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The Treatment of Profit in the Export Market in Antidumping Duty Proceedings

Brian D. Kelly

The general Agreement on Tariffs and Trade (GATT) Antidumping Code and US law and practice allow a seeming asymmetry in the antidumping calculation. While expenses in the domestic market result in adjustments based on the expense incurred, expenses in the export market may attract an element of profit. This results in a larger adjustment for export sales than for normal value, increasing antidumping duties relative to the case in which the adjustments are made symmetrically. This article appraises US policy both before and after the Uruguay Round Agreements Act using the oft-cited "level playing field" rationale to determine whether the additional deduction for profit in the export market is compatible with that rationale. We conclude that US practice prior to the Uruguay Round in fact was largely compatible with the level playing field rationale, but the adoption of the more far-reaching profit calculation following the Uruguay Round has created a serious distortion in the antidumping calculation. Since US law and practice reflect the Antidumping Code in this respect, this problem may exist in the practices of other signatories as well.

I. Introduction

Nations impose antidumping duties to offset "unfairly" low prices for imported products. Dumping is measured as the amount by which the price of the imported product falls short of its "normal" or "fair" value. The oft-stated motivation behind the imposition of antidumping duties is that a duty in the amount of the dumping will negate its effects on trade, albeit perhaps only indirectly, or over the long run. In political terms, antidumping duties are seen as "restoring a level playing field" (Levin, 2007) to trade. While economists point out that the effects on trade are almost certainly positive from the perspective of the importing nation, the political reality, in the United States at least, has been the adoption of a social welfare function that stresses the restoration of the level playing field, the state of the world without dumping.

Academic critiques of antidumping policy have generally followed three themes. First, and perhaps most numerous, has been the explication of the position that antidumping laws damage all parties in trade, often the importing nations that impose them the most, and have no place in economically rational public policy. The original rationale for the laws, predatory pricing of exports, is considered rare or non-existent.

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Second, a number of authors have noted the extent, and perhaps abuse, of administrative discretion in antidumping practice, reflecting the political power of domestic industries over competing importers (Blonigen, 2006). Third, a body of work has pointed out major flaws in the calculation of antidumping duties, even if one assumes that their basic thrust has political or economic legitimacy (De-Lima Campos, 2005). Several studies, such as the TEN project of Horlick and Vermulst (2005), have spanned these categories.

This article falls into the third category, addressing a significant but generally overlooked issue in the Antidumping Code (World Trade Organization, 2007: Article VI of the General Agreement on Tariffs and Trade), as exemplified in US practice. This is not to gainsay the more fundamental economic critiques, but rather to acknowledge that, within the political paradigm of the “level playing field”, economic analysis can provide useful insights. Central to this effort is a simple, formal model of the level playing field approach that allows assessment of particular policies from that perspective. The Antidumping Code has long provided for the construction of export price when the actual export price is deemed unreliable (World Trade Organization, 2007: Article VI, para. 2.3). The Code also sketches the adjustments necessary to assure a fair comparison, including “In the cases referred to in paragraph 3, allowances for costs, including duties and taxes, incurred between importation and resale, and for profits accruing, should also be made” (World Trade Organization, 2007: Article VI, para. 2.4, emphasis added) While the Antidumping Code did not change materially in this respect with the Uruguay Round, the implementing legislation in the United States, in the form of the Uruguay Round Agreements Act (URAA) in 1995, significantly modified the treatment of constructed export price (CEP) profit in the US price calculation. Passed with little comment, the new CEP profit calculation in fact was a major break from past practice. The policy change begs the question, was the pre-URAA or the post-URAA approach, or neither, compatible with the restoration of the level playing field?

This article first provides the background of the CEP profit policy change, summarizing US practice before and after the passage of the URAA. The original and revised policies are then examined using the level playing field principal, in two respects: the application of a profit ratio to US selling expenses as well as to further processing costs; and the calculation of the profit ratio itself. The evaluation extends the approach of Kelly (2007), which provided a formal model to allow rigorous analysis of antidumping (and anti-subsidy) policies in terms of the “level playing field” rationale.

II. BACKGROUND: THE ADJUSTMENT FOR VALUE ADDED IN THE EXPORT MARKET

A. PRACTICE PRIOR TO THE URUGUAY ROUND

United States’ antidumping practice identifies two classes of sales, export price and constructed export price, known before the URAA as purchase price and exporter’s
sales price, respectively. In rough terms, export price applies when the foreign producer sells to an unaffiliated party in the United States, or perhaps to an unaffiliated party that in turn exports the product to the United States, prior to the exportation of the product, and with no significant involvement by a US affiliate. Constructed export price is used when the sale is to an affiliated party in the United States or is characterized by the involvement of a US affiliate. Certain adjustments are made to constructed export price that are not made to export price, the motivation being to place the transaction on an “as exported” basis. One of these adjustments is the profit earned on US operations.

Prior to the passage of the implementing legislation for the Uruguay Round trade agreements, US law and practice provided for the deduction of profit in the US price calculation only if there were further manufacture in the United States. This deduction applied to exporter’s sales price sales alone:

Additional Adjustments to Exporter’s Sales Price — For purposes of this section, the exporter’s sales price shall also be adjusted by being reduced by the amount, if any of—

1. commissions for selling in the United States the particular merchandise under consideration;
2. expenses generally incurred by or for the account of the exporter in the United States in selling identical or substantially identical merchandise; and
3. any increased value, including additional material and labor, resulting from a process of manufacture or assembly performed on the imported merchandise after the importation of the merchandise and before its sale to a person who is not the exporter of the merchandise.

The deduction of profit was implied by item (3) above (§772(d)(3)), which provided for the deduction of increased value rather than simply the costs incurred in a US process of manufacture or assembly. The Department of Commerce identified the profit earned on US operations by several methods, but by 1991 had determined that an allocation of the overall profit on US sales, based on the ratio of further manufacturing total manufacturing costs, should be the default policy (Department of Commerce, 1991).

The rationale for deducting the value added, rather than simply the cost, lay with the point in commerce at which the US transaction was compared with home market sales. The US merchandise was compared based on its physical characteristics at the time of exportation to the United States, not at the time of ultimate sale within the United States. Because the basis of comparison in the home market was moved from

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2 Normal value, to which US price is compared, is based on either home market sales, third country sales, or constructed value. The analysis in the text applies equally to all three bases; for expositional simplicity, the text considers home market sales alone.

3 In US and EU past and current practice an exported product is compared to a physically identical product sold in the home market. Should adequate domestic sales of the identical product not exist, sales of the product that is most similar physically are used for comparison. In US practice, the products are defined as clusters of their attributes, allowing systematic identification of the most similar product. The difference in merchandise adjustment arises when similar, rather than identical, products are compared.
the further manufactured product to the imported product, the equivalent value of the home market processing was in effect removed from the dumping calculation. Thus a simple consistency rationale suggested that the value added should be removed from the US price.\footnote{For example, consider the exportation of cold-rolled steel sheet, which, after importation, is galvanized (coated with zinc) by an affiliate of the exporter, then sold to an unaffiliated purchaser. The producer may sell both cold-rolled sheet and galvanized sheet in its domestic market, but the basis for normal value will be the cold-rolled sheet, not the galvanized product. In effect, the value differences in the domestic market between cold-rolled and galvanized sheet are removed by comparing the US product to cold-rolled rather than galvanized steel, consistent with the removal of the value added in the United States.}

The value theme also occurred in the difference-in-merchandise adjustment, required when the merchandise as exported to the United States was not physically identical to the domestic comparison merchandise to which it was being compared. That adjustment was described in Department of Commerce regulations:

... the Secretary will be guided primarily by the differences in the cost of production, to the extent that it is established to his satisfaction that the amount of any price differential is wholly or partly due to such differences, but, when appropriate, the effect of such differences upon the market value of the merchandise may also be considered (US Department of Commerce, 1989: at 19 C.F.R. 353.1; emphasis added).

Thus the aim of the difference in merchandise adjustment was to correct for any difference in value (equally, price) due to physical differences between the merchandise as exported and the merchandise sold in the home market. Cost differences were used for the physical differences adjustments, in rule if they were considered satisfactory surrogates for price differences, and in fact in nearly all cases. But the motivation for the physical differences adjustment was differences in value. In this sense the adjustment for added value in the United States was consistent with the difference in merchandise adjustment: the removal of (further) manufacturing costs was motivated by correcting for value differences created by the manufacturing.

B. URUGUAY ROUND MODIFICATIONS

In 1996, the Uruguay Round Agreements Act modified the approach to the deduction of value added, separating the former “increased value ... resulting from a process of manufacture or assembly” into cost and profit, and, in a new twist, provided that profit should be assigned to selling expenses and deducted from US price:

Additional Adjustments to Constructed Export Price – For purposes of this section, the price used to establish constructed export price shall also be reduced by –

(1) the amount of any of the following expenses generally incurred by or for the account of the producer or exporter, or the affiliated seller in the United States, in selling the subject merchandise (or subject merchandise to which value has been added) –

\footnote{This article does not analyze the motivation for identifying the matching domestic product based on the product as exported to, rather than as sold in, the United States. Essentially the reason is historical, based on the fact that, in earlier years of dumping administration, data were available to US officials only up to the point of importation, leading to the imported product, as entered by the US Customs Service, being the point of appraisal.}
(A) commissions for selling the subject merchandise in the United States;
(B) expenses that result from, and bear a direct relationship to, the sale, such as credit expenses, guarantees and warranties;
(C) any selling expenses that the seller pays on behalf of the purchases;
(D) any selling expenses not deducted under subparagraph (A), (B), or (C);
(2) the cost of any further manufacture or assembly (including additional material and labor), except in circumstances described in subsection (e); and
(3) the profit allocated to the expenses described in paragraphs (1) and (2) (19 U.S.C. 1677(a), §772(d) of the Tariff Act of 1930, as amended (post-URAA)) (Cornell University, 2007).

The URAA thus extended the adjustment for the profit assigned to US activity from further manufacturing costs alone to selling expenses as well. The rationale was that economic activity in the United States should attract profit, whether that was further processing or further selling efforts, although, interestingly, transport costs are subtracted at their actual amount under §772(c), without receiving a profit allocation. Further, the URAA formalized the increasingly common administrative practice of using an allocated profit rather than attempting to identify the actual profit associated with US operations. The rationale for the profit allocation was in large measure administrative, designed to ease the burden on both the administering authority, by basing the calculation on information already being gathered, and on respondents in the antidumping proceedings, by permitting shortcuts when certain information was not otherwise required (Clinton, 1994).

These changes beg two questions concerning the calculation of antidumping duties. First, given that the comparison between US and home market prices changed through the broadened application of profit to selling expenses, was the previous or the revised version, if either, consistent with the level playing field rationale that motivates the antidumping statute? Second, what are the implications of the profit calculation shortcut explicitly adopted by the URAA, evaluated again in terms of the level playing field rationale?

III. Evaluation of the Application of the CEP Profit Deduction

A. Modeling the level playing field

Antidumping duties are designed to raise the price in the importing country to the normal value, a value based on sales or cost of production in the home country, or occasionally on sales in a third country. They are corrective, intended to restore the state of the world in the absence of underselling. In short, they are aimed at restoring a “level playing field” in trade. Kelly (2007) presents a basic model that formally implements the level playing field rationale. This model is summarized here, then used to assess the efficacy of the further manufacturing provision prior to the URAA, and of the profit deduction created by the URAA, in implementing the level playing field rationale.
In the antidumping calculation, underselling is met with a duty $D$ equal to the amount of the amount of underselling, so that the equilibrium price $P_A^*$ is the original price to the export market $P_E$ plus the amount of the antidumping duty $D$:

$$P_A^* = P_E + D \quad (1a)$$

Underselling is defined, in the basic case, as the excess of domestic price in the foreign market $P_D$ over price to the export market, $P_E$:

$$D = P_D - P_E \quad (1b)$$

Which, by simple substitution, yields:

$$P_A^* = P_D \quad (1c)$$

That is, the intended US equilibrium price equals the price in the domestic market of the exporter. The level playing field is restored in that prices are equalized at the "normal" or "fair" value.\(^7\)

B. PRE-URAA PRACTICE

To assess the pre-URAA further manufacturing provision, assume that there are two products sold in both the export market and the domestic market of the exporting country, with pricing as follows:

- $P_{D,1}$ = domestic price of good 1
- $P_{D,2}$ = domestic price of good 2
- $P_{E,1}$ = export price of good 1
- $P_{E,2}$ = export price of good 2

Assume for simplicity that these are prices are the mill gate; the unaffiliated customer is responsible for transportation costs and other expenses after production. Good 2 is a further manufactured version of good 1, with the prices related by the additional of value-added $V$:

$$P_{D,2} = P_{D,1} + V_D \quad (2a)$$
$$P_{E,2} = P_{E,1} + V_E \quad (2b)$$

Assume that $V_D = V_E$, so that the increase in value (price) created by the further manufacturing is the same in the two markets. Under the level playing field rationale, the

\(^6\) Price generally refers to the first price to a customer that is not affiliated with the exporter.

\(^7\) The most common economic critique of the level playing field rationale is that there are many economically legitimate reasons for export price to be below domestic price or below cost. For present purposes, once again, we take the oft-stated rationale of the level playing field as a political given, assessing an element of antidumping practice from the perspective of that rationale.
and if (contrary to fact) one based the calculation on the product as sold, duties set to the difference would restore the level playing field to competition in the export market:

\[ D_1 = P_{D,1} - P_{E,1} \]  
\[ D_2 = P_{D,2} - P_{E,2} \]  

Each product is compared to the identical product in the domestic market, and no adjustment for value added is necessary. The level playing field condition of (1c) is satisfied in both cases.

Assume now that good 2 is not sold in the domestic market. The dumping comparison for good 1 remains the same. Sales of good 2 in the export market, however, must be compared to sales of good 1 in the domestic market. Since good 2’s price reflects the value added by the further manufacturing, removing that value places the two goods on a comparable basis, and the dumping comparison is:

\[ D_2 = P_{D,1} - (P_{E,2} - V_E) \]  
\[ P_{E,2} = P_{E,1} + V_E \]  

Substituting (4b) into (4a):

\[ D_2 = P_{D,1} - P_{E,1} \]  

The value deduction adjusts the export price from good 2 to good 1. At the same time, the basis for comparison to normal value is for the product as exported rather than the product as sold, so normal value is also for good 1. This effectively converts the dumping comparison to that for good 1, and maintains the consistency with the basic level playing field equation (1c).

The calculations of equations (4a) to (4c) in fact apply when good 2 is sold in the domestic market as well, for the point of comparison in the dumping comparison is the product as imported, not as sold; this remains true in the post-URAA practice. Consequently, US good 2 would be adjusted to good 1’s physical characteristics and would be compared to the domestic good 1. But the removal of the value, rather than the cost, associated with the further manufacturing in the United States meant that equations (4a) to (4c) reached the same result as equation (3), the direct comparison of good 2 across markets at the point of sale, meeting the level playing field condition of (1c).\(^8\)

\(^8\) As a simple test of the level playing field outcome, note that if pricing and adjustments are identical in the two markets represented in the equations, the dumping margin will be exactly zero.
The pre-URAA removal of added value rather than added cost in the export (US) market was also consistent with the letter and spirit, if not the implementation, of the adjustment for differences in merchandise. As described above, that adjustment is based on cost as a substitute for price (value) differences, or directly on value differences. Consider the case in which good 1 is sold in the domestic market alone. Further processing, done in the domestic market, creates good 2, which is exported to the United States and not sold domestically. Then export prices of good 2 would be compared to domestic prices of good 1 (note that there is no value added in the United States) with a difference in merchandise adjustment. Let \( C_I \) represent the cost of production of good 1, and \( C_2 = C_I + V_D \), where \( V_D \) represents the domestic further processing. The dumping margin would be:

\[
D_I = P_{D,1} + (C_2 - C_I) - P_{E,2}
\]  
(5a)

Substituting for \( C_2 \):

\[
D_I = P_{D,1} + ((C_I + V_D) - C_I) - P_{E,2} \\
= P_{D,1} + V_D - P_{E,2}
\]  
(5b)

A comparison of (5b) with (4a) shows that if the domestic further manufacturing costs were the same as the US manufacturing costs, the dumping margin would be the same if the value added occurred in the United States (4a) or in the home market (4b), if the difference in merchandise calculation were based upon value. Consequently, the pre-URAA value added adjustment was consistent with the motivation, if not the common implementation, of the difference in merchandise adjustment.9

C. THE URAA TREATMENT OF CEP PROFIT

The URAA replaced the value deduction for further processing with separate deductions for the cost of the further processing and for profit attributed not just to the further processing, but also to the selling expenses incurred in the United States. To evaluate this, we can extend the above model to include selling expenses.

Assume that good 1 is sold in both markets, incurring selling expenses of \( S_D \) in the domestic market and \( S_E \) in the export (US) market. For simplicity, initially assume that there is no further manufacturing in either market. Initially take as exogenous a profit rate of \( r \), computed by the administering authority based on company sales and cost information; Section III below addresses the computation of \( r \). Then the calculated duty is:

\[
D_I = (P_{D,1} - S_D) - (P_{E,1} - S_E - r* S_E)
\]  
(6a)

9 The difference in merchandise adjustment is made to the normal value side of the dumping equation, while the value added adjustment is made to the US side. So while the amount of dumping would be the same under equations (4a) and (5b), the dumping percentage would be higher under (4a), since net US price \( P_D \) is the denominator in the percentage calculation.
Without loss of generality, assume that selling expenses are identical in both markets, \( S_D = S_E \); then,
\[
D_f = P_{D,1} - (P_{E,1} - r^* S_E)
\]  
\( (6b) \)

A comparison of equation \( (6b) \) with \( (4a) \) above is instructive: \( (4a) \) reflects the subtraction from export price of value added, whereas \( (6b) \) reflects the subtraction from export price of profit attributable to selling expenses. Yet \( (4a) \) simplifies to \( (4c) \), the simple comparison of the domestic price and the US price of good \( 1 \). There is no equivalent simplification for \( (6b) \). The reason is that the removal of value added in equations \( 4 \) reflects a change in the US good being tested for dumping, from good \( 2 \) to good \( 1 \). Therefore the comparison product is not good \( 2 \) in the home market, but good \( 1 \); in effect; there is a value adjustment in the home market from good \( 2 \) to good \( 1 \), which keeps the calculation consistent between the domestic and export markets. With respect to selling expenses, however, there is no change in the comparison product; the basis of comparison remains the same.\(^{10} \) Instead, the actual amount of selling expenses in each market is deducted from price. Then, in the export but not the domestic market, an additional deduction is made for profit attributed to those selling expenses. This introduces error into the calculation when it is judged from the perspective of the level playing field. The amount of duty does not simply recreate the conditions that would prevail in the absence of dumping, but overcorrects by the amount \( r^* S \). United States' practice restricts \( r \) to be non-negative, so the bias is in one direction only, that of increasing dumping duties beyond the level implied by the level playing field criterion.

The presence of both selling expenses and further manufacturing in the dumping comparison does not alter this conclusion. If we introduce the second good, as in \( 4(a) \), as well as identical selling expenses in the two markets, the deduction for further manufacturing costs plus profit will be balanced by the shift in the comparison product in the home market to good \( 1 \). The \( r^* S \) terms will remain for selling expenses, but there is no further distortion introduced by the presence of further manufacturing expenses. This development assumes that profit is correctly allocated to the further manufacturing costs; the profit calculation will be reviewed in section \( III \) below.

An objection may be raised that US selling expenses are incurred on the more valuable good \( 2 \), and in the home market on the less valuable good \( 1 \), so an adjustment for profit based on selling expenses should occur at least when further processing is present. This is incorrect. If the value (price) of the product is relevant, the calculation of the individual selling expenses reflects that value. For example, commissions at 10 percent of selling price are based on the value of the product and will result in a deduction of 10 percent of price. Commissions of $10 per unit will be deducted from price at the amount of $10, not as a percentage of value; this represents the actual cost of the commission, regardless of the value of the product. While this means that the deduction for a more valuable product will be smaller as a percentage of sales value than

\(^{10} \) See the next subsection for a discussion of level of trade.
the deduction from a less valuable product, this simply represents the manner in which the expense is incurred; associating different profit amounts with the commissions on the different products would distort the comparison.

In summary, the URRA's extension of the profit adjustment to selling expenses was in error if the motivation of antidumping duties is to create a level playing field for international trade.

The Antidumping Code and US law provides that, when possible, the adjusted US and home market prices should be compared at the same "level of trade" (19 U.S.C. 1677(b), §773(a)(7) of the Tariff Act of 1930, as amended (post-URRA)) (Cornell University, 2007). Roughly speaking, this means that the US sales and domestic comparison sales should reflect the same level of services and sales activities on the part of the producer or seller. When the comparison is not at the same level of trade, the Department of Commerce has a rarely used option to apply a level of trade adjustment to correct for the difference in levels. At first glance this would appear to have potential to address the problem created by the profit deduction. The adjusted (export price) level in the United States could be compared to the same level in the home market, much as the physical product entered into the United States is compared to the same product sold in the home market. The alignment of level of trade does not resolve the difficulty with the profit adjustment, however. The selling expense adjustments are still made, without a profit allocation in the home market and with a profit allocation in the US market, even if the levels are aligned. The levels themselves are defined very broadly; it is rare that more than two levels are defined in a market. The level of trade adjustment under §773(a)(7)(A), which would appear to have potential as an adjustment for differences in value, is very rarely applied because it requires that both of the relevant levels exist in the home market and that there be a "pattern of consistent price differences" between those levels not attributable to expenses that are otherwise adjusted. The chief adjustment related to level-of-trade, under §773(a)(7)(A), is the allowance of a deduction for home market indirect selling expenses when the home market sale is considered to be at a more advanced level than the exports to the United States; this deduction is cost-based while the comparable US adjustment attracts profit. Consequently, the level-of-trade provisions do not gainsay the conclusions of equation 6(b) above.

IV. Calculation of Profit

A. Mechanics of the Profit Calculation

The URRA provides for the deduction of profit and describes the calculation method for profit. In practice, the Department of Commerce has generally calculated profit by working from the data bases for home market and US sales and expenses, and for cost of production, that it receives in the course of its proceedings. To describe this
calculation more precisely, define the following variables as aggregate revenues or expenses:\footnote{In implementing this policy, the Department’s computer programs multiply per unit revenues, expenses and costs by the quantity sold in each transaction, the sum the results across all transactions to reach the aggregates.}

- $R$: Gross sales revenues.
- $S$: Expenses that attract profit in the US price calculation (selling expenses, discounts and rebates, further processing costs).
- $T$: Expenses that do not attract profit in the US price calculation, primarily movement expenses.
- $C$: The cost of production for the product as sold in the home market or as imported into the United States.

For simplicity, assume a single product is produced and exported. The subscript $D$ refers to the domestic market, the subscript $E$ to the export (US) market. Total profit is:

$$
\Pi = (R_D - C_D - S_D - T_D) + (R_E - C_E - S_E - T_E)
$$

(6)

The profit rate $r$ is:

$$
r = \Pi / \left( (C_D + S_D + T_D) + (C_E + S_E + T_E) \right)
$$

(7)

In addition, the URRA provided for alternative calculation of the profit rate $r$ if the cost of production data necessary for its computation was not otherwise on the administrative record. The alternatives essentially broaden the class of products for which $r$ is calculated, but do not change the nature of the calculation. Also, in cases in which the added value is very large, substantially more than half of the total value of the product, the Department of Commerce has the authority to use alternative methods to calculate net US price. These relatively rare alternatives will not be considered further in this paper.

B. EFFECTS ON PRICE-TO-PRICE COMPARISON

With respect to dumping margins based on price-to-price comparisons, we can trace the effects of changes in each of the variables on dumping margins using equations (5b), (6) and (7), noting that net price in (5b) is revenue $R$ less expenses $S$ and $T$. Table 1 considers only decreases in revenues or costs; increases have the opposite effects. For simplicity, initially assume that $S_E$ includes only selling expenses, not further manufacturing expenses.
TABLE 1: DUMPING MARGINS BASED ON PRICE-TO-PRICE COMPARISONS

<table>
<thead>
<tr>
<th>Change in variable</th>
<th>Direct effect on dumping margin</th>
<th>Effect on profit rate</th>
<th>Effect of ( r \times S ) on dumping margin</th>
<th>Net effect on dumping margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export market</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R_E \downarrow )</td>
<td>↑</td>
<td>↓</td>
<td>↓</td>
<td>↑</td>
</tr>
<tr>
<td>( C_E \downarrow )</td>
<td>None</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td>( S_E \downarrow )</td>
<td>↓</td>
<td>↑</td>
<td>↑</td>
<td>↓</td>
</tr>
<tr>
<td>( T_E \downarrow )</td>
<td>↓</td>
<td>↑</td>
<td>↑</td>
<td>↓</td>
</tr>
<tr>
<td>Domestic Market</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R_D \downarrow )</td>
<td>↓</td>
<td>↓</td>
<td>↓</td>
<td>↓</td>
</tr>
<tr>
<td>( C_D \downarrow )</td>
<td>None</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td>( S_D \downarrow )</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td>( T_D \downarrow )</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
</tr>
</tbody>
</table>

The first column corresponds to the level playing field outcome: a $1 decrease in US revenues leads to a $1 increase in dumping margins, all else equal; a $1 decrease in a US expense leads to a $1 decrease in the dumping margin; all else equal; and a decrease in cost of production has no effect, given that these are price-to-price comparisons. Similarly, a $1 decrease in domestic revenues decreases the dumping margins by $1, and a $1 increase in domestic expenses increases the margin by $1.

The other impact on the margins, as described in section II above, is the \( r \times S \) term. On the US side, this term ameliorates the simple level playing field outcome. Decreased US revenues also lower the overall profit rate through equation (6), which in turn (through (5b)) lowers the dumping margin. Since the effect on profits is spread over US and domestic sales, the associated decrease in the antidumping duty will necessarily be smaller, in absolute value, than the increase in margins due directly to lower price, so the net effect is that the margins increase. The profit calculation ameliorates the effect of a price change, but does not reverse the direction of the effect upon the dumping margin. The same logic applies to the expenses included in \( S_E \) and \( T_E \), but in reverse: the profit rate \( r \) is increased, softening the impact of the decrease in expenses. In addition, the decrease in \( S_E \) works to decrease the product \( r \times S_E \), contrary to the direction of \( r \); the net effect is that a decrease in \( S_E \) leads to a decrease in \( r \times S_E \), which accentuates the effect of the original decrease on the dumping margin.

The effects of a change in cost of production are the most surprising from the perspective of the level playing field. A decrease in the cost of production leads to an increase in the dumping margin, due to the increase in \( r \) and the consequent larger profit deduction \( r \times S_E \). A firm selling identical products at identical prices with identical expenses will find itself facing a dumping margin due to the \( r \times S_E \) term, as

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12 If US price is above normal value, there are no dumping margins to begin with, and so the decrease in US revenues, for example, would lead to a decrease in the "safety" margin, the excess of US price over normal value.

13 This result, which takes requires some algebraic manipulation, is available from the author on request.
described in the previous section; if it becomes a more efficient producer, it will find that dumping margin increasing due to the mechanics of the profit calculation.

The domestic side is easier to work through because the $E$ term is not involved. A $1$ decrease in domestic revenue leads to a $1$ decrease in the dumping margin directly, an effect that is accentuated by the decrease in the profit rate and therefore a decrease in the profit assigned to US expenses. A $1$ decrease in domestic expenses leads to a $1$ increase in the dumping margin, an effect that is accentuated by the increase in the profit assigned to US expenses. Thus the dumping effects of price and expense changes in the domestic market are accentuated through the mechanics of the profit allocation.

The impact of the profit calculation itself, as opposed to the extension of the profit factor to selling expenses that was discussed in section II, can be illustrated further by considering the case in which there is further manufacturing in the United States. For clarity, assume that the value added by that further manufacturing is readily identifiable, perhaps by a separate invoice line item on the sale to the unaffiliated customer. Under a methodology of simply subtracting the value added in the United States, the increased charge to the customer for the further processing would be deducted, leaving the product in an "as exported" condition. As analyzed in section II above, the pre-URAA calculation of removing the value added on particular US transactions or products was consistent with the level playing field rationale, for it made the same adjustment in the United States that in effect was made in the home market through the changing basis for normal value. However, with the cost plus allocated profit, rather than the actual value, instead deducted, the actual deduction would match the actual increased value only by chance. An increase in value of $1$ in the United States due to further manufacturing no longer leads to a deduction of $1$, this even though the comparison product in the home market has changed, effectively allowing the full value adjustment in the home market. The effect on the dumping calculation for any particular transaction could be to increase or to decrease the margin, but the US practice of zeroing (setting negative transactional margins to zero) implies that the increased margins will dominate, introducing a second systematic upward bias to the antidumping duties. The mechanics of the profit calculation mandated by the URRA guarantee that the level playing field rationale cannot be met.

C. Effects with cost-based normal value

Most US antidumping proceedings are not simple price-to-price comparisons. United States' policy has long reflected the view that costs can be used in the absence of domestic sales to form normal value; this is known as "constructed value". More controversially, US antidumping practice has, since the mid-1970s, eliminated most domestic sales made below the cost of production from normal value; this is called the "cost test" and frequently leads either to the complete elimination of sales and the resulting use of constructed value, or to the partial elimination of sales with the surviving sales used for normal value. Higher costs therefore can raise normal value
either by raising constructed value or by eliminating additional sales below cost, leaving the surviving sales with a higher average price.

All other things equal, a general decrease in a company’s costs would be expected to either decrease the dumping margin or leave it unchanged. The margin would decrease either through a decrease in constructed value (and therefore normal value), or through the elimination of fewer low-priced domestic sales, which would leave a larger, lower-priced universe of domestic sales to serve as the basis for normal value. The dumping margin would be unchanged if costs were not being used in the calculations, a rarity in US practice; if relevant US sales were at sufficiently high prices that an decrease in normal value did not create dumping margins; or if the decrease in costs happened not to eliminate any further domestic sales due to discontinuities in domestic net prices. 14

As analyzed above, in the pure price-to-price comparison, a decrease in cost will lead to an increase in the dumping margin through the CEP profit calculation. Should the basis for normal value be constructed value rather than price, the cost decrease will have a greater effect on normal value than it will on US price; the denominator of the CEP profit calculation includes costs as well as selling expenses, so a decrease in costs will lower dumping margins, but this effect is lessened by the CEP profit calculation. Should the basis for normal value be domestic prices that are subject to the cost test, lowering costs will result in increased margins through the CEP profit effect for cost ranges in which no relevant domestic sales are eliminated, with the stepping-up of margins occurring as costs move through ranges that eliminate relevant home market sales. This leads to the pattern observed by practitioners, that decreasing costs will alternately raise and lower antidumping margins. Antidumping margins will increase in the face of declining costs as long as additional sales are not driven below cost, then take discrete jumps upwards as additional sales fall below cost. This odd pattern is due to the mechanics of the CEP profit allocation.

VI. CONCLUSIONS

Current US practice with respect to CEP profit exhibits two flaws, if one evaluates that practice from the perspective that antidumping duties should restore a “level playing field” to trade. One, new with the URRA, is that US selling expenses attract profit, therefore increasing the deduction from US price, without an equivalent profit adjustment in the domestic market. This provides a systematic upward bias to the US antidumping calculation. The second is that the profit calculation itself incorporates elements of costs and revenues that are irrelevant to the actual value added in the United States, causing distortions in the calculation and leading to counter-intuitive

14 To illustrate the latter point, suppose good 1 had an increase in net price from $350 to $400 during the period reviewed. Costs, initially calculated at $360, are revised upwards to $380 due to a change in Department of Commerce methodology. The sales at $350 would be eliminated under either set of costs, while the sales at $400 would survive either set, so the cost increase would not affect the dumping margins.
effects such as increasing dumping margins in the face of decreasing cost of production. While the focus here has been on US practice, the Antidumping Code appears to countenance at least the first aspect of that practice, the application of profit to expenses beyond further manufacturing costs, and so the departure from the level playing field calculation may be occurring in the practice of other GATT signatories as well.

References


