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ARTICLE

Why the Potential for Trade Diversion should Be Examined Prior to Considering Setting an Antidumping Duty Lower than the Dumping Margin

Jorge Miranda^{*}

This paper argues that, where the potential for trade diversion is significant, the protective effects of antidumping measures are heavily diluted, as in such circumstances imports can be sourced from non-subject countries at prices lower than the price of subject imports inclusive of an AD duty reflecting the full dumping margin. Therefore, investigating authorities in World Trade Organization (WTO) Members where the 'lesser duty rule' is part of domestic legislation should examine whether the potential for trade diversion is significant prior to considering setting an AD duty at a level lower than the dumping margin.

I INTRODUCTION

Article 9.1 of the Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994 ('the AD Agreement') of the World Trade Organization ('WTO') allows setting antidumping ('AD') duties at a rate lower than the dumping margin but sufficient to eliminate injury to the domestic importcompeting industry.1 Considering the application of an AD duty at a rate lower than the dumping margin but sufficient to offset injury is known as the 'lesser duty rule'. A number of WTO Members (including the European Union, Australia, New Zealand and Mexico) have incorporated this approach into their national legislation. The 'lesser duty rule' is perceived by some as an enlightened practice since it permits calibrating the magnitude of AD duties in order to mitigate the effects of such duties upon consumers (which often times consist of industrial users). Interestingly, the 'lesser duty rule' assumes that the exporting countries subject to AD duties are the only source of import supply. Conversely, a growing body of literature has examined the reallocation of trade flows from subject exporting countries to nonsubject exporting countries, subsequent to the imposition of AD measures, and concluded that such reallocation (AD duty driven 'trade diversion') can be significant and occasionally even massive. Because the reallocation of trade flows to non-subject exporting countries makes it possible to import at prices lower than the price of subject imports inclusive of an AD duty reflecting the full dumping margin, such reallocation has effects that are analogous to those of a 'lesser duty'. This suggests that, where the potential for trade diversion is significant, the application of a 'lesser duty' would be unnecessary.

summarizes Section 2 approaches to the implementation of the 'lesser duty rule' and, by means of a graphical model, compares a 'lesser duty' vis-à-vis an AD duty reflecting the full dumping margin. Section 3 discusses the empirical evidence on trade diversion resulting from the imposition of AD measures. Section 4 presents a graphical model that examines trade diversion. Section 4 shows that, where the potential for trade diversion is significant, a 'lesser duty' is unnecessary. Section 4 also shows that, notwithstanding this basic insight, policy makers have an incentive to apply a 'lesser duty' regardless, because a 'lesser duty' of a very small

Principal International Trade Advisor, International Trade Group, King & Spalding LLP. The opinions expressed in this paper are mine alone and do not represent in any way official views of King & Spalding LLP or its clients. Without implicating, I also thank Olivier Cadot, Folkert Graafsma and Jesse Kreier for valuable comments. All errors remain my own.

¹ Importantly, the AD Agreement makes reference to modalities of injury (present injury, threat of injury and 'material retardation') as well as to the manifestations of injury (in terms of price effects and certain industry/financial indicators listed in Arts 3.2 and 3.4, respectively) but does not define injury as such. In practice, the existence of present injury is demonstrated based upon evidence showing significant declines in the Arts 3.2 and 3.4 indicators from their base values at the outset of the 'period of investigation' (typically encompassing three or more years prior to the launching of the AD investigation), bearing in mind any relevant business cycle considerations. Consideration of sources of injury other than the dumped imports (such as a secular contraction in the industry concerned due to technological change, for instance) is required under Art. 3.5 of the AD Agreement.

magnitude would lead to a rise in domestic prices lower than the one that would occur with significant trade diversion. I contend that, while this policy is good economics, it is not consistent with Article 9.1 of the ADAgreement because it would not counteract injury fully. Section 5 closes the paper by presenting some policy recommendations.

2 IMPLEMENTATION OF THE 'LESSER DUTY' RULE

2.1 The Lesser Duty Rule in Practice

While the AD Agreement recognizes the possibility that an AD duty be applied at a rate lower than the calculated dumping margin, it is completely silent as to how this approach might be implemented. WTO Members that consider the application of a lesser duty identify a 'noninjurious (export) price' or 'NIP', which serves as the ceiling for the lesser duty. The NIP indicates the level of export prices at which the dumped goods would allegedly cease to cause injury to the domestic industry. The NIP is frequently calculated as the export price according to which the domestic industry would be able to charge a domestic price that would allow it to recover its fixed and variable costs, in addition to earning a 'reasonable' profit.² If the NIP is lower than 'normal value',³ the 'injury margin'⁴ will be of a lesser magnitude than the dumping margin,⁵ and thus an AD duty commensurate with the injury margin, but lower than the dumping margin, would be practicable. Conversely, if the NIP is higher than 'normal value', the injury margin will be of a greater magnitude than the dumping margin, making an AD duty at a rate lower than the dumping margin unfeasible.⁶

For recent examples of how the European Union applies the 'lesser duty rule', see *Photovoltaic Modules, Cells and Wafers from China* (2013: paragraphs 263–266 and 270) and *Biodiesel from Argentina and Indonesia* (2013: paragraphs 173–177 and 179).⁷ Summaries of the practice of the European Union in this regard can be found in Muller, Khan and Scharf (2009: pp. 602–622), Van Bael & Bellis (2011, pp. 402–405), and Vermulst (2010: pp. 464–477).⁸ For recent examples of the implementation of the 'lesser duty rule' by Australia, New Zealand and Mexico, see, respectively, *Hot-Rolled Coil Steel from Japan, the Republic of Korea, Malaysia and Taiwan* (2012: pp. 76–79); *Preserved Peaches from Spain* (2011: pp. 104–108); and *Coaxial Cables from China* (2012: paragraphs 104–108).

2.2 Comparison of a 'Lesser Duty' and an AD Duty Reflecting The Full Dumping Margin in Terms of their Effect on Welfare

Assuming that only the subject country exports the good concerned, Figure 1 explains formally why the application of a 'lesser duty' would be preferable to the application of an AD duty reflecting the full dumping margin. Figure 1 depicts the domestic market in country A for the product at issue. In particular, the upward curve S^A₀ represents domestic supply while the downward sloping curve D^{A}_{0} represents domestic demand. Because country A is small (relative to the world market) and its domestic market is opened to foreign trade, the domestic price reflects world prices. If country F sells at price EP^F₀ (which translates into domestic price P^{A}_{0} ,⁹ domestic demand would be larger than domestic supply. Such excess demand, equivalent to $Q_0^D - Q_0^S$, would be soaked up by imports in that same quantity (M_0) .¹⁰ Suppose that an antidumping duty reflecting the full dumping margin is imposed on imports from country F.11 The import price would be pulled up to $EP_0^F(1+\gamma)$ and domestic prices to P_{1}^A . At this higher domestic price, domestic supply would expand to Q_1^s , domestic demand would drop to $Q_1^{D_1}$ and the quantity of imports would contract to M1 (because excess demand contracts to $Q_{1}^{D}-Q_{1}^{S}$

- ² Notably, this 'target price' approach is potentially inconsistent with the characterization of injury as a deterioration in the condition of the domestic industry over the period of investigation because applying a lesser duty that would allow the domestic industry to reach such 'target price' does not necessarily ensure that the domestic industry returns to its initial condition in terms of the indicators listed in Arts 3.2 and 3.4 of the AD Agreement. Other options for determining the NIP include the export price of undumped imports and domestic prices prior to their being affected by the dumped imports. In the latter case, adjustments are made to express such prices in terms of the country of export.
- ³ The benchmark for assessing the existence and extent of dumping
- ⁴ The difference between the non-injurious (export) price and the actual export price.
- ⁵ The difference between 'normal value' and the actual export price.
- ⁶ Article 9.3 of the AD Agreement bans the application of AD duties at a rate higher than the dumping margin.
- ⁷ In *Photovoltaic Modules, Cells and Wafers* a lesser duty was applied because the injury margin was lower than the dumping margin. Conversely, in *Biodiesel* the AD duty reflected the full dumping margin because the injury margin exceeded the dumping margin.
- ⁸ According to the practice of certain WTO Members, including the European Union, the injury margin can also reflect the degree by which the dumped imports undercut domestic prices.
- ⁹ E stands for the exchange rate; in particular, the value of one unit of the currency of country B in terms of the units of currency of country A. Therefore, when the currency of country A depreciates vis-à-vis the currency of country B, E rises. In the event of a rising exchange rate, the domestic currency price of foreign goods would be higher. For simplicity, we also assume there are no tariffs nor freight. We relax this assumption in the next section.
- ¹⁰ The model assumes that domestic goods and imports from all sources are perfect substitutes.
- ¹¹ This antidumping duty would be *ad valorem* and the corresponding rate would be γ .





The welfare effects of a price rise where the product at issue is an importable are well-known. Because consumer surplus would fall by more than the sum of the increase in producer surplus and the tax revenue collected through the AD duty, the economy as a whole would experience a net loss in welfare (or deadweight loss) represented by the triangles abc and def. Suppose now that a 'lesser duty' is imposed on imports from country B. Accordingly, the rate of this antidumping duty, δ , would be lower than the dumping margin. Under this scenario, the import price would only be pulled up to $EP_0^F(1+\delta)$ and domestic prices to P_{2}^{A} The quantity of imports would fall to M_{2} instead (because domestic supply would expand, and domestic demand would contract, by less). The net welfare loss involved would also be smaller. In Figure 1, this is represented by the smaller deadweight loss triangles agh and iff.

There is a problem with this model, however, and that problem is that the model relies on an assumption (i.e., only the subject country exports the good concerned) that is generally incorrect. Another way to characterize the problem involved is that the model treats AD duties as if they were the analogue of tariffs, applicable upon all trading partners. This is inappropriate because AD duties are company-specific and they are only assessed on exporters from subject countries.

3 AD DUTY DRIVEN TRADE DIVERSION

3.1 Definition

In view of the fact that AD duties do not affect all exporters, the normal outcome of the imposition of such duties is to shift the trade flow at issue (at least in part) from subject to non-subject countries (on account that AD duties make subject countries uncompetitive).

The term 'trade diversion' as such is due to Viner (1950), but Viner conceptualized it from the perspective of the formation of a customs union, where tariffs on intraregional trade are eliminated. Thus, 'trade diversion' in the context of a customs union (or a free trade agreement also involving the elimination of tariffs on intra-regional trade), comes about when the elimination of tariffs on intra-regional trade makes the lowest-cost supplier (located outside the relevant region) uncompetitive, because a higher-cost supplier (located within the relevant region) can offset such disadvantage on the basis that its exports (unlike the exports of the lowest-cost supplier) are tariff-free. The ensuing reallocation of import volume from the lowest-cost supplier to a higher-cost supplier is known as 'trade diversion'. This reallocation has a cost, however, because consumers no longer buy from the cheapest supplier. Because the elimination of tariffs on intra-regional trade lowers import prices, domestic prices drop, reducing domestic supply and expanding demand, which in turn boosts imports (by generating additional excess demand). This growth in import volume is known as 'trade creation'. So, in the context of a customs union or a free trade agreement ('FTA'), trade diversion is always accompanied by trade creation.

Trade diversion resulting from the application of AD duties is similar to trade diversion in the context of a customs union or free trade agreement in that it also involves a reallocation of import supply, although in this case such reallocation is from subject countries to nonsubject countries. Importantly, as will be explained below, this reallocation of import supply may or may not lead to higher import prices depending upon the circumstances involved. If it leads to higher import prices, domestic prices will rise, increasing domestic supply and curtailing demand, which will then reduce imports. In this case, AD duty driven trade diversion will be accompanied by 'trade depression' (the opposite of 'trade creation'). By contrast, if the reallocation of import supply has no effect on import prices, domestic prices, domestic supply, demand and import volumes will remain invariant. Under this scenario, AD duty driven trade diversion will not co-exist with trade depression. So, whether AD duty driven trade diversion is accompanied by trade depression is a function of whether it takes place at the expense of rising import prices.

3.2 Empirical Evidence on AD Duty Driven Trade Diversion

AD driven trade diversion has received increasing attention in the literature and a number of authors have

quantified the degree of trade diversion/trade depression by reference to a number of countries.¹² Prusa (1997, 2001) found very extensive trade diversion as regards the application of AD duties by the United States. In particular, in his seminal 1997 paper he concluded that 'import diversion mitigates most, if not all, of the effect of AD actions on the value of imports'.¹³ However, in his 2001 paper (based upon an updated dataset) he found that trade diversion remained important although not as strong. Sectoral studies that have found various degrees of trade diversion from the application of AD measures by the United States include Krupp and Pollard (1996), Asche (2001), and Baylis and Perloff (2010).

Brenton (2001) found ample trade diversion from antidumping actions by the European Union ('the principal effect of anti-dumping actions is to raise the share of total EU imports of non-named countries . . . at the expense of suppliers subject to anti-dumping measures').¹⁴ However, the findings of Konings, VandenBussche and Springael (2002) sharply conflict with those of Brenton, since these authors found little trade diversion in relation to the application of antidumping measures by the European Union.¹⁵ By contrast, Khatibi (2009) concluded that antidumping actions by the European Union caused significant trade diversion, but admonished that this was not anywhere to the extent of offsetting the contraction in import volume from subject countries.

Malhotra and Rus (2009) found substantial trade diversion as regards the application of AD measures by Canada, and emphasized that this effect was likely to become stronger with the passage of time, as new entrants built up business relationships with importers.¹⁶ As regards India, Gulati, Malhotra and Malhotra (2005) concluded that trade diversion was very extensive and thus 'significantly mitigate[d] the restrictive effect of AD policy',¹⁷ although their study is restricted to the vitamin C industry. Using a broader dataset, Ganguli (2008) also found substantial trade diversion as regards the application of AD measures by India, although not enough to offset trade depression entirely. In turn, Park (2009) found China's antidumping measures had significant trade diversion effects. The evidence with respect to the degree of trade diversion caused by Mexican antidumping measures is conflicting. Miranda (1995) refers to several cases where 'the decrease in subject imports was counterbalanced by a rise in imports from non-subject countries'.¹⁸ In an oft-quoted memo, Niels (2003) concluded that non-subject imports had no statistical relationship with the imposition of antidumping duties. Conversely, Mendieta (2009) using a more extensive and updated dataset, and a different estimation technique from Niels, found that trade diversion was very extensive.

To sum up, empirical studies have generally found that AD duty driven trade diversion is significant, but normally not to the extent of cancelling out the trade depression effects of AD duties.

4 A GRAPHICAL MODEL OF AD DUTY DRIVEN TRADE DIVERSION

This section presents a graphical model of AD duty driven trade diversion. The model assumes that three countries other than country F; that is, countries B, C and D, also export to country A. For simplicity, exports from country F are not considered initially. The model also assumes that, unlike country B, countries C and D engage in price discrimination or 'dumping' when exporting to country A.¹⁹ International price discrimination is often explained on the grounds that supply and demand conditions are bound to be differ from one country to another where national markets are spatially separated. This explanation, however, does not appear to have much utility for purposes of understanding price discrimination in an integrated world market. For explaining international price discrimination, I rely on a variant of the 'pricing-to market' approach ('PTM') conceptualized by Krugman (1986) and tested by Knetter (1989, 1993) and Feenstra, Gagnon and Knetter (1996), among others. Simply put, PTM implies that, because exporters need to replicate the going market price in the destination market (which is a function of import prices), they tend to absorb at least in

¹² Bown and Crowley (2007) found that AD duties also cause trade deflection, as the imports displaced from the country applying such measures find their way to third country markets. Their estimates are in respect of Japanese exports. Avsar (2010) has quantified trade deflection in respect of Brazilian exports.

¹³ Prusa (1997: p. 207).

¹⁴ Brenton (2001: p. 599).

¹⁵ There would be little room for trade diversion where AD investigations routinely target multiple exporting countries. However, Art. 5.8 of the AD Agreement bans initiating AD investigations against exporting countries accounting for less than 3% of total imports. This means that AD investigations can be launched against new entrants only until they have exceeded this threshold.

¹⁶ Malhotra and Rus (2009: p. 198).

¹⁷ Gulati, Malhotra and Malhotra (2005: p. 935).

¹⁸ Miranda (1995: p. 154).

¹⁹ For simplicity, we do not consider dumping in the sense of sales at prices below cost.

part any depreciation of the currency of the country of import (in terms of their own currency) that would render them uncompetitive in that market. The proportion in which absorption takes place varies increasingly with market share (the smaller the market share, the higher the degree of absorption, since the possibility to pass on exchange rate fluctuations to consumers is much weaker). Absorbing exchange rate fluctuations at least in part means that mark-ups are not constant but vary by destination. Hence, in the event of exchange rate fluctuations, exporters tend to engage in international price discrimination.

The landed import price also includes a tariff component and a freight component, and tariffs and freight costs can differ from one exporting country to another. For example, one country can benefit from zero tariffs by reason of a FTA while another only has access to the most-favoured nation tariff ('MFN') bound at the WTO. In addition, freights costs are a function of distance to the destination market. Accordingly, it would seem that exporters further calibrate their mark-ups by destination with the purpose of absorbing any tariff and freight differentials vis-à-vis other competitors in the target market.

A simple example may help illustrate this point. Suppose that the world price for the product concerned is 100, that the FTA tariff is zero, that the MFN tariff is 10%, that freight from the closest supplier (which is part of the relevant FTA) is 10% ad valorem, and that freight from a supplier farther way (which is not part of the relevant FTA) is 20% ad valorem. Accordingly, the exporting country with the FTA tariff and the lowest freight will able to charge a landed import price of 110, or 100 as ex-works price +0% tariff +10% freight.²⁰ By contrast, its competitor will be forced to charge an exworks price lower than 100, because the mark-up therein would need to be calibrated, in order to accommodate the tariff and freight differential involved. In particular, the competitor's ex-works price would have to be set at 85 so that the resulting landed import price is 110 too (or 85 as ex-works price + 10% tariff + 20% freight). Importantly, in lowering its ex-works export price to accommodate the relevant tariff and freight differentials, the competitor would incur in price dumping, within the meaning of WTO rules, since its ex-works price for sales in its

home-market would not have been similarly adjusted downwards. $^{21}\,$

In Figure 2 (the domestic market for importing country A), the domestic price (P_0^A) is set by the lowest landed import price. This is the export price of country B, inclusive of tariffs and freight. We assume that country B benefits from a zero tariff and the lowest freight. Country B's export price is represented by the expression

 $EP_{0}^{B}(1+\tau^{B}+\phi^{B})$ where τ indicates the tariff rate and ϕ the cost of freight. Country C also benefits from a zero tariff but its freight is higher than country B's. In turn, country D is subject to the MNF tariff and its freight is higher than country's C. Countries C and D cannot make any sales at their full landed import prices,²² because they would be far more expensive than country B. Accordingly, countries C and D adjust downwards their ex-works export prices to country A in whatever proportion is necessary to replicate country B's landed import price. In so doing, they engage in dumping (because no symmetrical downward adjustment is made to their ex-works homemarket prices). Since countries C and D sell at the same landed import price as country B, consumers in country A buy from all three countries. Accordingly, in Figure 2 the volume of imports is denoted by $Q_0^D - Q_0^S$ (or M₀) and is divided up between the three countries. In value terms, imports from countries B, C and D are shown by the relevant rectangles.





Figure 3 assumes that an AD investigation is launched against imports from countries C and D and that, pursuant to such investigation, they become subject to AD

²⁰ For simplicity, we assume that the tariff is assessed on the *ex-works* value of the good concerned.

²¹ Exporting the good concerned back to countries C and D would be uneconomical, on account that the resulting duty and freight inclusive price would be much higher than the domestic price in these two markets.

 $^{^{22}}$ EP^C₀ (1+ $\tau^{C}+\phi^{C}$) and EPD₀ (1+ $\tau^{D}+\phi^{D}$), respectively. For simplicity, we assume that, E, the exchange rate, is the same for country B, country C and country D and that it remains unchanged within the relevant period of time.

duties. If countries C and D were already uncompetitive vis-à-vis country B on account of the tariff and freight differentials involved, the application of AD dumping duties on such countries would make even more uncompetitive.²³ As a result, imports from countries C and D would disappear altogether, and country B would become the only source of import supply. Importantly, as domestic prices would remain unchanged in spite of the imposition of antidumping duties on countries C and D (because country B's landed import price would not rise), excess demand and the volume of imports, Q^D₀-Q^S₀, would remain unchanged too, and there would be no trade depression. In this case, AD duties would be wholly ineffective in terms of providing protection for the domestic industry (since they would have no impact upon either domestic prices or import volumes).²⁴

Figure 3 AD Duty Driven Trade Diversion with No Trade Depression



Conversely, in Figure 4 we assume that, subsequently to the imposition of AD duties on countries C and D, country F enters country A's market, pricing aggressively in order to induce consumers to switch their purchases from both domestic producers and country B. The domestic price that results from country's F landed import price is denoted by the expression P^{A}_{1} . At this level of domestic prices, domestic supply contracts to Q^{S}_{1} , demand expands to Q^{D}_{1} , and the volume of imports grows to $Q^{D}_{1}-Q^{S}_{1}$. Suppose now that an AD investigation is launched against country F and that, pursuant to such

Notes

investigation, country F becomes subject to AD duties. Suppose, purely for the sake of argument, that the AD duty rate (reflecting the full dumping margin) for country F is so high that it makes imports from this country prohibitive.²⁵ The key question is whether, following the application of AD duties (at the full dumping margin) against country F, domestic producers would be able to increase local prices all the way to the AD duty inclusive landed import price of country F. Logically, the answer to this question is an emphatic 'no', because once local prices rise to EP_0^B ($1+\tau^B+\varphi^B$), imports from country B would resume.²⁶ In such circumstances, EP_0^B ($1+\tau^B+\varphi^B$) would become the effective ceiling for domestic prices.

At this level of domestic prices (P_0^A) , domestic production and demand would return, respectively, to Q_0^S and Q_0^D , and the volume of imports would be pulled back to $Q_0^D - Q_0^S$. In Figure 4, trade depression (in volume terms) is denoted by the sum of $Q_0^S - Q_1^S$ and $Q_1^D - Q_0^D$. Trade diversion (in volume terms as well) is equivalent to $Q_0^D - Q_0^S$. The shaded rectangle in Figure 4 represents the income that is transferred to country B because country A's consumers now buy their imports from a more expensive source than country F. In this case, AD duties would be partially effective in terms of providing protection to the domestic industry, but pricewise not anywhere near the magnitude of the AD duty reflecting the full dumping margin.

Figure 4 AD Duty Driven Trade Diversion with Trade Depression



³ The AD duty inclusive landed import prices of countries C and D are not shown for simplicity, but we can assume that they would overlap with EP_0^c (1+ $\tau^c+\varphi^c$) and EPD_0^c (1+ $\tau^c+\varphi^c$), respectively, since the AD duties (at the full dumping margin) would neutralize (at least theoretically) the price discrimination involved in each case.

Ashe (2001) argues that the imposition of AD duties by the United States against salmon from Norway did not benefit domestic producers, because such duties only led other exporting countries to take over Norway's market share. Interestingly, the 'replacement/benefit' adopted by the US International Trade Commission at some point (and subsequently abandoned) implied inquiring into whether AD measures in any one case would not generate trade diversion at constant import prices. Needless to say, as this test involved examining the potential effectiveness of AD measures, as opposed to whether the dumped imports caused material injury, it went over and above the requirements of the AD Agreement.

 $^{^{25}}$ At EP^F₀ (1+ τ^{F} + ϕ^{F} + γ), imports from country F would become prohibitive. γ is, again, the AD duty rate reflecting the full dumping margin.

²⁶ This is consistent with the observation in Gulati, Malhotra and Malhotra (2005: p. 932) to the effect that 'higher domestic prices . . . attract new foreign countries or import sources that did not find it profitable to export . . . previously').

In Figure 5, we assume that a lesser duty is imposed on imports from country F. The corresponding AD duty inclusive landed import price for country F is denoted by the expression $EP_0^F (1+\tau^F+\phi^F+\delta)$, where δ indicates the lesser duty rate. The key question is whether, following the application of a lesser duty against country F, domestic producers would be able to increase local prices all the way to the AD duty inclusive landed import price of country F (reflecting the lesser duty rate). Again, the answer to this question is an emphatic 'no', because once local prices rise to EP_{0}^{B} $(1+\tau^{B}+\phi^{B})$, imports from country B would resume and, in such circumstances, the landed import price of country B would become the effective ceiling for domestic prices, lesser duty or not.²⁷ Thus, as can be seen, in the event of significant trade diversion the level of protection afforded to the domestic industry is much diluted, regardless of whether a lesser duty is used.

Figure 5 The Futility of a Lesser Duty in the Event of Significant Trade Diversion



While a lesser duty could be often redundant, if set too low, domestic prices would not be able to increase to the level of the landed import price of the most competitive non-subject exporting country. This situation is depicted in Figure 6. In Figure 6, $EP_0^F (1+\tau^F+\phi^F+\delta)$ represents the AD duty inclusive landed import price of country F, incorporating a lesser duty rate set a very low level, which is positioned below the landed import price for country B. At the resulting domestic price, P^{A}_{2} , domestic production would only return to Q^s₂. In this case, injury to the domestic industry would not be completely offset, contrary to the stated purpose of a 'lesser duty' according to Article 9.1 of the Agreement. By contrast, at the domestic price tied to the landed import price of the most competitive non-subject exporting country, PA0, domestic production would fully recover to Q^s₀. In such case injury would be entirely offset.

Figure 6 Incentive to Set the Lesser Duty as Low as Possible



Nevertheless, as setting a low lesser duty would minimize the resulting impact on domestic prices /import volumes, and the net welfare loss involved (see section 2), policy makers are likely to be predisposed towards setting a low lesser duty.

5 CONCLUSIONS AND POLICY RECOMMENDATIONS

The protective effect of antidumping measures depends on whether, following the imposition of such measures, consumers have the option to switch to non-subject suppliers. If non-subject suppliers sell at the same price as the subject suppliers, antidumping measures will generate trade diversion from subject to non-subject suppliers but import volumes would remain invariant. By contrast, if non-subject suppliers sell at prices that are higher than those charged originally by the subject suppliers, there will still be trade diversion from subject to nonsubject suppliers, although this switch in sources of import supply will be accompanied by a reduction in import volumes.

As the potential for trade diversion in any one AD investigation is not known on an *ex ante* basis, the authorities considering setting AD duty at a rate lower than the dumping margin would profit for bearing in mind the following considerations before deciding to take this step:

- (1) Are there actual or potential non-subject suppliers? Whether the investigation targeted multiple exporters and whether it follows up previous proceedings on the same product would shed light in this regard.
- (2) Do non-subject suppliers sell at prices lower than the price of the subject suppliers inclusive of an AD duty reflecting the full dumping margin?

 $^{^7}$ In Figure 5, trade diversion and trade depression are the same as in Figure 4.

- (3) Are non-subject suppliers sufficiently large to supply the domestic market should imports from the subject suppliers disappear?
- (4) Could non-subject suppliers be held up by non-FTA tariffs, freight costs technical/sanitary standards, or peculiarities in product characteristics?

If importation from non-subject sources at competitive prices and sufficient volumes were not viable, then the authorities would have reasonable grounds to expect less than significant trade diversion, in which case trade diversion would not be able to play its natural role as built-in mitigating factor to the effects of antidumping measures, and this in turn would justify considering setting the antidumping duty at a rate lower than the dumping margin.

References

Asche, Frank. 'Testing the Effect of an Anti-dumping Duty: The US Salmon Market'. *Empirical Economics* 26 (2001).

Avsar, Veysel. *The Anatomy of Trade Deflection*. Mimeo: Florida International University, Department of Economics, 2010.

Baylis, Kathy & Jeffrey M. Perloff. 'Trade Diversion from Tomato Suspension Agreements'. *Canadian Journal of Economics* 43, no. 1 (2010).

Crystalline Silicon Photovoltaic Modules and Key Components (i.e. Cells and Wafers) from China (2013), Preliminary Determination, Official Journal of the European Union,

4 June 2013 (available at http://eur-lex.europa.eu/LexUri Serv/LexUriServ.do?uri=OJ:L:2013:152:0005:0047:EN:PDF).

Biodiesel from Argentina and Indonesia (2013), Preliminary Determination, Official Journal of the European Union, 27 May 2013 (available at http:// eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L: 2013:141:0006:0025:EN:PDF).

Bown, Chad P. & Meredith A. Crowley. 'Trade Deflection and Trade Depression'. *Journal of International Economics* 72 (2007).

Brenton, Paul. 'Anti-dumping Policies in the EU and Trade Diversion'. *European Journal of Political Economy* 17 (2001).

Coaxial Cables from China (2012), Final Determination, Official Gazette, 10 August 2012 (available at http:// www.dof.gob.mx/index.php?year=2012&month=08&day= 10).

Feenstra, Robert C., Joseph E. Gagnon & Michael Knetter. 'Market Share and Exchange Rate Pass-Through in World Automotive Trade'. *Journal of International Economics* 40 (1996).

Ganguli, Bodhisattva. 'The Trade Effects of Indian Antidumping Actions'. *Review of International Economics* 16, no. 5 (2008).

Gulati, Summet, Nisha Malhotra & Shavin Malhotra. 'Extent of Protection via Anti-dumping Law: A Case Study of the Vitamin C Industry in India'. *Journal of World Trade* 39, no. 5 (2005).

Hot-Rolled Coil Steel from Japan, the Republic of Korea, Malaysia and Taiwan (2012), Final Determination (Report to the Minister Number 188), 19 November 2012 (available at http://www.customs.gov.au/webdata/resources /files/102-FinalReport-REP188.pdft).

Khatibi, Arastou. *The Trade Effects of European Antidumping Policy*, European Center for International Political Economy, 2009, Working Paper No. 7.

Knetter, Michael. 'Price Discrimination by U.S. and German Exporters'. *American Economic Review* 79, no. 1 (1989).

Knetter, Michael. 'International Comparisons of Pricing-to-Market Behavior'. *The American Economic Review* 83, no. 3 (1993).

Konings, Jozef, Hylke Vandenbussche & Linda Springael. 'Import Diversion under European Antidumping Policy'. *Journal of Industry, Competition and Trade* 1, no. 3 (1993).

Krugman, Paul. 'Pricing to Market When the Exchange Rate Changes'. NBER Working Paper No. 1926, reprinted in S.W. Arndt & J.D. Richardson (eds). *Real-Financial Linkages Among Open Economies.* Cambridge, Mass.: MIT Press, 1986.

Krupp, Corinne M. & Patricia S. Pollard. 'Market Responses to Antidumping Laws: Some Evidence from the U.S. Chemical Industry'. *Canadian Journal of Economics* 29, no. 1 (1986).

Mendieta, Alfonso. *Anticompetitive Effects of Antidumping Policy in Mexico*. Doctoral Dissertation, University of East Anglia, School of Economics, 2009.

Miranda, Jorge. 'An Economic Analysis of Mexico's Use of Trade Remedies Law from 1987 to 1995'. In *Trade Punches: Trade Remedy Law and Disputes under NAFTA*. Edited by Beatriz Leycegui et al. Washington, DC: National Planning Association, 1995.

Muller, Wolfgang, Nicholas Khan & Tibor Scharf. *EC* and WTO Anti-Dumping Law. 2nd edn. Oxford: Oxford University Press, 2009.

Niels, Gunnar. *Trade Diversion and Destruction Effects of Antidumping Policy: Empirical Evidence from Mexico*. Mimeo: OXERA and Erasmus University Rotterdam, 2003.

Nisha, Malhotra & Horatiu A. Rus. 'The Effectiveness of the Canadian Antidumping Regime'. *Canadian Public Policy* XXXV, no. 2 (2009).

Park, Soonchan. 'The Trade Depressing and Trade Diversion Effects of Antidumping Actions: The Case of China'. *China Economic Review* 20 (2009).

Preserved Peaches from Spain. Final Determination, August 2011 (available at http://www.med.govt.nz/ business/trade-tariffs/pdf-docs-library/current-duties-andcompleted-investigations/final-report-preserved-peachesfrom-spain.pdf). Prusa, Thomas J. 'The Trade Effects of U.S. Antidumping Actions'. In *The Effects of U.S. Trade Protection and Promotion Policies*, edited by Robert C. Feenstra. Chicago: The University of Chicago Press, 1997.

Prusa, Thomas J. 'On the Spread and Impact of Antidumping'. *Canadian Journal of Economics* 34, no. 3 (2001). Van Bael, Ivo & Jean-Francois Bellis. *EU Anti-Dumping* and Other Trade Policy Instruments. 5th edn. Kluwer Law International, 2011.

Vermulst, Edwin. *EU Anti-Dumping Law and Practice*. 2nd edn. London: Sweet & Maxwell, 2010.

Viner, Jacob. *The Customs Union Issue*. New York: Carnegie Endownment for International Piece, 1950.

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