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Economic Perspectives on Dumping Law* by

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I. Economic Rationales for Dumping

The definition of dumping has broadened somewhat over the years. Dumping was originally conceived only as selling abroad at a price below domestic price. Efforts to quantify whether dumping was occurring, however, led to the use of criteria for determining the "domestic price" by omitting domestic sales which are below cost. Thus some now consider dumping to include "sales below cost", at least presumptively. This presumption is questionable, as will become apparent below, but this alternative criterion for dumping has gradually acquired the elevated status of an alternative definition. That is, selling below cost is now often regarded as dumping even if sales below cost are occurring in the firm's domestic market as well.

Economic theories of dumping have paralleled these developments. The classic treatment of dumping was that of Viner[1] who used a definition that is equivalent to international price discrimination. Taking that approach, Viner established what has been the economists' presumption ever since: that absent "predation" dumping is basically harmless for the importing country. Only more recently have a number of writers dealt with the alternative definition of dumping as sales below cost. No consensus has yet developed as to why such behavior occurs, if indeed it does, and thus there is as yet no clear consensus as to what the welfare effects of dumping below cost may be. Still, a number of insights have been generated which I will discuss.

This discussion of the theoretical aspects of dumping, then, will be divided into two parts. In Section II I will focus solely on the classic model of dumping as international

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[1] Jacob Viner, *Dumping: A Problem in International Trade,* (New York: Kelley, Reprinted 1966)

price discrimination. I ask first whether price discrimination per se is objectionable. Then I ask whether international price discrimination should be regarded as better or worse than that which occurs entirely within a domestic economy.

In Section III I will turn to the more recent discussion of dumping below cost. This raises several issues regarding the appropriate definition of cost to be used in defining dumping. Different definitions have different implications for the theoretical story one tells about why dumping takes place. These stories, which exist in varying degrees of completeness and rigor in the international economics literature, have only just begun to be explored for their welfare implications.

II. Dumping as International Price Discrimination

The Classic Theory of Price Discrimination

If a firm sells an identical product in two different markets for different prices, that, by definition, is price discrimination. Such behavior automatically implies some departure from the ideal of perfect competition, since a perfectly competitive firm would chose instead to sell all of its output in the market with the higher price. If instead a firm cannot sell as much as it wishes in a given market at a given price, then it must decide the price that it will charge based in part on how much it will then be able to sell. Its pricing decision will depend on a variety of factors, and it would be only a coincidence if these factors were to lead it to charge the same price in two different markets. If it does not, then it is engaging in price discrimination.

This could not occur, of course, if the two markets were tied together. Suppose that buyers in one market can resell without extra cost in the other market, or that buyers in one market can travel costlessly to the other market to make their purchases. In either case, the firm could not succeed in maintaining a higher price in one market than in the other. But if a barrier exists that makes such transactions costly or impossible, then price discrimination will be a normal phenomenon. In fact, even within the domestic economy, extra costs associated with resale and with movement among markets are the norm rather than the exception, and price discrimination is a fact of economic life.

The theory of price discrimination provides a simple determinant of the market in which price will be highest. Profit-maximizing monopolistic firms charge a markup over cost that is larger the less "elastic" is the demand for the product with respect to price. That is, if a given price increase induces a comparatively small drop in quantity demanded in one market compared to another, the firm will charge a higher markup over cost in the former than in the latter. If costs for supplying the two markets are the same, then this larger markup will also result in a higher price. This pricing rule is really just a refinement and formalization of the idea of charging "all that the market will bear," where the market with the less elastic demand will bear a higher price without substantially reducing sales.

The next question concerns the welfare implications of such behavior. On the face of it, price discrimination smacks of "price gouging" in the higher priced market and sounds undesirable. In fact the theory validates this impression to an extent, showing that monopoly pricing itself is indeed welfare worsening for the economy as a whole. Not only does the monopolist himself profit from his behavior. It can also be shown that the profits of the monopolist are smaller than the loss in welfare to its customers, so that total welfare of society declines. Thus economic theory validates the man in the street's aversion to monopoly pricing, an aversion that is also reflected in anti-trust laws, especially in the United States.

However, the undesirable behavior here is the charging of a high price in one market alone, and not necessarily the charging of a higher price in one market than in another. It is the behavior of the firm as a monopolist that lowers welfare, and not the fact that the firm happens in addition to price discriminate. Were it possible effectively to prohibit price discrimination without lessening the monopoly power of the firm, then it is not at all clear that society's welfare would rise.

To see this, consider the effects of a prohibition against price discrimination. This would lead the monopolist to reduce price in one market and raise it in the other. One group of consumers will benefit, the other will lose, and the profits of the firm will also decline. It is possible that the gains to the first group of consumers from the lower price will be large enough to offset the losses to others, but this outcome is by no means necessary. This is about as far as economic theory can take one toward determining whether price discrimination should be prohibited, and it is not a very satisfactory conclusion. It appears that such a prohibition could as easily lower welfare as raise it.[2]

There is one special case that should be mentioned, however, where an unambiguous conclusion is possible. Suppose that the monopolist faces a demand in one market that is perfectly elastic. That is, in one market it can sell all that it wishes at the prevailing price and is, in effect, a perfect competitor there. Less elastic demand in another, protected, market may still lead it to price discriminate if it is able, but a prohibition on price discrimination now will surely raise welfare unless the protected market is so large that the monopolist opts to forego sales in the elastic market entirely. The prohibition in this case has the effect of undermining completely the firm's monopoly power, and the gain in welfare is a result of this move to perfect competition. 0 In general, however, there is no guarantee that eliminating price discrimination will make a firm behave any more like a perfect competitor. Therefore economic theory does not provide any clear justification for laws like the Robinson-Patman Act in the U.S. which prohibits price discrimination, and one perhaps should not be too concerned that such laws are seldom enforced.

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2 The literature does provide more results than this, but they are not very helpful. For example, Varian shows that the welfare effect of eliminating price discrimination must be positive if the total output of the firm rises as a result. See Hal Varian, "Price Discrimination and Social Welfare", *American Economic Review* 75 (1985) 870–5. This is interesting, but not very helpful, since it is also known that total output may either rise or fall.

International Price Discrimination

When price discrimination as just described occurs internationally, the separated markets being those of different countries, the practice is called dumping only if the lower price is charged in the export market. Otherwise it is sometimes called "reverse dumping" and is usually not objected to, since a higher price for export than for domestic sales can easily be attributed to transport costs and to other additional costs associated with selling in a foreign market.

Dumping, however, is also quite a natural phenomenon, in spite of such extra costs of trade. It is likely to occur whenever a firm is the only, or one of the only, sellers in its home market and in addition is protected from foreign competition at home by natural or artificial barriers to trade. In such a case it will face a less elastic demand for its product in its home market than abroad and will respond to that discrepancy by charging a higher markup at home than abroad. If the extra costs of foreign sales are not too high, the actual price it charges will be lower in the foreign market, and this will be regarded as dumping. In the extreme case of a firm that is a monopolist at home and a perfect competitor abroad, if costs are the same for sales in either market, then the firm will surely dump.

As this extreme case may suggest, however, the undesirable behavior in such a case is not the low price in the foreign market, but the high price at home. It is the exercise of monopoly power in the home market that lowers social welfare, in this case by raising prices to consumers above cost, and not the firm's pricing of its exports, over which as a perfect competitor it has no alternative. Even in the less extreme case in which a firm has some market power in both markets and thus is free to set both prices, the lower of the two prices that it charges is a response to its weaker monopoly position in that market and causes less distortion than does the higher price. Thus where dumping does occur in this classical form of price discrimination, it is not the low price but the high price at home that should be objected to, and it would appear that restrictions against dumping from the importing country's point of view make no economic sense.

This conclusion is reinforced if one considers specifically the welfare of the importing country. The reason that price discrimination (per se), within a single economy, is not unambiguously beneficial is that there are two groups of consumers to be considered, one of which is being discriminated against. In the case of dumping, however, if one takes the point of view of the importing country only, all consumers are being discriminated in favor of. That is, the importing country as a whole benefits unambiguously from dumping to the extent that it receives access to imported goods at a lower price than it would if dumping were not taking place. This lower price must be a benefit to the importing country as a whole, despite distributional effects that will hurt some residents who compete with imports, precisely because the importing country is a net demander of the dumped good.

Having said this, however, there are a number of complaints that can be made against this form of dumping, and these need to be considered.

First, suppose that dumping does indeed lower the price of the dumped good in the importing country.[3] As just alluded to, the fact that the importing country as a whole must gain from this lower price does not negate the harm that may be done to those within the importing country who happen to compete with imports. That is, if there is a domestic import competing industry, its owners and workers will earn less in total wages and profits if dumping is going on than if it is not. Now if the monopoly situation that facilitates dumping is not a new one, so that dumping has been going on for some time, then these lower wages and profits do not represent an actual loss to anyone, but merely a potential gain that is foregone. However, if the dumping and the drop in price is a new event, then existing owners and workers will find their livelihoods diminished. This is a real cost to

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3 Recall that this need not be the case. If there is sufficient competition on the world market, then the only effect of international price discrimination may be to raise the price in the exporter's domestic market, but leave it unchanged abroad. In this case there will be no welfare effect on anyone abroad.

these individuals and to the society in which they live. We know from the lower price of imports that others in the same society gain more than these people lose, in the sense that it is theoretically possible to tax the gainers, compensate the losers, and leave everyone better off. But this sort of income redistribution does not take place in practice, and some other policy to prevent or otherwise deal with the harm to injured parties within the importing country may well be warranted.

It does not follow that an anti-dumping policy is appropriate, however. The problem here is the drop in price of imports and the injury that it causes, and this is true independently of what caused the drop in price in the first place. Indeed, countries do have other policies to deal with such contingencies in the form of their safeguards or escape clause mechanisms, and there is no reason that these should not be brought to bear on the dislocations caused by dumped imports.[4]

A second rationale for anti-dumping policies in response to price-discriminatory dumping concerns the trade barriers within the exporting country that facilitate the exporter's monopoly power there. One can argue quite correctly that price discrimination would be impossible if some sort of barrier to imports did not protect the exporting firm from competition in its domestic market. To the extent that this barrier takes the artificial form of an import tariff or quota, say, rather than being a natural barrier such as transport cost, then one can correctly regard dumping as a symptom of a welfare reducing policy—the trade barrier—that in this case lowers welfare both by distorting trade and by fostering monopoly power. An anti-dumping policy in this case might be viewed as a tool, not to raise the exporter's price, but to apply pressure to remove the trade barrier and so make the exporter's domestic market more competitive.

On the face of it, however, this is hardly what those who seek protection under the anti-dumping statutes have in mind. They almost surely are looking for a higher price

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4 See Deardorff, A. V. (1987) "Safeguards Policy and the Conservative Social Welfare Function," in *Protection and Competition in International Trade*, H. Kierzkowski (ed.) Oxford: Basil Blackwell, pp. 22–40, for a theoretical analysis of safeguards policies.

with which to compete, and would be dismayed if the only effect of their actions were to open up foreign markets to greater competition. Nonetheless, as a matter of global policy, this might be defended as moving the world closer to a global optimum. I regard this as a questionable justification for national policies, however, given especially that firms can acquire domestic monopoly power through so many other means than trade barriers.

A final complaint against dumping of any kind, which could be raised against price-discriminatory dumping in some circumstances, is that it will cause a waste of resources in the importing country as it attempts to adjust to the lower price. This adjustment is actually wasteful of resources only if there are reasons for the adjustment to take place inappropriately rapidly, and this in turn is most likely if the source of the problem—the dumping of imports—is only temporary. If dumping is likely to be permanent—that is, if the particular configuration of market power of firms in the various world markets that causes them to charge the prices that they do is likely to remain indefinitely—then it is appropriate that adjustment of resources out of the competing domestic industry occur, and the costs of that adjustment are not a waste.

However, one can sometimes argue that the causes of even price discriminatory dumping are likely to be fleeting and that domestic adjustment to a lower price today will be followed by adjustment in the opposite direction tomorrow, all of which then accomplishes nothing and should be avoided. This argument will appear again below where dumping below cost makes it somewhat more plausible. However, even for price discrimination that case can sometimes be made.

For example, suppose that the protected domestic market of the exporting firm is insulated from shocks in supply and demand that cause large swings up and down of the world price. One will naturally find the exporter charging a more stable price in its domestic market, while of necessity moving up and down with the world price for its exports. When the world market price is depressed, then, due say to a temporary upsurge in supply from elsewhere, the exporter will be regarded as dumping. And in this case the dumping arises from a cause that is temporary and so will be temporary itself.

Would an anti-dumping policy be helpful in such a situation? If so, it might be warranted as a means of avoiding the costs of adjustment first into and then out of the industry. However, in precisely this situation anti dumping policies would have hardly any effect. The fluctuation here is on the world market and a policy to restrict the price of a particular foreign exporter may exclude him from the market, but it will not appreciably raise the price.

Finally, even if one could make the case that an anti-dumping policy would alleviate the costs due to such a temporary shock, it is not clear that it would be the best policy for that purpose. Once again, safeguards policies often are applied with a view to alleviating unnecessary adjustment costs due to trade. More and more, recent decisions under the U.S. escape clause have been contingent on demonstrations that the protected industries would become viable after a reasonable period of time. Such considerations have not routinely been a part of the anti-dumping mechanisms in the U.S. or elsewhere, which therefore have not been well-equipped to deal with such issues. Thus I again would discourage the use of anti-dumping policies as a means to avoid temporary dislocation due to imports, even when those imports can correctly be regarded as dumped.

III. Dumping Below Cost

As mentioned above, an alternative definition of dumping is the pricing of exports below some definition of cost. The motivation for this definition presumably lies in the fact that sales below cost cannot be profitable unless they are offset by other sales above cost, either at other times or in other markets. Thus, for example, one might use exports below cost as evidence that a firm must be charging a higher price in its home market, and thus that it is price discriminating, since otherwise it would be conducting all of its operations at a loss. Or alternatively one might use exports below cost as evidence that the exporter will raise its price in the future, and thus as evidence of predation. As I will argue, both of these inferences are questionable, but they do seem to lie behind the common understanding of why exporting below cost should be objected to as dumping.

To understand the economics of dumping below cost, one must first distinguish various definitions of cost. The most important distinction is between average cost and marginal cost. Average cost, also called fully allocated cost, includes all costs incurred by the firm, divided by the number of units it produces. Marginal cost, on the other hand, measures only the cost of additional units of production. The distinction is most important in the short run, when many components of costs are fixed and therefore only a portion of cost rises and falls when output varies. These marginal costs, also called short run variable costs, are the proper basis for efficient output decisions and thus efficient pricing behavior in the short run for a firm that has already incurred any fixed costs of enterring a market.

Thus, it is of course true that if a firm sells for a price below average cost, then it is making a loss on the transaction. However, if a portion of that average cost is fixed cost, and thus must be incurred whether or not the good is produced, then it might incur an even greater loss were it to produce and sell less. What matters instead is whether the price it can get for additional output exceeds the additional cost of producing it, and this is the notion of marginal cost.

In what follows, I will therefore divide my discussion of dumping below cost into two parts. To the extent that such dumping merely reflects prices below average cost, but not marginal cost, there is nothing particularly surprising about it, and I will begin with that case. Despite the fairly easy explanation for such behavior, there are nonetheless some interesting issues that do arise and need to be discussed.

Dumping below marginal cost, on the other hand, is a more intriguing phenomenon—in theory if not in fact—since it seems to run counter to rationality on the part of exporting firms. I will discuss it second. A number of explanations do exist for such behavior and I will discuss each of them briefly.

Dumping Below Average Cost

As already noted, pricing below average cost is normal behavior for any firm as a short run response to a depressed market, provided only that a portion of its costs are fixed. The firm does not even have to be imperfectly competitive to do this: perfect competitors will continue to produce and sell when the price they face drops below their average cost, so long as it remains above their marginal cost. Indeed, imperfectly competitive firms will be somewhat less likely to do this, since they typically charge a price higher than marginal cost. Thus pricing below average cost should not even be taken as evidence of market imperfection, as was the case of price discrimination above.

This reasoning, which applies to domestic sales, applies as well to trade. One would expect exporters, like domestic sellers, to sell below average cost whenever the market into which they sell is depressed and they are unable to extricate themselves from fixed costs. This would be the case both for a temporary drop in the market—in which case the losses of all firms would be recovered later when the market turns back up—and for a short time after a permanent drop—in which case the sales are needed only to cut their losses prior to leaving the business.

To the extent that both domestic and foreign firms share similar cost conditions and confront a fluctuating domestic market, one would therefore expect both to sell for prices below average cost in periods of slack demand. To define these sales on the part of exporters as dumping, and to offset them with an anti-dumping duty, when domestic firms are behaving in exactly this same way, is nothing more than simple protectionism. There is surely nothing "unfair" about dumping in this situation.

It is true, of course, that an anti-dumping duty in this situation will lessen the adverse effects of the depressed market on domestic firms, and one might want to defend it on distributional grounds as a safeguards action. But the same would be true even if the exports were not dumped (if the foreign firms had lower costs than domestic firms, for example), and this therefore does not provide a rationale for anti-dumping duties per se.

Another interesting issue arises, however, if dumping below average cost occurs in a situation where the structure (though not the size) of costs is different for exporters and for domestic firms.[5] Suppose, for example, that the foreign exporters view a larger portion of their costs as fixed than do the domestic firms as in the example used to illustrate the interface theory in Section 1.7. In response to a downturn in the domestic market, then, price may fall fairly quickly below the marginal costs of domestic firms—who will thus cease production—while remaining above the lower marginal costs of the foreign exporters. In this situation one will find exports displacing domestic production, seemingly because of a willingness of foreign exporters to sell at a loss. What is happening, however, is only that the exporters are responding to the handicap of their greater fixed costs by continuing to produce even after domestic producers are safely out of the market.

Such a difference in structure can arise for several reasons. For example, due to scarcity of labor and high relative wages in a country like the U.S., one might expect to find U.S. industries employing more capital-intensive techniques of production than are used by their counterparts abroad. This would give U.S. firms a higher proportion of fixed costs than their foreign competitors, and might lead U.S. firms to appear to be dumping abroad in times of slack world demand.

Another and apparently more relevant possibility arises from differences in labor market institutions. In Japan, for example, large employers have a tradition of lifetime employment for their workers, and are thus quite reluctant to lay workers off when demand is low. They therefore view labor as a fixed cost, whereas in the U.S. the use of labor is more readily variable. Under these circumstances it is natural for Japanese firms

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5 This is essentially the rationale for dumping that is explored in Ethier, "Dumping," *Journal of Political Economy* 90 (1982) 487.

to continue production and exports to the U.S. at prices that U.S. firms view as too low for them to stay in business.

If this difference in labor-market institutions and the resulting dumping were simply a natural result of differences between the two countries in attitudes towards work and job security, then the phenomenon just described would not be a legitimate occasion for the use of public policy. Instead, the changes in trade and employment that would take place during cycles in industry demand would be an efficient and appropriate reflection of these differences in attitudes.

On the other hand, if these differences result instead from artificial differences between the countries that are themselves by-products of government policy, then some additional policy to offset their adverse effects may be warranted. For example, suppose the differences in employer attitudes towards layoffs reflect the implicit (or explicit) contracts between firms and their workers in response to different government programs of unemployment compensation. That is, suppose that U.S. firms more readily lay off workers precisely because they and their workers know that compensation will be provided by the government. The fact of this policy, however desirable it may be on grounds of social welfare, does mean that employers and employees bear less than the total cost of the decision to lay off workers, and that downturns in demand therefore impose an external diseconomy on the rest of society. In the presence of this diseconomy, dumping that results from international differences in these policies does cause adverse effects, and an absence of policy response is no longer optimal. This is an example of the situation that Jackson and Davey[6] have described as the Interface Principle: When countries with different cultures and institutions interact, certain frictions may arise at the interface between them that will unavoidably require some sort of policy response.

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6 John H. Jackson and William Davey, *Legal Problems of International Economic Relations*, (St. Paul: West, 2ed. 1986) 650–2.

It does not follow, however, that anti dumping duties are the optimal response to dumping, or even that anti-dumping duties are necessarily desirable. As always with trade intervention in the presence of a domestic distortion, trade policy is at most a second best means of dealing with the distortion, and has its own built-in adverse effects that may more than offset its benefits. To the extent that layoffs impose negative externalities on society, in this case due to the presence of a particular social program, the optimal policy response would be either a tax on layoffs or a subsidy to continued employment, either of which would force employers to bear the full costs of their actions, and these policies would not impose the additional cost on consumers of an anti-dumping duty.

Thus, while dumping below average cost does in some cases pose interesting policy issues, I conclude that it does not provide a legitimate rationale for anti-dumping duties, at least as a first best policy response.

Dumping Below Marginal Cost

While the explanation I have given above for dumping below average cost makes good economic sense, and in some cases seems a plausible explanation of behavior that the world describes as dumping, it seems clear that it does not capture what many who must deal with cases of perceived dumping believe to be going on. Alternative scenarios are possible, however, and since these all involve departures in some way from the apparent short-run profit-maximizing norm of pricing subject to marginal cost, I group them here under the heading of dumping below marginal cost.

With one exception, each of these scenarios involves some sacrifice of short-run profit in return for some other objective, and thus permits some degree of pricing below legitimate short-run marginal cost. The one exception, on the other hand, explains sales below marginal cost essentially by mis-defining marginal cost. I will deal with this exceptional case first.

Short-Run Rigidities and Uncertainties

Davies and McGuiness[7] provide three economic explanations for dumping below marginal cost. The first of these rests on uncertainty about export markets and the need for producers to make decisions about production before prices are known. In these circumstances, producers naturally decide output on the basis of an expected price, not the unknown actual price. There must therefore be occasions that arise in which price turns out to be lower than expected. If price turns out to be sufficiently low that the producer would not have chosen to produce had he known the low price in advance, this does suggest sales at a price below the firm's ex ante marginal cost.

However, the problem here is simply an incorrect definition of marginal cost and/or price. Prior to the resolution of the uncertainty, the appropriate price on which to base decisions—the only one available, in fact—is the expected price (the probability-weighted average of the several prices that may later obtain), and a firm should produce, in order to maximize expected profits, whenever this expected price exceeds marginal cost. This is being done correctly, even when the actual price turns out later to be below that marginal cost.

Later, after the resolution of the uncertainty, the original marginal cost that was used for the decision is no longer relevant. Once the firm has committed itself to produce a certain output, then the marginal cost that would have applied to changes in that output no longer matters. Instead, once output is fixed, the marginal cost that can be avoided by reducing output is really zero. Sales at any price above zero are therefore profitable, and do not violate the principle of pricing above marginal cost, properly defined.

Thus, while it is surely true that apparent dumping does occur on the part of firms that have fixed their outputs before finding out that the price they can get is unusually low, this is not really a separate explanation of dumping. Rather, it merely describes yet

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7 Davies and McGuiness, "Dumping at Less than Marginal Cost" *Journal of International Economics* 12 (1982) 169.

another situation in which short-run marginal cost can differ—in this case quite substantially—from long run average cost.

Sales Maximizction

Turning now to reasons for dumping below true marginal cost, one encounters a variety of explanations in which something other than short-run profit maximization is the objective of behavior. The first of these, also discussed by Davies and McGuiness,[8] would arise if a firm were to attempt to maximize sales rather than profit. There has been a strand of macroeconomic literature for many years that has discussed this alternative objective for the firm. The usual justification for it is that managers of large modern firms are somewhat removed from the stockholders' pure interest in profits, and that managers tend to be rewarded in part in proportion to the gross size of the operations they manage. This then gives them an incentive to push up firm sales at the expense of profits.

Since a purely competitive profit maximizing firm will always expand output and sales to the point where marginal cost exactly equals price, it then follows that a firm which tries instead to maximize sales will expand beyond this point and so find marginal cost above price. For an imperfectly competitive firm (in which such sales-maximizing behavior is more plausible) things are not this simple, but the same principle suggests that an imperfectly competitive firm may expand output beyond the point of price equaling marginal cost.

Having established that such behavior may arise (in domestic markets as well as in trade) one must then ask whether there is anything objectionable about it. From the stockholders' point of view the answer is certainly yes, but that is their own private concern, and should not be of concern here. From their competitors' point of view the answer would again be yes, since the excess output of the sales maximizing firm will depress price. But this cost to competitors is more than made up for by gains to

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8 See supra note 7.

consumers, for whom the lower price of all firms is a greater benefit. Thus, at least within a closed economy, such sales maximizing behavior is a matter to be worked out within the firm, and if the firm persists in that behavior the rest of the economy as a whole can only benefit. Not surprisingly there is no tradition in the law of penalizing such behavior when it arises only among domestic competitors.

Internationally, however, such behavior would be regarded as dumping, and would be subject to anti-dumping duties. The economics of the situation are the same, though, and there does not seem to be any economic defense for anti-dumping duties applied here. If a foreign exporting firm happens to be organized in such a way that its managers stress sales at the expense of profits, there is no obvious reason why they wouldn't continue to do this in the future. The importing country's best response would once again be simply to accept the windfall of cheap imports, and it should employ any competing resources elsewhere, where they can be more productive.

Predation

So far I have skirted an issue that has occupied a place in the literature on dumping from its inception: the possibility that dumping may be predatory. The idea here is the same as predatory pricing within a domestic economy. An aggressive firm, seeking to establish a monopoly position in a market, does so by selling at a loss for long enough to drive its competitors out of business. Then, once it has the market to itself, it raises price above what it could have gotten otherwise and reaps monopoly profits.

To put it in context, this behavior is once again a case of a firm having an objective other than short-run profit maximization, and thus selling for a price below short-run marginal cost. In this case the objective is long-run profit maximization, and the firm is willing to sacrifice short-run profits for long-run profits. This is perfectly rational behavior, if the firm's assumptions about its ability to get and keep a monopoly position are correct.

Nor, in this case, can one argue that such behavior is economically harmless and should be permitted. Monopoly pricing does lower the welfare of society as a whole—that is, it lowers the welfare of everyone other than the monopolist by even more than it benefits the monopolist. Thus any behavior that will lead to greater monopoly power in the economy should be subject to discipline of some sort. In addition, the objection is even stronger in the international context, where the monopolist will be in one country and those exploited by the monopolist will be in another. The importing country, dealing with the results of such predatory dumping, will not even have the consolation that at least the monopolist is "one of us."

However, for a number of reasons economists have routinely dismissed predatory dumping as so unlikely that it should not be used to justify anti-dumping duties. A typical assessment was Viner's empirical judgment that "there have not been many well authenticated instances" of predatory dumping.[9]

There are a number of reasons why predatory dumping might be expected to fail. The first is simply that predatory pricing in any market is quite difficult. To succeed, it requires not only that the predator be able to drive its competitors from the market; it must be able to keep them out as well. The latter could most easily be done by keeping price fairly low, but then the benefit to the monopolist, as well as the cost to society, is small.[10]

Second, in the international context of dumping, the observed behavior consists very often of low prices charged by a number of foreign exporting firms. Even if these low prices do succeed in eliminating all domestic competitors, the foreign firms will not benefit, and the domestic economy will not suffer, unless these several firms are then able to agree among themselves to raise price. In practice it usually appears that foreign firms are every bit as aggressive in competing with one another as they are in competing with the

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9 See supra note 5.

10 This is the situation in so-called contestable markets, where even a monopolist must charge what is essentially the competitive price or risk entry by other firms.

import competing firms that they displace, and the outcome of a monopolized market is therefore unlikely.

Finally, again in the international case, an importing country has a potential policy available for dealing with a predatory exporter that is preferable to taxing the cheap imports in the initial stages to the competition. Instead, if an importing country were to threaten credibly to tax imports only once they become monopolized, and hence to tax away the monopoly profits that are the supposed lure for predatory behavior, that behavior would presumably stop. Taxing the cheap imports in the initial period would stop it too, of course, but given the many alternative reasons that exist for dumping, it would be unfortunate for the importing country to deprive itself of cheap imports just because of its fear of predation, when means exist for dealing with it later when the predatory intent has already been established.

Competition for Market Share

A final explanation for dumping below marginal cost is closely related to predatory pricing, yet without it pernicious implications. In anything other than a perfectly competitive industry, sellers cannot automatically sell all they wish at some given prevailing price. Macroeconomic theory typically assumes instead that the sales of an imperfectly competitive firm depend simply on price, and that firm's therefore maximize profit subject to this constraint. In practice, however, the sales constraints faced by firms are much more complicated than this. Sales depend not just on current price charged, but also on a host of other factors, both present and past. Firms engage in a variety of "marketing" activities designed to expand their market shares, and many of these activities are intended to expand sales in the future as much as in the present. Thus marketing activities are a kind of investment: expenses undertaken today in return for the future profits that will derive from a larger market share.

Now marketing includes a wide variety of activities, including advertising, product and package design, and the efforts of salesmen. But it also includes the use of price, not as in a static model just to raise the quantity sold today, but also to raise market share and hence quantity sold in the future. To the extent that increased production or sales in the present will lead to lower costs or a higher price in the future, then it pays a firm to charge less than marginal cost today in return for these benefits later on.

What distinguishes this behavior from predatory pricing is simply that it is usually the normal method of competition for all firms in the market, and does not require for its success that a particular firm acquire an unwieldy market share. Instead, all firms in many industries have often had to engage in some sort of marketing activities in order to get the market shares they have, and these marketing activities may well have included pricing below marginal cost at some point in their histories.

A complete economic understanding of this sort of phenomenon requires a good deal more than the description of it just given. In particular, one needs some explanation of why future sales, price, or cost should depend on current sales, since otherwise there is no connection between the present and the future that would warrant low prices being charged today. Several such explanations are possible, of which two deserve to be mentioned here because of what they in turn imply about the welfare implications of dumping.

For example, suppose that the quality of a product is not immediately recognizable simply from viewing it, but must instead by learned by consuming it. Such "experience goods" have the property that consumers will pay more for them after consuming them once, than they will before they have ever been tried. Producers of such experience goods therefore need to provide special incentives to get consumers to try their product once, knowing that after that they will be able to recover more than their costs on later sales. One such incentive, of course, is a low price, and one would naturally expect to find new entrants to a market for experience goods charging less than marginal cost in order to expand their market shares.

It is true, in this case, that this behavior (which would be called dumping if done internationally) bears a strong resemblance to predatory pricing. The dumping firm is doing it precisely in order to expand market share, and also with the intention later of charging a higher price. But as should be clear from the reason for this behavior, it is not at all a bad thing for society that it should do this. On the contrary, since information about the product is valuable, both to consumers and to the firm, the willingness of the seller to bear the entire cost of disseminating this information is a clear benefit to consumers, even after the price rises and they must pay what the product is worth.

It is true, as always in these cases, that dumping for this reason does displace some domestic production, and this imposes a cost on domestic producers. But this is no different from the cost that one normally expects in aggressively competitive markets in which new products and processes routinely replace old.

A second example also seems appropriate as the basis for a number of instances of dumping. In this case it is not consumers who learn about the product, but rather the firms themselves who learn better how to produce it. Particularly in "high technology" industries, there is a well-documented process of learning by doing that occurs in the early stages of a product's life, and during that period costs tend to fall as more experience is acquired in production. In such a "learning by doing" industry, firms derive benefits from production over and above any price they may receive for selling their product, and they will naturally be willing to sell for a price that is below any notion of marginal cost.

In this case once again, if this behavior is undertaken by an exporter, it will be accused of dumping. But there is no way that it can be regarded as harmful to society, which now benefits both in the short run from the dumped price and in the longer run from the even lower price that may result when costs fall.

The learning by doing case is also interesting, however, because it sometimes suggests another reason for being opposed to dumping. It is argued that if indeed there are these benefits to be gained from learning how to produce the good more cheaply, then a country's government ought to take action to assure that it is domestic firms that receive these benefits. That is, if dumping means that foreign firms are gaining not only short run market share, but long-run expertise that will leave domestic firms far behind, then surely one ought not to permit it.

In fact, however, this argument assumes that firms do not also bear the cost of their own technological advancement, and this assumption directly contradicts the observation that they are "paying" for their own learning by the low price they charge today. As long as there is a reasonable level of actual or potential competition somewhere in the world (it need not include domestic firms), firms will not earn excessive profits from their activities but will only earn profits after learning has occurred sufficient to compensate them for the expense already undertaken during the learning process. The only members of society to derive a windfall gain from all of this are consumers, who get cheaper goods indefinitely as a result of somebody else's efforts.

Nor is it the case that domestic firms will necessarily be excluded from this process. If domestic firms are as adept at learning as their foreign competitors, or if they have some other comparative advantage that will allow them a lower cost even after both they and their competitors have learned the ropes, then they should be able to compete as well with foreign producers without protection as they would with their domestic rivals. And if they do not have the wherewithal to compete, then the country and world both gain from their demise.

In short, there are a variety of reasons why firms in any competitive environment may sell below marginal cost as a means of investment in their own future. This is normal behavior among domestic competitors, and it is just as normal between domestic and foreign firms. Once again, to brand normal business practice with the label "dumping" and to countervail it with an anti-dumping duty, is to provide domestic firms with an arbitrary and unwarranted degree of protection from competition that can only be costly in terms of national and consumer welfare.