Anti-Dumping in Agriculture between Canada and the U.S.:
Two Cases of Tomatoes

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A. Introduction

During 2001, two anti-dumping cases were brought forward regarding tomatoes in the North American fresh tomato trade. On March 28, 2001, U.S. greenhouse tomato growers filed an anti-dumping petition with the United States International Trade Commission (USITC) and the United State Department of Commerce (DOC). Three months later, Canadian greenhouse growers announced they would file an anti-dumping complaint against U.S. fresh tomato imports, and the complaint was formally filed with the Canada Customs and Revenue Agency (CCRA) on September 28, 2001. In both cases, preliminary findings of dumping and injury were upheld, and formal inquiries are taking place at this time. The U.S. case has just had (February 19, 2002) its final determination of dumping, including the margin of dumping, and is in the final phase of its determination of injury to US producers. The Canadian case is also in its final phases, both in term of the margin of dumping and injury.

So we have here an unusual situation in which two similar commodities are facing anti-dumping proceedings between two countries where the charges are being leveled by both countries against the industry in the other. Even though one case is focused on a subset of fresh tomatoes, namely greenhouse tomatoes, and the other is on fresh tomatoes more generally, it may strike one as odd that there can be dumping going on in both countries simultaneously, from Canada into the US for greenhouse tomatoes and from the US into Canada for fresh tomatoes. After all, dumping is supposed to be a kind of predatory behaviour of a firm that has market power across borders and is harming the other firms in the importing country’s domestic industry in order to drive them out of business.

This adds an element of curiosity to what otherwise seems to be just another pair of cases in a long list of such anti-dumping cases that seem to crop up regularly in the post-Uruguay Round period. It is the purpose of this paper to give an overview of what is happening in each of these two cases, and to examine them more closely to see if there are any lessons of broader interest. One question that occurs is whether these anti-dumping cases are in some way legitimate or, as some have argued, just a different but now common expression of protectionist actions. Another question is whether anti-dumping actions make any sense within the agricultural sector where significant market power at the commodity level is not prevalent, and whether or not current regulations should be applied at all to cases within the agricultural sector. We will try and shed some light on each of these questions.

B. Legal Background for Anti-Dumping Cases

Drawing on the 1994 updating of Article VI of the GATT, dumping is defined as a situation “by which products of one country are introduced into the commerce of another country at less than the normal value of the products”. This kind of action “is to be condemned if it causes or threatens material injury or materially retards the establishment of a domestic industry” (GATT, 1994).
The article goes on to define what is import at less than normal value, that to offset or prevent dumping an anti-dumping duty may be levied at a level of less than or equal to the “margin of dumping” (defined as the difference between the exported and normal value of the product as described above), and that in order to impose any anti-dumping duty it must be determined that “the effect of the dumping … is such as to cause or threaten material injury to an established domestic industry or is such as to retard materially the establishment of a domestic industry.”

Importing at less than its normal value arises under three alternative situations. These are defined as being “if the price of the product exported from one country to another
a. is less than the comparable price, in the ordinary course of trade, for the like product when destined for consumption in the exporting country, or,
b. in the absence of such domestic price, is less than either
   i. the highest comparable price of the like product for export to any third country in the ordinary course of trade, or
   ii. the cost of production of the product in the country of origin plus a reasonable addition for selling costs and profit.” (GATT, 1994)

Of these three situations, one commonly observes within agriculture-related anti-dumping cases that it is the last of the three, whether the import price is less than the cost of production of that product, that is used to indicate whether dumping is occurring.

Little guidance on what exactly constitutes material injury is given in Article VI, but in the Uruguay Round Agreement, there is a special “Agreement on Implementation of Article VI of the GATT 1994” which among other things spells out in Article 3 in more detail the procedures by which injury occurs. This quite lengthy article emphasizes the importance of the volume of imports, price undercutting, price depression, and the importance of separating the price effects of imports compared to other economic factors that may be relevant in price determination. In other words, some emphasis is given to showing convincingly, not just alleging, a causal relationship between increased imports and the resulting price declines that injure domestic firms.

These are then the legal guidelines given to countries that investigate anti-dumping complaints that are lodged, each with its own operating procedures. Following these guidelines, the investigations have two components, proving first that dumping has occurred and then that this dumping has provoked injury.

C. The US Case Against Greenhouse Tomatoes from Canada

There are six main issues in the US case: (a) how to define the product and industry under consideration (what is “like product”?); (b) what is the export price, (c) what is normal value, (d) what is the exporter’s cost of production, (e) what is the margin of dumping, and (f) whether the import of Canadian greenhouse tomatoes is inflicting injury on the US industry. The product definition is important in order to know the comparison industry and market, and most importantly to ascertain whether or not there is injury to the US domestic industry. The next three issues, export price, normal value, and cost of production, are needed, according to the legislation and regulations that are applicable, to
determine if dumping is occurring and, if so, by how much (the margin of dumping). Finally, all of this is only relevant if there is judged to be injury to the US domestic growers. In other words, determining that dumping is occurring, and that injury is involved, are the two necessary conditions required in order for an anti-dumping duty to be charged.

Like Product

The main issue here is whether the investigation should be limited to greenhouse tomatoes or should include all fresh tomatoes including field tomatoes. In this case, the Department of Commerce has ruled that the investigation will focus on greenhouse tomatoes, and that they are a distinct domestic product. They arrive at this conclusion by examining evidence on the production processes involved, costs, pricing and marketing, plus physical characteristics like skin thickness, water content, colour, texture and taste. Noticeably absent from this list, from an economist’s perspective, is some indication about consumer demand and substitution relationships between fresh field and greenhouse tomatoes, in particular what kind of price elasticities of demand are likely in these two products.

Why is this important? The investigating authorities need to obtain pricing and cost information, not to mention import volume data, so it is necessary to be sure about commodity is being examined. However, it is even more important in the injury investigation to specify if attention should be given to all fresh tomatoes or only the subset that is greenhouse tomatoes. In that investigation, one is really interested in the own- and cross-price elasticities of demand, in order to see to what extent a specified increase in sales of imported greenhouse tomatoes will lower the price of greenhouse tomatoes. If the definition is a broad one and fresh field tomatoes substitute reasonably with greenhouse tomatoes, an increased volume of imported greenhouse tomatoes will have little effect on the greenhouse industry price (given the substantial dominance of field tomatoes in total consumption), hence there will be little injury to domestic greenhouse growers arising from the imports. Conversely, the volume of imports could have enough of an effect on the domestic greenhouse tomato price that increased imports would injure domestic greenhouse tomato growers.

Export Price

The next major issue is the export price. The objective is to ascertain the price at which the offending imports were sold into the trade in the U.S. These data are obtained initially by the petitioners of the case from USDA terminal market prices, adjusted by transportation and customs duties, inland freight within the U.S. and standard commissions to arrive at the ex-factory prices. Subsequently, data are obtained directly from the exporting firms alleged to be dumping by the Department of Commerce officials undertaking the dumping investigation. The procedure is the same: observe the U.S. selling price, then subtract the various charges and costs to arrive at the ex-factory price (fob price) in Canada. Furthermore, because there were several product categories of greenhouse tomatoes (e.g., common round tomatoes (beefsteak), cherry tomatoes,
plum or pear tomatoes and cluster or “on-the-vine” tomatoes, these calculations were done for each of the categories. In this case, twenty HS numbers are involved.

\emph{Normal Value}

“Normal value” is the price in the exporter’s domestic market at which the product in question is sold in the course of normal trade, assuming sales into the Canadian domestic market are sufficient to allow calculation of a normal value, which was the case. To determine this normal value, standard published data from Agriculture and Agri-Food Canada were the starting point, followed by the more detailed preliminary and final determinations where actual selling prices are obtained from the exporters involved in the case.

However, the petitioners or complainants in this case (the U.S. greenhouse industry firms filing the complaint) had reason to believe that the within-Canada sales of greenhouse tomatoes were made at prices that were below the cost of production of those tomatoes. Therefore they requested that the Department of Commerce conduct a “sales-below-cost” investigation. This is a fairly standard procedure, and the reason for this is to see if a significant share of the sales in the domestic market is being made at prices below the cost of production. If so, then the previously constructed “normal value” is of no use since it would lead to comparing the export price in the U.S. against an artificially low domestic price in Canada. In this situation, any sales within Canada at prices below cost are not included in the calculation of the Normal Value. This is the situation that the complainants believed was the case in their request for the sales-below-cost investigation which requires a cost of production calculation to be done.

\emph{Cost of Production Analysis}

The Department of Commerce undertook such an analysis, country-wide, which follows legislative guidelines laid out for such calculations. Costs of production include cost of materials and fabrication, selling, general, administrative, interest and packing expenses. Capital costs are included and an amount for profit is added. These costs were obtained from the exporting companies concerned, with numerous interactions between the companies and the DOC investigators in the preparation of the final determination. For each Canadian greenhouse tomato exporting firm a cost for each type of tomato was arrived at doing a weighted average of all contributing farms.

\emph{Anti-Dumping Margin Calculations}

The final step in determining dumping, and a dumping margin, is to compare the constructed export prices with normal values, adjusted using the cost of production data by deleting any domestic sales made at prices below cost, as noted above. This was done for each greenhouse exporter, using a weighted average across all tomato products being exported. There was a Preliminary Determination of these margins on October 2, 2001, where the margins ranged from 0.00% to 50.75%. The Final Determination on February 19, 2002 confirmed that dumping was occurring, but the rates ranged by exporter from less than 2% (\emph{de minimis} margins, treated as if they were zero) to 18 percent, with an
average of 16 percent. These final determination rates are now being imposed on all greenhouse tomatoes with exporter-specific rates. They are, however, subject to the final determination of injury by the ITC to be completed by April.

**Injury Determination**

This part of the process is undertaken by the International Trade Commission, and it completed its preliminary determination in May 2001. Its final determination is yet to be completed, as noted above, so all our information is drawn from the preliminary report.

The first element of the injury examination is the subject of like product. The issues involved here are raised in the section above on like product. In the preliminary determination, the conclusion was that greenhouse tomatoes alone are the like product, but the conclusion was mixed, that there are some differences and that this question must be re-examined in the final phase of the investigation. In particular it was acknowledged that the two tomato types are substitutes in demand in a variety of situations. Given the much larger field tomato market, if the two products are relatively close substitutes, the greenhouse tomato price will be largely determined by the field tomato price. If so, the impact of import volumes of greenhouse tomatoes will have much more modest effects on tomato prices, and comparably modest levels of injury that could arise.

In determining injury, the Commission concluded that “there is reasonable indication that the domestic greenhouse tomato industry is materially injured by reason of subject imports from Canada.” However, the evidence given is sufficiently mixed that it acknowledges this will have to be examined in more detail in the final determination.

Some of the evidence brought forward is the following. The market for greenhouse tomatoes have grown steadily since 1998, while the demand for field tomatoes has remained stable at a higher level of consumption. The production of US greenhouse tomatoes has also expanded over this period at the same rate as consumption has expanded. Therefore the market share of US production has remained constant.

The volume of Canadian (subject) imports has grown quickly, more rapidly than the market has grown. Their market share has grown from 34 percent to 44 percent. What makes this all add up is that non-Canadian greenhouse tomato imports has declined equivalently. So Canadian export growth in this market has been at the expense of Mexican and European export declines.

**Price Effects**

As is appropriate, considerable attention is paid to the price formation process in greenhouse tomatoes. At the outset, it is noted that the domestic industry is highly concentrated, but that with the product being perishable and with no inventories, the ability of individual market participants to affect market wide prices is constrained. This is confirmed by the fact that most of these tomatoes are sold on the spot market or under one-week contracts. Of particular relevance to this inquiry, there is the question of whether Canadian imports have depressed the price in this market or have they prevented prices from increasing. Price patterns on individual sales show a mixed pattern of
underselling and overselling, but increasingly they undersold domestic product in the last year, 2000, in 61 percent of the cases to retailers which is the dominant channel of sales. Looking at average unit values of prices to domestic producers, they fell from 1998 to 1999 but then rose from 1999 to 2000. The Commission notes that the supply and price of field tomatoes appears to influence prices of greenhouse tomatoes, and the seasonal pattern conforms to field tomato seasonality which predates greenhouse tomato production. Finally, it was observed that 2000 prices, although higher than 1999, were lower than in 1998, and this was more so for those tomato product types where the Canadian product was more common.

The Commission found that, for the purposes of its preliminary determination, there was “sufficient information to conclude that the subject imports had significant price depressing and price suppressing effects on prices of the domestic like product” (i.e., greenhouse tomatoes). It also acknowledged that in the final investigation, it will explore further the effects of Canadian imports as well as field tomatoes and non-subject imports on prices of greenhouse tomatoes.

In turning to a summary injury assessment, the Commission noted that production was growing, net sales were increasing, and hours worked by and wages paid to production and related workers were also increasing. But by many financial indicators, the U.S. domestic greenhouse industry is in some difficulty. Profit margins were flat or declining over the three years. Therefore, the Commission concluded that due to the price depressing effects of the Canadian imports and the industry’s poor financial condition, there is a reasonable indication that the U.S. industry is materially injured by reason of these imports.

D. The Canadian Case Against Fresh Tomatoes from the US

On September 28, 2001, a group of greenhouse tomato growers in Canada (Canadian Tomato Trade Alliance, or CTTA) filed a complaint alleging dumping by U.S. fresh tomato growers. On November 9, 2001, the Canadian Customs Revenue Agency (CCRA) initiated a dumping investigation into this case and filed a Statement of Reasons to outline the initial analysis. At the completion of this investigation it will issue a preliminary determination of dumping that is expected at the end of March 2002. At the same time the Canadian International Trade Tribunal is conducting a preliminary inquiry to determine if there is a reasonable indication that the dumping has caused or threatens to cause injury to the Canadian industry. If these investigations find dumping and injury, a provisional duty may be applied equal to the estimated margin of dumping. Final determinations regarding dumping and injury, or termination of the investigation if dumping is not found, follow within three to four months of the preliminary findings.

Like Goods
Under Canadian anti-dumping legislation, like goods have “the same physical characteristics (same genus and species), are substitutes, follow the same distribution network and fulfill the same customer needs. On this basis, fresh tomatoes produced by
the Canadian industry, largely greenhouse tomatoes,\(^1\) were found to be “like the subject goods (U.S. fresh tomatoes, almost always field tomatoes). However, fresh tomatoes for the fresh market were distinguished as being different from fresh tomatoes used for processing. It should be noted that in the Canadian case, the determination of like goods or like product is different than in the U.S. case against Canadian greenhouse tomatoes, despite using similar criteria as to what constitutes like goods.

**Export Price**

The export price in Canada is considered to be “generally the lesser of the importer’s purchase price or the exporter’s selling price to Canada, less all costs, charges and expenses resulting from the exportation of the goods.” The CTTA estimated these prices in its complaint drawing on terminal market prices published by Agriculture Canada. These were compared to actual declared selling prices on customs documentation by the CCRA and it was found that the CTTA prices if anything were higher. This would make dumping less likely (i.e., a more conservative estimate), so the CTTA prices were accepted by the CCRA as reasonable.

**Normal Value: Domestic Price**

Much as in the U.S. anti-dumping legislation and procedures described above, Canadian anti-dumping procedures base “normal values” on the domestic selling price of goods in the country of export, or on the total unit cost of the goods plus an amount for profit. In this case, the CTTA chose not to use U.S. domestic selling prices for estimating normal value because the CTTA alleged that there are substantial quantities of tomatoes sold domestically at prices below production costs in the U.S. This is not unusual in sales of agricultural products in both Canada and the U.S., and the CTTA were able to find newspaper articles to support their claim that US field tomatoes were being sold below cost for the majority of the year.

**Normal Value: Cost of Production**

When normal values are derived from costs of production, those costs are defined to include the costs of producing the goods, plus a reasonable amount for administrative, selling, all other costs (presumably including capital costs), and profit. Because there are two main field tomato producing areas of the U.S., (California and Florida account for more than seventy percent of US field tomatoes), the CTTA produced two sets of production costs, one for each region. For California, a University of California study of tomato costs was used as the base for cash costs, and a consultant developed a cost model that added non-cash overhead costs that included capital costs. In addition, local distribution and freight were added, as were an administrative, marketing and selling cost component. For Florida, a University of Florida (Food and Resource Economics Department) study was used as the base, adjusted to include local distribution, freight,

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\(^1\) Looking at the fresh tomato production within Canada, the market has shifted substantially toward greenhouse production in the last five years. In 1996, in terms of tonnage, field tomatoes accounted for 65 percent of all fresh tomatoes (the remainder, 35 percent, being greenhouse tomatoes), while in 2000, greenhouse tomatoes accounted for 88 percent of this market volume. Processing tomato production is still much larger within Canada. For comparison, the tonnage of field tomatoes for processing in 2000 was 2.4 times as large as total fresh tomato production in Canada in that year.
administrative, marketing, and selling costs. No component for profit was added. These estimates, done for 1998 and 1999 respectively, were brought up to the year 2000 by indexing them by the U.S. Farm Input Price Index. The CCRA verified the cost estimates with the U.S. I.T.C. and the California Tomato Commission and found the CTTA estimates to be “in line” with other data. Given the conservative nature of these cost estimates from ignoring profit, the CCRA accepted the CTTA’s estimated normal values.

**Margin of Dumping**

On the basis of these CTTA data comparing normal values with export prices, accepted by the CCRA, the CCRA has concluded that there is reasonable evidence that dumping of field tomatoes did occur in the period under consideration, Oct 1, 2000 to Sep 30, 2001. Further, the estimated dumping margins ranged from 14 percent to 76 percent as a percentage of normal value.

**Injury**

The issue of injury is first addressed by the complainants (CTTA) who argue that incomes have been reduced resulting from price suppression by U.S. imports. What makes this occur so clearly is that they claim that Canadian greenhouse grower are price takers, that their price is primarily determined by the Canadian selling price of tomatoes from the U.S. They estimate the loss of revenue due to this dumping at $20 million annually. They argue that the lowered prices, in addition to reducing incomes, have reduced incentives to expand and upgrade operations and this raises the risk of lower capital investment, employment and market share. These arguments, that Canadian tomato growers are basically price takers, are in contrast to the arguments made by U.S. complainants in the U.S. anti-dumping case against Canadian greenhouse tomatoes.

The issue of injury was taken up further by the Canadian International Trade Tribunal (CITT) who issued their preliminary determination of injury on January 8, 2002. As in the U.S. case, the issues of “like goods” and “domestic industry” are the first that must be addressed. The criteria are similar to those used by the USITC, except that demand side factors including substitutability and pricing appear to get (appropriately) more attention. With briefs submitted from both sides, the Canadian greenhouse growers and the U.S. field tomato growers, the CITT concluded that the similarities between greenhouse tomatoes outweighed the differences. Therefore, the “subject goods” were judged to be one class of goods, fresh tomatoes, and that domestically grown tomatoes for fresh consumption are “like goods” to the subject goods, imported fresh tomatoes. On the “domestic industry” question, greenhouse growers were judged to represent a major proportion (over 85 percent) of domestic fresh market tomato production.

On the question of injury, the Tribunal examined the evidence submitted by the CTTA, which cited persistence dumping of US tomatoes that has depressed Canadian greenhouse tomato prices. This argument was supported by many letters from greenhouse tomato producers. The Tribunal did not collect independent data on these matters, but found from the evidence presented that there is a reasonable indication that the domestic industry has been injured by dumping of the subject goods.
E. The Economics of Anti-Dumping in Tomatoes

There is a long history in the literature of economics of dissatisfaction with anti-dumping measures and procedures. It has long been argued, at least going back to Viner (1923), that anti-dumping provisions only serve protectionists, particularly the interests of firms desiring protection against normal and fair competition from foreign firms. Much of what is argued to be dumping is garden-variety price discrimination, which is neither illegal in domestic commerce nor rare.

Another argument is that if dumping occurs, it benefits consumers by offering them a cheaper source of the commodity in question. Measures that prevent consumers from obtaining a cheaper source would typically not be in a country’s overall interest, unless of course it would represent only temporary gains, followed by higher prices, as would occur from predatory pricing (below).

The only substantial concern that anti-dumping measures address is this exercise of market power by a firm wishing to injure its competitor sufficiently by undercutting its prices, and driving the competitor out of business, then later raising prices. This practice is known as predatory pricing. In this context, anti-dumping measures might be considered as an international application of anti-trust or competition policy. If this aspect of anti-dumping were given importance, there would be within the regulations some effort to address the extent of market power of the dumping firm, yet such provisions are not in place. There have been attempts to modify anti-dumping procedures so they would more closely mimic anti-trust or competition policies (Krishna, undated). However, efforts such as these to limit the applicability of anti-dumping measures have usually run into strong political opposition from firms that see anti-dumping measures as helpful sources of protection when any industry is under some competitive stress.

In fact, many would argue that the abuse of anti-dumping measures by firms and industries seeking another means of achieving protective duties against imports is one of the major weaknesses in the existing trade rules. Consequently, it is on the agenda of the current Doha Round of WTO negotiations to find ways to reform the existing Article and the national regulations that fall under the original GATT Article VI (1994) and the WTO Agreement on Implementation of GATT Article VI.

However, I wish to focus more on the economics of the agriculture industry in general and the tomato industry in particular, and the validity of these anti-dumping actions from an economic perspective. I wish to argue that proving dumping and injury is particularly easy in the agricultural sector due to some of its inherent economic characteristics, when combined with the kind of anti-dumping procedures we see so clearly applied in both tomato cases.

I will begin with the determination of dumping and consider the normal value calculation, first with reference to domestic prices and second with reference to costs of production. Then I will turn to injury determination, where my comments will focus the evidence needed for injury.
On domestic prices and normal value, all it takes for a dumping margin to be determined is for there to be some price discrimination between the domestic market and the export market. Especially for smaller countries selling into larger ones, it is not unusual to find there is more competition in export markets than in the domestic market. Either for reasons of active price discrimination or for a firm that is a price taker in export markets but with an element of market power at home, any profit-maximizing firm will price higher domestically than in the more competitive, more elastic demand, export market. By itself, this will meet the test of dumping. As there is more product differentiation as one can expect with increased consumer interest in identity preservation, the ability of firms to choose their prices will be enhanced and the situation described above will be more common. It is already common in horticultural products.

On cost of production and normal value, the situation is even more pre-disposed to meet the test of dumping. In virtually all agricultural commodities, especially in the horticulture sector, the trend in real producer prices is downward. What is going on is no mystery to economists in the agriculture sector, of course, and that is that there is a long history of improvements in technology, increased productivity in producing the farm commodity. This means two things. First, it means that firms who are slow in adopting the improved methods are going to face cost-price squeezes and some will be driven by poor financial performance out of the industry. These situations will bias upward the likelihood of disclosing losses in the industry. Second, with the necessary lags in getting cost data up-to-date, yet the more immediate evidence on prices, there will be a stronger likelihood of finding costs exceeding revenues, even for the firms that are keeping up-to-date in their technology. Third, in a slight variation on this last point, farmers will be making decisions on which market to serve and at what prices based on marginal costs, yet the calculated cost of production data is explicitly average cost in nature.

In addition to this, there are cycles in agricultural commodity prices that frequently extend beyond the two or three years used in anti-dumping analyses, and in the lower parts of the cycle, it is a foregone conclusion that the farm prices will be below costs of production.

So for a variety of reasons, it is no surprise to find in the production of an agricultural commodity that export prices may be below costs of production. What makes the results on anti-dumping investigations even more meaningless in terms of the economics of the industry is that firms can be found to be “selling at a loss” in both their export markets and their domestic markets. What kind of economic sense does this make? Obviously the time period is too short to give a long run picture, or the cost data are inappropriate.

For similar reasons, these characteristics of the ag sector make it pre-disposed to a finding of injury as well. First, on like product questions, what is really important is the price determination process of the domestic product in the allegedly injured industry. What effect in the medium to longer term on the price of that product is likely to arise from an increase in the “dumped” imports? This requires attention to demand side characteristics and the substitutability of the import and the domestic product in the consumption decisions of the consumers. Supply side characteristics are secondary.
In terms of injury to the industry, let us look at the greenhouse tomato industry from an aggregate perspective. Here is a market where demand is growing at 13 percent per year. Production within the U.S. is growing at about the same annual rate, 12.3 percent, and capacity is growing at about the same rate, 12.6 percent. This means that the U.S. market share is being maintained, despite growing Canadian imports. However, industry volume growth rates of 12 percent per year is unusually rapid growth in any context, and investment in the industry is growing equivalently. This does not suggest injury. The same kind of data will emerge in the Canadian case against US imports.

On the pricing side in this market there are several salient characteristics. First, with the institutional arrangements for pricing and the industry structure, this market does not look like one with any significant market power being exerted. This is especially true when you look at the strong influence of fresh field tomatoes on the greenhouse price. So there is no evidence of any predatory pricing or the structural elements that would generate it.

Second, Canadian product in the greenhouse tomato market accounts for one-third of all greenhouse tomatoes, which by itself would give a modest degree of market power. However, in the context of substitution with fresh tomatoes, Canadian imports account for only about 5 percent of the market. The ability to affect prices under these conditions is very small indeed.

Third, real prices in this market are falling, just as is the case in virtually all farm commodities. Taking USDA annual prices for fresh tomatoes from 1989 to 2000 for the country as a whole,\(^2\) deflating them by the Consumer Price Index, and regressing the real price series against a time variable, the trend rate of decline is –3.3 percent. This is a relatively rapid rate of decline in real prices, although not unusual for the horticultural industry. These data serve to underline all that was said above about the impact of declining real prices. Injury as defined for dumping investigations will be relatively easy to show under such conditions.

From this quick review of the apparent economics of the US tomato industry, it does not appear that the industry is being injured in aggregate, and it certainly does not look like any financial distress that may exist with some firms is due to Canadian imports.

Once the preliminary determinations are available for the Canadian case, it is highly likely that the same observations can be made. There is a healthy U.S. tomato industry that is growing and exporting field tomatoes, albeit with more competition from the greenhouse tomato sector (see Cook). But there is substantial technical change occurring with relatively rapid declines in real prices, and it is likely this situation will lead Canadian investigators, following their own legal procedures, to find that dumping is also occurring. These investigations may also find injury, but again, the injury is not due to an economic definition of dumping. Any injury being imposed on Canadian tomato growers will be due to the normal market forces of improving technology and declining real prices, conditions faced by all participants in all segments of the fresh tomato market.

\(^2\) From “Vegetables for Fresh Market: Marketing Year Average Prices by State and United States,” Annual Price Summary, Agricultural Statistics Board, NASS, USDA, various years.
F. Conclusions
Anti-dumping regulations and actions are one of the most controversial elements of current trade policy. The economics arguments against dumping have been going on for the best part of this century and this case illustrates the weak economic foundations of those regulations once again. However, those economic foundations are even weaker in the agricultural sector than for cases in manufacturing.

Both the tomato dumping cases we have reviewed are following established legal structure and procedures. However, due to the combination of the dumping tests and procedures, and certain characteristics of the agricultural sector, in both the U.S. and Canadian cases the decisions are likely to result in dumping decisions and duties. The conditions within the agriculture sector that pre-dispose it to dumping decisions are a combination of price cycles and negative real price trends, plus the more general phenomenon of price discrimination that is not unique to agriculture.

Neither of these cases is what an economist would call dumping. There is no monopoly power involved in one or a small number of firms and no evidence of predatory pricing. In both cases, the exporting firms alleged to be causing the dumping are selling the same commodity in their own markets but are found to be selling below cost in those markets. How can it be that a large number of firms in both countries, with apparently plenty of competition and market growth for their product, are hurting themselves by selling below cost in both markets?

What makes the current dumping regulations laughable is that the facts of both the cases are indistinguishable from normal competition in international markets where there are some firms that may have acquired some competitive advantage or increased efficiency, for example from improved technology or favourable exchange rate movements, and who are acting to exploit those advantages in competitive markets. There is no injury occurring due to exports from the other country. The only injury some of these firms are experiencing is due to declining real prices that are putting pressures on the finances of these firms, a situation we find in most parts of agriculture. However, the end result of these anti-dumping provisions, that are so well illustrated by these two cases that are not unique to one country or another, is the considerably increased likelihood of extra duties being imposed, a retreat from freer trade, and a reversion to more protection in the agricultural sector.
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