Dirty Tariffication Revisited: The EU and Sugar

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It is widely believed that a number of countries, including the EU, engaged in dirty tariffication during the Uruguay Round of trade talks. This article examines the EU’s record on sugar and finds little evidence to substantiate the claim. However, world prices increased between the base period (1986-88) and the date of implementation (1995), and so tariffication resulted in an increase in the tax that would have been charged on sugar imports into the EU. As well, the Special Safeguard provisions meant that a substantial additional levy could be charged.

Keywords: agriculture, EU, sugar, tariffication, trade
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Introduction

An important commitment made in the Uruguay Round of trade talks, and reflected in the Agreement on Agriculture (the URAA), was the conversion into ordinary customs duties of the plethora of non-tariff barriers that had previously characterised international trade in agricultural goods. This process was known as tariffication (Josling, Tangermann and Warley, 1996).

Once the Uruguay Round had been completed, and the new tariff schedules established, a number of authors suggested that some countries had engaged in “dirty tariffication”. Ingco’s detailed calculations attracted most attention. She concluded: “The results indicate that the specific and ad valorem tariffs which many countries have set in their schedules are significantly higher than the wedge between actual domestic and world market prices in the base period, hence affording higher protection than prevailed in 1986-88” (Ingco, 1995, 22; 1996, 433). Ingco continued: “The extent of ‘dirty tariffication’ varied widely among countries and commodities. In many countries it appears to have occurred in the ‘sensitive’ commodities such as dairy, sugar, and grains. Among the industrial countries, the magnitude appears largest in the European Union and EFTA” (1996, 433). She reports results for rice, wheat, coarse grains, sugar, beef and veal, pork, poultry and dairy. Ingco’s work has been widely cited, for example by Hathaway and Ingco (1996), Tangermann (1996), Messerlin (2001), and Nogués (2003). Nogués claims that “In fact, dirty tariffs, are probably one of the most obscure episodes in the 50 plus years of the multilateral trade negotiations” (2003, 7).

Discussion of dirty tariffication embraces both a narrow and a wide concern. For example, the International Agricultural Trade Research Consortium notes that the term has sometimes been used “because the initial tariffs from which reductions start are often very high …” (IATRC, 1994, 18). This is a fairly broad statement. The IATRC explains that “In part this reflects the high rates of protection in agriculture.” But the consortium then suggests that “governments have often searched for price data for calculating base period tariff equivalents that result in high tariffs compared to the actual level of protection in the base period.” It is this latter, narrower, definition of dirty tariffication, which suggests that governments manipulated the data, that is addressed in this article. For example, for EU sugar, Ingco (1996) suggests that the tariff equivalent should have been calculated at 234 percent. Instead, she claims, the EU’s calculation came out at 297 percent, some 63 percentage points higher.

It is widely recognised that the base period for tariffication, 1986-88, built into the calculations some of the biggest price gaps in recent history. Thus it is conceivable
that, even after the full implementation of the tariff reductions agreed to in the Uruguay Round, bound tariffs could still be higher than those in force immediately prior to the implementation of tariffs in 1995. Figure 1 shows that the world market price for sugar is indeed volatile, and that – expressed in U.S. dollars – prices were at a low in the period 1986-88. Ingco’s work suggests that over the period 1979-93 the EU’s tariff equivalent for sugar was 150 percent compared to the 234 percent she calculated for the base period (Ingco, 1996).

A further complication arose when domestic policy change was implemented after the base period 1986-88, with no corresponding adjustment to the tariffs calculated for the base period. For example, in the EU, the MacSharry reforms of 1992 resulted in a reduction in the intervention price for cereals and, by extension, the implicit support prices for pig and poultry products. Accordingly, for cereals (and rice) the EU agreed that the applied import duty would be capped. There was, however, no consequential adjustment to the tariff equivalents that had been determined for pig and poultry products.

Figure 1 Sugar in bulk, Caribbean ports, f.o.b. (US¢/lb.), monthly data, January 1960 to December 1999.

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What Were WTO Members Supposed to Do?

The process of tariffication is referred to only indirectly in the URAA. Article 4(1) refers to the tariff bindings and “other market access commitments” contained in members’ schedules; and Article 4(2) asserts that “Members shall not maintain, resort to, or revert to any measures of the kind which have been required to be converted into ordinary customs duties,” except in specified circumstances. It is the modalities document (GATT, 1993), reproducing almost exactly the language of the Dunkel text (GATT, 1991), which sets out the procedure.1

The modalities document notes that “The policy coverage of tariffication shall include all border measures other than ordinary customs duties,” and that “The calculation of tariff equivalents, whether expressed as ad valorem or specific rates, shall be made using the actual difference between internal and external prices in a transparent manner” for the years 1986 to 1988 (GATT, 1993, annex 3, section A, paragraphs 1 and 2).

External prices were to be “average c.i.f. unit values for the importing country”; where this was not relevant, either the “appropriate average c.i.f. unit values of a near country” could be taken, or an external price could be “estimated from average f.o.b. unit values of (an) appropriate major exporter(s) adjusted by adding an estimate of insurance, freight and other costs to the importing country” (ibid., paragraph 4). Although the EU was a significant importer of raw sugar during the reference period, this sugar was primarily obtained from the ACP (African, Caribbean and Pacific) states at preferential prices, and imports of sugar (whether white or raw) over the most-favoured-nation variable import levy were negligible. Thus the EU had no relevant c.i.f. unit values to deploy, and, as illustrated below, it looked to another source.

As for the internal price, according to the modalities document this should “generally be a representative wholesale price ruling in the domestic market or an estimate of that price where adequate data is not available” (ibid., paragraph 6).

What Did the EU Say It Would Do?

In March 1992, as required by the Dunkel text, the EU had submitted its market access offer. As reported in Agra Europe (20 March 1992), for white sugar the internal price over the base period was given as 719 ecu/tonne and the external price as 195 ecu/tonne,2 giving a tariff equivalent of 524 ecu/tonne (equivalent to an ad valorem tariff of 268.7 percent). For raw sugar the internal price was given as 600 ecu/tonne and the external price as 176 ecu/tonne, giving a tariff equivalent of 424 ecu/tonne (240.9 percent). The footnotes suggest that, for sugar, the internal price was
the “intervention price + 10% + storage levy”, and the external price for raw sugar was derived from the New York bourse, while that for white sugar was taken from Paris. The following were the base rates of duty the EU entered into its tariff schedules at Marrakesh: 424 ecu/tonne for raw sugar for refining (reducing by 20 percent to 339 ecu/tonne by the end of the implementation period) and 524 (down to 419) for refined sugar.

Similarly, in November 1992, following the U.S.-EU meeting at Blair House, the EU declared: “For the Community, the tariffs will be … equal to the difference between the world price (f.o.b.) of the product and its intervention price on the Community market, increased by 10% and by the monthly increments” (Commission of the European Communities, 1992, 1). Table 2 of the same document reported that, for white sugar, the external reference price for 1986-88 was 195.0 ecu/tonne, resulting in a tariff equivalent of 524.0 ecu/tonne. This idea – that the EU’s internal price would be “the average Community support price (in most cases the intervention price) increased by 10%” – dates back to the EU’s GATT “offer” of November 1990 (European Communities, 1990, 3).

Thus the EU had made quite clear over a number of years how it intended to apply tariffication for sugar (and many other products as well). Whether or not its methodology – particularly the intervention price plus 10 percent – really reflected the language of the modalities document is a moot point. But it is difficult to believe that other countries were not aware of the EU’s intent. Nonetheless, Nogués has suggested that one possible explanation for dirty tariffication is that “the notification of tariff equivalents to the WTO was made at the last minute before closing the UR. After many years of frustrating talks, negotiators were tired and wanted to end and close the round in spite of the fact that they sensed an outcome that was unbalanced against developing countries” (2003, 7).

297 Percent?

As noted above, Ingco claims that the EU’s tariff equivalent equated to an ad valorem tariff of 297 percent. It is not clear whether this refers to white (refined) sugar, or raw sugar for refining. In fact the EU declared specific tariff equivalents of 524 and 424 ecu/tonne, for white and raw sugar respectively, equivalent to ad valorem rates of 268.7 and 240.9 percent on the basis of the external prices notified by the EU. Either Ingco has used the wrong specific tariffs in her calculation (i.e., higher than 524 or 424 ecu/tonne), or she used lower external prices than those declared by the EU. Given the specific tariffs fixed by the EU, the world market price determined by Ingco would have to be nearly 10 percent lower than that declared by the EU for white
sugar, and nearly 20 percent lower for raw sugar, if her estimate of 297 were to stand. This does not square easily with the suggestion that the EU engaged in dirty tariffication.

**Validating the EU’s Calculations**

The inability to replicate Ingco’s figure of 297 percent does not, however, dismiss the claim that the EU engaged in dirty tariffication for sugar. Accordingly, in this section, an attempt is made to validate the EU’s calculations. The first task is to check the EU’s maths. A problem this immediately throws up is that of the green “money” system that operated in the EU until the early 1990s, and in particular the so-called switch-over mechanism, which applied from April 1984 until its abolition in 1995 (Swinbank and Tanner, 1996). By then the correcting coefficient had reached 1.207509. Thus the EU’s intervention price for white sugar in 1994/95 was fixed at 523.3 ecu/tonne, whereas that for 1995/96 was 631.9. This change did not reflect a real increase in support prices of nearly 21 percent, but simply that the agricultural ecu in which support prices had been expressed prior to the abolition of the switch-over was worth 21 percent more than the commercial ecu in which they were now denominated. In preparing its GATT commitments the EU worked in commercial ecu, but this meant it had to convert from agricultural to commercial ecu using the appropriate correcting factor for the base period. The evidence suggests that the EU itself was confused. Ingco does not say how she dealt with this issue.

Figure 2 summarises the EU’s support system for sugar. An intervention price is fixed, which is valid throughout the marketing year (July to June). Although the EU has a net export surplus, intervention is very rare. This is so for two reasons. First, the European Commission manages the market through a regular tender to determine export refunds (subsidies), thus keeping market prices above the intervention price equivalent. Second, during the period under consideration (but not now) the EU operated a complex storage policy under which, when sugar processors sold white sugar (*except to intervention*), they paid a storage levy into a self-financing fund. This money was then used to pay, on a flat rate basis, the industry’s storage costs, and helped ensure that the EU’s surplus was kept in private stores before being exported. This also explains why the EU claimed that its effective support price was the intervention price plus the storage levy.

The EU’s intervention price for white sugar throughout the period was unchanged at 541.8 agricultural ecu. For the present research, the correcting factor was applied to this on a daily basis, and a simple average intervention price of 604.0 commercial ecu over the three-year period 1986-88 was calculated. Similarly, after having added in the
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storage levy charged, an average effective support price of 648.1 commercial ecu/tonne was calculated for the period.

![Diagram of price support structure for white sugar](image)

**Figure 2** Structure of price support for white sugar (ecu/tonne)

Similar, but not necessarily the same, data were required to determine the aggregate measurement of support (AMS): an internal “applied administered price” and an external “reference price”. For white sugar the EU again referred to the Paris bourse for the external price, and declared a figure of 193.8 ecu/tonne, virtually the same as that declared for tariffication (Commission of the European Communities, 1994: supporting table 6). For its “applied administered price” it took the intervention price. Table 1 compares calculated estimates from the present research with the EU’s declaration for its applied administered price.

<table>
<thead>
<tr>
<th>Year</th>
<th>EU figure</th>
<th>Author’s estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>609.9</td>
<td>583.3</td>
</tr>
<tr>
<td>1987</td>
<td>616.2</td>
<td>612.5</td>
</tr>
<tr>
<td>1988</td>
<td>616.2</td>
<td>616.2</td>
</tr>
<tr>
<td>1986-88</td>
<td>614.1</td>
<td>604.0</td>
</tr>
</tbody>
</table>

For 1988 the EU’s figure is replicated exactly. The EU’s figures for 1986 and 1987 raise suspicions: the former seems to take little, and the latter no, account of the differences in the correcting factor compared to that for 1988. However, if the intervention price (541.8 agricultural ecu/tonne) is multiplied by the correcting factor valid from 15 January to 30 June 1987 (1.125696), the resulting figure is 609.9 commercial ecu (as reported by the EU for 1986!). As illustrated below, these figures feed through into the tariffication calculation.
In undertaking tariffication, the EU took the intervention price augmented by 10 percent, plus the storage levy, as its estimate of an internal price. The EU’s calculations were replicated and the results appear in table 2 (in commercial ecu/tonne). The applied administered price, reported above, was augmented by 10 percent, and to it was added the storage levy, converted to commercial ecu using the same correcting factor used by the EU for that year. The final column of table 2 reports the author’s calculation, which is the average daily rate for the calendar year, applying the appropriate data for the day.

<table>
<thead>
<tr>
<th>Year</th>
<th>EU figure, as reported in <em>Agra Europe</em>, 20 March 1992</th>
<th>Estimate calculated using EU methodology</th>
<th>Author’s estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>716</td>
<td>715.9</td>
<td>686.0</td>
</tr>
<tr>
<td>1987</td>
<td>724</td>
<td>723.3</td>
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<td>1988</td>
<td>718</td>
<td>717.6</td>
<td>720.4</td>
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<tr>
<td>1986-88</td>
<td>719</td>
<td>718.9</td>
<td>708.5</td>
</tr>
</tbody>
</table>

The estimates in columns three and four suggest then that the EU overstated its internal price by about 10 ecu/tonne, both for the AMS calculation and for tariffication. But was this dirty tariffication, or just sloppy arithmetic?

In addition to the intervention price, a threshold price was also fixed. For the marketing years 1986/87 and 1987/88 this was 670.3 agricultural ecu/tonne. According to calculations done for the present research the average threshold price for the period was 745.6 commercial ecu/tonne.

The variable import levy – which could be fixed on a daily basis if required – was designed to bridge the gap between the threshold price and the lowest world offer price. The *Official Journal of the European Communities* reports the import levy fixed for white sugar. For example, on 6 January 1986 it was fixed at 485.9 agricultural ecu/tonne. Over the three-year period 1986-88 the levy averages, on a daily basis, 547 commercial ecu/tonne. This is virtually the same as the figure of 542 claimed by the EU in its “offer” of December 1990 (European Communities, 1990, annex II), validating the commission’s maths.

Furthermore, there is (approximate) mathematical consistency. The difference between the threshold price (745.6) and the EU’s internal price (intervention, plus 10 percent, plus storage levy: 708.5) is 37 ecu/tonne. This is a measure of the extent to which one would expect the variable import levy to exceed its tariff equivalent. The
present research suggests that the EU’s tariff equivalent of 524 ecu/tonne perhaps overstates the true figure by about 10 ecu/tonne. Contrast this “true” figure (514) with the average import levy reported in the previous paragraph (542/547), and the margin between the two is 28-33 ecu, much as might be expected.

Thus it would appear that the data the EU has reported is (more-or-less) internally consistent; but has it used a representative world market price for its calculations? A world market price series for the EU was constructed by deducting the variable import levy from the threshold price, on a daily basis; monthly averages were then produced. These 36 data plots are reported by the solid line in figure 3. The average “world market price” for this series is 198.5 ecu/tonne, which – as one would expect from the foregoing discussion – corresponds to the 195 ecu/tonne the EU reported for tariffication. But more significantly, it also corresponds to the information the EU published at the time. In 1989 the commission reported from the Paris Bourse a price for white sugar (f.o.b. designated European ports, in new bags) of 173.1 ecu/tonne for the marketing year (July to June) 1986/87, and 184.3 ecu/tonne for the marketing year 1987/88 (Commission of the European Communities, 1989, T/189). The derived series presented here, working back from the import levy, averages 178 and 185 for the two marketing years respectively.

Figure 3  World market prices, ecu/tonne, monthly data, 1986-88, Caribbean bulk, f.o.b.; and European white.

Source: Caribbean bulk (f.o.b.) is monthly data from figure 1, converted to ecu using monthly ecu/$ exchange rates published in various issues of European Economy. Supplement A.

White European is a series derived by the author by deducting on a daily basis the variable import levy from the threshold price and producing monthly averages.
Figure 3 also re-presents (the dotted line) the monthly data from figure 1, showing the price of bulk sugar f.o.b. in Caribbean ports, converted to ecu using a monthly average exchange rate. Whilst clearly there is some correspondence between the two price series (the coefficient of correlation is 0.95), there are periods when the gap between the two narrows, and others when it widens. The average gap between the two series is 46 ecu/tonne (standard deviation 13.0). Whilst not validating the EU’s choice of world market price, this comparison does suggest it is a credible figure.

Dirty Tariffication, the Bigger Picture

As noted above, tariff equivalents were determined for the base period 1986-88, with the new tariffs applied from 1995. To repeat, the EU determined a tariff equivalent of 524 ecu/tonne for white sugar. It committed itself to a 20 percent reduction, to reach a new bound rate of 419 ecu/tonne in 2000. This involved six annual reductions. Thus, on 1 July 1995 a tariff of 507 ecu/tonne came into force.

However, by 1995 world market prices were higher than they had been in the base period. Thus the variable import levy that had been in force on 30 June 1995 was 423.2 ecu/tonne. (Over the first six months of 1995 it had averaged 469.4 ecu/tonne.) Hence, tariffication resulted in a sharp increase in the import duty!

This example may raise questions about the appropriateness of the implementation rules, and it may have contributed to a general unease that WTO members had collectively conspired to produce dirty tariffication; but it does not mean that the EU broke or bent the rules to achieve this outcome.

The Bigger Problem: Special Safeguards

The URAA allowed countries to retain yet additional protection. The Special Safeguard provisions are only available on those tariff lines that underwent tariffication. An additional duty can be imposed, on a consignment basis, if the c.i.f. import price falls below a reference or trigger price determined for the base period 1986-88. This trigger price is the average c.i.f. import price recorded in that period. Imports into the EU were dominated by preferential shipments from the ACP states. Accordingly the EU has determined trigger prices of 413 and 531 ecu/tonne for raw and white sugar respectively. This has meant that the Special Safeguard provisions for sugar imports into the EU have been permanently invoked since the implementation of tariffication in 1995.5

Article 5(5) of the URAA sets out a formula to determine the additional duty. It kicks in when the offer price falls 10 percent below the trigger price, and then increases progressively as the world market price falls. An offer price of 195
ecu/tonne – the figure used by the EU for tariffication – would trigger an additional duty of 113 ecu/tonne.

Thus the reality is that the combined effects of tariffication and the Special Safeguard provisions did not create a fixed tariff. Instead they conspired to perpetuate a variable import levy regime. The *ad valorem* equivalent of the tariff equivalent, and the additional duty payable at the world market price that resulted in that tariff equivalent, taken together, is 327 percent. It may be that Ingeo took some account of the Special Safeguard provisions in her calculations; but she does not say so, and again it is not clear how to replicate her figures.

The URAA provided for the reduction of tariffs, but it made no provision for the phased reduction of the Special Safeguard mechanisms. They “remain in force for the duration of the reform process” (Article 5(9)). It is beyond the scope of the present article to speculate on the future of Article 5, other than to note that if its provisions (and trigger prices) remain unchanged it will remain a significant trade barrier.

**Conclusions**

The purpose of this article was not to defend the EU’s policy for sugar, or the EU’s position in the URAA. Instead its purpose was to examine the widely held view that dirty tariffication was an important characteristic of the URAA. With regard to EU sugar little evidence was found to support that claim. The EU’s calculations were validated, but the figures here do suggest that the EU overstated the internal price, and hence its tariff equivalent, by about 10 ecu/tonne. Whether this was deliberate manipulation of the data (i.e., dirty tariffication), or arithmetical error, is difficult to determine; but I tend to the latter view. Nonetheless, the tariff equivalent was lower than the average of the daily import levies that had been set in 1986-88.

This detailed examination of the EU’s tariffication process for sugar illustrates two structural characteristics of the URAA, the implications of which may not have been fully obvious to negotiators at the time. First, a significant time lag between the reference period for determining tariff equivalents (1986-88) and the date of implementation of the new fixed tariffs (1995) meant that circumstances could (and did) change. For the EU this meant that the import tariff chargeable on sugar from July 1995 was substantially higher than the variable import levy that had applied immediately prior to that date, and that it would not be until well into the implementation period that tariff *cuts* would be achieved. This is a generic issue that could have arisen in any country for any product subject to tariffication.

The second structural characteristic concerns the Special Safeguard clause. This could, of course, be invoked for any tariff line that had been subject to tariffication;
but in a number of instances – the EU’s preferential imports of ACP sugar is one notable case – this did allow considerable additional border protection to remain. Thus, since 1995, in addition to the most-favoured-nation tariff on sugar, the EU has had the ability to apply an additional duty. Overall the EU’s border protection for sugar remained prohibitively high, and only imports under preferential arrangements were able to penetrate the EU’s market. Thus negotiators in the Doha Development Agenda need to address not just the tariff, but also the provisions of Article 5 of the URAA.
References


**Endnotes**

1. The modalities document is not however a legal text. It notes that it was issued on the understanding that it could “not be used as a basis for dispute settlement proceedings” (GATT, 1993, 1). Thus, post-Marrakesh, it would be difficult for aggrieved WTO members to challenge tariff bindings even though dirty tariffication could be shown to have occurred.

2. *Agra Europe* reports 196, but that figure is changed in this article to 195 to be consistent with other documents. In its GATT “offer” of November 1990, the EU had reported external prices for white and raw sugar of 195 and 176 ecu/tonne respectively (Commission of the European Communities, 1990).

3. Intervention and other CAP support prices were fixed in ecu, now the euro. When the exchange rate of national currencies moved against the ecu this should have produced an immediate change in support prices in national currencies (a situation that persists for non-Euroland currencies today). The green money system was an attempt to secure domestic price stability by delaying these price changes, even though this meant support prices across the EU were no longer common. From time to time the conversion rates used to translate support prices (expressed in ecu) into national currencies were amended, but often with a considerable lag. “Devaluations” of green conversion rates – which increased support prices in the country concerned – were easier to secure than were “revaluations” – which resulted in price cuts. The “switch-over” mechanism introduced an asymmetric system. Now if a currency was revalued against the ecu, the common price level was, in effect, increased by the same amount so that support prices in the revaluing country need not fall; this left scope also for other member states to “devalue” their green conversion rates, thus securing a price increase for their farmers.

4. Entitlement to price support is limited by quota. Figure 2 applies to A and B sugar, which can be sold in the EU or receive an export refund. A producer levy is charged (usually at a higher rate on B sugar), which reduces the net return to sugar refiners. C sugar must be exported from the EU without recourse to (direct) subsidy.


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