

# **IMPROVING MARKET ACCESS: ECONOMIC CONSEQUENCES OF MULTILATERAL AGREEMENTS**

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## **Introduction**

An assessment of issues related to the three pillars of the Uruguay Round Agreement on Agriculture (URAA) is an important part of the OECD's programme of work on the analysis of impacts of and options for the reform of trade policies. In this context, work has recently been completed on the evaluation of the implementation of commitments on domestic support, export subsidies and markets access which signatory countries have undertaken under the URAA<sup>1</sup>. Work of a more forward looking nature has also been completed on export subsidies and is in progress with regard to market access<sup>2</sup>. This paper draws on this last area of analysis. It first briefly explains the tools and analytical framework employed in the analysis, and the limitations these impose on the analysis; then, an overview will be provided of TRQs, fill rates and tariff structure that has resulted from the URAA; the paper then goes on to discuss some preliminary results of work on market impacts of different options for further improvement in market access and finishes with a few conclusion.

The scope of this paper is narrowly defined to examine only tariffs and TRQs under the market access commitments of the URAA. Tariffs and TRQs are instruments which can be used by importing countries to control market access. However, there are numerous instruments which exporters can use to compete for market access, such as export subsidies, export credits, food aid, price pooling mechanisms or state trading enterprises. Only export subsidies are disciplined and subject to reduction commitments under the URAA.

## **Tools and methods**

The main tools used in the analysis presented in this paper are the Agricultural Market Access Database (AMAD) and the OECD's Aglink model. AMAD is a co-operative effort between Agriculture and Agri-food Canada, EU Commission-Agriculture Director-General, FAO, OECD, The World Bank, UNCTAD, and the United States Department of Agriculture-Economic Research Service. AMAD includes data on bound tariff volumes, scheduled in-quota, over-quota and MFN tariff rates, applied MFN tariff rates, notified imports under the TRQ, TRQ country allocations, import volumes and values, supply and utilisation data, world reference prices, import unit values and primary product equivalent factors. The participating agencies, under co-

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<sup>1</sup> An evaluation of the implementation of the Uruguay Round Agreement on Agriculture with regard to domestic support, export subsidies and market access. OECD, December 2000.

<sup>2</sup> A forward looking analysis of the elimination of export subsidies. OECD, December 2000.

ordination of the OECD Secretariat, have agreed to continue maintenance and an annual update. AMAD is available free of charge on [www.amad.org](http://www.amad.org).

The Aglink model is a partial equilibrium, net trade model of global agriculture, which the OECD has developed in co-operation with its Member countries, and which it uses in its medium term outlook work and in the forward looking analysis of domestic and trade policy issues. The model has been substantially modified to make it more appropriate for the analysis of market access issues. In particular, all relevant TRQ and tariff information has been included while in a number of important cases its net trade specification has been modified to account for endogenous determination of both imports and exports.

The analytical framework for the analysis recognises that there are three policy levers associated with the TRQ regime and that governments can use to influence imports. These are quotas, in-quota tariffs and out-of-quota tariffs. However, only one policy instrument at a time is the binding instrument. So, for any importing country at any one time, either the quota, the lower in-quota tariff, or the higher, out-of-quota tariff determines domestic and world prices and import volume. The TRQ system operates in such a way that imports can be: (1) less or equal to the TRQ and enter at the in-quota tariff rate, (2) larger than the TRQ, but still enter at the in-quota tariff rate, (3) in excess of the TRQ and enter at the over-quota tariff rate, and finally (4) there can be non quota imports.

The combination of this particular set of tools and methods poses some limitations to the analysis. For instance, the structure of the Aglink model and its underlying assumptions allow for an analysis of *aggregate* world market impacts for the more *homogeneous* products. Also, Aglink is a commodity based model with a much more aggregated product coverage than the individual TRQs as covered in the AMAD database. A concordance table mapping the HS codes from the TRQ schedules to commodities represented in Aglink was needed. This has necessarily included a certain amount of arbitrariness. For instance, there are cases where one TRQ is scheduled, but this TRQ covers more products in Aglink. In other cases TRQs are scheduled for a basket of commodities not all of which may be included in the model's definition of the product, or more than one TRQ is scheduled for what is recognised only as a single product in the model.

### **TRQs and fill rates**

Under a TRQ system, a lower tariff (in-quota) applies to imports within the quota while a higher tariff (out-of-quota) applies to imports exceeding the quota. As of May 2000, 37 countries, including all OECD Members other than Turkey, had committed about 1 370 individual TRQs to this system. OECD countries schedules 59 per cent of the total, or 810 TRQs. Once these TRQs are further restricted and aggregated to the commodity coverage in Aglink, only 91 remain in our sample<sup>3</sup>.

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<sup>3</sup> The commodity coverage in Aglink is wheat, rice, coarse grains, soyabeans, rapeseed, sunflower seed, oilseed oil, palm oil, oilseed meal, beef, pork, poultry, sheepmeat, milk, butter, cheese, whole milk powder, skimmed milk powder, whey powder and casein.

One indicator that may be used in assessing progress in enlarging market access is the TRQ fill rate. An assessment of this for the 810 TRQs scheduled by OECD countries provides some ambiguous results. For instance, looking at the average for 1995 to 1998, the total average fill rate for OECD countries was 170 per cent. However, this number is biased upwards because equal weight is given to TRQs irrespective of the volume of trade. Thus the 1000 per cent fill rate in case of 1 tonne TRQ and a 10 tonne actual trade has the same weight as the 100 per cent fill rate of a 1 million tonne TRQ and an equal volume of trade.

So probably a more meaningful picture is obtained when we look at the distribution of fill rates across various fill ranges. This shows that a relatively large number of TRQs are in low fill rate ranges. The fill rate of about 25 per cent of the 810 TRQs scheduled by OECD countries is less than 20 per cent. In addition, this share slightly increased over the 1995 to 1998 period, while at the same time the share of TRQs with a more than 100 per cent fill rate declined. While in 1995 the number of TRQs with a fill rate exceeding 100 per cent was greater than the number of TRQs with a less than 20 per cent fill rate, in 1998 this difference had disappeared.

When the focus of the analysis shifts to commodities, a number of interesting facts are revealed. First, oilseeds and their products are the least protected from all commodities covered in the Aglink model. In fact, of the 91 TRQs covered by the model, there are none for oilseed meal, only two for oilseeds and three for vegetable oils. The other conclusion that comes out from this comparison across commodities is that none of the 91 Aglink TRQs have a 100 per cent fill rate. Rice comes closest at 91 per cent, and whey powder has the lowest average fill rate at 61 per cent.

Another potential indicator of the extent to which TRQs may restrict trade, is provided by a comparison between the total scheduled TRQ volume for a particular product and total world imports of that product. If total trade is large relative to the scheduled TRQs, their trade restrictiveness may be relatively small. But if the volume of scheduled TRQs is equal to or larger than global imports, this would suggest that they are a limiting factor to trade development. This comparison shows that the TRQ system might be particularly restrictive as regards trade for certain dairy products such as WMP, where global imports are 65 per cent of the total scheduled TRQs and SMP, where trade is only 4 per cent larger than the quota. Again, oilseeds and their products are at the other end of the spectre, with global imports exceeding 29 times the TRQ level for oilseeds and even more than 60 times that for vegetable oils.

## **Tariffs**

Analysing and understanding the effects of the TRQ system also needs information on tariffs that have resulted following the Agreement. This section provides information on the average tariff level for the countries and commodities in our sample to offer an overview of the average protection level among the countries and between products. In this analysis, specific tariffs have to be converted to their ad valorem equivalents. The issue of specific tariffs is an important one, as some 40 per cent of the items in the tariff schedule covered Aglink countries and commodities include a specific tariff. There is no commonly agreed procedure for the conversion of specific tariffs. In this paper the calculations are mostly based on reference prices used in Aglink.

The results show that the protection level for the countries and commodities in the sample used for this analysis remains high, despite the reduction commitments under the URAA. The average level of in-quota, over-quota and no quota tariffs in 1995 was 74 per cent. They fell to 61 per cent in 2000. The reduction in tariffs of some 17 per cent is only about half that stipulated in the Agreement. This again highlights the importance of specific tariffs in the calculation. Scheduled tariffs, including the specific tariffs, indeed fall by the 36 per cent countries have committed themselves to. But the fact that world prices have generally fallen during second half of the 1990s implies that the ad valorem equivalents of specific tariffs have fallen by less than the 36 per cent required, and may actually have increased.

An examination of the tariff structure across countries and commodities shows that Japan has the highest tariffs among OECD countries, with an average of 152 per cent in 2000. This compares with lows for Australia and New Zealand of 3.5 and 5.5 per cent respectively. Within these average tariffs, important differences exist between in-quota, over-quota and no quota tariffs. The in quota tariffs are relatively low and fall to 20 per cent in 2000. Over-quota tariffs are more than seven times as high, with an average of almost 160 per cent in 2000, and a high of 600 per cent for whey powder. Tariff rates for non quota products are substantially lower than these over-quota tariffs, but still some 10 percentage points above the in-quota tariff rates. The over-quota tariffs almost certainly prohibit any trade over the quota, unless this is allowed by the importing country to happen at in-quota tariffs. While in-quota tariffs and tariffs from non-quota products are much lower, they are certainly not trivial and may represent significant hurdles. This is possibly one reason for the relatively low fill rates mentioned above.

An examination of the tariff structure across commodities confirms the evidence from the TRQ review, namely that oilseeds and their products are the least protected commodities, while the level of protection for dairy products is highest. The average tariff on oilmeals, for instance, is only 11 per cent. This compares with dairy products, which have depending on the product, the highest rates for all types of tariffs. For instance, at just below 39 per cent, the average in-quota tariff for butter is 40 per cent more than the next highest rate which is levied on pork. At nearly 600 per cent, the average over-quota rate for whey powder is more than twice as high as that on coarse grains, which is only slightly higher than of numbers 3 and 4 in the league, which are other dairy products, butter and WMP.

### **Implications of further market access liberalisation**

The OECD's Aglink model will be applied to assess the effect on international and domestic markets of options for further market access liberalisation. In this analysis, a scenario with various types of trade liberalisation will be compared against baseline projections where quotas and average tariff rates in the year 2000 are held fixed for the outlook period. We assume that low demand - rather than quota administration - is the reason for low fill rates. To the extent that this is not true, the results of the scenarios may have an upward bias.

In this work, the following liberalisation scenarios will be examined:

- 1) a gradual 5% increase in quotas,
- 2) a gradual 50% increase in quotas (to gauge the sensitivity of the results to different quota expansion rates),
- 3) same as 1 but including a gradual 36% reduction for in-quota tariff rates,

- 4) same as 2 but includes a 36% reduction for average in-quota rates,
- 5) a gradual 36% reduction in out-of-quota and non-quota tariff rates.

As this work is in progress, conclusions drawn at this stage can only be tentative. One important conclusion is that in a context where many TRQs are under filled, the amount by which quotas are expanded – be this five or fifty per cent - does not lead to materially different results. A result consistent with expectations. Results available at this stage also suggest that when quota expansion is combined with a lowering of in-quota rates, the impacts on world prices becomes larger. Again, this is consistent with expectations: if in-quota tariffs are reduced, and quota administration does not explain under fill, then this lowering of tariffs will lead to increased trade, until the TRQ becomes the binding instrument. Thus, combining in-quota tariff reduction with an expansion of the TRQ should generate more trade and larger world price impacts. The tentative results suggest, finally, that the largest impacts occur when all tariffs are reduced simultaneously.

Finally, the analysis shows that under a TRQ system, only one instrument is binding at a time, that the binding instrument may change over time and that it alters for different commodities within a country and among commodities between countries. For instance butter and cheese TRQs in Canada have a 100 per cent fill rate and market access would be improved by increasing the quota. On the other hand, lower over-quota tariffs would increase SMP imports in the United States, where imports over the quota already take place. This is different again than the situation for coarse grains in the European Union where the TRQ is under filled and market access could be improved through a reduction in the in-quota tariff rate. The largest global market impacts for all commodities of further trade liberalisation will therefore be achieved through liberalisation of all TRQ related instruments, i.e. in-quota tariffs, over-quota tariffs and the quota itself, at the same time.

## **Conclusions**

A number of conclusions can be drawn from the foregoing analysis. First, the level of protection which exists after the implementation of the market access commitments of the URAA remains high and many of the TRQs are not filled completely. While in-quota tariffs are substantially less than the over-quota tariffs, they are nevertheless significant hurdles to trade and may partly explain this under fill of TRQs. Trade over the quota is mostly prohibited by excessively high over-quota tariffs, unless such trade is allowed at the in-quota tariff rate.

Nevertheless, the tariffication process under the URAA has made trade barriers more transparent and less arbitrary. The existence of a number of clearly defined trade instruments – TRQs and various tariffs – implies that there is an equally large number of levers by which market access improvement can be further negotiated. The analysis suggests that there is scope for increasing trade under the existing system, and that the greatest potential exists if all instruments are liberalised simultaneously.

Finally, this paper has not touched upon the issue of quota administration as an explanation for low TRQ fill rates. While we have assumed in this analysis that under fill is due to low demand, this is likely a simplification of reality. But it can be argued that quota administration will no longer be an issue if all tariffs are lowered and in particular if the gap between in-quota and over-

quota tariffs is much reduced. To the extent that over-quota tariffs do not inhibit trade over the quota, quota administration will no longer be an instrument that stands in the way of increased trade.