of the subsidy need not be considered by the Commission in its injury analysis; it suffices to consider the effects of the "subsidized imports," however small the subsidy may be. See *Alberta Pork Producers' Mktg. Bd. v. United States*, 669 F. Supp. 445, 465-66 (Ct. Int'l Trade 1987); cf. *Hyundai Pipe Co. v. United States Int'l Trade Comm'n*, 670 F. Supp. 357 (Ct. Int'l Trade 1987) (similar determination in antidumping case).

43. See, e.g., *Certain Elec. Conductor Aluminum Redraw Rod from Venez.*, USITC Pub. 2103, Inv. No. 701-TA-287 (Aug. 1988) (views of Vice Chairman Brunsdale); *Certain Brass Sheet and Strip from Japan and the Neth.*, USITC Pub. 2099, Inv. No. 731-TA-379 (July 1988) (dissenting views of Commissioner Cass) (dumping investigation

eliminated.⁴⁴ They then estimate the consequences for the prices and volume of imports and the resulting prices and output of competing domestic products.⁴⁵ If the elimination of the subsidies would "materially" benefit U.S. producers of competing products, then the subsidized imports will be found to have caused material injury. Such analysis relies heavily upon information about the size of the subsidies, the elasticity of import supply, the elasticities of domestic demand and supply, and so on.⁴⁶

The more traditional injury analysis, which does not search for a causal link, also follows a reasonably familiar pattern. First, the Commissioners inquire whether "material injury" or threat thereof is present at all in the domestic industry.⁴⁷ That is, if the industry is doing sufficiently well according to most indicators of its condition, such as profitability, output, prices, employment, and wages, a negative determination may be warranted.⁴⁸

When injury is present, the analysis of causation involves in part a search for simple correlations in the data. Thus, the Commissioners will often inquire whether the volume of subsidized imports increased at a time when the indicia of overall U.S. industrial performance declined. If such an inverse correlation is present, they will likely draw the inference that subsidized imports are a "cause" of the problem; if the correlation is absent, imports are less likely to be identified as a "cause" of injury.⁴⁹ The traditional causation analysis also focuses on whether the subsidized imports are depressing the price of domestic products. The Commissioners search for anecdotal evidence of individual sales lost to import competition and especially for evidence of "price undercutting" by imports—evidence that imports are priced cheaper in the marketplace than domestic products.⁵⁰ Finally, they consider arguments that factors other than imports are entirely responsible for the injury. For example, perhaps a price leader in the domes-

illustrative of the approach of Commissioner Cass to injury analysis in both dumping and countervailing duty investigations).

44. E.g., *Certain Brass Sheet and Strip*, USITC Pub. 2099, Inv. No. 731-TA-379, at 63.

45. E.g., *id.* at 64.

46. E.g., *id.* at 71-72.

47. See, e.g., *Welded Steel Wire Fabric from Italy, Mex. and Venez.*, USITC Pub. 1795, Inv. No. 701-TA-261(A), 8 Int'l Trade Rep. Dec. (BNA) 1537, 1540-42 (Jan. 1986); *Lamb Meat from N.Z.*, USITC Pub. 1534, Inv. No. 701-TA-214, 6 Int'l Trade Rep. Dec. (BNA) 1781, 1783-86 (June 1984).

48. See, e.g., *Welded Steel*, 8 Int'l Trade Rep. Dec. (BNA) at 1538-39.

49. See, e.g., *Stainless Steel Prods. from W. Ger., Fr. and the U.K.*, USITC Pub. 1391, Inv. No. 731-TA-92, 5 Int'l Trade Rep. Dec. (BNA) 1630, 1633-37 (June 1983); *Leather Wearing Apparel from Uru.*, USITC Pub. 1144, Inv. No. 701-TA-68, 2 Int'l Trade Rep. Dec. (BNA) 5625, 5627 (May 1981).

50. See, e.g., *Iron Constr. Castings from Braz., India and China*, USITC Pub. 1838, Inv. No. 701-TA-249, 8 Int'l Trade Rep. Dec. (BNA) 2216, 2222 (Apr. 1986); *Certain Cold-Rolled Carbon Steel Prods. from Korea*, USITC Pub. 1634, Inv. No. 701-TA-218, 7 Int'l Trade Rep. Dec. (BNA) 1598, 1601 (Jan. 1985).

tic industry is responsible for reducing domestic prices,⁵¹ or imports from some country not under investigation caused the difficulties experienced by domestic firms.⁵²

A negative injury determination terminates the proceeding. An affirmative injury determination, which requires an affirmative vote by three of the six Commissioners,⁵³ results in the issuance of a final countervailing duty order by the ITA directing the U.S. Customs Service to collect countervailing duties at the border on the subsidized merchandise.⁵⁴

II. TRADE POLICY AND THE GOAL OF ECONOMIC EFFICIENCY

Unquestionably, competition from overseas producers can disadvantage domestic producers, just as competition from domestic producers can disadvantage other domestic producers. Firms may fail as a result of this competition, and workers may lose their jobs. Despite the economic dislocation that may result from competition in the marketplace, however, competition is usually thought to be desirable for its ability to promote efficient resource allocation. It drives inefficient producers from the market and induces workers to move to firms and industries in which their services are most valuable. As a result, goods and services are produced at minimum cost, and prices to consumers decline.⁵⁵

These benefits of competition arise whether the competition is foreign or domestic. Competition from abroad, in particular, encourages each nation to specialize in the production of goods and services that it can supply relatively more efficiently than other nations—the principle of comparative advantage.⁵⁶ This process of specialization and the attendant flow of goods and services in international commerce benefits all trading countries since it reduces costs of production and allows consumers to purchase goods and services at lower prices.⁵⁷

In many cases, these benefits of international competition to each trading nation remain when competition from foreign firms in the home market takes the form of subsidized imports. And, as the analysis

51. See *Certain Table Wine from W. Ger., Fr. and Italy*, USITC Pub. 1771, Inv. No. 701-TA-258, 7 Int'l Trade Rep. Dec. (BNA) 2645 (Oct. 1985).

52. See *Potassium Chloride from Isr. and Spain*, USITC Pub. 1592, Inv. No. 303-TA-15, 7 Int'l Trade Rep. Dec. (BNA) 1112, 1116 (Nov. 1984).

53. 19 U.S.C. § 1677(11) (1982).

54. *Id.* § 1671d(c)(1).

55. See, e.g., J. Henderson & R. Quandt, *Microeconomic Theory* 292–93 (3d ed. 1980); E. Mansfield, *Microeconomics* 468–71 (5th ed. 1985).

56. For elementary discussions of the principle of comparative advantage and the gains from trade under competitive conditions, see J. Bhagwati & T. Srinivasan, *Lectures on International Trade* 152–70 (1983); P. Lindert, *International Economics* 16–23, 45–51 (8th ed. 1986).

57. See J. Bhagwati & T. Srinivasan, *supra* note 56, at 30–33; P. Lindert, *supra* note 56, at 16–23.

will suggest, even when subsidized import competition is potentially contrary to the national economic interest, countervailing duties are rarely, if ever, the appropriate policy response in theory or in practice.

Any such conclusion must rest, of course, upon some assumption about the proper criteria for evaluating the merits of countervailing duty policy. For the most part, the analysis to follow assumes that the pursuit of domestic economic efficiency is the proper goal of U.S. international trade policy in general, and that it should guide the policy response to foreign subsidy practices in particular. Unless otherwise indicated, the "efficiency" of resource allocation will be measured by the sum of U.S. producer surplus (the economic profits and other economic rents⁵⁸ earned by domestic firms and workers), U.S. consumer surplus (the excess of consumer willingness-to-pay over the consumer price of goods and services), and U.S. "government surplus" (tariff revenue). A policy that maximizes the sum of U.S. producer, consumer, and government surplus relative to alternative policies is said to be "efficient"⁵⁹ and a policy that increases or decreases that sum relative to the status quo is said to be "welfare-enhancing" or "welfare-reducing," respectively.⁶⁰

To many, the proposition that the goal of economic efficiency should guide U.S. trade policy will not be controversial.⁶¹ Others, however, may wonder whether trade policy should promote goals unrelated to efficiency, such as a more equitable distribution of wealth. The normative approach of the analysis therefore warrants a brief discussion.

Beyond question, domestic firms that compete with subsidized im-

58. An "economic rent" is a payment to a factor of production in excess of the amount required to retain that factor of production in its present use. If a worker earns a wage in his current position that exceeds the wage (or utility equivalent) that is available in his next best alternative employment, for example, the excess is an economic rent.

59. More precisely, policy A is more efficient than policy B if those who prefer A to B can compensate those who prefer B to A and remain better off themselves, whether or not such compensation actually occurs—the potential compensation criterion. For an exposition, see E. Mansfield, *supra* note 55, at 482; H. Varian, *Microeconomic Analysis* 268–76 (2d ed. 1984).

60. When national surplus is maximized, goods and services will be produced at minimum cost, and resources will be allocated to their most valuable uses. H. Varian, *supra* note 59, at 270–75.

61. Conceivably, the goal of U.S. trade policy might be the pursuit of worldwide economic efficiency rather than domestic economic efficiency. The two goals are often consistent, especially when strategic interaction among trading nations is taken into account. See, e.g., *infra* notes 181–89 and accompanying text (discussing tariffs to extract monopsony rents); *infra* notes 190–201 and accompanying text (discussing profit-shifting subsidies). Where tension between worldwide and domestic economic welfare arises in the design of trade policy, however, the analysis assumes that U.S. trade policy will not sacrifice the interests of domestic producers and consumers even if the gains abroad would exceed the losses domestically. Cf. *infra* notes 203–17 and accompanying text (discussing countervailing duties to deter inefficient subsidies that injure only the subsidizing country).

ports may suffer financial difficulties as a result of such competition, resulting in lost profits and unemployment in the workforce. Thus, competition from subsidized imports may lead to serious economic hardship for workers and their families, a hardship that society may wish to ameliorate. The hardship that results from competition with subsidized imports, however, is no different from the hardship that can result from competition with unsubsidized imports or indeed from competition with domestic firms; the burdens of unemployment and economic dislocation are the same whatever causes them. For this reason, individuals dislocated by import competition, "subsidized" or not, arguably should enjoy no greater entitlement to government assistance than the victims of other competition; they should enjoy the benefits of the public safety net programs available to all displaced workers, and no more.

But a counterargument exists. Many workers displaced by import competition, particularly those with skills not readily transferable to other industries, may suffer greater hardship than other displaced workers. When domestic firms fail as a result of competition from other domestic firms, for example, the demise of one domestic firm is typically accompanied by the expansion or creation of another (more competitive) domestic firm in the same line of business. Displaced workers *may* then have an opportunity to secure alternative employment that draws upon their existing skills and training, perhaps even in the same geographic area. The same cannot be said of workers displaced by import competition since relocation to find employment overseas is rarely an attractive or a viable option.

Similarly, when workers are displaced by cyclical downturns in the domestic economy, they may at least anticipate that the displacement is temporary and that they will eventually be able to return to work in a position that draws upon their existing human capital. In the interim, the public safety net program that typically pays the greatest benefits, unemployment insurance, will provide assistance. Workers displaced by import competition, by contrast, may have less hope of returning to work in the same industry, and thus confront a choice between retraining themselves for a new line of work or accepting employment in unskilled positions.⁶²

This observation perhaps justifies programs of special assistance for workers who are displaced by import competition and whose skills are not readily transferable to other industries. The more difficult question is whether trade restrictions are ever the best way to deliver such assistance.

Conventional economic wisdom suggests that the hardship of eco-

62. But see Richardson, Trade Adjustment Assistance under the United States Trade Act of 1974: An Analytical Examination and Worker Survey, in *Import Competition and Response* 321 (J. Bhagwati ed. 1982) (empirical study questioning the accuracy of hypothesis in text).

conomic dislocation is usually better alleviated with tools other than restrictive trade policies.⁶³ Retraining programs, public employment agencies, and the like can often reduce periods of unemployment and move workers to alternative positions in which their services can be utilized efficiently. Special "adjustment assistance" programs can and do provide added relocation and retraining assistance to workers displaced by import competition.⁶⁴ Economists have long maintained that such programs can reduce the hardships of economic dislocation at lower cost to the economy than protectionist policies. Such programs not only create fewer short run allocative inefficiencies than do restrictive trade policies, but they also encourage the movement of resources to higher valued uses in the long run.

Protection, by contrast, impedes the efficient reallocation of resources.⁶⁵ Furthermore, protection is an exceptionally clumsy method of redistribution. Many of the benefits are captured not by the displaced workers, but by wealthy stockholders in the companies that receive protection and workers who would have retained their jobs in the absence of protection. Other methods of redistribution are superior because they provide aid directly to needy individuals.

Thus, the proposition that trade policy should pursue economic efficiency without regard to distributional consequences does not necessarily imply that the government should leave dislocated workers to fend for themselves. Rather, it implies an assumption, well-supported in the economic literature, that policies other than protection can alleviate any distributional inequities more effectively and more cheaply.⁶⁶

But again, a plausible counterargument exists. Although duties or other forms of protection assuredly impose net costs on the economy, the taxes to finance alternative means of redistribution can themselves create considerable distortions.⁶⁷ More importantly, the federal, state

63. See, e.g., J. Bhagwati & T. Srinivasan, *supra* note 56, at 212-14; R. Lawrence & R. Litan, *Saving Free Trade* 12-33 (1986). For an interesting formal treatment of some of the tensions between efficiency and distributional objectives in trade policy, and how best to resolve them, see Diamond, *Protection, Trade Adjustment Assistance, and Income Distribution*, in *Import Competition and Response*, *supra* note 62, at 123; see also Shavell, *A Note on Efficiency vs. Distributional Equity in Legal Rulemaking: Should Distributional Equity Matter Given Optimal Income Taxation?*, 71 *Am. Econ. Rev. Papers and Proc.* 414, 417 (1981) (suggesting that redistribution through progressive taxation is less costly than redistribution through inefficient legal rules).

64. See 19 U.S.C.A. §§ 2272-2294 (West 1980 & Supp. 4 Dec. 1988).

65. E.g., R. Lawrence & R. Litan, *supra* note 63, at 22.

66. The problem of adjustment to import competition may raise efficiency issues as well as distributional issues—at times the costs of adjustment may outweigh the benefits of lower import prices. If so, protective measures may have some appeal as a "second-best" response to the problem of adjustment costs. See *infra* notes 109-40 and accompanying text.

67. By itself, this point is not terribly compelling. One can view protection as a way of providing aid to needy individuals (workers in the protected industry) that is financed by a tax (duty) on the consumption of a particular good. Given all of the alternative ways to finance the same amount of aid to the same individuals through income, con-

and local bureaucracies that administer other redistributive programs may be relatively expensive to operate and may themselves consume much of the budget for redistribution. The administrative costs of imposing additional duties at the border through the Customs Service, coupled with the attendant deadweight losses in the protected markets, might be modest by comparison and thus in some cases tip the balance in favor of redistribution through protection.

In the end, therefore, theory alone cannot establish conclusively that protection is an inefficient means of redistribution, at least in relation to the politically and bureaucratically feasible alternatives. That proposition can only be established through empirical research into the actual costs associated with the viable options for redistribution. Yet definitive empirical evidence is lacking.⁶⁸ Consequently, the analysis to follow will briefly consider whether countervailing duties might reasonably be used to accomplish distributional goals, assuming *arguendo* that protection is sometimes a sensible policy instrument for that purpose.⁶⁹ The remainder of the analysis is limited to the question whether countervailing duties can be used to enhance the efficiency of resource allocation.

III. COUNTERVAILING DUTIES UNDER CONDITIONS OF PERFECT COMPETITION

Subsidies⁷⁰ arise for a variety of reasons and have a variety of con-

sumption, or other taxes, it is most improbable that the duty is the most efficient method of raising the necessary revenue. See W. Corden, *Trade Policy and Economic Welfare* 43-45 (1974).

68. A considerable amount of empirical research on the costs of protection has been done, and this research indeed suggests that protection is an exceptionally costly way to assist workers displaced or threatened with displacement by import competition. One recent study suggests, for example, that the annual deadweight loss per U.S. job saved as a result of restrictions on U.S. imports of Japanese automobiles is \$226,000. See, e.g., R. Lawrence & R. Litan, *supra* note 63, at 31; see also Tarr & Morkre, *Aggregate Costs to the United States of Tariffs and Quotas on Imports*, in *The New Protectionist Threat to World Welfare* 216, 221 (D. Salvatore ed. 1987). Most of the deadweight loss to the U.S. economy reflected in this and similar studies, however, results from the use of quotas or voluntary restraint agreements that permit foreign producers to capture the "quota rents" (the difference between the elevated U.S. price and the price overseas) associated with protection. When protection is structured instead as a tariff (or the quota rights are auctioned), and assuming no retaliation for the loss of quota rents by foreign countries (a bold assumption), the deadweight loss to the U.S. economy from protection may be reduced considerably. Furthermore, none of these studies compare the costs of redistribution through protection to the costs of feasible alternatives for achieving the same redistribution. Consequently, the empirical evidence on the costs of redistribution through protection relative to the costs of alternative means of redistribution is, at least arguably, inconclusive.

69. See *infra* notes 139-40 and accompanying text.

70. In the analysis to follow, the term "subsidy" encompasses any government program or practice that provides assistance to business on terms other than those freely available in the market. This notion of "subsidy" is broader than the definition of "sub-

sequences for the subsidizing country. Subsidies can correct market failures and enhance economic welfare in the subsidizing country, or can distort resource allocation and reduce the subsidizing country's economic welfare.⁷¹ They can also enhance or reduce worldwide economic welfare.⁷² Much of the existing literature on the international discipline of subsidy practices devotes considerable attention to the question whether these various categories of subsidies can be reliably distinguished.⁷³ From the perspective of a country that imports the subsidized merchandise, however, these distinctions are often of no consequence. Specifically, if product and input markets in the importing country are perfectly competitive and adjust quickly to any disequilibrium, a subsidy will enhance the economic welfare of the importing country whatever the effect of the subsidy on the welfare of the subsidizing country or on the welfare of the world as a whole.⁷⁴

In contrast, countervailing duties will often reduce the welfare of the importing country. The principal caveat to this last proposition is that duties may improve the "terms of trade"⁷⁵ for the importing country. A second caveat relates to the question whether countervailing duties may deter subsidization altogether and thereby confer benefits on

sidy" under U.S. law, and is adopted here to facilitate discussion of the widest possible range of government practices.

71. See J. Henderson & R. Quandt, *supra* note 55, at 304-08 (discussing use of taxes and subsidies to correct market failures).

72. See Barcelo, *supra* note 12, at 786-94.

73. See, e.g., *id.* at 782-84; Schwartz & Harper, *supra* note 12, at 835.

74. Some readers may wonder whether perfect competition is an interesting case to analyze. If the market for the goods in question is "competitive" in the sense that marginal producers around the world are unable to sustain supracompetitive prices or to earn supracompetitive profits, then why would a foreign country bother to initiate subsidies in the first place? Subsidies in such a market will simply induce entry to the point where marginal producers earn the same competitive rate of return that they would earn in the absence of the subsidy. Thus, the argument might run, it is irrational to subsidize producers in a competitive market.

This analysis is misguided for two reasons. First, even if entry into a competitive market will ultimately fully erode the benefits of any subsidy in the long run, transitory benefits to incumbent producers do exist in the short run. Second, even in competitive industries, subsidies can provide the owners of scarce factors of production with a long-term increase in rents. For example, if arable land is scarce and the opportunities to bring new land of comparable quality into production are limited, then farm subsidies can increase the value of farm land for as long as the subsidies remain in place—to put it another way, subsidies can increase inframarginal rents. Finally, the government's objection in initiating a subsidy program may have nothing to do with a desire to provide producers with rents—the purpose of the subsidy may simply be to increase (or sustain) output and employment in a politically powerful industry, for example, or to increase foreign exchange earnings from exports. Indeed, many subsidy programs in the United States and elsewhere seem to be directed toward competitive industries. For example, agricultural products are subject to the largest share of export subsidies. P. Lindert, *supra* note 56, at 181.

75. "Terms of trade" refers to the relative prices of imports and exports for a trading nation. An improvement in the terms of trade means that imports have become relatively less expensive.

producers in the importing country who must compete with subsidized goods in their *export* markets.

The cases in which countervailing duties might in theory generate a net benefit to the economy, however, are difficult to identify in practice. Moreover, even if the cases of potential benefit could be reliably identified, a systematic effort to impose duties in those cases might well result in a retaliatory or strategic response by trading partners that would eliminate the gains. Finally, the costs to the government of administering the countervailing duty laws, as well as the rent-seeking expenditures of domestic producer groups seeking to avail themselves of protection, can be considerable. These costs weigh further against any type of countervailing duty policy.

It is even more clear that the *existing* U.S. countervailing duty laws cannot be explained or justified as a mechanism for the imposition of welfare-enhancing duties in competitive markets. Existing law largely ignores the factors that would be essential to ascertain the welfare consequences of duties, and the central features of existing law—the special treatment of export subsidies, the specificity test, the injury test, and so on—have little or no bearing on the welfare effects of duties in a competitive setting. Thus, a net gain to the economy under existing law can arise only by chance. In short, the economic case for applying any type of countervailing duty policy in competitive markets, let alone existing U.S. policy, appears quite weak.

These conclusions follow from a careful analysis of the effects of countervailing duty policy in both the U.S. home market and in U.S. export markets. Indeed, the effects of a countervailing duty on U.S. economic welfare will often be determined entirely by its effects in the U.S. home market. But if a countervailing duty leads the subsidizing country to abandon or curtail its subsidy program, or otherwise affects market prices overseas, and if U.S. firms export to those overseas markets, then the effects of the duty on U.S. exporters must also be considered.

A. *Effects Within the U.S. Market*

In analyzing the effects of a countervailing duty on U.S. economic welfare, it is helpful to begin the analysis by considering a simple model containing one importing and one exporting country.⁷⁶ The analysis

76. In the interest of simplicity, the analysis is limited to “partial equilibrium analysis”—it considers only the effect of subsidies and duties in the markets for the product directly affected by them and ignores any “spillover” effects into markets for other products. Partial equilibrium methods are unsatisfactory for many topics in the economics of international trade and, as a consequence, general equilibrium models dominate much of the theoretical work in this field. For present purposes, however, partial equilibrium analysis is adequate since a countervailing duty ordinarily affects only one product from one country, and it is reasonable to assume that the general equilibrium effects of such

can then be extended to the case of multicountry trade. In both cases, the essential conclusions remain the same.

1. *Two-Country Trade*.—Consider a perfectly competitive market in which imported and domestic products are perfect substitutes.⁷⁷ For the moment, assume that all U.S. imports of the product under consideration come from a single country, say, Canada.⁷⁸ Assume further that all Canadian exports of the product at issue enter the U.S. market.⁷⁹ Finally, assume for simplicity that U.S. producers of the product do not export.⁸⁰

a. *Perfectly Elastic Import Supply*.—Figure I depicts a market in which the supply of imports $S_i(1)$ is perfectly elastic⁸¹ at a price P up to and beyond the quantity of imports demanded in equilibrium. In other words, any capacity constraint that might turn the supply curve upward will not be reached. The domestic supply curve, S_d is upward sloping.⁸² The domestic demand curve is given by D . Market equilibrium

duties are small and do not alter the welfare conclusions derived in the partial equilibrium framework.

Thus, partial equilibrium models are frequently used to analyze the welfare consequences of tariffs (such as countervailing duties) that are limited to a single market. E.g., P. Kenen, *The International Economy* 17–19, 175–77 (1985); P. Lindert, *supra* note 56, at 129–31. For a simple general equilibrium model that develops a novel justification for countervailing duties, however, see Feenstra, *Trade Policy with Several Goods and 'Market Linkages'*, 20 *J. Int'l Econ.* 249, 252–64 (1986) (welfare effect of small duty turns on degree of substitutability or complementarity between subsidized and unsubsidized goods in exporting and importing countries because subsidies and countervailing duties affect terms of trade for complements and substitutes).

77. The essential conclusions of the analysis to follow apply equally to markets in which imported and domestic products are imperfect substitutes as long as firms are price takers. Of course, imperfect substitutability may create a degree of market power for some firms. See *infra* notes 141–202 and accompanying text.

78. Either Canada is the sole supplier of the product in world markets or, more probably, transport costs are prohibitive for imports from other possible sources. These conditions frequently hold in practice. For example, Canada is the only significant source for U.S. imports of live hogs, fresh raspberries, several kinds of fresh fish, softwood lumber, and a number of other products. See, e.g., *Live Swine and Pork from Can.*, USITC Pub. 1733, Inv. No. 701-TA-224, 7 *Int'l Trade Rep. Dec.* (BNA) 2285, 2291 (July 1985).

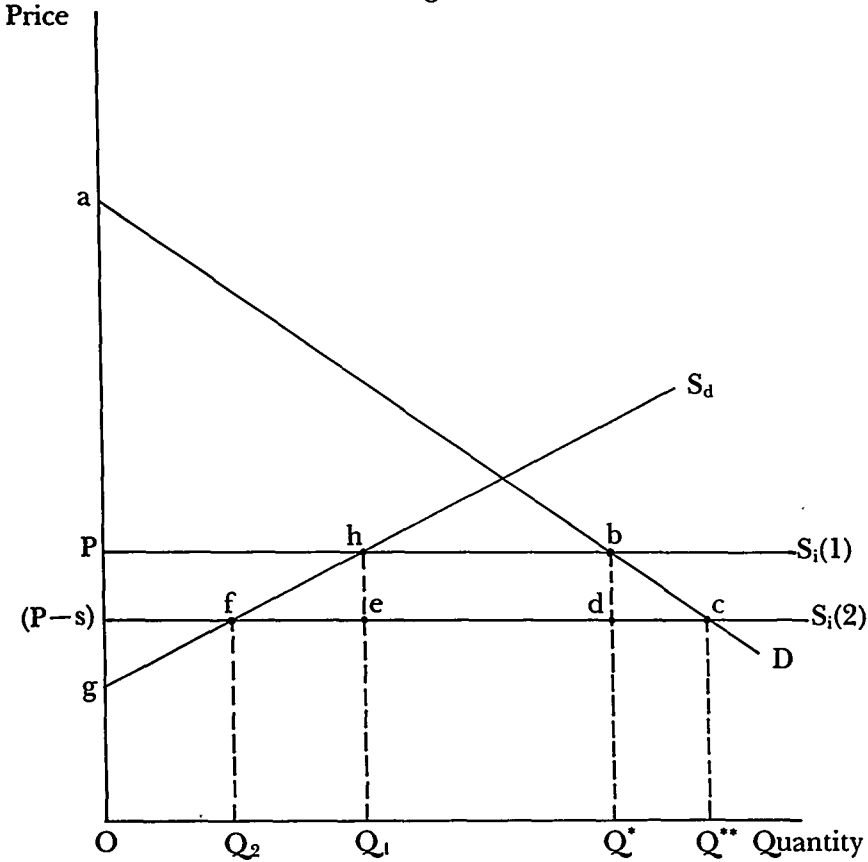
79. Again, the explanation would probably lie with transport costs.

80. Thus, for the moment, the analysis need not consider the effects of subsidies and countervailing duties on the surplus earned by U.S. exporters in their overseas markets. That analysis is provided at *infra* notes 104–08 and accompanying text.

81. The *elasticity* of import supply describes the responsiveness of the quantity of imports supplied to changes in price. See W. Nicholson, *Microeconomic Theory* 361 (3d ed. 1985). If the supply of imports is perfectly elastic at price P , then at that price any quantity of imports will be supplied. At a price below P , however, no imports will be supplied at all. Thus, a perfectly elastic import supply curve is drawn as a horizontal line at price P .

82. The analysis extends readily to markets in which the domestic supply curve is perfectly elastic, but such markets hold little interest. Domestic producer surplus is zero in such markets, and hence domestic producers have little incentive to seek protection from import competition.

Figure I



is at price P , with domestic production of Q_1 and imports of $Q^* - Q_1$.

Suppose that the government of Canada offers its producers a subsidy⁸³ that lowers their costs of production and causes the import supply curve to shift downward to $S_i(2)$ by an amount s —it is now perfectly elastic at a price $(P - s)$.⁸⁴ The new equilibrium price is then $(P - s)$; domestic production falls to Q_2 , and imports rise to $Q^{**} - Q_2$.

Despite the decline in domestic production, U.S. economic welfare has plainly increased as a result of the subsidy. Before the subsidy, con-

83. The analysis is identical whether the subsidy is a domestic subsidy or an export subsidy.

84. Not all “subsidies” will have such a simple and direct effect on the import supply curve. Indeed, some subsidies may have no effect on the import supply curve. This observation is central to a recent critique of the way that countervailing duties are calculated by the ITA. See Goetz, Granet & Schwartz, *supra* note 12, at 23. In general, the import supply curve will not shift by precisely the per-unit-amount of the subsidy. See Schmitz & Sigurdson, *Stabilization Programs and Countervailing Duties: Canadian Hog Exports to the United States 4–5* (Mar. 1988) (unpublished manuscript on file at Columbia Law Review).

sumer surplus⁸⁵ is abP , and producer surplus is Phg . After the subsidy, producer surplus declines to $(P - s)fg$, but consumer surplus increases to $ac(P - s)$. The net increase in economic welfare is given by $fhbc$.

Finally, suppose the United States imposes a countervailing duty equal to s per unit of imports to offset the effect of the subsidy. That a duty of precisely this amount would not in general be imposed under existing law is unimportant because the qualitative effects of the duty on U.S. welfare are the same whatever the size of the duty. From the perspective of U.S. consumers and producers, the effect of the duty is to shift the import supply curve back to its original position, and to restore the market equilibrium at P . Consumer surplus is again abP , and domestic producer surplus is Phg . Tariff revenue to the U.S. government is $hbde$.

Obviously, U.S. economic welfare is greater than before the subsidy program by the amount of the tariff revenue.⁸⁶ But economic welfare was even greater before the imposition of the countervailing duty—the net loss as a result of the duty is given by the two triangles feh and bdc .⁸⁷ A countervailing duty under these conditions, or any other duty for that matter, assuredly reduces welfare.

b. *Imperfectly Elastic Import Supply*.—The analysis is more complex if the import supply curve is upward sloping.⁸⁸ In Figure II, $S_i(1)$ is the import supply curve before the subsidy. The total supply to the U.S. market, $S_t(1)$, is the horizontal sum of $S_i(1)$ and the domestic supply curve, S_d . Initial market equilibrium is at price P_1 , with domestic production of Q_1 and imports of $Q^* - Q_1$. Consumer surplus is abP_1 ; producer surplus is P_1hg .

The subsidy shifts the import supply curve downward by the amount s to $S_i(2)$, and shifts total supply downward to $S_t(2)$. At the new equilibrium price, P_2 , domestic production is Q_2 , and imports are $Q^{**} - Q_2$. Consumer surplus increases to acP_2 , while domestic producer surplus falls to P_2fg . The net gain in surplus to the U.S. economy is the area $fhbc$.

To this point, the analysis closely parallels the analysis of Figure I.

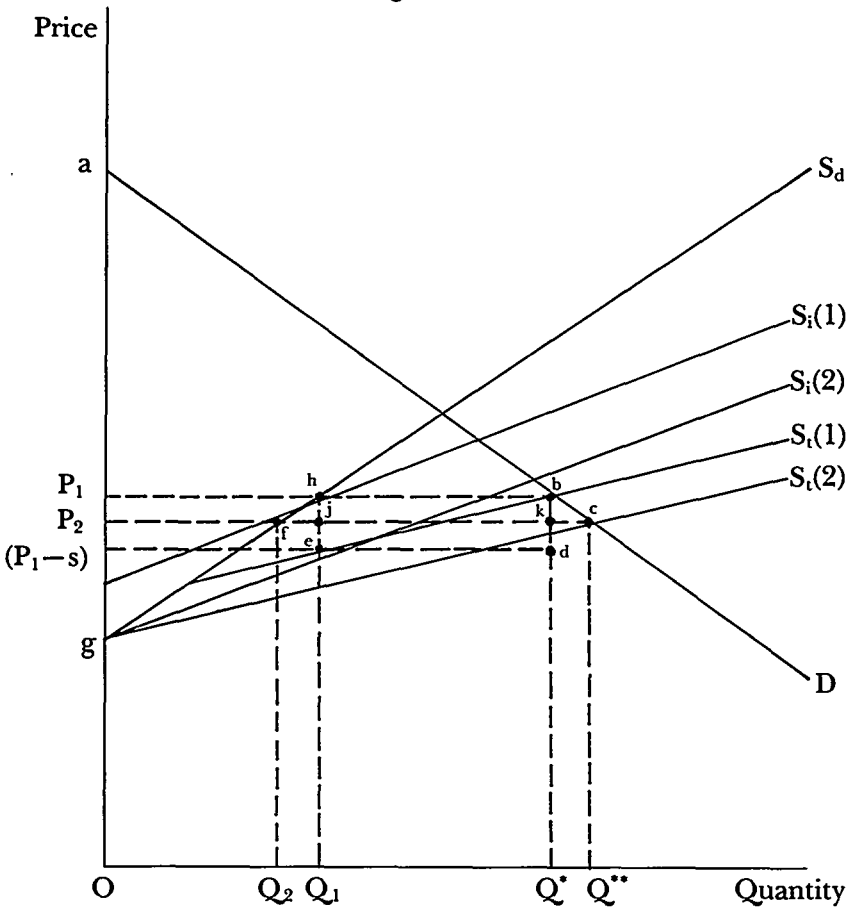
85. The use of the Marshallian demand curve, D , to measure consumer surplus assumes that the marginal utility of income for consumers is constant. Otherwise, the area defined by abP is not a precise measure of consumer surplus, but is still a useful approximation. See H. Varian, *supra* note 59, at 263–68; Willig, *Consumer's Surplus Without Apology*, 66 *Am. Econ. Rev.* 589 (1976).

86. Indeed, this fact may prompt Canada to discontinue the subsidies. See *infra* notes 106–07 and accompanying text.

87. Triangle bdc may be interpreted as a loss of consumer surplus due to the increase in market price. Triangle feh may be interpreted as a loss of surplus due to the fact that the marginal costs of production for U.S. producers are greater than the price of imports for domestic output above Q_2 .

88. The import supply curve will slope upward if foreign producers suffer decreasing returns to scale as they expand production, or if the cost to them of their input products increases as production expands. In such a case, import supply is not perfectly elastic. See *supra* note 81.

Figure II



But now consider the imposition of a countervailing duty in the amount s per unit of imports. From the perspective of U.S. consumers and producers, the import supply curve again shifts back to $S_i(1)$, and domestic consumer and producer surplus are the same as before the subsidy. Tariff revenue is equal to the rectangle $hbde$ (note that the vertical distance bd is equal to s , the amount of the duty). As Figure II is drawn, the countervailing duty increases U.S. economic welfare because the area of the rectangle $jkde$ exceeds the sum of the triangles ffh and bkc .⁸⁹ However, it is also easy to construct a diagram in which the opposite result emerges.⁹⁰

89. See Deardorff & Stern, *Current Issues in Trade Policy: An Overview*, in *U.S. Trade Policies in a Changing World Economy* 52-53 (R. Stern ed. 1987) (deriving similar result regarding welfare consequences of countervailing duty with upward-sloping import supply curve).

90. For example, Figure II establishes that a countervailing duty reduces welfare if the import supply curve is flat. It must also reduce welfare if the import supply curve is sufficiently close to being flat. Intuitively, the price of imports net of the duty will not

The difference in the effect of the duty on welfare in Figures I and II arises because the import supply curve in Figure II is upward sloping. The imposition of the duty reduces U.S. consumption of imports in both cases, but only in Figure II does reduced consumption of imports lead to a lower price of imports (net of the duty). In Figure II, therefore, the duty shifts the terms of trade in favor of the United States, making imports relatively less expensive. Part of the tariff revenue then comes out of *foreign* producer surplus.⁹¹ In Figure I, by contrast, all of the tariff revenue comes out of domestic consumer surplus.

For a number of reasons, however, the result in Figure II is at best a dubious justification for the use of countervailing duties and assuredly fails as a justification for existing U.S. law. As noted, the revenue from the duty is in part at the expense of foreign producers. In effect, the U.S. Treasury appropriates some of the benefits of the subsidy—all of the benefits in the case of an export subsidy limited to U.S.-bound exports. The foreign government will surely recognize that countervailing duties absorb part of the subsidy and *may* respond by curtailing the subsidy program or abolishing it altogether, a possibility discussed at length below.⁹² The market will then return to the equilibrium that prevailed before the subsidy, which is assuredly worse from the U.S. perspective than the equilibrium with the subsidy and without the countervailing duty.⁹³

Moreover, even assuming that the subsidy program would remain in place, it would be difficult to determine when the net welfare effect of a countervailing duty would be favorable. A considerable amount of information would be required in each case to make an empirical comparison of “rectangles” and “triangles” as in Figure II, including information about demand, domestic supply, import supply, and so on. Serious errors in the development of that information would be inevitable, and significant costs to assemble the information would be incurred.

Not surprisingly, therefore, the U.S. countervailing duty laws are not tailored to exploit the opportunity to impose countervailing duties under the circumstances depicted in Figure II. The law in no way takes proper account of the factors that would be necessary to determine whether a countervailing duty would enhance U.S. welfare by shifting

fall very much, and virtually all of the duty revenue comes out of domestic consumer surplus rather than foreign producer surplus.

91. This implicitly assumes that foreign productive capacity is owned by foreigners, not by U.S. investors. To the extent that U.S. investors have a claim on the profits earned by the foreign producers, the benefits of the duty in Figure II (if any) are lessened.

92. See *infra* notes 106–07 and accompanying text.

93. For example, in the Canadian softwood lumber case, which involved the largest volume of trade of any countervailing duty case on record, the Canadian government elected to raise prices for export lumber in order to avoid the payment of duties to the United States. See *supra* note 7.

the terms of trade in such a way that the increase in government revenue will offset the net decline in the sum of producer and consumer surplus. Furthermore, a countervailing duty as calculated under existing law may well reduce U.S. welfare even if a rate of duty exists that would enhance U.S. welfare.⁹⁴

Further, it would be ill-advised to modify U.S. law to facilitate the imposition of duties in cases where the shift in the terms of trade would generate net benefits. Such "benefits" from the imposition of countervailing duties have nothing to do with the existence or nonexistence of a foreign "subsidy." A country whose consumers collectively possess monopsony power in international trade—that is, a country that faces an upward sloping import supply curve—can always exploit that monopsony power by imposing a tariff on imports.⁹⁵ The "optimal" tariff under these conditions will maximize domestic economic welfare at the expense of the importing country's trading partners. A danger of such tariffs, of course, is that if one country imposes duties to exploit its monopsony power, other countries will do the same. The prospect of such a degeneration of the international trading system, motivated by the pursuit of "optimal" tariffs or other policy objectives, underlies the formation of the GATT system and its considerable (though imperfect) constraints on tariff increases and other trade restrictions.⁹⁶

This observation counsels against the use of countervailing duties to exploit monopsony power. Subsidization is then a mere pretense for the imposition of duties that are beneficial only because of their effects upon the terms of trade, and that would be equally beneficial, as a first approximation, in the absence of subsidization. Thus, the countervailing duty laws would be converted into nothing more than a device for cheating on international obligations—subsidization becomes an excuse for the imposition of a tariff that is otherwise impermissible because of GATT or other international covenants. Trading partners could not be expected to react passively, but could and quite possibly would react in kind. Many U.S. exports might then become subject to countervailing duties⁹⁷ and the ultimate impact on U.S. economic wel-

94. A duty calculated to offset the subsidy exactly will maximize U.S. welfare only by coincidence; an alternative rate of duty will almost always do better. See P. Lindert, *supra* note 56, at 145. For discussion of the welfare maximizing tariff, see A. Dixit & V. Norman, *Theory of International Trade* 150–52 (1980).

95. See J. Bhagwati & T. Srinivasan, *supra* note 56, at 174–79; P. Lindert, *supra* note 56, at 144–47.

96. The formation of GATT was motivated by the need to dismantle trade barriers erected in the 1920s and 1930s that were perceived to have exacerbated the Great Depression and slowed economic recovery. See P. Kenen, *supra* note 76, at 230–33.

97. Many U.S. government programs arguably confer "subsidies" upon U.S. producers. Agriculture—a major source of U.S. exports—is heavily subsidized through farm programs. Many other industries receive direct or indirect assistance from the Defense Department and other agencies for research and development. State and local governments frequently provide below-market loans and other location incentives to manufacturers. In short, the list of potentially countervailable U.S. "subsidies" is exten-

fare would be highly ambiguous, at best.⁹⁸

Concededly, even if existing law does not take account of the factors necessary to determine whether a countervailing duty will capture sufficient monopsony rents to enhance U.S. economic welfare in a given case, and even if modification of the law to facilitate such a determination would invite retaliation, duties imposed under existing law may *by chance* provide a net economic benefit to the United States because of their effects upon the terms of trade. But the observation that existing U.S. policy may by chance benefit the United States hardly provides a compelling rationale for that policy.

2. *Multicountry Trade*.—Figures I and II are constructed on the assumption that trade in the product at issue is limited to one importing country and one exporting country. That assumption can be relaxed without materially changing the implications of the analysis for countervailing duty policy: circumstances exist in which countervailing duties conceivably lead to a net welfare gain in the U.S., but they are difficult to identify in practice and in any event existing law is clearly not designed to exploit those potential gains. Efforts to modify the law to exploit the opportunities for gains would likely evoke strategic reactions by foreign governments that might well eliminate any gains.

Thus, assume that the United States imports a product from a variety of countries. Each exporting country has the option of exporting to the United States, or to a number of other countries around the world. One exporting country begins to subsidize its domestic producers, and the United States must decide whether to impose a countervailing duty on a unilateral basis.

a. *Perfectly Elastic Import Supply*.—Consider first the case in which the import supply curve to the United States is perfectly elastic, at least up to some capacity constraint that will not be reached in equilibrium (the analogy to Figure I). A subsidy program by a small exporting nation under these conditions will do little or nothing to shift the supply curve, at least in the short run, assuming that its producers have limited capacity to expand production. They will simply continue to sell at the

sive. For a survey of some of the U.S. government programs that might be considered subsidies, see Cooper, *Industrial Policy and Trade Distortion*, in *The New Protectionist Threat to World Welfare*, *supra* note 68, at 233, 244-49; Cooper, *supra* note 2, at 107-12.

98. A possible counterargument rests on the observation that countervailing duties have not been used to a significant extent in the past by nations other than the United States; thus, perhaps the United States could modify its countervailing duty laws to facilitate systematic exploitation of U.S. monopsony power without fear of parallel retaliatory actions abroad. Even assuming that the information problems associated with such a policy could be overcome, however, that argument is probably misguided. The limited use of countervailing duties at present by U.S. trading partners probably owes in part to the fact that the existing U.S. countervailing duty laws do not provide systematic benefits to the United States. Foreign governments thus have little interest in mimicking existing U.S. law. The situation would change dramatically if U.S. law were revised to facilitate the systematic capture of monopsony rents.

world market price and pocket the subsidy as profit. And if the world market price remains unchanged, consumer and producer surplus in the United States will be unaffected by the subsidy.

Likewise, the imposition of a unilateral countervailing duty by the United States under these circumstances is unlikely to affect U.S. economic welfare, save for the cost of the countervailing duty proceeding itself. The subsidizing country will simply redirect its exports to a nation that does not impose a countervailing duty, and the United States will substitute imports from another source at the world market price.

Of course, if all other importing nations were to impose countervailing duties along with the United States, exporters in the subsidizing country would be unable to circumvent the duty and would have to absorb it to remain competitive. In that event, economic welfare in the importing countries would rise by the amount of the revenue from the duties, unless the subsidy program were discontinued. But the United States is the only major trading nation to use countervailing duties systematically.⁹⁹ Hence, a countervailing duty by the United States is unlikely to be matched by other countries, and under the circumstances hypothesized here, the countervailing duty is unlikely to have any material impact on U.S. economic welfare.

This discussion assumes that the subsidizing country is "small"—that it can respond to a countervailing duty by redirecting its U.S. exports to other markets at the prevailing world price. If the subsidizing country has a sufficiently "large" share of trade in the product at issue, however, either initially or as a result of capacity expansion induced by the subsidy, it may be unable to sell all of its exports in alternative markets without lowering the price,¹⁰⁰ and U.S. importers may be unable to secure substitute supplies at the prevailing world price. The latter possibility is discussed below as it implies that the import supply curve at some point becomes upward sloping. The former possibility changes the analysis only slightly.

If the supply of imports from nonsubsidizing countries is perfectly elastic and the subsidizing country must lower its price if it is to redirect all of its U.S. exports to other markets, two equilibria are possible. In the first, the United States ceases to import from the subsidizing coun-

99. See *supra* note 18 and accompanying text.

100. More precisely, suppose for purposes of illustration that transportation costs to and from all world markets are negligible. Let the U.S. share of worldwide imports (U.S. imports/imports by all countries) equal x ; let the subsidizing country's share of worldwide exports (subsidizing country's exports/exports by all countries) equal y . Both x and y are evaluated at the world market price that prevails prior to the introduction of the subsidy.

Imports by all countries will equal exports by all countries. Thus, with a perfectly elastic supply of imports in the world market, and assuming that the United States is the only country to impose a countervailing duty, the subsidizing country will be unable to circumvent the duty entirely by redirecting its exports to other countries at the prevailing world market price if $x + y > 1$.

try altogether. The U.S. price then exceeds the price elsewhere in the world by an amount no greater than the amount of the duty, and the U.S. government earns no revenue from the duty. Because the U.S. can substitute alternative supplies at the prevailing world price, however, the U.S. price remains constant after the duty. Hence, the duty once again has no effect on U.S. economic welfare, save the expenditure of resources on the countervailing duty proceeding.

In the second possible equilibrium, the U.S. price exceeds the price elsewhere by precisely the amount of the duty, and the subsidizing country continues to supply some portion of the U.S. market. Here, the U.S. government earns some revenue from the duty. And because the U.S. price once again remains constant, U.S. economic welfare has increased by the amount of the duty revenue.¹⁰¹

We defer for the moment the question whether this scenario might justify the use of a countervailing duty. But note that U.S. producers are unlikely to seek countervailing duties under these circumstances. If they properly anticipate that duties will have no impact on the U.S. price, they will have no incentive to file a countervailing duty petition. The more interesting case to consider, therefore, is the case of an upward sloping import supply curve.

b. *Upward Sloping Import Supply*.—Assume now that the U.S. import supply curve is upward sloping. As before, if subsidized producers are already producing at capacity before the introduction of the subsidy, the short run effect of the subsidy is simply to increase their profits with no increase in production and thus no reduction in market prices. But if the subsidy remains in place over the long run, it is likely to induce increased output, and the U.S. price, as well as prices in other world markets, will tend to decline. The magnitude of this decline in prices depends upon the elasticity of supply in the subsidizing country (how much additional production the subsidy induces), the elasticity of supply in other producing countries (how much the production elsewhere declines in response to a decline in price), and the elasticity of demand in world markets affected by the subsidized output (how much consumer prices must fall to allow the increased volume of output to be sold).

If the United States then imposes a countervailing duty, exporters in the subsidizing country will likely respond by redirecting their exports to existing and perhaps new export markets in which no countervailing duty is imposed. If demand in these other markets is elastic enough, the subsidizing country may cease exports to the United States altogether—it will surely do so if the price received in alternative markets would be greater than the U.S. market price less the duty.

101. Another possibility is that the subsidizing country expands its productive capacity so much over time that it can become the sole supplier of imports in its overseas markets. At that point, the analysis of two-country trade in Figure 1 becomes directly applicable.

Under these conditions, U.S. economic welfare assuredly declines: when the subsidized supplies are withdrawn from the U.S. market, the U.S. price rises as import customers must substitute more costly supplies from alternative sources. The resulting decline in consumer surplus assuredly exceeds the increase in producer surplus (recall Figure II). And because the subsidizing country no longer exports to the United States, U.S. government revenue from the duty is zero.

In the alternative equilibrium, the subsidizing country does not redirect its exports entirely to other markets because the price in those markets would then fall below the price in the U.S. market by more than the amount of the countervailing duty. Instead, the subsidizing country continues to export some of its subsidized output to the United States, and the U.S. government earns some revenue from the duty. This circumstance is most likely to arise, for example, when the output of the subsidizing country is large in relation to the size of the world market, when demand in markets outside the United States is relatively inelastic, or when high transport costs preclude economical shipment of the subsidized merchandise to alternative destinations. The situation depicted in Figure II is analogous, although imperfectly. As in Figure II, the U.S. price rises as a result of the duty and the sum of domestic consumer and producer surplus declines, but the government earns revenue from the countervailing duty and exporters in the subsidizing country reduce their price (net of the duty) to U.S. importers.

Clearly, the revenue from the duty might more than offset the net decline in the sum of consumer and producer surplus.¹⁰² For example, suppose that demand in markets outside the United States is highly inelastic. Then, the subsidizing country will discover that prices in those markets fall precipitously as it redirects its exports away from the United States. Conceivably, demand elsewhere could be so inelastic that the supply of imports to the U.S. market ultimately declines very little in response to the duty, and the rise in the U.S. price is very small. The loss of consumer surplus in the United States is then negligible, yet duty revenue may be considerable. High transport costs to alternative markets can produce a similar result.

But for reasons that are familiar from the analysis of two-country trade,¹⁰³ the theoretical possibility of a net welfare gain to the United States either in this case or in the case of the perfectly elastic import supply curve is a dubious justification for the use of a countervailing duty. A duty may lead to the abolition of the subsidy program, and

102. To establish this proposition formally, it suffices to consider a limiting case. Assume that demand outside the United States is totally inelastic. Then, the total volume of imports into the United States will not change at all as a result of the duty, and the U.S. price will not rise. Consequently, no net decline in the sum of producer and consumer surplus in the United States will occur, but the U.S. government will earn some revenue from the duty on imports from the subsidizing country as long as the subsidy remains in place.

103. See *supra* notes 92-98 and accompanying text.

thus return the market to the presubsidy equilibrium that is clearly worse for the United States than the equilibrium with the subsidy but without the countervailing duty. In addition, any welfare gain occurs only because the duty shifts the terms of trade against the subsidizing country and, in effect, exploits the collective monopsony power of U.S. consumers. The circumstances under which a net gain to the United States will arise would be quite difficult to identify in practice, and the existing countervailing duty laws clearly are not designed to identify those circumstances. Thus, a net gain will arise under existing law only by chance. Concomitantly, any effort to amend the law to allow the United States to exploit its monopsony power more systematically would likely be met with retaliation.

B. *Effects Upon U.S. Exports*

If U.S. producers do not export the good that is subject to a countervailing duty, then the analysis above captures all of the partial equilibrium effects of the duty on U.S. welfare. No account need be taken of the effects of the duty on U.S. exporters. Yet, in some industries, both imports and exports may be present.¹⁰⁴ And, if some U.S. producers do export prior to the imposition of the countervailing duty, a number of refinements to the analysis are necessary. The essential conclusions, however, remain much the same.

Specifically, if the duty causes the price in the U.S. market to rise above the price in overseas markets, then some if not all exports from the United States will be redirected to the U.S. market to take advantage of the higher price. The U.S. producers of the goods now sold in the U.S. market at a higher price will earn greater surplus than prior to the imposition of the duty. As before, however, their gain will be more than offset by a loss of domestic consumer surplus due to the increase in the domestic price, much as in Figure I.¹⁰⁵ Hence, whether a duty may cause goods that would otherwise be exported to remain in the U.S. market does not change the analysis in any important way.

Because of transportation costs or other factors, however, some U.S. exporters may continue to export after the imposition of the countervailing duty, even if the market price abroad is, at least in some locations, lower than the price at home. Then, if the countervailing duty causes a decline in the price overseas of the good subject to duty, the price received by U.S. producers on their overseas sales will fall and any

104. Under competitive conditions, a possible explanation is transport costs—it may at times be cheaper for producers in California to ship to other Pacific Rim countries than to the East Coast of the United States. Of course, a variety of other explanations exist for “two-way” trade under imperfectly competitive conditions. Conditions of imperfect competition are addressed *infra* notes 141–202 and accompanying text.

105. See *supra* note 87 and accompanying text. This discussion again assumes that the supply curve for goods produced within the United States is upward-sloping.

surplus on those sales will be reduced. This observation further reinforces the case against the imposition of a duty.

But this analysis neglects one possible response of the subsidizing government to the imposition of a countervailing duty. A countervailing duty may induce the subsidizing country to abandon or to cut back its subsidy program. If exports from the subsidizing country compete with U.S. exports either in the home market of the subsidizing country or in a third-country market, U.S. exporters may then benefit from *higher* prices in those markets. The resulting increment in U.S. producer surplus on overseas sales might, in theory, offset the adverse effects on the U.S. market of the discontinuation of the subsidy.¹⁰⁶

Upon reflection, however, this possibility also fails to provide a persuasive justification for the use of countervailing duties. Even assuming that a unilateral countervailing duty induces the subsidizing country to discontinue its subsidy program, U.S. exporters will enjoy a significant increment of surplus on overseas sales only if U.S. exports are significant in quantity and if the conditions of supply and demand abroad are such that discontinuation of the subsidy program will significantly increase prices in U.S. export markets. Such a price increase is unlikely to occur unless the subsidizing country has a significant share of trade in the product at issue in the relevant markets and the supply of imports to those markets from alternative sources has considerable upward slope. The increase in prices abroad will also be constrained by the elasticity of demand in overseas markets—the more elastic the demand, the less prices will rise. Thus, a significant increase in surplus on U.S. export sales will only arise under limited circumstances, and the circumstances in which that increase would offset the welfare loss in the U.S. market will be even more limited. These circumstances would be extremely difficult to identify in practice, and are obviously not considered under existing law as part of the determination whether or not to impose countervailing duties.

More importantly, there can be no assurance that the response of foreign governments to countervailing duties will be to reduce or eliminate their subsidies. As a first approximation, the greater the surplus that U.S. exporters would earn on overseas sales if the subsidy programs were discontinued, the *less likely* that a unilateral countervailing duty would induce the discontinuation of those programs. With respect to export subsidies, this observation is almost self-evident. Other things being equal, a unilateral countervailing duty seems more likely

106. When the foreign government abandons its subsidy program, the duty will be lifted. But a loss to U.S. consumers still occurs because they no longer enjoy the benefits of a lower price due to the subsidy. In addition, a time lag may exist between discontinuation of the subsidy program and elimination of the duty, thus compounding the loss to consumers. A duty can only be lifted after "administrative review" by the Department of Commerce, see 19 U.S.C.A. § 1675 (West 1980 & Supp. 4 Dec. 1988), which may occur months or even years after a change in policy by the foreign government.

to induce discontinuation of the underlying subsidies, the greater the extent to which the duty results in a transfer of the subsidy payments from the subsidized foreign producers to the U.S. Treasury. If this transfer is complete, the subsidy payments have no impact on output, employment, foreign exchange earnings, or any other variable that the foreign government seeks to influence through subsidization. And, the transfer is complete when a countervailing duty applies to an export subsidy on goods exported to the United States: all of the subsidy payments, assuming the duty is properly calculated, are captured by the United States as duty revenues. If the subsidizing country increases its export subsidy on goods destined for the United States, the duty will rise accordingly.¹⁰⁷ Thus, it would be irrational for the subsidizing country to continue to apply the export subsidy program to U.S. exports.

But the subsidizing country has no reason to modify its export subsidies on goods destined for other markets since such subsidies have no effect on the rate of duty applicable to its U.S. exports—the United States has no right under U.S. law or under the GATT to impose duties on U.S. imports if foreign subsidies merely benefit goods destined for third-country markets. Thus, the likely effect of a U.S. duty to offset an export subsidy is simply to induce the discontinuation of the subsidy on exports to the United States, with no effect on export subsidies applicable to sales in third-country markets. U.S. exporters will enjoy no price increase at all on their third-country sales under these conditions, and U.S. consumers will lose the benefits of the subsidy on goods destined for the United States.

The analysis is more difficult with respect to countervailing duties that offset domestic subsidies, but the conclusion is arguably the same. Once again, the analysis rests on the assumption that a unilateral duty is more likely to result in discontinuation of the underlying subsidy program, the greater the extent to which the duty captures the subsidy for the U.S. Treasury. Other things being equal, a countervailing duty imposed by the United States will capture a greater proportion of the benefits of a domestic subsidy, the greater the extent to which the production of the subsidizing country is exported to the United States. But U.S. exporters are most likely to gain substantial surplus from discontinuation of a subsidy program when the subsidizing country has a substantial presence in U.S. export markets—that is, when much of the subsidizing country's production is *not* exported to the United States. Thus, as in the case of export subsidies, a unilateral countervailing duty to offset a domestic subsidy is perhaps least likely to induce discontinuation of the subsidy program when the benefits, if any, of its discontinuation to U.S. exporters would be the greatest.

Even more importantly, suppose that a countervailing duty *would*

107. Under U.S. law, countervailing duties are revised periodically to take account of fluctuations in the level of support under subsidy programs. See *supra* note 38.

induce the foreign government to discontinue its domestic subsidy. The foreign government can nonetheless preserve the competitive position of its exporters in third-country markets by substituting an export subsidy applicable only to its sales in those markets. At that point, the United States cannot impose a countervailing duty because U.S. imports are no longer "subsidized," but U.S. exporters will still confront "subsidized" competition in third-country markets. Unless the governments of third countries respond with countervailing duties of their own, which is unlikely given historical experience,¹⁰⁸ the imposition of the countervailing duty will have done little or nothing to add to the surplus earned on U.S. exports.

IV. DEPARTURES FROM PERFECT COMPETITION IN THE LABOR MARKET: UNEMPLOYMENT AND ADJUSTMENT COSTS

Although the case for countervailing duties in competitive markets appears exceedingly weak, the assumptions of the competitive model plainly do not hold in all industries. One failure in those assumptions arises when labor markets fail to clear promptly, or clear at a supracompetitive wage. Indeed, public support for protectionist measures often rests on the perception that import competition causes serious economic dislocation, such as plant closings and sustained unemployment. It is possible, at least in theory, that the imposition of countervailing duties may be justified, either by considerations of efficiency or distributional equity, as a second-best response to the economic dislocation or "adjustment costs" caused by subsidized import competition. The existing countervailing duty laws, however, are poorly suited to identify the circumstances in which the imposition of a duty might be appropriate for these purposes. Furthermore, existing U.S. law provides other measures more properly suited to address the dislocation and adjustment costs associated with increased import competition.

A. *Efficiency Considerations*

In the preceding discussion of subsidies and countervailing duties under conditions of perfect competition, domestic producer surplus was measured as an area above the domestic supply curve, bounded at the top by a horizontal line drawn at the prevailing market price.¹⁰⁹ Because the domestic supply curve reflects the marginal costs of production for domestic producers, this area captures the amount by which price exceeds the marginal costs of production for each unit of output, summed over all units of output that are produced. In other words, it reflects the amount by which total revenues exceed total variable costs—a measure of the economic profits and rents earned by the in-

108. See *supra* note 18.

109. See *supra* notes 58–60, 76–91 and accompanying text (Figures 1 and 11).

dustory.¹¹⁰ This measure of producer surplus is inaccurate if the marginal cost of the resources that are employed in the domestic industry does not equal the return that those resources could earn from alternative employment.

1. *Inefficient Unemployment and Possible Corrective Measures.*—Suppose that the marginal cost of labor to the widget industry is \$10 per hour at all levels of output; firms must pay workers at least that amount to secure their services. The industry supply curve will then reflect a marginal cost of labor valued at \$10 per hour. But if the return to widget workers in alternative employment is, say, only \$8 per hour, employment in the widget industry at \$10 per hour provides surplus to workers of \$2 per hour that is not captured by the difference between price and marginal costs of production. The area between the domestic supply curve and the prevailing market price then *understates* the true surplus from industry operations. As a general proposition, that area will understate domestic producer surplus whenever the marginal cost of any input to the productive process is held above the return that the input can earn in its best alternative use; that is, whenever marginal inputs earn a rent.¹¹¹

Under competitive conditions, and in the absence of some external distortion of marginal input prices, such rents do not arise because firms can always purchase any input by bidding incrementally more than the input can obtain in its next best alternative use. If widget workers can only earn \$8 per hour or its equivalent¹¹² in alternative employment, for example, a wage offer of \$8.01 will ensure the workers' willingness to work for the widget industry, other things being equal. And although wages may rise above \$8.01 per hour if the demand for labor to produce widgets is strong enough, any such rent will decline if the demand for labor weakens, thus ensuring that workers will remain employed in the widget industry as long as the prevailing wage exceeds \$8 per hour. Consequently, the marginal cost of labor, as reflected in the industry supply curve under competitive conditions,

110. See W. Nicholson, *supra* note 81, at 403–04; H. Varian, *supra* note 59, at 268.

111. A word of clarification is in order. If the industry supply curve slopes upward because an expansion of production causes the prices of inputs to be bid up, *inframarginal* inputs will receive a rent—a payment in excess of the minimum amount that is necessary to secure the input. Workers who are willing to work for \$5 per hour, for example, may find that they can earn \$10 per hour because the demand for labor is strong. Such rents are captured by the area between the domestic supply curve and the prevailing market price as long as those rents will decline to zero in response to a sufficient weakening of demand for the input—the industry supply curve will then reflect *marginal* costs for each input equal to the return that the input can earn in its next best alternative use. It is only when rents cannot or do not decline to zero in response to a sufficient weakening of demand that *marginal* inputs will earn a rent and producer surplus will be understated.

112. Of course, workers care not only about the wage rate, but about benefits, the working environment, and so on.

will not exceed the returns available elsewhere to marginal workers. This will be true for the marginal cost of other inputs as well.

The assumptions of the competitive model may not describe all input markets accurately, however, especially certain labor markets. For a variety of reasons, marginal workers may earn a premium over the returns available in their next best employment alternative. For example, one source of rents to marginal workers is unionization. Unions take advantage of their monopoly position to raise wages above the competitive level, thus providing all employed members of the union with a premium over the returns available elsewhere. Another source of rents to marginal workers is a state-imposed floor for the price of labor—a minimum wage. Assuming that the minimum wage exceeds the market-clearing wage, it will create a pool of workers who are willing to work for the minimum wage or less, but cannot find employment. The workers who do find employment at the minimum wage earn a “rent” equal to the amount by which the minimum wage exceeds the value of their leisure time (since, by hypothesis, unemployment is the alternative open to them).¹¹³

The economic equivalent of rents to marginal workers can also result from the government transfer payments system. To the extent that welfare programs, unemployment insurance,¹¹⁴ or other transfer programs provide a subsidy to unemployed workers, the private value of leisure will exceed the social value of leisure. Marginal workers whose next best alternative activity is leisure will then earn rents measured with respect to the social value of their next best alternative activity because their wage must exceed the private value of leisure to attract them into the workforce.

The observation that the transfer payments system may create the equivalent of rents to marginal workers suggests that such rents, even if absent under normal business conditions, may emerge as a result of a business downturn. In fact, transfer payments and unemployment insurance have been suggested as one explanation for a downward “stickiness” of real wages—an apparent tendency for real wages to remain stable in the face of slackening labor demand—which causes unemployment to rise more than might be expected in an otherwise competitive labor market.¹¹⁵ Rising unemployment, to the extent attributable to

113. In the United States, minimum wage workers are perhaps most typically employed in the service industries—cleaning and janitorial services, fast-food establishments, and the like. Thus, the extent to which imports compete with domestic firms that employ considerable numbers of workers at minimum wage may be quite small.

114. The case of unemployment insurance is actually rather complicated, since unemployment insurance is by no means a pure transfer program. Much of it is financed through employer premiums that are experience-rated (albeit imperfectly).

115. See Baily, *Wages and Employment Under Uncertain Demand*, 41 *Rev. Econ. Stud.* 37, 44 (1974); Gordon, *The Theory of Domestic Inflation*, 67 *Am. Econ. Rev.* 128, 130–31 (1977); Gordon, *Recent Developments in the Theory of Inflation and Unemployment*, 2 *J. Monetary Econ.* 185, 205 (1976).

the transfer payments system, may thus be a signal that "rents" to marginal workers are emerging. Likewise, truly "involuntary" unemployment, where it exists,¹¹⁶ reflects the presence of rents to marginal workers since it implies a labor market disequilibrium in which unemployed workers have a reservation wage¹¹⁷ below the going market wage for equally productive workers, yet cannot find anyone to hire them for their reservation wage.¹¹⁸

Of what significance to trade policy is the fact that some marginal workers may earn rents? In general, the existence of such rents implies a labor market equilibrium in which wages are inefficiently high and employment is inefficiently low. Quite apart from considerations of international trade policy, therefore, government intervention might in theory be justified to cure this inefficiency.

One possible form of intervention is legislation to eliminate the source of the rent. But the existing political consensus in the United States would surely block any attempt to abolish minimum wages, eliminate transfer payments to the unemployed, or repeal the antitrust exemption for unions. An alternative form of intervention is a wage subsidy. A properly calculated subsidy could eliminate any disparity between the private marginal cost of labor and the social marginal cost of labor. Moreover, because the wage subsidy directly addresses the source of the market distortion, it is generally a more efficient remedy for that distortion than other forms of intervention (such as protection against foreign competition) that can increase employment, but will simultaneously introduce other distortions.¹¹⁹

But a wage subsidy may be politically unacceptable. Moreover, the task of determining the appropriate rate of subsidy market-by-market would be extraordinarily difficult and fraught with error,¹²⁰ and the

116. To be sure, some economists doubt the existence of genuinely "involuntary unemployment" outside of markets in which an artificial government or union wage floor prevents wages from declining to clear the market. See, e.g., Lucas & Rapping, *Real Wages, Employment and Inflation*, in *Microeconomic Foundations of Employment and Inflation Theory* 257, 272-73 (E. Phelps ed. 1970).

117. A "reservation wage" is defined as the minimum wage that a worker requires before he will accept employment. E. Dolan, *Basic Economics* 320 (3d ed. 1983).

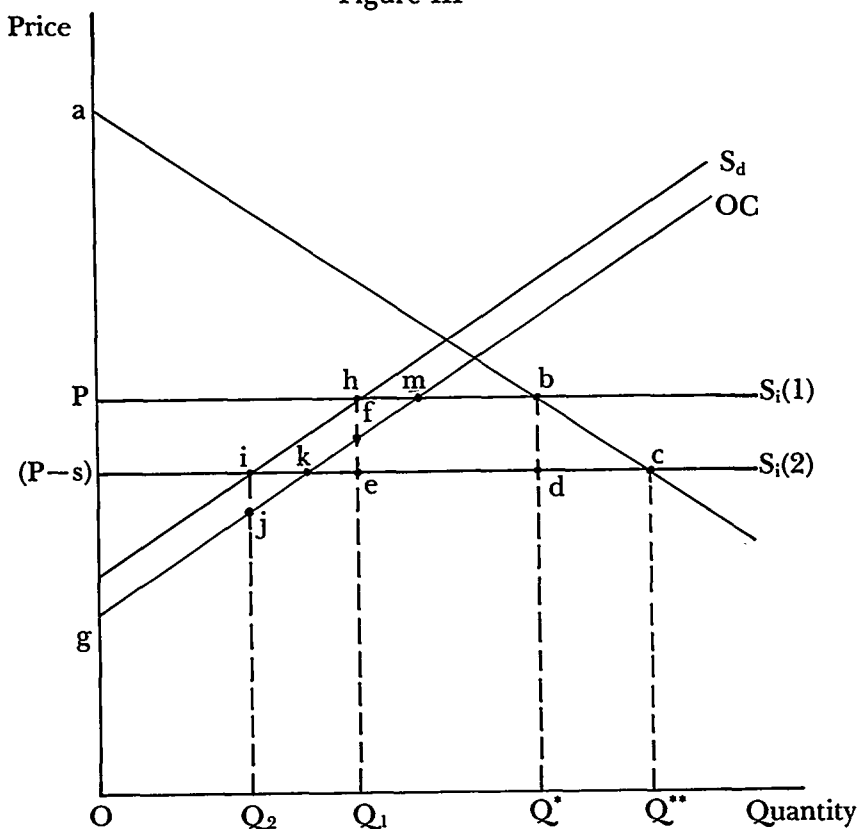
118. Recent work in labor economics advances a number of interesting hypotheses about the reasons for "involuntary" unemployment and the sources of apparent labor market disequilibrium. A useful collection of essays is found in G. Akerlof & J. Yellen, *Efficiency Wage Models of the Labor Market* (1986).

119. In models of international trade with "sticky wages" (the source of the "stickiness" is typically left unspecified), import competition produces inefficiently high unemployment levels because wages do not decline to clear the labor market. Neglecting the transaction costs of tax collection and subsidy disbursement, however, a wage subsidy is a more efficient solution to the problem than import protection. See J. Bhagwati & T. Srinivasan, *supra* note 56, at 212-32; H. Johnson, *Aspects of the Theory of Tariffs* 117-51 (1971); Bhagwati & Srinivasan, *The Theory of Wage Differentials: Production Response and Factor Equalisation*, 1 *J. Int'l Econ.* 19, 29 (1971).

120. A similar problem, of course, also afflicts alternatives to subsidization such as protection.

transaction costs associated with a bureaucracy to compute and disburse wage subsidies might well swamp the benefits of the wage subsidy as a policy tool. As a result, corrective intervention in the labor market to address the inefficiencies caused by the existence of rents to marginal workers may not be forthcoming.¹²¹

Figure III



This observation raises the question whether trade policy may at times be a "second-best" solution to such inefficiencies. In particular, it raises the question whether countervailing duties might at times be appropriate to prevent an inefficient reduction in employment as a consequence of subsidized competition. Figure III illustrates this possibility. It is constructed upon the same assumptions as Figure I—two-country trade, perfectly elastic supply of imports from abroad, upward sloping domestic supply, and so on.¹²² The difference lies in the pres-

121. Obviously, wage subsidy programs are relatively rare in the United States, although government training programs and other types of assistance to dislocated workers may have effects similar to those of wage subsidies.

122. See *supra* notes 76-82 and accompanying text.

ence of an "opportunity cost curve," OC , which lies below the domestic supply curve.¹²³ The gap between the domestic supply curve, S_d , and the opportunity cost curve, OC , represents rents to marginal inputs, most likely labor.¹²⁴ Thus, domestic producer surplus must now be calculated as the area between the prevailing market price and the opportunity cost curve.

Prior to the introduction of the subsidy, the import supply curve $S_i(1)$ is horizontal at price P ; market equilibrium is thus at price P and quantity Q^* . Domestic production is equal to Q_1 , and imports are equal to $Q^* - Q_1$. Consumer surplus is given by the area abP , and producer surplus—now measured with reference to the curve OC —is given by the area $Phfg$. Note that this equilibrium is inefficient: domestic producer surplus would increase by the area of the triangle hfm if domestic production could somehow expand to the point at which the curve OC intersects the horizontal import supply curve at P . An appropriate input subsidy might do the trick but, by hypothesis, such a subsidy program is for some reason infeasible.

Now suppose, as in the construction of Figure 1, that the foreign government introduces a subsidy and the import supply curve shifts downward to $S_i(2)$ at the price $(P - s)$. The new market equilibrium at a price of $(P - s)$ reflects total consumption of Q'' , with domestic production at Q_2 and imports of $Q'' - Q_2$. Consumer surplus has risen to $ac(P - s)$, while producer surplus has fallen to $(P - s)ijg$.

Unlike Figure I, the subsidy is no longer unambiguously beneficial because only part of the decline in domestic producer surplus—the area $Phfk(P - s)$ —is captured by domestic consumers. The remainder of the decline in domestic producer surplus, area ijk , is not. Hence, the sum of domestic producer and consumer surplus rises or falls as a consequence of the subsidy according to whether the area $hfkbc$ is larger or smaller than the area ijk . As the diagram is drawn, the subsidy is beneficial, but it is straightforward to construct a diagram in which the subsidy reduces domestic economic welfare—that is, in which the adjustment costs to domestic producers exceed the benefits to domestic consumers.¹²⁵

Consider next the effects of a countervailing duty. From the perspective of domestic producers and consumers, a duty of s per unit of imports shifts the import supply curve back to the price P . Domestic consumer and producer surplus increase to the levels that prevailed before the introduction of the subsidy, and government revenue from the duty is given by the area $hbde$, assuming that the duty does not in-

123. For convenience, the opportunity cost curve is drawn parallel to the supply curve, but this is not essential.

124. Of course, other factors of production might command rents at the margin as well, such as an input product sold by a monopolized industry.

125. An alternative diagrammatic treatment may be found in Krugman, *The U.S. Response to Foreign Industrial Targeting*, 1984 Brookings Papers Econ. Activity 77, 91.

duce discontinuation of the subsidy. By comparison to the market equilibrium after the introduction of the subsidy but before the countervailing duty, the sum of domestic producer, consumer and government surplus rises or falls as a result of the duty according to whether the sum of areas kfe and bcd is smaller or larger than area ijk . In the diagram as drawn, the countervailing duty reduces aggregate domestic welfare. One can easily construct examples in which the duty increases aggregate domestic welfare.¹²⁶

In short, when workers earn rents at the margin and first-best policies to correct the resulting inefficiency are not available, foreign subsidies conceivably reduce national economic welfare. And even if they do not, countervailing duties may enhance national economic welfare quite apart from any effect on the terms of trade: assuming no reaction by the subsidizing country in the form of retaliation or discontinuation of the subsidy, duties may generate an increment in producer surplus and government revenue that exceeds the associated loss of consumer surplus. Of course, the assumption of passivity on the part of the subsidizing country will not always be accurate.

One further consideration warrants mention: the analysis in Figure III is static, and the magnitude of any rents at the margin is fixed regardless of the magnitude of subsidies or duties. In actuality, rents, or the loss of rents, may change over time, particularly with fluctuations in the business cycle. Suppose, for example, that an industry suffers a downturn in the demand for its output because of an increase in import competition. If the industry is heavily unionized, unemployment may rise because a majority of union members initially vote to reject wage concessions. Similarly, if the industry employs a lot of workers at minimum wage, increased unemployment may result as the demand for labor declines but the wage is held fixed. The unemployment rate within the industry is also likely to rise for the period of time that unemployment benefits are available to displaced workers. Rising unemployment for these reasons, or the employment of displaced workers in lower paying positions in other industries, again reflects a loss of rents by marginal workers not entirely captured by the analysis of the competitive model.

Over time, however, unemployment is likely to decline. Unions eventually tend to accept wage concessions to limit the number of layoffs. Union and nonunion workers alike generally become more willing to accept wage concessions after their unemployment benefits are exhausted. Even minimum wages may decline in real terms when unemployment among low-skilled workers is extensive—the nominal minimum wage is then more likely to remain fixed so that the real minimum wage declines with overall price inflation. These developments

126. For example, one might allow a larger vertical distance between the curves S_d and OC , thus increasing the area ijk . Such a diagram would depict a greater magnitude of rents to marginal workers.

may not eliminate rents to marginal workers altogether, but will often reduce them considerably as the labor market gradually adjusts to the fall in the demand for labor.

These observations suggest that the loss of producer surplus attendant upon an increase in import competition is likely to be greatest during the initial period of increased competition. Over time, real wages in the affected industry will often adjust to allow some displaced workers to return to work; rents at the margin will decline accordingly and the loss of worker rents will be ameliorated. Indeed, import competition may put downward pressure on any rents earned by marginal workers, with attendant benefits to the economy once a downward adjustment of the rents has occurred. For example, increased import competition may eventually induce unions to forego monopoly rents and eliminate distortions otherwise created by unionization.

2. *Implications for Countervailing Duty Policy.*—At first blush, the analysis above offers a plausible rationale for countervailing duties: in some cases, they may represent a second-best response to the adjustment costs that result from the entry of subsidized competition into markets in which marginal workers earn rents.¹²⁷ Interestingly, the analysis also provides a justification for an “injury test,” which would focus on the extent to which subsidized competition may impose adjustment costs on domestic producers that exceed the benefits of the subsidies to domestic consumers, and the extent to which countervailing duties might generate an increment in producer surplus and government revenue that outweighs the associated loss of consumer surplus.

But a number of objections arise. If the first-best policy (say, a wage subsidy) is infeasible, an appropriate second-best policy may also be infeasible. For example, if the wage subsidy is infeasible because information problems prevent accurate calculation of the appropriate wage subsidy market-by-market, those same information problems will likely make it difficult, if not impossible, to ascertain whether a countervailing duty will enhance economic welfare.

Moreover, existing law does not track this second-best rationale for countervailing duties very closely. The injury test under existing law is not applied in all countervailing duty investigations.¹²⁸ When the injury test does apply, it requires no balancing of producer and consumer interests and entails no effort to assess whether adjustment costs are large enough that duties might enhance national economic welfare. Furthermore, an affirmative finding of injury under the existing injury test does not require the presence of factors that would suggest that

127. See Cooper, *supra* note 2, at 120 (suggesting possible use of countervailing duties to counter “acute adjustment costs”); Lawrence, Comment on a Paper by Krugman, 1984 Brookings Papers Econ. Activity 125, 127 (suggesting use of countervailing duties to protect against the effects of foreign subsidies upon domestic unemployment).

128. See *supra* note 39 and accompanying text.

marginal workers are earning rents—factors such as substantial unemployment, extensive unionization,¹²⁹ or a large number of workers employed at minimum wage. Thus, if countervailing duties are to be justified on efficiency grounds as a response to the adjustment costs that result from subsidized import competition, considerable modification to existing law is warranted.

Further reflection suggests, however, that even an appropriately modified countervailing duty law would be, at best, superfluous. As with other possible efficiency justifications for countervailing duties, any welfare gain from a duty in a market where marginal workers earn rents has little to do with the subsidization of imports. Rather, whenever imports are present in such a market, a duty or tariff on imports conceivably enhances national economic welfare. Concomitantly, subsequent to *any* increase in import competition, an increase in the level of protection conceivably enhances welfare. The benefits of a duty, if any, arise whether the import competition or the increase in import competition results from subsidization, changing technology, rising educational levels abroad or other changes in the nature of factor endowments, fluctuations in the exchange rate, or some other development.

It makes little sense, therefore, to condition the policy response to increased import competition upon the existence or nonexistence of subsidization. If the public policy concern is with the magnitude of attendant adjustment costs, the focus should be solely upon the consequences of the increased import competition, whatever its cause. The “escape clause” under U.S. law¹³⁰ has precisely such a focus. Under the escape clause, U.S. industries that suffer “serious injury” as a result of increased imports may petition for a period of temporary relief. If the ITC determines that the statutory requirements for relief are satisfied—increased imports, serious injury, and a causal relation between the increased imports and the injury—the President may grant relief after due consideration of a number of factors, including the effect of import relief upon consumers.¹³¹ Relief may take a variety of forms, including “adjustment assistance” to displaced workers (assistance for retraining, relocation, supplemental unemployment benefits, and the like) or temporary tariffs or quotas.

Without question, this approach to the amelioration of adjustment costs has considerable advantages over countervailing duty laws. First, the escape clause applies to all imports, so that the cause of increased import competition is properly deemed irrelevant.¹³² Second, any restrictions on imports are temporary (limited to eight years), so that the

129. Of course, the proposition that union wages ought to be protected from erosion is subject to the objection that union wages are artificially inflated from the outset and ought to be allowed to decline.

130. See 19 U.S.C.A. §§ 2251–2254 (West 1980 & Supp. 4 Dec. 1988).

131. *Id.* § 2253(a)(2)(F)(ii).

132. See *id.* § 2252(b)(1).

process of adjustment to new competitive conditions is not permanently retarded, and protection is roughly limited to the period in which any inefficient reduction of employment in the affected industry is likely to be the greatest. Third, the requirement of "serious injury" tends (albeit imperfectly) to limit affirmative injury determinations to industries that show evidence of serious unemployment¹³³—an important indicator that adjustment costs may be large enough to justify protection. Fourth, the extent of any protection for the industry is determined with reference to the consequences of protection, and is not mechanistically constrained to equal the size of the "subsidy." Finally, the requirement that the President consider the interests of consumers before granting any relief¹³⁴ permits a balancing of the costs and benefits of protection.

In short, although the existing escape clause assuredly falls short of an ideal response to the problem of adjustment costs, it seems a far better response than the existing countervailing duty laws.¹³⁵ Likewise, efforts to amend the countervailing duty laws so that they might deal more appropriately with adjustment costs would confront the problem that these laws by their nature address "subsidized" competition, yet the existence or nonexistence of subsidization should be irrelevant to the formulation of a response to the problem of adjustment costs.

This proposition perhaps requires one caveat. As noted earlier, the adjustment costs attributable to an increase in import competition are likely to be most severe immediately following a change in competitive conditions. Hence, if subsidized competition is systematically transitory—that is, if subsidies are frequently temporary—it might be argued that subsidized competition at times warrants a greater measure of protection than other types of import competition. In particular, it might be argued that while protection against most forms of import

133. See *Nonrubber Footwear*, USITC Pub. 1717, Inv. No. TA-201-55, 7 Int'l Trade Rep. Dec. (BNA) 2125 (July 1985); *Heavyweight Motorcycles, and Engines and Power Train Subassemblies Thereof*, USITC Pub. 1342, Inv. No. TA-201-47, 4 Int'l Trade Rep. Dec. (BNA) 2469 (Feb. 1983) (Report to the President); 19 U.S.C.A. § 2252(c)(1)(A) (West 1980 & Supp. 4 Dec. 1988).

134. 19 U.S.C.A. § 2253(a)(2)(F)(ii) (West 1980 & Supp. 4 Dec. 1988).

135. It might be argued that a disadvantage of using the escape clause to address the problem of adjustment costs is the GATT requirement of "compensation," which does not apply to the use of countervailing duties. Under article XIX of the GATT, a signatory cannot impose trade restrictions under the escape clause without compensating adversely affected members of GATT if the restrictions impair the value to them of a prior GATT concession (typically a tariff concession under article II). GATT, *supra* note 13, art. XIX. In practice, such compensation usually takes the form of a reduction in tariffs or nontariff barriers on products outside the scope of the escape clause action.

It is incorrect to view this compensation requirement as a disadvantage of the escape clause. To the contrary, if the trade concession that serves as compensation is chosen wisely, the United States can provide protection to an industry suffering from serious adjustment costs while removing protection from an industry that does not require protection to avert such costs. The U.S. economy may then reap a double benefit.

competition should facilitate long-term adjustment to the change in competitive conditions, a long-term adjustment to subsidized competition is unnecessary because of its transitoriness, and a short-term adjustment may be undesirable because of the attendant adjustment costs.¹³⁶

Whatever the merits of this argument in theory, it lacks empirical support. A review of prior countervailing duty cases reveals little evidence of subsidy programs that are explicitly transitory in character, such as programs that provide benefits only during cyclical business downturns.¹³⁷ Furthermore, there is no reason to suppose that subsidy programs in general will be short-lived. To the contrary, as anyone familiar with farm subsidies in the United States, Europe, Japan, or elsewhere will attest, government subsidy programs often last for decades and are notoriously difficult to curtail or discontinue.¹³⁸ Thus, although the evidence is limited, it does not support the proposition that "subsidized" import competition is particularly transitory. Other sources of increased import competition, such as exchange rate fluctuations, may be far more transitory.

Finally, even if it could be shown that subsidies are more transitory than other sources of increased import competition, that fact would by no means establish the need for anything resembling the existing countervailing duty laws. At most, it might justify some attention in escape clause proceedings to the question whether the change in competitive conditions in the industry under investigation may, for whatever reason, be temporary. That question should in any event receive careful consideration in the selection of escape clause remedies since it bears upon the long-term viability of domestic producers and thus upon the question whether any temporary protection should be designed to preserve the domestic industry—and the rents that it earns—from erosion by increased import competition, or instead merely to ameliorate adjustment costs by facilitating a more orderly contraction.

B. *Distributional Considerations*

Just as protection is only a second-best response to the inefficiencies that arise when inputs earn rents at the margin, protection may be an inefficient way to promote greater equity in income distribution. The received wisdom is that other methods of redistribution are more

136. Jacob Viner's concern about dumping by foreign companies arose largely because of his assumption that dumping is transitory. See J. Viner, *Dumping: A Problem in International Trade* 139-40 (1923).

137. Most of the programs that provide benefits only during business "downturns" are found in the agricultural sector, such as price support programs, deficiency payment schemes, and the like. See, e.g., *Rice from Thailand*, 51 Fed. Reg. 12,356 (1986); *Lamb Meat from N.Z.*, 50 Fed. Reg. 37,708 (1985).

138. See generally Pickard, *Price and Income Adjustment Programs*, in *Agricultural Law* 2-20 (J. Davidson ed. 1981) (discussing history of farm subsidies in the United States).

effective and less costly.¹³⁹ Assuming *arguendo* that protection is at least occasionally a sensible policy instrument for redistribution, however, countervailing duties are at best an inferior protectionist option. The argument against the use of countervailing duties for this purpose follows immediately from the superiority of the escape clause as a means to ameliorate the problem of adjustment costs.

Recall that the case for special assistance to workers who are displaced by import competition rests on the premise that adjustment to import competition is more difficult than adjustment to other causes of economic dislocation. Increased domestic competition, for example, causes some domestic firms to contract while others in the same industry expand. The total number of jobs in the industry can remain the same or even increase. Likewise, business cycles generally do not cause a permanent reduction in the number of jobs in affected industries; displaced workers can often return to work. Increased import competition, by contrast, may cause a permanent contraction in the affected domestic industry. Hence, the argument runs, adjustment to import competition is more difficult for workers displaced by import competition because they often must retrain for positions in other industries or accept unskilled positions at drastically reduced wages.¹⁴⁰

Again, however, the burden of adjustment to import competition in no way depends upon the presence or absence of subsidization. Whether the increase in import competition results from subsidies, from shifting comparative advantage and economic development abroad, or from other factors, the burden on the displaced worker is much the same. It makes little sense to condition the use of protectionist measures upon the reason for the increase in import competition, rather than simply on its consequences.

Hence, the escape clause again dominates any type of countervailing duty policy as a means to lessen the burden of import competition upon displaced workers. The protection that it offers is temporary and readily limited to the period in which special assistance is warranted. Its "serious injury" test searches for evidence of severe economic dislocation that might justify a program of special assistance. The magnitude of any protection is tailored to the circumstances at hand. Finally, the escape clause properly deems irrelevant the cause of the increase in import competition. Thus, even assuming for the sake of argument that protective measures are at times desirable as a way to redistribute income, countervailing duties are comparatively ill-suited to that purpose.

139. See *supra* notes 63–69 and accompanying text.

140. If increased import competition is transitory, then displaced workers need not confront the choice between retraining for another industry or accepting unskilled employment. The case for special assistance to such workers is accordingly weaker than the case for special assistance to workers displaced by a permanent change in competitive conditions.

V. DEPARTURES FROM PERFECT COMPETITION IN THE PRODUCT MARKET

In theory, foreign governments may use subsidies to help their industries to earn supracompetitive returns at the expense of U.S. industries and consumers. This possibility is sometimes advanced as a justification for countervailing duties.¹⁴¹ In its simplest form, the analysis supposes that foreign governments may provide the financing for predatory campaigns to monopolize U.S. or world markets. Even if the threat of such predation is sufficiently real that some sort of countervailing duty remedy might be desirable, however, existing U.S. countervailing duty law is grossly overbroad as a remedy for predation.

Alternatively, the analysis suggests that a foreign government may use subsidies to enhance the strategic position of its producers, thereby enabling the subsidizing country to earn supracompetitive returns, to capture additional scale economies, or to reap certain positive externalities at the expense of its overseas competitors. Although the imposition of a countervailing duty under such circumstances might in theory enhance national economic welfare, the identification of those circumstances would be virtually impossible because of insurmountable information requirements. And, once again, existing law does not begin to take account of the factors that might justify the imposition of a duty.

A. *Predation*

Few topics in antitrust law have generated more academic attention over the past thirty years than predation and, in particular, predatory pricing.¹⁴² A predatory price is usually defined as a price that entails a sacrifice of profit in the short run for the purpose of driving competitors from the market, with the anticipation that the exit of those competitors will enable the predator firms to raise prices and earn monopoly or "supracompetitive" profits thereafter.¹⁴³

The argument that predatory pricing might justify the imposition of countervailing duties runs as follows: A foreign government provides a subsidy to its producers that enables them to sell their output profitably at a price that is unprofitable to U.S. producers. As a result, U.S. producers are driven out of business, and the foreign producers gain a dominant position in the U.S. market. At that point, the foreign producers raise their prices above the competitive level, and U.S. consumers must pay a monopoly price that they would not have had to pay if domestic competition had survived. To avoid this outcome, the argument runs, the United States should impose countervailing duties on

141. See, e.g., Barcelo, *supra* note 12, at 797; see also sources cited *infra* notes 144, 182 & 193.

142. A useful collection of materials on predatory pricing may be found in R. Posner & F. Easterbrook, *Antitrust* 680-714 (2d ed. 1981).

143. See, e.g., Joskow & Klevorick, *A Framework for Analyzing Predatory Pricing Policy*, 89 *Yale L.J.* 213, 219-20 (1979); Ordovery & Willig, *An Economic Definition of Predation: Pricing and Product Innovation*, 91 *Yale L.J.* 8, 9 (1981).

the subsidized imports to eliminate their competitive advantage and save U.S. competition from extinction.¹⁴⁴

This argument has some merit in the abstract—foreign government-financed predation, if it exists, can indeed impose a welfare loss upon the U.S. economy. In fact, the domestic welfare loss from foreign predation may be greater than the loss from predation by domestic firms. To see why, assume that static, partial equilibrium analysis captures the essential welfare consequences of predation,¹⁴⁵ and that in the absence of predation, the market would at all times be perfectly competitive and in long run equilibrium. Suppose first that a domestic firm conducts a predatory campaign in which it plans to drive other domestic firms out of business by setting a price below all firms' variable costs. A welfare loss then occurs because consumer willingness-to-pay, at the margin, is below that cost. If the campaign is successful and the predator subsequently raises price above the competitive level—long-run marginal cost—another welfare loss occurs because consumer willingness-to-pay exceeds long run marginal cost.¹⁴⁶ The loss of consumer surplus due to the supracompetitive price is partially offset, however, by an increase in producer surplus, in the form of monopoly profits, to the successful predator.

Now suppose that the same predatory campaign is conducted by a foreign firm. We may assume that the campaign is financed by a foreign government subsidy, but the source of the financing is unimportant to this analysis. If U.S. competitors do not match the below-cost price during the predatory campaign, no productive inefficiency arises domestically, and the predatory campaign is a net gain to the U.S. economy in the form of an increase in consumer surplus that exceeds the loss of producer surplus.¹⁴⁷ If the predatory campaign succeeds, however, and prices rise above the competitive level, the loss of domestic consumer surplus will not be partially offset by an increase in domestic producer surplus¹⁴⁸—foreign companies will capture monopoly profits.

144. See G. Bryan, *supra* note 12, at 277; Schwartz & Harper, *supra* note 12, at 835; see also Ordover, Sykes & Willig, *supra* note 11, at 332 (suggesting that subsidized imports conceivably create foreign-dominated monopolies by driving out domestic producers even in the absence of anticompetitive intent); cf. W. Corden, *supra* note 67, at 246–47 (discussing “predatory dumping”).

145. Joskow & Klevorick, for example, focus in part on the relation between pricing, market structure and the rate of technological progress. Joskow & Klevorick, *supra* note 143, at 231–34.

146. Whether a price above variable cost but below long-run marginal cost should be viewed as creating a welfare loss depends upon the assumption about the need to replace existing fixed investments, an issue that need not be addressed for purposes of this illustration.

147. This proposition is analogous, although imperfectly, to the effect of the subsidy in Figure 1 above, and assumes away any additional loss of domestic producer rents due to the failure of input markets to clear at competitive prices. See *supra* notes 76–87 and accompanying text.

148. This assumes that domestic firms have failed.

In sum, from the U.S. perspective, foreign government-financed predation may entail less welfare loss than domestic predation during the predatory campaign (perhaps even a gain), but it potentially entails a far greater welfare loss in the longer term if the predatory campaign succeeds. Some policy response to foreign government-financed predation may well be warranted, therefore, and countervailing duties are certainly one option.

But the antitrust laws ordinarily provide a remedy for predatory pricing. Perhaps implicit in any argument that countervailing duties are needed as a remedy for foreign government-financed predation, therefore, is an assumption that the antitrust laws cannot or should not be employed to deal with such predation. This assumption is arguably correct. Under existing law, the "act of state" doctrine provides that U.S. courts will not scrutinize the legality of statutes, decrees, orders, and resolutions by a foreign government.¹⁴⁹ This doctrine would almost certainly lead to the dismissal of any antitrust action against a foreign government that alleged that the government was engaged in predation through one of its subsidy programs.¹⁵⁰ It would also in all likelihood lead to the dismissal of an action solely against the beneficiaries of the subsidy program if such an action would necessitate an inquiry into the legality of the program.¹⁵¹

Absent any challenge to the legality of the subsidy program itself, an antitrust violation might be impossible to establish. Although beneficiaries of the subsidy program might be shown to have reduced their prices in response to the subsidy, a foreign company does not violate the antitrust laws merely by reducing prices in response to government assistance, even if the effect is to drive U.S. competitors from the market and provide the foreign company with a dominant position.¹⁵²

149. E.g., *Alfred Dunhill of London, Inc. v. Republic of Cuba*, 425 U.S. 682, 686 (1976).

150. Dismissal might also be required by the Foreign Sovereign Immunities Act of 1976, Pub. L. No. 94-583, 90 Stat. 2891 (codified in scattered sections of 28 U.S.C.), unless the subsidy program could be characterized as a "commercial activity" within the commercial activity exception to the provisions of that Act, 28 U.S.C. §§ 1603, 1605 (1982 & Supp. IV 1986).

151. In *Timberlane Lumber Co. v. Bank of Am.*, 549 F.2d 597 (9th Cir. 1976), the plaintiff alleged, *inter alia*, that the defendants invoked the Honduran judicial process to help them in maintaining their monopoly over lumber exports from Honduras. The Ninth Circuit, reversing the district court, held that the act of state doctrine did not require dismissal of the claim, in part because the plaintiff "does not seek to name Honduras or any Honduran officer as a defendant or co-conspirator, nor does it challenge Honduran policy or sovereignty in any fashion that appears on its face to hold any threat to relations between Honduras and the United States." *Id.* at 608. By contrast, a suit predicated on the theory that a foreign government subsidy program amounts to government financing for a predatory scheme would raise far more serious questions about the actions of foreign government officials and raise potentially difficult foreign relations issues.

152. Even if foreign producers actually acquire a monopoly position, the mere existence of monopoly power does not establish a violation of the antitrust laws. See,

Every subsidy has the effect of reducing certain costs of production, and the natural, competitive response to a reduction in costs is usually a reduction in prices. Although such a price reduction would surely disadvantage competitors, it would not by itself evidence predatory intent, nor would it seem to violate any of the cost-based tests for predatory pricing embraced by the courts in recent years:¹⁵³ a subsidy that reduces costs from the perspective of the beneficiary of the subsidy should reduce commensurately any cost-based benchmark for the detection of a predatory price.¹⁵⁴

Would efforts by the subsidized firms to raise prices after the predatory campaign violate the antitrust laws? Perhaps, but not necessarily. A single predator firm can generally institute price increases without violating the law.¹⁵⁵ If the predatory campaign involves multiple firms, an agreement to raise prices would violate section 1 of the Sherman Act.¹⁵⁶ But as an industry becomes more concentrated due to the elimination of competition, prices may well rise without any agreement to increase them simply because of the change in strategic conditions.¹⁵⁷ Moreover, even if a section 1 violation could be shown, the efficacy of an *ex post* damages remedy against foreign firms may at times be poor

e.g., *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 273 (2d Cir. 1979), cert. denied, 444 U.S. 1093 (1980); L. Sullivan, *Handbook of the Law of Antitrust* 29-30 (1977).

153. The Areeda-Turner test condemns as predatory any price below average variable cost, a proxy for marginal cost. See Areeda & Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 Harv. L. Rev. 697, 712-18 (1975). This test has been applied by a number of courts. See, e.g., *Arthur S. Langenderfer, Inc. v. S.E. Johnson Co.*, 729 F.2d 1050, 1055-56 (6th Cir.), cert. denied, 469 U.S. 1036 (1984); *Americana Indus., Inc. v. Wometco de P.R., Inc.*, 556 F.2d 625, 627-28 (1st Cir. 1977); *International Air Indus., Inc. v. American Excelsior Co.*, 517 F.2d 714, 723-24 (5th Cir. 1975), cert. denied, 424 U.S. 943 (1976). Prices above average variable cost but below average total cost may also evidence predation upon a showing of predatory intent. See *Transamerica Computer Co. v. International Business Machs. Corp.*, 698 F.2d 1377, 1384-89 (9th Cir.), cert. denied, 464 U.S. 955 (1983); see also *Pacific Eng'g & Prod. Co. v. Kerr-McGee Corp.*, 551 F.2d 790, 795-97 (10th Cir.) (pricing below average total cost not predatory when firms possess excess capacity), cert. denied, 434 U.S. 879 (1977); Joskow & Klevorick, *supra* note 143, at 252-54 (recommending that a price above average variable cost but below average total cost be presumed predatory unless defendant shows that this price maximizes short-run profits). Thus, average total cost may also be used as a benchmark for the detection of potentially predatory prices. All of these benchmarks, however, rely upon the private costs of production to the antitrust defendant, which are reduced by the presence of government subsidies.

154. Thus, for example, assume that the Areeda-Turner test will be used to determine whether the price of imports is predatory. If a firm with constant variable costs of \$100 per unit receives a \$50 per unit subsidy, its private variable costs per unit decline to \$50. Any price above \$50, therefore, will presumably avoid condemnation under the Areeda-Turner test.

155. See *supra* note 152.

156. 15 U.S.C. § 1 (1982).

157. See, e.g., Ordovery, Sykes & Willig, *Herfindahl Concentration, Rivalry and Mergers*, 95 Harv. L. Rev. 1857, 1867-72 (1982).

since enforcement of any judgment may be quite difficult.¹⁵⁸

In short, if a subsidy program facilitated price reductions by foreign producers that enabled them to obtain monopoly power in the U.S. market, the existing antitrust laws might not provide an effective remedy. A possible solution, of course, is to amend the antitrust laws to encompass foreign government-financed predation more clearly. But if the policy considerations that underlie the act of state doctrine—international comity and deference to the Executive Branch in matters affecting foreign relations¹⁵⁹—are to be accorded much weight, federal court litigation over the question whether foreign subsidies facilitate “predation” might seem undesirable. Unlike the antitrust laws, however, countervailing duties are sanctioned by international agreement under the GATT, and they are assessed and administered by the Department of Commerce, an arm of the Executive Branch. Similarly, the difficulties of enforcing antitrust remedies against foreign firms may weigh in favor of a more prophylactic approach.

Thus, a plausible argument might be made that countervailing duties are superior to an antitrust remedy, but it remains to inquire whether any remedy at all is really necessary—whether the threat of monopolization by subsidized foreign producers is a serious one. A number of writers have suggested that predation is extremely uncommon, if not nonexistent, in the private sector. Predatory campaigns are costly for the predator, and recoupment of losses even if the campaign is successful may be impossible. For this reason, it is argued, rational entrepreneurs will rarely, if ever, find predation worthwhile.¹⁶⁰ Other writers suggest that predation is at times a rational business strategy, as perhaps when the predator has a lower cost of capital than rivals, but nonetheless conclude that it is fairly uncommon.¹⁶¹ Even if predation is sometimes rational and occasionally arises, however, the error costs of legal rules against predation may be prohibitive: more often than not, such rules may result in the condemnation of desirable competitive behavior.¹⁶²

These writers focus upon privately financed predation by domestic firms. In the abstract, however, foreign government-financed preda-

158. In addition, the costs of administering a complex antitrust suit can be quite substantial.

159. See generally L. Schwartz, J. Flynn & H. First, *Free Enterprise and Economic Organization: Antitrust* 863-70 (6th ed. 1983).

160. See R. Bork, *The Antitrust Paradox* 144-60 (1978); Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. Chi. L. Rev. 263, 267-70 (1981); McGee, *Predatory Price Cutting: The Standard Oil (N.J.) Case*, 1 J.L. & Econ. 137 (1958). The Supreme Court was heavily influenced by this body of work in *Matsushita Elec. Indus. v. Zenith Radio Corp.*, 475 U.S. 574, 588-93 (1986).

161. See Posner, *Exclusionary Practices and the Antitrust Laws*, 41 U. Chi. L. Rev. 506, 515-23 (1974); Telser, *Cutthroat Competition and the Long Purse*, 9 J.L. & Econ. 259 (1966).

162. See Easterbrook, *supra* note 160, at 318-33.

tion *might* seem somewhat more likely than privately financed predation. Governments may care little about the overall profitability of predation and the prospects of recouping losses incurred during a predatory campaign. Governments often subsidize the private sector, and they may be willing to "subsidize" otherwise unprofitable predation.¹⁶³ In addition, some foreign government subsidy practices may unwittingly lead to predatory outcomes, irrespective of the government objective behind the subsidy program. Finally, foreign governments may enjoy a lower cost of capital than private firms and, as noted, predation is more likely to be profitable when the predator enjoys a lower cost of capital.

Theory aside, however, there is little empirical evidence to suggest that foreign government-financed predation occurs to any significant extent.¹⁶⁴ To be sure, countervailing duty cases sometimes involve U.S. "industries" that appear to be highly concentrated, taking the ITC's definition of "industry" to be the relevant market for antitrust analysis and ignoring alternative sources of imports.¹⁶⁵ But whether the other structural conditions necessary for successful predation¹⁶⁶ are present in these cases is a matter of conjecture.

Given the absence of clear evidence that foreign government-financed predation poses a significant threat to the competitiveness of U.S. markets, an argument can be made that countervailing duty laws are an undesirable way to deal with the perceived threat of predation. Laws that deal with nonexistent problems are not merely superfluous,

163. Of course, if government-financed predation by foreign producers is ultimately unprofitable from the perspective of the foreign country (its government and producers taken as a whole), even a successful predatory campaign is less likely to reduce U.S. economic welfare: short-run gains to U.S. consumers are more likely to outweigh long-run losses.

164. In *Outboard Marine Corp. v. Pezetel*, 461 F. Supp. 384 (D. Del. 1978), the plaintiff alleged that a Polish-owned manufacturer was monopolizing the U.S. market for golf carts. The court held, *inter alia*, that without proof that the foreign firm set price below some measure of cost, the foreign firm would not be liable for predatory pricing for offering lower prices as a result of a subsidy by the foreign government. *Id.* at 400. Interestingly, the countervailing duty laws do not apply to imports from nonmarket economies such as Poland. See *Georgetown Steel Corp. v. United States*, 801 F.2d 1308, 1313-18 (Fed. Cir. 1986); see also Alford, *When is China Paragony? An Examination of the Application of the Antidumping and Countervailing Duty Laws of the United States to China and other "Nonmarket Economy" Nations*, 61 S. Cal. L. Rev. 79 (1987) (discussing application of antidumping laws to nonmarket economies).

165. See *Agricultural Tillage Tools from Braz.*, USITC Pub. 1761, Inv. No. 701-TA-233, 8 Int'l Trade Rep. Dec. (BNA) 1028, 1030 (Oct. 1985) (ITC determination) (only two producers in U.S. "disc" industry); *Nitrocellulose from Fr.*, USITC Pub. 1390, Inv. No. 701-TA-190, 5 Int'l Trade Rep. Dec. (BNA) 1565, 1566 (June 1983) (ITC determination) (only one producer in U.S. industry); *Potassium Permanganate from the People's Republic of China and Spain*, USITC Pub. 1369, Inv. No. 731-TA-125 (Apr. 1983) (preliminary determination) (only one producer in U.S. industry); *Potassium Permanganate from Spain*, 47 Fed. Reg. 29,300 (1982) (ITA determination).

166. See *infra* notes 169-76 and accompanying text.

but invite abuse and error. On the other hand, perhaps the absence of clear evidence of the problem merely suggests that the countervailing duty laws have deterred foreign government-financed predation in the past, and that they remain necessary to deter foreign government-financed predation in the future, especially absent any change in the antitrust laws directed at the problem.

Whatever position one takes on the need for a remedy for foreign government-financed predation, however, the existing countervailing duty laws cannot possibly be justified as a reasonable means to combat it. Presently, countervailing duties are routinely imposed under conditions in which there is no danger of monopolization. The recent duties on many steel products, and on a variety of farm, forest and fishery products, are illustrative. The market share of the producers subject to the duties is typically small, and conditions of entry and exit in the affected markets, both at home and abroad, are such that the attempted exercise of market power by any producer would be thwarted by new entry or reentry.¹⁶⁷ Hence, unless existing law can be justified on some other basis—a highly disputable proposition—the analysis above suggests at a minimum that the law requires substantial modification to ensure that countervailing duties will not be imposed absent evidence that foreign government-financed predation poses a serious threat of monopolization in the industry under investigation.

Unfortunately, a definitive test for the existence of predation, with or without the complicating factor of government subsidization, is difficult to fashion. A number of tests for predation in the private sector have been proposed, some based upon a comparison of prices with costs, some based upon changes in output or prices, others incorporating a structural analysis designed to identify markets in which successful predation is a realistic danger, and still others that search for evidence of predatory intent.¹⁶⁸ This is assuredly not the place to resolve the debate over which of these approaches, if any, is superior. But taken as a whole, the academic literature on predation suggests several principles that might be used to limit the use of countervailing duties to cases in which monopolization is a genuine concern.

As noted, when the beneficiary of a subsidy reduces prices in response to the subsidy, no inference can ordinarily be drawn about the

167. In *Live Swine and Pork from Can.*, USITC Pub. 1733, Inv. No. 701-TA-224, 7 Int'l Trade Rep. Dec. (BNA) 2285 (July 1985), for example, countervailing duties were eventually imposed on imports of live hogs. Canadian producers collectively had less than five percent of the U.S. market and faced competition from over 10,000 domestic hog farmers.

Similarly, in *Certain Carbon Steel Prods. from Korea*, USITC Pub. 1346, Inv. No. 701-TA-170, 4 Int'l Trade Rep. Dec. (BNA) 2393 (Feb. 1983), countervailing duties were eventually imposed on certain steel imports from Korea, which had a market share of less than one-half of one percent. Korea faced competition not only from many domestic steel firms in the market, but also from innumerable other foreign suppliers.

168. See sources cited *supra* notes 143, 153, 159 & 160.

existence of a predatory objective from the price level alone. In most instances, such price reductions will represent nothing more than a competitive response to the institution of a subsidy program under conditions in which the acquisition of monopoly power is neither intended nor likely, and indeed, in which monopolization is often inconceivable. Hence, a structural analysis of the industry in question would be a useful first step to weed out cases in which the characteristics of the industry make the acquisition and exploitation of a market power by the alleged predators infeasible.

Similar recommendations have been advanced with respect to the analysis of predation under the antitrust laws.¹⁶⁹ Although the details of these recommendations vary somewhat, general agreement exists that the structural analysis should focus on at least three factors: concentration, conditions of entry, and conditions of reentry.¹⁷⁰ In particular, a price above the competitive level is most unlikely to arise unless, after the exit of competitors, the market exhibits a high degree of concentration and the predator firms¹⁷¹ control a large share of the market.¹⁷² And even if concentration is high, the predator firms may be unable to raise prices significantly after the exit of competitors without attracting entry by new firms or reentry by former competitors which will drive prices back down to the competitive level. Thus, both "entry hurdles"¹⁷³ and "reentry barriers"¹⁷⁴ must be considerable.

169. See, e.g., Joskow & Klevorick, *supra* note 143, at 219–22; Ordovery & Willig, *supra* note 143, at 10; Ordovery, Sykes & Willig, *Predatory Systems Rivalry: A Reply*, 83 *Colum. L. Rev.* 1150 (1983).

170. See Joskow & Klevorick, *supra* note 143, at 224; Ordovery & Willig, *supra* note 143, at 10–12.

171. The likelihood of a supracompetitive price is reduced as the number of foreign firms that survive after the predatory campaign increases, because they must then coordinate pricing among themselves to avoid competing away the benefits of their collective market power.

172. Joskow & Klevorick, *supra* note 143, at 225–27; Ordovery & Willig, *supra* note 143, at 11.

173. Entry "hurdles" exist if prospective entrants to a market are cost-disadvantaged relative to established firms merely because the latter group of firms already function as a going concern. They arise when the fixed investments of the potential entrant are wholly or partially irreversible, as when, for example, the cost of the investments cannot be fully recovered if the entrant later decides to exit. Under these conditions, potential entry does not constrain the pricing behavior of existing firms as much as actual entry: existing firms enjoy a strategic advantage because their fixed costs are already sunk. They can then make credible threats to reduce prices below the level that allows a potential entrant to enter profitably—the level that allows at least a competitive rate of return on the entrant's fixed investments. Existing firms can thereby deter entry, yet sustain prices above the competitive level, up to a point, over time. See W. Baumol, J. Panzar & R. Willig, *Contestable Markets and the Theory of Industry Structure* 279–309 (1982); C. von Weizsacker, *Barriers to Entry* 125–44 (1980); Baumol & Willig, *Fixed Costs, Sunk Costs, Entry Barriers, and the Sustainability of Monopoly*, 96 *Q.J. Econ.* 405, 416–19 (1981); Ordovery & Willig, *supra* note 143, at 11–12.

174. Reentry barriers exist when a firm that has exited the industry cannot reenter without incurring added costs for that purpose. If a firm that shuts down during a pred-

Markets that exhibit a degree of concentration, entry hurdles, and reentry barriers sufficient to make successful predation realistically possible may be quite rare.¹⁷⁵ Indeed, as noted, some writers have argued that such markets may not exist at all.¹⁷⁶ A structural analysis of the sort suggested here, and elaborated at length by the commentators cited above, would thus preclude the imposition of countervailing duties in the vast majority of cases in which they have been imposed in the past.

In industries in which a structural analysis suggests that successful predation is possible, however, it does not follow that countervailing duties should be imposed automatically. Rather, domestic producers should also be required to demonstrate that their survival as competitors is jeopardized by the pricing of the subsidized imports—that the alleged predation has had or will have the effect of driving rivals from the market, leaving the predator firms with considerably increased market power. Absent evidence that competitive rivalry has diminished or will diminish significantly as a result of the subsidization, no threat to the competitiveness of market pricing would exist. A showing that the survival of domestic competitors is threatened by subsidization is somewhat analogous to the injury test under existing law, but would require a showing of considerably more injury to domestic firms than mere “material injury,” which suffices for the imposition of duties presently.¹⁷⁷ It would also require a showing that the threat to viability arises by reason of the subsidy and that the imposition of a duty to offset the subsidy would cause prices to rise by enough to protect the viability of existing competition.¹⁷⁸ As noted previously, such a “causal

atory campaign can costlessly resume production when the predator attempts to raise prices, then predation would be pointless. Ordovery & Willig, *supra* note 143, at 12. But if a firm that shuts down must incur additional, irreversible costs to reassemble or restart its physical and human capital, the predator will again have some ability to sustain a price above the competitive level. In the extreme, if reentry entails the same irreversible costs as new entry, then “reentry barriers” are identical to the “entry hurdles” discussed *supra* note 173.

175. To conduct a structural analysis of concentration, entry hurdles, and reentry barriers, it is necessary to define the “relevant market” for the measurement and assessment of these factors, much as in conventional antitrust analysis under the “rule of reason.” See, e.g., R. Posner & F. Easterbrook, *supra* note 142, at 347–85. That exercise is closely akin to the definition of “industry” for purposes of injury analysis under the existing countervailing duty laws, which also looks to factors such as the cross-elasticity of demand and supply. See *Oil Country Tubular Goods from Braz., Korea and Spain*, USITC Pub. 1633, Inv. No. 701-TA-215, 7 Int’l Trade Rep. Dec. (BNA) 1669, 1671 (Jan. 1985) (attention to cross-elasticity of demand); *Tool Steels from Braz. and W. Ger.*, USITC Pub. 1403, Inv. No. 701-TA-187, 5 Int’l Trade Rep. Dec. (BNA) 1642, 1645 (July 1983) (attention to cross-elasticity of supply); 19 U.S.C.A. § 1677(4) (West 1980 & Supp. 4 Dec. 1988).

176. E.g., R. Bork, *supra* note 160, at 149–54.

177. See *supra* notes 39–54 and accompanying text.

178. A demonstration that the threat to the viability of domestic competitors arises because of subsidized competition within the U.S. market, rather than subsidized com-

link" between the injury to domestic firms and the subsidy at issue is not required by existing law.¹⁷⁹

In sum, a countervailing duty law properly tailored to address the problem of foreign government-financed predation would differ from existing law in a number of key respects. It would incorporate a structural analysis, akin to elements of the traditional rule of reason analysis in antitrust law, to determine whether a serious threat of monopolization can exist within the industry in question. It would also inquire whether the subsidies in question result in prices that pose a genuine threat to the viability of domestic competition and whether the imposition of duties on U.S. imports would suffice to alleviate the threat to competition.¹⁸⁰ Whether these prerequisites for countervailing duties should be *sufficient* for the imposition of duties to combat predation, or should simply be *necessary*, is left for future consideration.

Indeed, if one supposes that the error costs of any test for foreign government-financed predation may be considerable and that such predation is of little empirical importance, then any remedy to deal with it may be undesirable. The remarks above are offered not so much to suggest a definitive policy toward foreign government-financed predation, but rather to show that existing law is wildly inconsistent with an approach to the imposition of countervailing duties that would limit their use to cases in which foreign monopolization of domestic markets might be a legitimate concern.

B. *Strategic Trade Policy*

The burgeoning literature on "strategic trade policy" suggests new justifications for intervention in trade, including possible justifications for tariffs that resemble countervailing duties.¹⁸¹ Although these arguments for countervailing duties are related to the analysis of predation developed above, they do not depend on the proposition that foreign subsidies will extinguish domestic competition through predatory price cutting. They are, however, ultimately unconvincing. The extraordi-

petition in U.S. export markets, should also be required. Otherwise, the imposition of duties on U.S. imports will not alleviate the threat to competition.

179. See *supra* note 42 and accompanying text.

180. The distinction between export subsidies and domestic subsidies that exists under current law is also unnecessary to a legal regime concerned principally with foreign government-financed predation. In particular, the mere existence of an export subsidy warrants no inference of predation—a structural analysis and analysis of the threat to viability is still necessary to determine whether predation might be present. Concomitantly, although foreign governments may under some conditions find export subsidies the cheapest way to finance predation (it is perhaps easier for them to eliminate foreign competition in the home market through tariffs and other protective measures rather than through predatory domestic subsidies), domestic subsidies may deliberately or unwittingly lead to predatory outcomes. At most, therefore, export subsidies may arouse slightly greater suspicion of predation, but do not warrant special treatment.

181. See sources cited *infra* notes 182, 185, 189 & 191–93.

nary amount of information required to determine whether the imposition of a countervailing duty would be a sensible component of strategic trade policy makes it highly unlikely that countervailing duties could ever be usefully applied for that purpose. Furthermore, existing U.S. countervailing duty law does not even direct inquiry at the factors that would be determinative of whether the imposition of a duty might be beneficial.¹⁸²

Consider first an imperfectly competitive industry in which all producers are located abroad. Hence, under free trade, all monopoly rents are captured by foreign firms.¹⁸³ Assume further that the foreign producers receive subsidies of one sort or another from their governments. The imposition of a "countervailing duty" on imports under these conditions *may* enhance national economic welfare because duties serve as a means of "rent extraction." Foreign producers will ordinarily respond to a duty by reducing their prices,¹⁸⁴ and hence the duty revenue may more than offset the loss of domestic consumer surplus:¹⁸⁵ part of the revenue comes out of the monopoly rents of the foreign producers. Intuitively, this result is closely analogous to the earlier result regarding countervailing duties under conditions of perfect competition with

182. For simplicity of exposition, the discussion to follow is limited for the most part to industries in which producers earn supracompetitive returns ("monopoly rents") or in which producers could earn such rents with the appropriate government policy in place. See generally W. Baumol, J. Panzar & R. Willig, *supra* note 173, at 279-303 (existence of economies of scale or "increasing returns" within firms that permit the survival of only a few large firms in the long run, coupled with barriers to entry that allow firms to maintain a supracompetitive price without attracting new competition, explain presence of a monopoly rent). With minor modification, however, the discussion can be adapted to encompass industries in which an expansion of industry output will yield supracompetitive returns to society but not to the firms in the industries themselves: industries in which firms generate positive externalities, e.g., Krugman, *Is Free Trade Passe?*, 1 J. Econ. Persp. 131, 137-38 (1987) (positive externalities exist in high-technology industries where returns to innovation are large and difficult to appropriate), or in which the costs of production decline with increasing output but firms compete away the cost savings. See Brander, *Rationales for Strategic Trade and Industrial Policy*, in *Strategic Trade Policy and the New International Economics* 23, 32-35 (P. Krugman ed. 1986). Thus, the analysis extends readily to all of the justifications for strategic trade policy developed in the economic literature.

183. Of course, this fact would be of little interest if the foreign firms were owned by domestic stockholders who ultimately captured the monopoly rents as dividends.

184. From the perspective of the foreign producer, a duty is equivalent to a leftward shift in the perceived demand curve (and marginal revenue curve) for the producer's output. A reduction in price will typically follow.

185. See, e.g., Brander & Spencer, *Tariff Protection and Imperfect Competition*, in *Monopolistic Competition and International Trade* 194 (H. Kierzkowski ed. 1984); Katrak, *Multi-National Monopolies and Commercial Policy*, 29 *Oxford Econ. Papers* 283 (1977). Duties on imports purchased from foreign monopolists may also induce domestic entry that ultimately benefits the nation imposing the tariff by reducing monopoly power in the industry. W. Corden, *supra* note 67, at 215-19; Brander & Spencer, *Tariffs and the Extraction of Foreign Monopoly Rents Under Potential Entry*, 14 *Can. J. Econ.* 371, 378-81 (1981) [hereinafter Brander & Spencer, *Extraction of Foreign Rents*].

an upward sloping import supply curve.¹⁸⁶

As with duties to exploit national monopsony power in a competitive market, however, the usefulness of duties for the purpose of rent extraction has little to do with the existence or nonexistence of subsidization abroad. Subsidization, if present, is no more than a pretense for rent-extraction measures that would have much the same appeal in the absence of subsidization. Among other objections to duties under these conditions, it may be too optimistic to suppose that foreign governments would react passively. They may instead adopt some sort of retaliatory policy against the exports of the country imposing the duty, and all nations may suffer in the end. A further objection is that alternative government policies, such as price controls, may be potentially superior to duties for extracting foreign monopoly rents and, unlike duties, those policies can eliminate distortions attributable to monopolistic pricing.¹⁸⁷

Finally, a determination whether a countervailing duty would extract sufficient rents to offset the decline in the sum of domestic consumer and producer surplus would be extraordinarily difficult. Such a determination would require consideration of much the same factors necessary to assess whether a duty would enhance national welfare by shifting the terms of trade in a competitive market¹⁸⁸ *plus* consideration of factors necessary to predict the consequences of the duty in an imperfectly competitive market, including an assessment of the strategic reaction by foreign producers.¹⁸⁹ That analysis, if it could be undertaken at all, would be costly and fraught with error. Thus, in the abstract, the use of subsidization as a pretense for the imposition of duties to extract monopoly rents has no more appeal than the use of subsidization as a pretense for the imposition of duties to exploit national monopsony power in a competitive market.

The discussion to this point assumes, however, that all producing firms are located abroad. The analysis becomes considerably more complex if some of the producing firms are located at home. To understand these complications, it is essential to understand one possible ex-

186. See *supra* notes 88–91 and accompanying text.

187. See Brander & Spencer, *Extraction of Foreign Rents*, *supra* note 185, at 385–86. Tariffs may have appeal as a “second-best” policy for rent extraction, however, if superior alternatives are for some reason politically infeasible.

188. See *supra* text following note 93.

189. Brander and Spencer analyze a model with two producing nations and a third consuming nation. The Cournot-Nash policy equilibrium (Cournot-Nash behavior entails an assumption by each actor that a change in its behavior will not cause other actors to change their behavior) involves export subsidies by both producing nations and a “countervailing duty” by the importing nation. Brander & Spencer, *Export Subsidies and International Market Share Rivalry*, 18 *J. Int’l Econ.* 83, 83–85 (1985). With simplifying assumptions about demand and cost conditions, the specific (per unit) countervailing duty in Nash equilibrium is equal to the *sum* of the specific subsidies conferred by the two subsidizing countries. A small increase in one of the subsidies results in an increase in the duty equal to one-quarter the increase in the subsidy. *Id.* at 96–98.

planation for why foreign subsidies might be introduced in the first place.

Whenever producers in a worldwide industry earn or could earn monopoly rents—that is, whenever they sell their output for a price in excess of its marginal cost or could do so if they could expand to reap additional economies of scale—the producers in any particular country *might* be able to increase their monopoly rents if they could increase their output. Specifically, under the right cost, demand, and strategic conditions, an increase in output might result in higher rents if the producers who expand their output could then earn comparable rents per unit on a larger volume of output or larger rents per unit of output.¹⁹⁰ Plainly, if the rents earned by producers in a given country would increase following an expansion of their output, the national economic welfare of their home country might increase as well, since some of the increase in rent would come at the expense of *foreign* rather than domestic consumers. Under these conditions, the country's government may have an incentive to intervene in the industry to promote an expansion of domestic production.

One way that a government can promote an expansion of its domestic production is simply to protect its home market from import competition through tariffs or nontariff barriers.¹⁹¹ This policy obviously has the potential disadvantage of encouraging monopoly pricing in the protected home market, but may have offsetting advantages due to the emergence of scale economies and the opportunity to earn greater rents on exports.¹⁹² To be sure, these offsetting advantages may not be enough in the event of foreign retaliation. But putting retaliation to one side, the temptation to protect the domestic industry may be considerable.

Much the same insight might explain why foreign governments initiate subsidy programs. Subsidies, like tariffs and nontariff-barriers, can encourage the expansion of home-market producers. In addition, the expansion of home-market production and the consequent decline in world prices will often lead to a reduction of output by unsubsidized producers abroad. As a result, subsidies can shift monopoly rents to

190. Marginal costs might decline due to additional scale economies, or prices might increase if the output of other producers decreased by an amount greater than the expansion of output by the producers in question.

191. E.g., Krugman, Import Protection as Export Promotion: International Competition in the Presence of Oligopoly and Economies of Scale, *in* Monopolistic Competition and International Trade, *supra* note 185, at 180; Venables, Trade and Trade Policy with Imperfect Competition: The Case of Identical Products and Free Entry, 19 *J. Int'l Econ.* 1, 12–16 (1985).

192. But see Horstmann & Markusen, Up the Average Cost Curve: Inefficient Entry and the New Protectionism, 20 *J. Int'l Econ.* 225, 226 (1986) (protection induces inefficient entry that offsets, wholly or partially, other benefits of protection); Markusen & Venables, Trade Policy with Increasing Returns and Imperfect Competition: Contradictory Results from Competing Assumptions, 24 *J. Int'l Econ.* 299, 315 (1988) (free entry reduces gains from activist trade policies).

the producers receiving the subsidy at the expense of their competitors.¹⁹³ To be sure, the desirability of such "profit-shifting subsidies" to the subsidizing country may diminish or vanish altogether if other producing nations are expected to engage in retaliatory subsidization. But especially when governments assume that their decisions will not influence the behavior of other governments, they may find subsidization quite tempting.¹⁹⁴

Suppose, therefore, that a worldwide oligopoly is comprised of both U.S. and foreign producers. A foreign government introduces a profit-shifting subsidy that leads to an expansion of foreign production, a contraction of U.S. production, and a shift of monopoly rents to foreign producers at the expense of U.S. producers. Assume also that the U.S. market is an important source of customers for the foreign oligopolists. Is a countervailing duty a desirable response to the introduction of the profit-shifting subsidy?

A duty on U.S. imports certainly will help to counteract the adverse

193. This proposition has been established repeatedly in models that postulate Cournot behavior by domestic and foreign oligopolists (models in which domestic and foreign oligopolists are assumed to make output decisions on the assumption that other oligopolists will not alter their outputs). A subsidy has the effect of lowering costs of production for the subsidized oligopolists, leading to an expansion of their output. The unsubsidized foreign oligopolists, taking the new subsidized output levels as unalterable (the Cournot assumption), respond by reducing their output, and the increase in profit to the subsidized firm is actually greater than the value of the subsidy. See Brander, *supra* note 182, at 29; Brander & Spencer, *supra* note 189, at 87-94; Brander & Spencer, *International R&D Rivalry and Industrial Strategy*, 50 *Rev. Econ. Stud.* 707, 708-11 (1983). A simple, intuitive illustration is developed in Krugman, *supra* note 182, at 135-37.

The analysis is somewhat more complex when the subsidized good is consumed in the home market of the subsidizing country and the welfare effect of the subsidy on domestic consumers must be considered. Nonetheless, a subsidy on all home market production, or on exports alone, may raise national economic welfare under these conditions. See Brander & Spencer, *supra* note 189, at 89; Dixit, *International Trade Policy for Oligopolistic Industries*, 94 *Econ. J.* 1, 11-12 (Supp. 1984); Eaton & Grossman, *Optimal Trade and Industrial Policy Under Oligopoly*, 101 *Q.J. Econ.* 383, 399-402 (1986); see also Flam & Helpman, *Industrial Policy Under Monopolistic Competition*, 22 *J. Int'l Econ.* 79, 90 (1987) (analyzing the consequences of subsidies in a model of monopolistic competition). Again, an intuitive illustration is developed by Krugman, *supra* note 125, at 97-101.

These results may not survive changes in the assumptions about the nature of the strategic interaction among oligopolists. One recent paper suggests that if the oligopolists operate in a market where they take the *prices* of other firms as fixed rather than the outputs of other firms as fixed (a market characterized by Bertrand rather than Cournot competition), the optimal government policy is a *tax* rather than a subsidy. See Eaton & Grossman, *supra*, at 391-96. Furthermore, if the oligopolists have "consistent conjectures"—that is, if they accurately anticipate how other oligopolists will respond to their output decisions—the same paper suggests that nonintervention is the optimal government policy. *Id.* at 394-97.

194. See Brander, *supra* note 182, at 36-43; Brander & Spencer, *supra* note 189, at 90-94; Eaton & Grossman, *supra* note 193, at 397-99; Ordovery, Sykes & Willig, *supra* note 11, at 334-36.

effects of the subsidy on the market share of U.S. producers and shift some rents back to U.S. producers and to the U.S. government. Depending upon cost conditions, demand conditions, the nature of strategic interactions among governments and producers, and so on, the additional rents to domestic firms and to the government because of the duty *may* offset the decline in domestic consumer surplus. Intuitively, any net gain to national economic welfare comes from a combination of two phenomena discussed above—the rent extraction effect of the duty and an expansion of domestic firms at the expense of foreign firms due to the protection of the domestic market.¹⁹⁵

Ultimately, however, this scenario does not provide a convincing basis for the imposition of countervailing duties. Even if foreign governments could be expected to react passively, the information necessary to ascertain the welfare consequences of a duty would include detailed knowledge of worldwide cost and demand conditions and an understanding of the strategic interaction among domestic and foreign oligopolists. It seems clear that such information could not be reliably developed.¹⁹⁶

In one recent two-country model of countervailing duties under these conditions, for example, the calculation of the appropriate countervailing duty required knowledge that the oligopolists played a Cournot game,¹⁹⁷ knowledge of the demand curve in the home market, and knowledge of the cost functions of the domestic and foreign oligopolists.¹⁹⁸ Then, on the implicit assumption that retaliation in other product markets would not occur, an assumption that governments play a Cournot game with each other in the market under study,¹⁹⁹ and with the further simplifying assumptions of constant marginal costs for all firms and linear demand, it was possible to express the “optimal” (Cournot equilibrium) countervailing duty as a function of the marginal costs of domestic and foreign firms and the foreign export subsidy.²⁰⁰ Even then, the optimal duty was not equal to the amount of the subsidy, but was equal to one-half of the subsidy, plus an adjustment for differences between domestic and foreign marginal costs.²⁰¹ The possibility of cooperative behavior between the two countries to improve upon the

195. Dixit develops a two-country model in which the optimal “countervailing duty” can be expressed as a function of cost differentials between the two countries and the export subsidy of the foreign country. Dixit, *supra* note 193, at 10–12.

196. See Grossman, *Strategic Export Promotion: A Critique*, in *Strategic Trade Policy and the New International Economics*, *supra* note 182, at 47–68.

197. See *supra* note 189 (concept of Cournot-Nash behavior).

198. See Dixit, *supra* note 193, at 10–11.

199. The Cournot assumption about government-to-government interaction is especially unappealing here: it is unlikely that a subsidizing country will sit idly by and allow a countervailing duty to capture its export subsidy for a foreign treasury. See *supra* notes 106–07 and accompanying text.

200. See Dixit, *supra* note 193, at 10–12.

201. *Id.* at 11.

Cournot outcome was not addressed, although, plainly, a cooperative outcome would be superior.

This illustration strongly suggests that the information requirements of a countervailing duty policy sensibly designed to counteract profit-shifting subsidies or other types of strategic trade subsidies are insurmountable. For all practical purposes, it is impossible to determine whether a duty will enhance national economic welfare in a given case. This problem is especially troubling if one supposes that sophisticated foreign subsidy policies of the sort contemplated by the strategic trade policy literature are rare, so that the number of industries in which countervailing duties might be appropriate to counteract them is small. Under these conditions, the case against any type of countervailing duty policy becomes quite powerful: if the optimal countervailing duty is usually zero, and if it is impossible to identify the few cases in which a nonzero duty is appropriate, then a duty rate of zero in all cases is probably the best option.

It is even more clear that that the existing countervailing duty laws bear no relation to a policy sensibly tailored to address the problems raised in the strategic trade policy literature. The law does not even take account of the question whether the conditions that might warrant protection—monopoly rents, significant unrealized scale economies or positive externalities—exist in the industry under investigation, much less whether a duty might produce a net gain to the U.S. economy in cases where these conditions do exist. Consequently, countervailing duties are commonly imposed under existing law when it seems utterly implausible that the U.S. economy will reap these types of benefits. The many steel cases and agricultural cases are once again illustrative.²⁰² At a minimum, a policy rationally designed to address strategic subsidies by foreign governments would limit the application of countervailing duties to a small subset of the industries to which the law currently applies. But given the seemingly insurmountable information requirements of such a policy, perhaps concern about these subsidies is best left to the realm of theoretical economics and excluded from the realm of public policy.

VI. INTERNATIONAL COOPERATION

The discussion to this point views the countervailing duty policy of the United States in isolation, without reference to its possible role in a broader international regime for the control of subsidies. One possible

202. See *supra* note 167 and accompanying text. The U.S. steel industry has been in decline for many years and is hardly a plausible source of supracompetitive returns. See Hogan, *Protectionism in the Steel Industry: A Historical Perspective*, in *The New Protectionist Threat to World Welfare*, *supra* note 68, at 352–64. The agricultural sector is intensely competitive and is also an unlikely source of supracompetitive returns. It is equally difficult to imagine how steel or agriculture might be a source of unrealized scale economies or significant positive externalities.

justification for the U.S. countervailing duty laws, however, views those laws not simply in terms of their market-by-market effects in individual cases, but as part of a larger multilateral system to discourage trade-distorting subsidies, or facilitate trade concessions. The existing U.S. countervailing duty laws, however, cannot be understood as part of a system to enforce multilateral restraints on trade-distorting subsidies, because such restraints in large part do not exist, and because unilateral countervailing duties are, in any event, unlikely to serve as an effective enforcement mechanism. Neither can existing U.S. law be justified as a method for facilitating trade concessions.

A. Deterrence of Inefficient Subsidization

Subsidies may enhance or distort resource allocation in the subsidizing country, just as they may enhance or distort resource allocation in the world as a whole. A subsidy can enhance resource allocation in the subsidizing country if it corrects some preexisting market failure (externality) in that country. The inability of private firms to appropriate gains from innovation, for example, may lead to inefficiently little investment in research and development in some industries and provide a justification for R&D subsidies. Subsidies to correct such market failures also tend to improve resource allocation in the world as a whole by moving resources to their most valuable uses and increasing the aggregate value of world output. These subsidies seem desirable, therefore, and aside perhaps from short-run adjustment costs that they may impose upon other countries,²⁰³ the nations of the world have no mutual interest in deterring them or counteracting them.

Other types of subsidies are more troublesome for the world economy. As the prior discussion of strategic trade policy suggests,²⁰⁴ some subsidies may enhance the economic welfare of the subsidizing country while imposing costs on other countries that exceed the benefits to the subsidizing country. Subsidies to enable domestic producers in imperfectly competitive industries to capture a greater share of monopoly rents in world markets, for example, may have this characteristic.²⁰⁵ Still other types of subsidies reduce not only worldwide economic welfare, but seemingly reduce the economic welfare of the subsidizing

203. See *supra* notes 127–36 and accompanying text.

204. See *supra* notes 181–202 and accompanying text.

205. A subsidy to a domestic oligopolist, designed to facilitate its expansion at the expense of foreign oligopolists, can have two offsetting consequences. First, it tends to induce a net expansion of output by the oligopolistic industry. Other things being equal, such an expansion typically increases worldwide welfare by reducing prices and thereby reducing the distortion attributable to supracompetitive pricing in the oligopolistic industry. But the subsidy also induces a shift of production to the subsidized producers. If those producers are less efficient than their competitors, output is produced at higher cost. This tends to reduce worldwide welfare. Where both effects are present, the net effect is ambiguous.

country itself.²⁰⁶ Many agricultural subsidies seem to have this characteristic.²⁰⁷

The adverse effect of subsidies upon worldwide economic welfare can be compounded if political forces compel governments to engage in "competitive subsidization" by matching the subsidies that are granted by the governments of other trading nations. Recently, for example, when the European Community initiated a subsidy program to encourage wheat exports, farm interests in the United States persuaded the U.S. government to initiate a wheat export subsidy program of its own.²⁰⁸ In general, the strategic environment facing governments that must choose whether to initiate subsidy programs may resemble a prisoner's dilemma game. If governments behave noncooperatively, each may find that subsidization is the dominant strategy, with the result that each nation is worse off because all nations grant subsidies.²⁰⁹

To escape pressures to grant subsidies that reduce domestic economic welfare, and to escape pressures for competitive subsidization, trading nations may wish to establish international constraints upon subsidy practices. If such constraints eliminate subsidies that reduce worldwide economic welfare, nations on average will benefit. Thus, an effective system of international constraints on welfare-reducing subsi-

206. To illustrate, consider a widget subsidy that allows widgets to be produced and sold in a competitive market at a price below the social marginal cost of the inputs needed to produce it. Such a subsidy distorts resource allocation in the subsidizing country (putting aside second-best issues) because, in the absence of the subsidy, some of the inputs used to produce widgets would be shifted to the production of alternative products with a value at least equal to the cost of the inputs. That is, in the absence of the subsidy, resources would be reallocated so that the same quantity of inputs was used to produce an output of greater value. The subsidizing country as a whole would realize a greater return from its productive activities, and thus its economic welfare would increase.

Such a subsidy also distorts worldwide resource allocation: even though other countries may benefit from the opportunity to buy subsidized widgets, the benefits to these countries are less than the costs to the subsidizing country. This conclusion again follows from the fact that the price of the subsidized widgets is less than the social marginal cost of the inputs used to produce them. The value of worldwide output, along with worldwide economic welfare, would increase if the inputs used to produce marginal widgets were shifted to a higher-valued use.

207. For example, agricultural subsidies often take the form of price supports. A price support program that leads to prices above the competitive level will create inefficiency by encouraging production to a point where the marginal costs of production exceed the willingness-to-pay of marginal consumers.

208. See EC Wages Counterattack in Markets Threatened by U.S. Export Enhancement, *Inside U.S. Trade*, Oct. 4, 1985, at 1, 11.

It is reported that farm subsidies in the industrialized countries total \$200 billion per year. Proposals by the United States government for a multilateral agreement to eliminate farm subsidies over a 10 year period have met with little enthusiasm abroad. See Farnsworth, *The Industrialized World Shows Its Love for the Farm*, *N.Y. Times*, June 26, 1988, at E2, col. 1.

209. See Brander, *supra* note 182, at 36-38; Ordoover, Sykes & Willig, *supra* note 11, at 334-36.

dies may be understood as a way out of the prisoner's dilemma—a way to achieve the cooperative solution. A system of constraints upon subsidies may accomplish little, however, without an enforcement mechanism. If compliance is “voluntary,” governments may lack the ability to resist domestic political pressures for new subsidies. Countervailing duties are one possible enforcement device.²¹⁰

For the reasons developed earlier, however, many foreign subsidies enhance the economic welfare of importing nations.²¹¹ Thus, to the extent that an international agreement restricting subsidy practices is not limited to classes of subsidies that are injurious to the importing nation, such as foreign government-financed predation and certain subsidies introduced for purposes of strategic trade policy, a country that uses countervailing duties does *not* directly benefit in many cases from the protection that the duties afford to the home market. Viewed myopically, such protection will often be detrimental to national economic welfare. The benefits of the international agreement to each country arise because of the broader system of constraints that the agreement places upon the ability of all participating governments to engage in welfare-reducing subsidization. In particular, the systematic gains to participating nations emerge because the threat of countervailing duties *abroad* enables each nation to resist political pressures at home for wasteful subsidization, and the use of countervailing duties by all countries deters subsidies that would otherwise injure each nation's exporters in their overseas markets. Occasional protection of the home market through the use of a countervailing duty, though costly in many cases to the nation that imposes the duty, is the quid pro quo for these benefits.

This observation immediately suggests several reasons why the existing U.S. countervailing duty laws cannot be understood as part of such a system. First, multilateral restrictions on most of the subsidy practices that are countervailable under U.S. law simply do not exist. The only important international restrictions are those of the GATT system. Yet GATT signatories and signatories to the GATT Subsidies Code are subject to significant restrictions only with respect to their use of *export* subsidies on *nonprimary* products.²¹² Export subsidies on pri-

210. See G. Hufbauer & J. Erb, *supra* note 26, at 5–9 (arguing for discipline of subsidies so that “unbridled and competing national subsidies” do not undermine world prosperity); Barcelo, *supra* note 12, at 798–800 (recommending international ban on most export subsidies and permissive standard for the imposition of countervailing duties in response to injurious, trade-distorting domestic subsidies); Ordovery, Sykes & Willig, *supra* note 11, at 336 (discussing use of countervailing duties to discourage subsidies that reduce worldwide welfare).

211. See *supra* note 85 and accompanying text.

212. See GATT, *supra* note 13, art. XVI(4); Subsidies Code, *supra* note 14, art. 9. Under the GATT, “primary products” are defined as products of farm, forest or fishery, or minerals, at the earliest stage of processing suitable for international trade in substantial quantities. GATT, *supra* note 13, art. XVI(B)(2). The Subsidies Code modifies this

mary products are subject only to vague constraints that have little bite in practice.²¹³ Domestic subsidies are subject to no significant constraints whatsoever.²¹⁴ Hence, except with respect to a subset of export subsidies, no system of international constraints exists that might require an enforcement mechanism. U.S. law can hardly be understood as a means to help enforce international rules of the game if those rules have yet to be created.²¹⁵

Second, countervailing duties are unlikely to be very useful as a means to enforce international constraints on subsidies unless the duties are imposed multilaterally. The unilateral imposition of countervailing duties by a single country will deter subsidization by other governments only haphazardly, and then only when such deterrence is perhaps least likely to enhance, or most likely to reduce, the economic welfare of the country that imposes the duty.²¹⁶ In addition, the unilateral imposition of countervailing duties will do little to deter wasteful expenditures on subsidies by the government that imposes the duties, although it may sometimes serve as an alternative to competitive subsidization. As suggested above, therefore, the two systematic benefits to countries that participate in an international agreement to restrict subsidy practices—the constraints on the ability of each government to engage in wasteful subsidization expenditures itself and the elimination of subsidized competition in each country's export markets—arise only if *other countries* are willing to use countervailing duties systematically against prohibited subsidy practices. The United States is presently the only major trading nation to use countervailing duties with any regularity, however, and the other countries that do use countervailing duties on occasion do not do so in coordination in the United States.²¹⁷

In short, it is impossible to understand or justify the existing U.S. countervailing duty laws as a component of a larger international scheme to enforce multilateral constraints on welfare-reducing subsi-

definition to exclude mineral products. Subsidies Code, *supra* note 14, art. 9 n.29. All other products are "non-primary" products in the terminology of the text.

213. The principal constraint is that export subsidies on primary products shall not enable the subsidizing country to obtain "more than an equitable share of world export trade" of the subsidized product. GATT, *supra* note 13, art. XVI(3); Subsidies Code, *supra* note 14, art. 10. This concept is so vague as to be largely unenforceable.

214. See GATT, *supra* note 13, art. XVI(1); Subsidies Code, *supra* note 14, arts. 8, 11.

215. In addition, GATT restrictions on export subsidies have an enforcement mechanism within the GATT that does not rely upon the willingness of signatories to impose countervailing duties. If a signatory grants an impermissible export subsidy, an aggrieved party can file a GATT complaint, invoking an elaborate dispute resolution procedure. See GATT, *supra* note 13, art. XXIII; Subsidies Code, *supra* note 14, arts. 12, 13. For reasons discussed in the text, this may well provide a more effective remedy to an aggrieved country than the unilateral imposition of countervailing duties by that country.

216. See *supra* notes 106-07 and accompanying text.

217. See *supra* note 18 and accompanying text.

dies. Even if countervailing duties might in the abstract have a role to play in such a scheme, the international consensus and coordination necessary to make countervailing duties a useful tool of enforcement simply do not exist at present.

B. *Facilitation of Trade Concessions*

A recent international economics textbook advances an interesting hypothesis about the rationale for restrictions on export subsidies under the GATT:

A prohibition against export subsidies was written into the original GATT. . . . When governments undertake to cut their tariffs or promise not to raise them, they are entitled to expect that other governments will not nullify the effects of the tariffs that remain, which is what export subsidies can do. If the United States has a 10 percent tariff on imported steel, but Brazil grants a 10 percent export subsidy to its steel industry, Brazilian steel will enter the United States at its free-trade price, and the American steel industry will not be protected. Widespread use of export subsidies could undermine the framework for trade liberalization established by the GATT and lead to tariff warfare.²¹⁸

Thus, the author suggests that a prohibition upon export subsidies is important to facilitate tariff concessions. In the absence of the prohibition, countries would fear the use of export subsidies to circumvent new, lower tariff rates and might be unwilling to make tariff concessions in the first place.

In principle, countervailing duty laws might serve a similar purpose. Absent a GATT restriction or some other mechanism to prevent the beneficiaries of tariff concessions from using subsidies to circumvent new tariff rates, a country making a tariff concession can protect itself with a countervailing duty law that allows it to impose duties to offset any new subsidies.²¹⁹ Conceivably, the existence of this protection might facilitate tariff concessions that would not otherwise be made. This justification for countervailing duty laws is a variant of a more general and increasingly familiar argument for limited protectionist measures. These "pragmatic free trade"²²⁰ justifications for protection rely upon a simple premise: a little protection is better than a lot.²²¹

218. P. Kenen, *supra* note 76, at 250.

219. The countervailing duty laws were indeed enacted in part out of a desire to maintain the existing level of protection against erosion by foreign subsidies. See *supra* note 1. The excerpt from Kenen's textbook suggests a slightly different proposition: the *net* amount of protection might be lower with countervailing duty laws in place because their existence makes the United States willing to accept more than offsetting tariff reductions.

220. See R. Lawrence & R. Litan, *supra* note 63, at 13.

221. A possible variation on this type of argument for countervailing duties is the

Such claims are always difficult to evaluate since their truth or falsity depends upon an unverifiable counterfactual hypothesis about the level of protection that would arise in the absence of some existing protectionist policy. Consequently, "pragmatic free trade" arguments can be—and are—invoked in support of all manner of protectionist measures. A simple response to these arguments is to concede that a little protection is better than a lot, but to suggest further that no protection is better than a little. One can argue, therefore, that if the countervailing duty laws reduce national economic welfare, then the nation would be better off by abolishing them, other things being equal. The assertion that other things cannot be equal for political reasons may or may not be correct, but does not alter any conclusions about the ideal course of public policy.

If this response seems unsatisfactory, there are several more specific responses to the particular claim that countervailing duty laws may be necessary to facilitate tariff concessions. First, the assertion that nations will be tempted to circumvent lower tariff rates through the use of subsidies seems greatly exaggerated. In the example quoted above, if Brazil confers a ten percent export subsidy to overcome a ten percent U.S. tariff and thereby enables Brazilian steelmakers to increase their U.S. sales, the subsidy on the increment in sales is a direct transfer from the Brazilian Treasury to the U.S. Treasury. It is not at all clear why Brazil would wish to bestow such a benefit upon the U.S. government, or why any propensity to do so increases as tariff rates decline. To the contrary, as tariff rates fall, it seems equally possible that foreign governments may reduce their subsidies because the subsidies are no longer as important to the ability of their exporters to sell abroad.²²²

Second, nothing in the history of the U.S. countervailing duty laws suggests that they were enacted because of a concern that subsidies would be used to circumvent the lower tariffs that would prevail after a round of tariff concessions. To the contrary, the countervailing duty laws have existed since 1897,²²³ long before the formation of the

suggestion that countervailing duty laws reduce the political pressure for competitive subsidization. If domestic producers could not secure protection from subsidized foreign competition, they might instead obtain subsidies that would impose an even greater cost on the national economy.

222. For example, suppose that Brazilian manufacturers of widgets can produce and sell them to the United States at a delivered price of one dollar per widget below the price charged by U.S. widget makers. But the United States initially imposes a tariff of two dollars per widget, so that Brazil is unable to compete. If export sales to the United States are for some reason vital to Brazil (a dubious assumption), Brazil might then be tempted to grant an export subsidy of one dollar per widget to make its widgets competitive. But if the United States reduces its tariff to one dollar per widget, the export subsidy is no longer necessary to the competitiveness of Brazilian exports, and the possibility arises that the subsidy will be discontinued.

223. See *supra* note 1 and accompanying text.

GATT or the advent of major international tariff negotiations.²²⁴

Finally, nothing prevents U.S. tariff negotiators from striking product-by-product bargains with the countries that benefit from U.S. tariff concessions to restrict their future subsidy practices or to preserve the right to use countervailing duties. It seems unlikely that a wide-ranging countervailing duty law, applicable to all manner of subsidies on every imported product, is really necessary for tariff negotiations to go forward.

In short, the "pragmatic free trade" justification for countervailing duties also seems to fail as an explanation for the structure and scope of the U.S. countervailing duty laws. There is little evidence that existing law is or was essential to facilitate politically sensitive tariff concessions, or that the overall level of protection in the United States would be greater in the absence of a countervailing duty policy.

CONCLUSION

None of the plausible efficiency justifications for countervailing duties can persuasively explain or justify the existing countervailing duty laws of the United States. A corollary of this proposition is that central features of existing law, such as the distinction between export subsidies and domestic subsidies, the specificity test, and the injury test, have no convincing efficiency rationale.

Given the present lack of international coordination for the discipline of welfare-reducing subsidy practices, and the resulting unilateral nature of U.S. policy, abolition of the countervailing duty laws might best serve the national economic interest. Alternatively, if abolition of the countervailing duty laws is unlikely in the existing political climate, then reform of the law is in order. But the proper directions for reform remain unclear since it is unclear which of the various policy objectives considered above are worth pursuing through a countervailing duty policy. There are reasons to be skeptical about all of them.

224. See *supra* notes 1 & 13-14 and accompanying text.

Indeed, Kenen's assertion that restrictions on export subsidies in the GATT were devised to facilitate tariff concessions is suspect. The history of GATT suggests that the export subsidy provisions were developed because of a broader desire on the part of the contracting parties to constrain government distortions of trade. See, e.g., K. Dam, *The GATT* 132-35 (1970); J. Jackson, *World Trade and the Law of GATT* 365-71 (1969).