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Agricultural and Trade Policy Reform: Implications for Agricultural Trade

NEGOTIATING AGRICULTURE IN THE URUGUAY ROUND

As is well understood, agricultural trade problems among the developed countries stem from domestic agricultural policies and, in particular, from the production-stimulating and consumption-suppressing effects of commodity-centred agricultural price and income support policies. The resultant increase in export supplies and decrease in import demands, and the insulation of national markets, have the general effects of depressing and destabilizing international market prices and distorting trade volumes and trade patterns. Agricultural trade arrangements and practices are generally designed to support national agricultural policies and programmes. This situation has prevailed for a very long time and, whilst constantly a subject in the GATT, the Uruguay Round is the first occasion when there has been agreement that domestic policies should be fundamentally changed to reduce their adverse trade effects.

The Pauline conversion to effect agricultural policy and trade reform by bringing about 'substantial and progressive' reductions in trade-distorting subsidies and by opening import markets was driven by several factors. In the broadest view, the Uruguay Round is concerned with strengthening the multi-lateral trading system – and providing an alternative to managed trade, aggressive unilateralism and regionalism – with a combination of trade liberalization, rule making and institutional reform (Lawrence and Schultze, 1990; Oxley, 1990). Reform of trade in agriculture in this context is one of the 'backlog' market access issues (along with trade in textiles and safeguard measures) that must accompany the extension of the GATT into the 'new areas' of services, intellectual property and international investment and reform of the GATT institutional system (Schott, 1990). Within the narrow domain of agriculture, the re-emergence of structural surpluses of major commodities by the mid-1980s, and the mounting financial and political costs of the resultant competitive subsidization, ensured that agricultural trade would be high on the UR agenda. Other forces in play were the imperatives of the United States

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reducing its budget deficit and the inability of the European Community to continue financing open-ended price supports at high levels once it became a major net exporter of most temperate-zone agricultural products. We would like to think that the supply from our profession of empirical knowledge about the size of the income transfers involved in national agricultural policies and their negative macro-economic, welfare and trade effects (for example, Stoeckel, 1985; BAE, 1985; World Bank, 1986; OECD, 1987; USDA, 1988) also influenced the willingness to enter into negotiations leading to mutual disarmament in contending farm programmes and agricultural trade arrangements and their concerted reform. Whatever the influence of these and related forces, since the mid-1980s there has been a coincidence of interest among those who wish to see fundamental reforms in national agricultural policies (the 'desubsidizers') and trade specialists who wish to subject agricultural trade to the authority and the disciplines of the GATT (the trade 'liberalizers').

Objectives

The United States' strategic objectives in agriculture – shared with other exporters – included ensuring that future growth in world import demand would be met from low-cost sources; the initiation of reform of the European Community's common agricultural policy before the EC deepened its relationships with other Western and Eastern European states; and curbing the tendency of less developed countries to switch from taxing farmers to subsidizing them as development takes hold (USDA, 1990). It has also been suggested that a US strategy was to pursue its internally-desired domestic agricultural policy reform through an international negotiation, and to shield the resultant agreement on reforms from domestic agricultural and congressional resistance by linking the agricultural component of the negotiations to agreement on the other elements of the negotiations and thus to the success of the Uruguay Round as a whole (Paarlberg, 1991). The Cairns group of medium-sized and smaller exporters, above all else, seek an end to the economic damage being wreaked on their agricultural export sectors by the subsidy and protection policies of the USA and the EC. Additionally, individually lacking the retaliatory power of the big trading countries, they seek, in particular, to have agricultural commerce subjected to the rule of international law. The EC, the other countries of Western Europe and Japan, while anxious to reduce the deterioration in economic and political relations caused by disputes over agricultural trade issues with the USA and the Cairns group countries, nonetheless sought to retain national agricultural policy flexibility and autonomy in the selection of a timetable for domestic farm policy reform.

The specific objectives of the major participants have reflected these strategic goals. The United States has sought primarily to reduce the European Community's negative effects on world agricultural markets through reductions in the level of its support prices, border protection and Community preference, and by eliminating its export subsidies. The Cairns group countries have shared the same objective with respect to the EC, and with the United States have also sought improved access to the markets of Japan and other devel-

oped countries. However, the subsidy and protection policies of the United States have also been a target for the Cairns group countries. The negotiating positions of the EC and Japan have been essentially defensive. The Community has sought to commit itself to only a modest level and pace of support reduction, and its proposals would allow it to retain a good deal of Community preference, to continue to insulate its producers from world markets with variable import charges (albeit to a reduced degree), to increase protection for oilseeds and feed grain substitutes, and to avoid specific commitments on export subsidy reductions. As an exporter, the Community fears the release of the full production capacity of US agriculture and needs assurance that US grain support will be reduced. Japan has sought primarily to avoid substantial cuts in farm support and protection. Indeed, it wishes to have its internal support and restrictive import regimes endorsed on food security grounds.

Modalities

As has been described elsewhere (for example, IATRC, 1990), the negotiating framework anticipated commitments being made in three areas: domestic subsidies, border protection and export competition. The EC in early 1991, confirmed its willingness to conduct negotiations to achieve specific binding commitments in each of the three areas. This significantly increased the prospects of an agreement without guaranteeing it. To the extent that the commitments in each area will include a reduction in a base period level of a particular type of support or protection, such reductions are likely to be phased in linearly over a five to ten year transition period beginning the year after an agreement is reached. Let us summarize the essence of the approaches emerging in each area, and the linkages between them.

The aggregate measure of support (AMS) is now being taken by most countries to be a measure of the extent to which internal or domestic support measures are trade distorting. However, countries still use the term differently, and its definition by certain major proponents has evolved over time. Although essentially calculated at the individual commodity level, there is no agreement yet about the level of commodity aggregation at which commitments would be taken. It does seem clear that required reductions will be in the total value of the AMS – ($P \times Q$) rather than the per unit value (P) – to give countries the flexibility of reducing their effective support prices or the quantity of production eligible for support, or a combination. Use of the AMS beyond a limited range of (albeit major) temperate farm products is by no means assured – though there is talk of ‘equivalent commitments’ in other commodity areas – and the AMS does not measure subsidies to farm product processors which are not passed back to farmers. Drawing the line between what is to be reduced (‘amber’) and what is to be exempt (‘green’) is a necessary and important first step which has yet to be completed. Negotiations on domestic support measures are focused on reductions, though Canada for one would also like to get some precise definition of the rules concerning which subsidies are countervailable.

Border protection

Commitments seem likely to differ from those for domestic subsidies in two important ways. Firstly, they will apply at a relatively disaggregated (for example, tariff line) level and could extend across the whole range of raw and processed agricultural products traded. Secondly, they will include a combination of commitments on per unit value (P) and import volume (Q), but not trade values ($P \times Q$). It has yet to be decided whether reductions in agricultural tariffs will be achieved via a request and offer approach, a formula approach, or a combination. Since tariffs are currently a relatively less important form of border protection for agricultural products, the most important instrument under discussion here is 'tariffication' – the conversion of GATT-inconsistent non-tariff barriers to 'equivalent tariffs' and their subsequent reduction. Tariff rate quotas – a limited volume of imports to which a relatively low tariff rate is applied, increasing over time in some cases – are likely to be an important element of access commitments. Similarly, given the perception that tariffication is a means of moving towards a situation of reliance on tariffs as the only legitimate form of border protection for agricultural products, the outcome of the Uruguay Round (UR) with respect to rules (particularly Article XI:2(c)) about when quantitative restrictions may continue to be used is a controversial and important element of the negotiations on market access. The removal of all country-specific exceptions and the binding of all terms of access are also important goals for many countries in the border protection area.

Export subsidy reduction

Commitments may be specified in terms of expenditures ($P \times Q$), volumes (Q) or a combination of these two. The per unit (P) option has much less support. As with the AMS, the level of commodity disaggregation of export subsidy commitments is still unclear. The main target of reductions is likely to be export subsidies applied to major temperate farm products at the first level of significant trade. However, depending upon clarification of the distinction between primary and industrial products, individual commitments on each specific processed product line are conceivable. Before export subsidies are reduced, they have to be defined. 'Producer-financed exports' (levy and two-price pooling schemes), 'concessional' (as opposed to 'grant') and 'tied' food aid, and export credits are all contentious issues still awaiting resolution. Since export subsidies are unlikely to be eliminated in the UR (as Japan and Canada, among others, would have liked) the clarification of rules governing their continuing use – in particular Article XVI:3 and its economically disreputable 'equitable world market share' clause – is part of the outcome being sought under export competition. Negotiations in this area also cover rules about restrictions on exports – something of interest to major importing countries like Japan.

Linkages

There are some theoretical linkages between commitments in these three areas. The EC, in its 1990 ('pre-Brussels') offer to reduce only overall support (AMS) levels, argued that this would automatically force down internal support prices and that reductions in import charges and export subsidy levels would necessarily follow. Simple analytics suggest that, under a predominantly market price support (MPS) or two-price system, reductions in tariff levels must force down domestic price levels (and, in turn, export subsidies), while reductions in export subsidy levels (volumes or expenditures) must force down either domestic support prices or managed domestic supplies or both. In contrast, under an MPS system, increased quantitative access may have relatively little impact on domestic market prices while causing increases in subsidized exports via a displacement effect (as with EC beef, butter and sugar).

Quantitatively, it can be deduced that, under a pure MPS system, the percentage reduction in export subsidy expenditures would always be higher (and sometimes much higher) than the logically corresponding percentage reduction in the tariff or the price support gap. The same is not true for subsidized export volumes, however. When supply and demand are relatively price-inelastic and export volumes relative to production are high, the export volume reduction percentage may well be lower than the logically corresponding percentage reduction of the price support gap.

In the real world such theoretical constraints on the equivalence of relative 'depths of cut' in different areas, which anyway would vary from country to country, tend to disappear or to be too difficult to calculate, for a variety of reasons. One is the existence of 'water in the tariff' – typical of the EC situation – where duty-paid import prices are well in excess of internal market prices, and thus could be reduced without markedly affecting the latter. Another is the widespread existence of support systems for given commodities which include a combination of market price support and direct payments. A third is the frequent occurrence of some form of supply control as part of the support system.

We can, however, conclude that reduction commitments in all three areas are necessary for at least the following reasons. Internal support reductions are required because export subsidy reductions and trade barrier reductions are irrelevant for support systems based on direct payments. Export subsidy reductions are necessary in order to impose effective constraints on domestic price (or production) levels because tariff reductions will not do it while the tariff 'contains water'. And specific commitments on tariff levels themselves are the only way to ensure their reduction.

In the end, it will probably be political considerations which determine the appropriate relationships between rates of reduction in each of the three areas. The importance of each area in overall agricultural support varies greatly between countries. Border protection is by far the most important element of Japanese support. In the EC it is border protection and export subsidies. In North America, with some notable commodity exceptions, it is direct government payments. In order for the overall package to be acceptable (that is for

ministers to be able to sell it to their domestic constituencies) it must be perceived as 'fair' in imposing equivalent commitments and burdens on each country. This implies a bias towards equality in the rates of reduction in each of the three main areas of commitment. The outcomes of other parts of the agricultural negotiations and of other parts of the overall negotiations having a bearing on agriculture are also uncertain at this time.¹

OVERVIEW AND EXPECTATIONS

Through the fog of uncertainty that necessarily attends this stage of the multilateral trade negotiations, it is possible to make a number of observations on where the negotiations stand. First, there is a genuine willingness to bring about substantive and enduring agricultural and trade policy reforms, and to do this by subjecting national agricultural policies and their derivative agricultural trade arrangements and practices to binding international disciplines. The disagreements are over the extent and the speed with which trade distorting domestic and export subsidies and border protection should be reduced, not over the commitment to do it. This is a discontinuity in the history of the treatment of agriculture in the GATT. Second the initial gulf that separated the major protagonists has been narrowed. Now that the United States and the smaller net exporters have lowered their sights and abandoned their demand for a degree of desubsidization and liberalization to which it was politically impossible for their negotiating partners to accede, the task has become that of getting Europe and Japan to take a somewhat longer step down the reform path than they initially offered. Third, whereas in previous GATT rounds agricultural trade reform has been addressed in isolation, and ultimately unsuccessfully, in the Uruguay Round a durable link has been forged between progress in agriculture and the other areas of the multilateral negotiations, including the new areas of services, intellectual property and international investments. The significance of this development may be generally underestimated. The willingness, shown in Montreal and Brussels, of the majority of the Cairns group countries to scuttle the whole negotiation rather than again acquiesce in the GATT's failing to deliver its promised benefits to agricultural exporting countries is an entirely new departure in the four decades-long pursuit of agricultural trade reform. Similarly, it appears that the US Administration is not willing to take to Congress for 'fast-track' ratification a draft agreement which does not include a substantial agricultural component. Fourth, to an important degree the most difficult negotiations are now in national capitals. At various international venues, the political commitment to subject agricultural policies and trade arrangements to new GATT disciplines has been made. At home, national authorities are presiding over an intense struggle for influence between, on the one hand, manufacturing and service industry groups who do not wish the Uruguay Round to collapse for want of an agricultural agreement and some competitive agricultural groups who would rather compete with the farmers of other countries than with those countries' treasuries and, on the other, agricultural groups that prefer regulation, subsidization and protection to competition. Interestingly, the pro-reform group

includes food manufacturers who require access to competitively priced farm products if they are to face freer trade in consumer food products, and the opponents of reform include some agricultural export groups who fear the loss of present support.

In forging an agricultural agreement it is necessary to keep in mind that the Uruguay Round is designed to create a stronger and more effective GATT for the twenty-first century. Accordingly, it is important that the search for an agricultural agreement in the short term should not lead to 'the planting of viruses' that will undermine and weaken the GATT in the longer term. Several examples can be given which illustrate the dangers and which explain much of the reluctance of many countries to accept some features of the agricultural negotiating proposals of the Community and Japan. First, there is a reluctance to accept ill-defined 'non-trade concerns' such as 'food security', 'rural culture', 'regional development', 'structural adjustment', 'environmental protection', 'animal welfare', or 'fourth criteria standards' as justification for continuing subsidization and protection. At a minimum, the exporters are asking that these legitimate objectives be pursued with trade-neutral policy instruments. Second, there is apprehension that the admission of exchange rate changes as a basis for adjusting international obligations (as the Community proposes as part of its 'corrective factor') would redefine the character and value of GATT tariff bindings. A similar concern attends the suggestion that obligations should be adjusted for differential rates of inflation. Third, unless they are very clearly time-limited in applicability and/or permit only a partial and diminishing 'correction' for world market price fluctuations, the admission of arithmetically determined corrective factors to tariff commitments would take us a long step towards the generalization of variable import levies and mark a departure from the restraints of the injury tests embodied in the GATT's present safeguards procedures. Fourth, unless accompanied by an effective cap or reduction commitment on domestic support prices, a decision not to place producer-financed export programmes under export subsidy disciplines would risk these becoming, in effect, consumer-financed export-dumping programmes and distorting trade more than equivalent regular export subsidies. Fifth, a decision to permit reductions in domestic support to count as 'effective supply management' could lead to the proliferation of GATT-legal import quotas under Article XI. Finally, it could be a dangerous precedent to permit the 'rebalancing' concept to lead to increases in protection in a negotiation designed to reduce it, and without formal recourse to the compensation provisions of Article XXVIII.

Our expectation is that an agreement on agricultural policy and trade reform will be reached in the Uruguay Round. It is clear that it will contain commitments that fall well short of those proposed initially by the USA and the Cairns group, but be more ambitious than the 1990 offers of the EC and Japan. The proposals by Hathaway (1990), Miller (1990), Hellstrom (GATT 1990) and IATRC (1991) suggest the elements and orders of magnitude of a feasible agreement. Trade-distorting internal subsidies, border protection and export subsidies might each be reduced by 30–50 per cent over a five-year period from a multi-year base, possibly 1986–90. The probability is that some aggregate measure of support will be used to define and verify subsequent

reductions in the internal subsidies provided by 'amber' programmes at the commodity or commodity group level. Improved market access seems likely to be accomplished through the tariffication process. However, the USA and Cairns group are unlikely to agree to increased import protection for oilseeds and feed grain substitutes or to safeguard measures that do not allow market prices and exchange rate changes to have a substantial and increasing influence on the returns to producers in all countries. Prospects for removing all or most country-specific exceptions, derogations and waivers, and for binding all or most terms of access, still look good. Export subsidies are the most politically offensive of all trade instruments and any agreement must provide for them to be cut by at least as much as domestic supports and access barriers, and probably by agreement to reduce both quantities of exports receiving subsidies and aggregate budgetary outlays. Special treatment for developing countries is likely to be reflected in slower rates of reduction commitments.

Such an agreement, though modest by the standards set by the radical initial proposals and 1990 offers of the United States and the Cairns group, would be a major accomplishment, for three reasons. First, it would mark an end to the situation wherein agricultural trade was in large measure outside the GATT and the start of an era in which the GATT's authority over the sector was acknowledged. Second, placing a ceiling on agricultural support and protection – and, more importantly, locking countries into a programme of reducing both – would reinforce policy changes that are already afoot in some countries and, beyond that, preclude a reversion to the unfettered competitive subsidization that has occurred in the past. This is the moment to ensure that, as national agricultural policies respond to future changes in economic conditions and political circumstances, they will be channelled in internationally constructive directions by legally binding quantitative limits on the levels of support and protection that can be provided and by clear guidelines on the agricultural policy instruments that are internationally acceptable. Finally, as is discussed in the next section, the economic effects of an agreement to reduce support and protection by the above orders of magnitude would be significant.

ECONOMIC IMPLICATIONS OF LIBERALIZING REFORM

The past decade has seen a range of modelling activity seeking to predict the effects of agricultural trade liberalization. In extending the results to conclusions about the potential impacts of a successful UR outcome, very little attention has been paid to the choice of the appropriate reference scenario. Some authors foresee a GATT breakdown generating a 'doomsday' or 'Götterdämmerung' situation characterized by escalation of export subsidy 'wars', heightened protectionism, trade 'bullying' by the big power triad, and increased world market distortion. Clearly, if this is the appropriate reference scenario, the quantitative results from most model analyses need to be somewhat inflated before they can be interpreted as indicative of the difference success in the UR could make! Others assume, often implicitly, that if the UR

negotiations fall apart the status quo will continue. While views about the alternatives vary widely, many people (including ourselves) believe that a continuation of existing agricultural and trade policies is the least likely response to a UR failure. We are more of the persuasion that significant changes in national agricultural policies are already in progress² and will continue even without an agreement on agriculture in the UR, while recognizing that a UR breakdown would inevitably escalate trade tensions at least in the short term. Under this scenario, the potential impact of the UR *per se* may be over-estimated by the various model results. The value of the results then lies in what they tell us about the potential costs and benefits of trade-liberalizing agricultural policy reform in general, rather than the UR in particular.

A full defence of our thesis – that global agricultural policy reform has a momentum of its own largely independent of, albeit reinforced by, the UR – is not possible, given the time and space constraints we face. May it suffice here to say that we would point to significant changes which have already occurred in Australia, Brazil, China, Japan, Mexico, New Zealand, Poland, Sweden and the USA or which are at present under discussion in the EC, Canada, Norway, the USSR and Eastern European countries, as current examples of unilateral agricultural liberalization. We would also point to budgetary restraints, macroeconomic costs, distributional and environmental concerns, pressures from other countries, World Bank/IMF conditionality, overhanging GATT panel decisions, bilateral and regional trade arrangements, and a general shift in focus away from ‘farm policy’ and towards agrifood and rural policy (in which more stakeholders have a voice) as forces underlying these reforms and common to many countries. The new policies being introduced in response to these forces are generally less distortive of global agricultural resource use, production, consumption and trade than the policies of yore. Thus the changes are for the most part consistent with GATT objectives but, rather than being GATT-driven, such unilateral reforms can be seen as the precondition that will make a multilateral agreement on agriculture achievable. For once, domestic desires and international imperatives are working together. In this light, the purposes of the UR negotiations may be those of locking governments into reshaping the objectives and reinstrumenting the programmes of their agrifood and rural policies in a manner in which they have already embarked, and of permitting them to move faster and further along the path of national policy reform because acting in concert will reduce the economic, social and political costs involved.

Model results

Useful reviews of the multicommodity agricultural trade models and what they say about the impacts of trade liberalization have already appeared in various places (for example, Meilke and Larue, 1989, Gardner, 1990, Blandford, 1990, Goldin and Knudsen, 1990). No comprehensive survey will be attempted here. However, we discuss briefly the flavour of the main results which seem to be emerging from this quantitative analysis of the effects of policies on trade, reflect on the interpretation of these results, and finish with

a suggestion about model improvement in the light of the way the technical negotiations are evolving.

A common perception is that, given the differences which exist in the structure of the models, the base period used, the country and commodity scope and how 'liberalization' is defined, there is a perhaps surprising degree of commonality in the results they generate, at least with respect to the world price impacts of a full liberalization on the part of the OECD countries – arguably the most commonly analysed scenario. It would appear that collective OECD support and protection during the 1980s served to depress world dairy product prices the most and grains prices the least, with the price impacts for sugar and meats falling in between. There is a consistently small to negligible price impact on oilseed markets. Perhaps the greatest inconsistency is in the foodgrain area, where varying results reflect differences in the way livestock feed demand is modelled, and where there still appears to be some room for debate about the overall direction of the price impact of programmes: not all policies pull foodgrain prices in the same direction.

Surprisingly little reported or discussed, though obviously much analysed, given the nature of the models, are the effects of OECD liberalization on patterns and volumes of world production and trade, in total and commodity by commodity. As one example, Tyers' and Anderson's results for one scenario include an overall increase in world trade volume of 25 per cent for the products covered by their analysis, with substantial increases in rice, red meats, dairy products and sugar trade volumes and a noteworthy decline in wheat trade. The published evidence seems to point to a considerable reshuffling of trade between OECD countries, with increased exports of grains and beef from Australia and North America and of rice from the USA, decreased exports of dairy products from the USA and Europe and of sugar and wheat from the EC, and increases in Japanese imports of most products. The developing countries' trade will also be affected by OECD liberalization. The evidence seems to favour the LDCs increasing their production of livestock products, sugar, wheat and rice while possibly contracting in the soybeans and coarse grains areas. As a result, their overall cereal imports might change very little, but these countries as a group would be slower to move towards a net import position for rice, beef and sugar.³ Given that the situation varies from one developing country to another, such generalizations are of limited usefulness. A wealth of detail on individual countries and commodities can be found in the studies collected in Goldin and Knudsen (1990).

Several analysts have addressed the question of what difference it could make if the LDCs as well as the OECD countries liberalized. One of the most comprehensive studies is the recent work by Anderson and Tyers (1990). Clearly, their concept of LDC liberalization goes well beyond the obligations to change agricultural support and protection which might derive from the UR, but not, perhaps, beyond what many developing country governments would nevertheless contemplate in a climate of global trade liberalization and economic policy rationalization. The important conclusions seem to be that, when LDCs liberalize too, the economic gains to them as a group are much greater, and individual country exceptions to the general result that LDCs are net beneficiaries are much harder to find. Because of the generally suppressive

effect of the LDCs' food, exchange rate, and non-agricultural protection policies, LDC liberalization can be expected to stimulate Third World agricultural production. Consequently, if coupled with OECD liberalization, it has the potential to dampen the overall stimulus to world dairy and meat prices, to render doubtful the direction of the overall effect on wheat and sugar prices and to reduce coarse grain prices. Agricultural exports (imports) by LDCs would be correspondingly higher (lower), with the reverse applying to industrial countries. The overall volume of world agricultural trade seems likely to be stimulated significantly more under this scenario (Tyers and Anderson, 1991).⁴

Zietz and Valdés (1990) reviewed some studies projecting changes in world prices and production and trade up to the year 2000. It seems clear that, even if only OECD countries liberalize, and given that liberalization will at best be partial, any world price benefits in the grains area will only slow (but not reverse) the long-run downward trend in real world grain prices which can be expected over the next decade and beyond (Anderson, 1990). When it comes to trade volumes, Zietz and Valdés estimate the cereal import needs of the LDCs at around 175 million tonnes by the year 2000. They estimate that this figure – which would represent an increase of 125 million tonnes from the early 1980s – is likely to be only marginally lower in the event of agricultural trade liberalization. Examining a 50 per cent OECD liberalization scenario Anderson and Tyers (1991) found that the disincentive effect of reform on food production in protected countries merely slows the output expansion resulting from normal productivity growth. Even with such liberalization, they predict that Western Europe's food production in 2000 would be 20 per cent higher than in 1990. Even in Japan they foresee no decline in aggregate farm output, with contraction in grains output being offset by expansion in intensive livestock production.

It is generally recognized that even the most sophisticated economic models are, of necessity, great over-simplifications of reality. But do their results provide at least 'broad' accuracy? Despite a few suggestions that they are very inaccurate – for example, Sharples (1987) argued that the modelling exercises tend to greatly under-estimate the benefits to be derived from trade liberalization – most economists seem to have accepted that they do. Perhaps this question needs to be revisited. Many obvious avenues for model 'improvement' have been tried, like making models 'general' rather than 'partial', 'dynamic' rather than 'static', more 'disaggregated' with respect to commodity and country coverage, representing support policies in explicit rather than in proxy (for example, price wedge equivalent) fashion, and employing some 'gross trade flow' rather than a 'net trade' structure. Given the need for models to be manageable and transparent, there tends to be a trade-off involved, with improvement in one dimension often implying a loss of specificity or accuracy in other dimensions. However, the overall impression we have is that these kinds of 'improvements' do not lead to radical changes in the results generated.⁵

One recent development in the technical aspects of the agricultural negotiations seems to be suggestive of a specific improvement which could readily be made to many models in the way major support policies are represented. As a final point we wish to elaborate on this suggestion.

Support and stabilization

In our view, there are two principal types of commodity price support in the OECD countries today. These are illustrated in Figures 1 and 2. We call them 'stabilizing' support and 'constant margin' (or 'world price top-up') support. Our premise is that, while some examples of 'constant margin' support exist (for example, tariffs, Canadian grains transportation subsidies), the vast majority of support in the OECD countries today is of the stabilizing variety, involving some administered or target level of producer prices, with the market price support gap rising or falling inversely with world price levels.⁶

In Geneva there has been a growing recognition that, while less insulation of producers from market realities might be a commendable long-term goal, significant reductions of current levels of support are only achievable if that support is able to retain, at least initially, a large measure of its stabilizing element. In other words, the stabilizing feature may be able to be diluted, too, but only gradually: support can not be abruptly switched from 'stabilizing' to 'constant margin' before being gradually reduced as 'pure' tariffication and earlier versions of proposed AMS reduction commitments would imply. As a result, the 'fixed external reference price' (FERP) principle, as an approach to AMS reduction commitments, has now gained broad acceptance in the negotiations. Proposed first by the EC and more recently embraced by the USA and the Cairns group, it essentially implies a commitment to reduce the level of (effective) producer support prices rather than to reduce the margin by which they exceed world price levels. The counterpart of this principle on the market access (tariffication) side would be something like the EC's 'corrective factor' without the trappings of a separate and direct exchange rate adjustment. Here the concept is more controversial, but will, we predict, in carefully circumscribed and time-limited form, and with some misgivings, be ultimately accepted, too, in return for an appropriately enhanced EC offer. A corresponding adjustment for export subsidy reduction commitments is yet to be proposed but can be anticipated if, and to the extent that, these commitments are expressed in terms of export subsidy expenditures. To be sure, it might be desirable if over the long term national commodity policies were to offer farmers no more than 'stop loss' price guarantees where the 'floor' price was significantly less than long-run market price, and better yet if gross or net farm income were to become the target variable in agricultural 'safety net' programmes (which is the direction in which Canadian stabilization programmes are evolving). However, there is no prospect that universal agreement on such far-reaching changes in agricultural commodity programmes can be reached in the Uruguay Round: farm product prices will continue to be at least partly 'stabilized' at above world transaction prices in developed countries for some time to come.

The basic 'price gap' model, with domestic prices fully linked to world prices, essentially represents all support as being of the 'constant margin' variety. In some models the reality of 'stabilizing' support is incorporated indirectly through the use of price transmission coefficients with a value less than unity. Our concern here is whether these coefficients are generally low enough for the OECD countries, even when estimated rather than judgements-

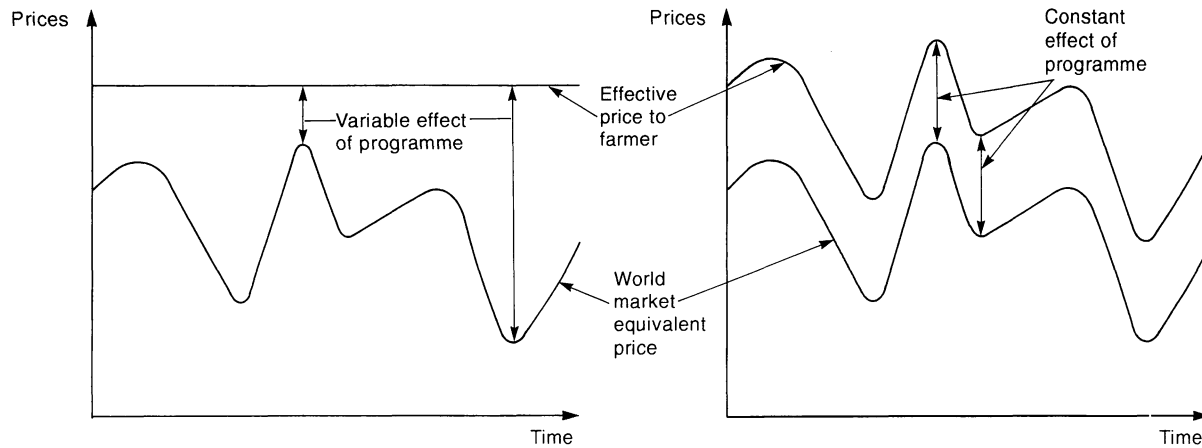


FIGURE 1 *Stabilizing support*

FIGURE 2 *Constant margin support*

tal. Our own preference is for models in which individual support policies are represented more explicitly. The existence of 'stabilizing' support would imply that the price support level should then be the exogenous policy variable and that the price support 'gap' or 'margin' should be endogenous. While recognizing that some progress with specification or respecification of some models along these lines has been made – for example, the OECD's 'MTM' model – some mis-specification still exists. To the extent that it does, the models concerned will be deficient for the purposes of simulating the impacts of a UR agreement involving incomplete reduction of support and protection based on a fixed external reference price principle.

Perhaps one reason for agricultural trade modellers having been reluctant to move far beyond the simple price gap approach is that, for purposes of comparative static analysis of full liberalization scenarios, it does not make any difference: the end-point is the same. Clearly, however, the time-path to this end-point will be different if support reductions are made according to the fixed reference price principle. And if the liberalization is only partial, the end-point reached can also be significantly different. This latter difference becomes more important the more a commodity's world price level is distorted because of existing support. The most striking example of this is probably the case of dairy products. Under a FERP-based support reduction internal support prices would be reduced by an agreed amount, independent of what happened to world prices. In contrast, under a constant margin reduction approach, internal support prices would only fall to the extent that world prices did not rise in response to the support reductions. A corollary of this is that, while under a constant margins reductions approach a 100 per cent reduction is necessary to remove all trade distortions, under a FERP-based commitment distortion-free trade may require a reduction of less or greater than 100 per cent of the support margin measured at base period price levels, depending on whether the base period world price level is distorted downward or upward. It can be shown that, if world prices are distorted downward – as seems to be the case for most products – the percentage 'depth of cut' necessary to reach a situation of distortion-free trade can be derived from the extent to which the support price in the most heavily distorting country exceeds the free trade equilibrium world price. To illustrate this with a simple numerical example: if the 'free trade' world price for product X was \$200/tonne, this being twice its current level of \$100/tonne (that is, a 50 per cent downward distortion), and if the price support level of \$400/tonne in the most heavily supporting country was four times the current world price level (a price support gap of 75 per cent), then a 67 per cent reduction in FERP-based support would be sufficient to reach a point of distortion-free trade since this would reduce the support price in that most heavily supporting country to \$200/tonne (abstracting, for purposes of simple example, from distortions in world prices of X which might derive indirectly from support for other commodities).

Another, and perhaps even more important implication of FERP-based support reductions when world prices are significantly distorted downward is that world price rises resulting from linearly phased support reductions will not occur linearly but are likely to be concentrated in the early years of the reduction period. Perhaps the best intuitive explanation of this phenomenon is

that, in such a case, the 'apparent' or 'gross' level of support (measured at current world prices) is greater than the 'real' or 'net' support (measured at undistorted or free-trade world prices). If gross support in different countries is distributed across a range of values (say price gaps between 0 and 75 per cent in the example above) the linear FERP-based reductions in 'gross' support levels will result in non-linear (more 'up-front') reductions in 'net' support and correspondingly early removal of the majority of the world price distortion. In addition, expectational behaviour may result in the market 'anticipating' the structural price rises which would be implicit in a set of agreed support reduction commitments, in which case the price gains may accrue in full very soon after the ratification of the agreement.

In summary, we conclude that the adoption of the FERP principle will imply that a modest reduction in support margins – say 30–50 per cent – will suffice to remove a large part of existing production and trade distortions in cases like the dairy sector where world market prices appear to be heavily distorted downward by existing support and protection. Furthermore, rather rapid corrections of a large part of those world price distortions appear to be in prospect. In the case of products like feed grains, on the other hand, where existing world prices appear to be little out of line due to offsetting distortions on the supply and demand sides, much production, consumption and trade distortion is likely to remain after such a modest cut.

It is important to keep the magnitude of these trade liberalization results in perspective. It seems clear that huge changes in world agricultural trade patterns are going to occur over coming years as the result of differential rates of population and income growth, great differences in income elasticities of demand between commodities and between rich and poor countries for given commodities, and differential rates of productivity growth. In addition, as we have seen with China and Vietnam, and may well see with Eastern Europe and the USSR, fundamental policy changes in major producing (and consuming) regions can have important implications for world trade. When superimposed on these potential changes, the possible impacts of any conceivable trade liberalization scenario look rather modest, at best.

Finally, it is important to recall that the UR negotiations are set against a backdrop of a long-term downward trend in real world market food prices, driven largely by technological advances and productivity gains. A relatively small one-time price boost due to policy reform cannot be expected to reverse this trend for long, and may only slow it. The widely held notion that global interventions by governments in agriculture serve to reduce world prices – a notion that we agricultural economists have fostered to no small degree – is becoming debatable, at least in several important commodity areas. No doubt UR-led liberalization on the part of OECD countries over the next decade will provide a boost to world prices in many commodity areas, *ceteris paribus*. However, it may well be that it is the reforms that the Eastern European countries and the majority of the LDCs introduce in the same time period (and independent of the UR outcome) which will tip the balance as to whether the world price effect of overall policy reform in coming years is positive or negative in many product sectors.

CONCLUDING OBSERVATIONS

While we have suggested that a feasible agricultural accord may contain modest numbers for agreed support and protection reductions, particularly when compared with the endogenous reforms that are already in train, we do not wish to detract from the importance of a UR agreement on agriculture. Rather we would want to emphasize five matters that lend importance to the agricultural component of the Uruguay Round. First, in narrowly agricultural terms, commitments made now will hinder a future resurgence of agricultural subsidization and market insulation in the developed countries and discourage the emergence of a second generation of agricultural protectionism in what are now developing countries as they experience economic growth. Second, even a modest accord would provide important benefits in the efficiency of world agricultural resource use, more defensible income distributions and a reduction in international political disharmony. Third, this is the first time that an attempt has been made within the GATT to place comprehensive international disciplines on the conduct and content of national economic sectoral policies. In this sense, what is being attempted in agriculture may be pioneering a course which may have to be emulated in other basic and high technology sectors in which there is a high degree of government intervention. Fourth, whereas agriculture has been peripheral in previous GATT rounds and after preliminary skirmishes among the 'Big 3' has been left aside, in the Uruguay Round an agricultural accord is a *conditio sine qua non* to the completion of the round and hence to the future of the international economic order. Fifth, if it seems that the political and programme concessions demanded of Europe and Japan seem onerous it is not just because the external effects of their domestic farm programmes are particularly distortive of resource use and markets: it is also because they are being challenged to acknowledge their responsibilities as guardians of an open and rules-based multilateral trading system and asked to make an investment in the international stability, prosperity and harmony that only such a system can provide.

The position of the developing countries in the Uruguay Round is also a departure from the past. In so far as previous rounds dealt primarily with market access issues it was easy for the rich countries to put the developing countries' interests in this area aside. In the Uruguay Round the developing countries' insistence on satisfaction on 'backlog' access issues (agriculture, textiles, tropical products, safeguards and 'voluntary' export restraints) as a precondition for their agreement to extending the GATT into new areas and to strengthening its institutional features has put the developing countries in the position of *demandeurs*. The blocking power of the developing countries, when joined with an indigenous policy ambience in the developed countries that favours unilateral agricultural policy reform, may just prove to be the combination that succeeds in 'bringing agriculture into the GATT'.

However, the agenda for international agricultural and trade policy in the Uruguay Round is overwhelmingly concerned with placing international disciplines on the familiar instruments of agricultural support and protection – domestic subsidies, import barriers and export aids. We suspect that by the time that this Conference reconvenes our attention will be focused on the next

wave of impediments to international commerce in food and agriculture. These will be the incidental international effects, or the protectionist use, of national and sub-national interventions and regulations directed at food safety, animal welfare, environmental protection, resource stewardship and labour standards (Hillman, 1991), and measures aimed at creating competitiveness. At present, the international community of nations is ill-equipped to handle these issues through the GATT or other international institutions (Runge, 1990). Accordingly, these are the matters which require the urgent attention of the international community of agricultural economists.

NOTES

¹In agriculture, the major other elements to be settled are the articulation of a code that will prevent divergent national sanitary and phytosanitary standards being unnecessary barriers to trade and the extent of the special and differential treatment to be accorded to developing country food exporters and importers with respect to their support and protection reduction commitments. On the first, there seems to be an excellent prospect of a code being agreed that will entail harmonization of international standards, equivalence of results, and appeal to scientific knowledge in the resolution of disputes. On special and differential treatment, there seems to be an inclination to be more accommodating to the wishes of developing country importers than to exporters, but to insist that the importers' obligations be commensurate with their level of development. The perception is that the LDCs have enjoyed the benefits of the GATT system while assuming few of its obligations. For instance, the tariffs levied by many LDCs are high and unbound, and many have sought exemptions for their import controls on balance of payments grounds under Article XVIII:B. There is no disposition to allow the LDCs a free ride in reforming the agricultural trading system. To do so would be bad for the cause of agricultural reform, for the GATT system, and for the LDCs themselves. The groups negotiating on subsidy-countervail issues, market access, safeguards, tropical products, natural resource-based products and dispute settlement mechanisms are also likely to produce agreements with a bearing on the conduct of agricultural trade.

²The agricultural policy developments we observe include the following. The old arguments for food self-sufficiency have lost much of their force in a world where affordable abundance at falling real prices is assured to all but the penurious. The historical preoccupation of policy with farm-level prices and incomes is being diluted as governments accept a wider responsibility for encouraging agrifood sector development through: (a) the delivery of good macroeconomic policies; (b) the provision of collective services; (c) the promotion of competitiveness, and (d) the correction of such market failures as dysfunctional instability, non-competitive market behaviour and the underpricing of resource and environmental externalities. Ministers of agriculture are assuming responsibility for rural development and for enhancing the social and amenity value of the countryside. To be sure, commodity-centred farm price and income support and stabilization still account for the bulk of sectoral expenditures, but commodity policies are being transformed from an undifferential mechanism for making income transfers to farmers into a more restrained societal commitment to underwrite the adequacy and stability of factor returns in agriculture. Payment limits are replacing open-ended price guarantees. Producers are being exposed to the market value of incremental output through coresponsibility levies and 'stabilizers'. Within the limits of budgetary exigencies, decoupled income payments have increasing appeal in delivering measured benefits to selected groups. Payments are justified less for producing farm products and more for the supply of environmental goods. And commodity programmes focus less on the augmentation of farmers' incomes through price 'supports' and more on their stabilization through economic 'safety nets' that come into force only in periods of exceptional market or production stress. These movements towards more trade-friendly policy objectives (competitive development rather than insulating subsidization) and instruments (direct payments and adjustment assistance rather than commodity price supports) are at once both the goals of the UR agricultural negotiations and the means that will permit their attainment.

³These big models tend to exclude, at least in disaggregated form, products such as fruits and vegetables and tropical products which are of major export importance to LDCs. Moreddu *et al.* (1990) suggested that, given generally low OECD import duties, this trade would not be much affected by OECD liberalization – a result which seems to be borne out by Mabbs-Zeno and Krissoff's analysis (1990) of cocoa, tea and coffee and by a recent UNCTAD (1990) study which covered cotton, groundnuts, copra, palm oil and tobacco as well as the tropical beverages. However, the research of Islam (1990) suggests that the LDCs have much to gain from an easing of OECD tariffs and, more importantly, non-tariff barriers (largely sanitary and phytosanitary regulations) in the fruits and vegetables area.

⁴We have chosen not to say anything in this paper about the stabilizing impact of liberalization on world market prices, something of particular importance for LDCs, and which has been emphasized repeatedly by, among others, Anderson and Tyers in a number of papers (for example, Anderson and Tyers, 1990). This observation, of course, does not preclude other major causes of instability still remaining after such liberalization.

⁵It might be worth noting that, even if a 'super-model' could be constructed containing all the above-noted attributes, it would still have a very simple neo-classical economic structure. Does this result in misleading information about the way actual policies can affect the market? Take the case of directed export subsidies as an example. Is it possible that, because of the way it is legislated, regulated and administered, and perhaps because of concentration among international grains traders and the psychology of the market, the US Export Enhancement Program is able to apply sustained downward pressure on international grains prices to an extent which would not be possible with a 'regular' export subsidy as represented in models where such prices are determined solely by supply and demand fundamentals? Such issues deserve further attention. In the meantime, however, the existing models provide our only guide to the quantitative impacts of policy reform.

⁶Whether this type of stabilizing support, provided more or less uniquely to the farm sector, is economically sensible or justified has been (and no doubt will continue to be) debated at length. The reality is that it exists, and continues to attract a great deal of political support. While a few farm commodity groups in a few countries prefer to manage their own market risk insurance, the majority of farm groups in the industrialized countries want the security of a floor price. The socialization of farm-level risk is a near-universal feature of the commodity policies of developed countries. Moreover, because instability will continue to be a feature of agriculture's product and factor markets even if agricultural support and protection are reduced, the provision of farm income 'safety nets' will probably emerge from the UR as an internationally acceptable form of government intervention in agriculture.

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DISCUSSION OPENING – DAVID BLANDFORD*

McClatchy and Warley do an excellent job of reviewing the progress made on agriculture in the Uruguay Round negotiations, identifying what type of agreement might emerge, and assessing its implications. I share their view of the importance and technical feasibility of obtaining a meaningful agreement on agriculture, and the broad outline of its likely content. Only time will tell if our collective optimism is justified by the signing of such an agreement.

The authors rightly stress the importance of bringing agricultural policy under greater international discipline. As is widely known, the OECD has been in the vanguard of establishing the case for reforming agricultural policies, not only because of the improvements in international markets that would result from such reform, but also because of its potential domestic benefits (OECD, 1982, 1987). Despite the complexity and political sensitivity of agricultural policy in many countries, there is now far greater awareness of the implications of existing policies and their costs, partly as a result of the analysis conducted by international and national organizations and private individuals, particularly in the academic community. Greater transparency concerning the nature and implications of policies is essential for stimulating discussion of reform options, and consequently the monitoring of policies is an important part of the OECD's continuing work (for example, OECD, 1991a).

McClatchy and Warley point out that the trade problems which are the focus of the current negotiations in Geneva are created by domestic agricultural programmes. There is a broad consensus on the direction, if not the magnitude, of the effects of these programmes on international trade. There is also a broad consensus on the desirability of reforms to minimize the trade distorting effects of the programmes. There is somewhat less consensus on whether this implies eliminating existing programmes altogether, modifying them, or replacing them with alternatives. Since a major objective of the OECD is the promotion of economic growth and social welfare in member-countries, the secretariat spends a great deal of time thinking about the role of government in agriculture. Consequently, in discussing the paper, I should like to focus on some of the policy issues which may not be resolved as a result of the current negotiations, but which are likely to prove important in the future.

As correctly emphasized in the paper, a major driving force behind the GATT negotiations is recognition of the growing costs of agricultural support. The latest estimates place the level of agricultural assistance in the OECD countries as a whole at 44 per cent of the total value of output.² This translates into almost 300 billion US dollars of transfers from consumers and taxpayers in 1990. Although the primary focus in the media tends to be on the costs of support for government budgets, over 60 per cent of the total is actually due to the implicit tax levied on consumers through higher food prices.

The high costs of agricultural support, particularly the taxpayer costs, have been an important factor in stimulating policy reform. In so far as the reduc-

*Organization for Economic Co-operation and Development, Paris.¹

tion of government costs leads to less trade distortions, budgetary and trade reform objectives will coincide. However, such a correspondence may not always exist. For example, the taxpayer costs of agricultural support can be reduced by shifting the burden to consumers. This may intensify trade distortions.

For this reason, the possible focus in the trade negotiations on a reduction in aggregate support ($P \times Q$), suggested by McClatchy and Warley, leaves open the possibility that international obligations can be met by countries, but at the risk of perpetuating domestic distortions. Countries may choose to operate on quantity rather than price and use production quotas to reduce total support. Recent quantitative analysis by the OECD (1991b) suggests that reduction of quotas could be an effective way to reduce both budgetary costs and trade distortions. Unfortunately, domestic consumers would then lose the potential benefits of reducing support. The negative distributional and efficiency aspects of quotas, and their limitations in achieving long-term adjustment, have been well established (OECD, 1990). The use of quantitative controls to meet international obligations on reducing support is unlikely to result in domestic markets which are more integrated into international markets.³

An undue focus on budgetary aspects poses an additional problem in that it has been argued that, if governments wish to provide income support to agriculture, this should be done through direct payments (OECD, 1990). The use of such payments offers the possibility of greater transparency and the reduction of demand-side distortions in the trade equation. If direct payments are de-coupled from production, supply-side distortions can also be reduced. There should be some recognition of the desirability of directing the reduction of support to those measures which distort both production and consumption, and of replacing non-transparent indirect subsidies with transparent direct subsidies, substantially delinked from production. A move to direct payments, providing that these are implemented in an appropriate manner, would seem to be a desirable way of achieving simultaneously domestic and international benefits from the reform of agricultural policies.

In addition to the budgetary question, there are a number of other issues which, if not exactly neglected in the negotiations, have not been centre stage. These are likely to be increasingly important in the future, and have the potential to create contradictions between domestic and international objectives. Probably the two most important areas are those of environment/public goods issues and stability.

The issues surrounding agriculture and the environment are complex. Agricultural externalities in the form of contamination of groundwater by chemicals, soil erosion, loss of wetlands and other wildlife habitats are increasingly recognized. Similarly, there is growing perception of the role of agriculture as a supplier of public goods, such as landscape and public amenity, as well as a sink for carbon dioxide in a world subject to possible changes in climate. The determination of appropriate policy responses to these issues is difficult. If there is widespread market failure in agriculture, should this be rectified primarily by regulation, through taxes, or through subsidies? These alternatives are unlikely to have equivalent domestic and international implications.

One particularly troubling issue is seen when the optimal policy choice implies a level of production greater than that which would be forthcoming under free trade. The achievement of an appropriate supply of public goods by agriculture may, in some cases, require a production-related subsidy. Furthermore, there is the possibility that, in the absence of coordinated international approaches to the problem of externalities, border measures may be necessary to prevent domestic measures, which seek to correct market failure, from being undermined. The problem of the environment is likely to be of increasing importance not only domestically, but also internationally. There is substantial potential for conflict between domestic and international objectives in this area.

The issue of stability is also one which has the potential to create contradictions between domestic and international policies. McClatchy and Warley indicate that many domestic policies have a stabilization component. There is room for debate on the degree to which current policy measures actually stabilize domestic markets, but nevertheless the stability issue is likely to become increasingly important if there is a general movement towards more open markets. Up to now, much of the focus in OECD countries has been on measures which might be used to guarantee a degree of producer income stability. In the future, the question of whether there is a role for governments in stabilizing consumer prices, for example, through public stockholding is likely to gain prominence.

The concluding comments to their paper made clear that McClatchy and Warley are well aware of the likely future importance of these issues. Like them, I believe that, although it may not be possible to address all agricultural issues fully in the current GATT round, the achievement of an agreement which would bring agriculture under greater international discipline is of major importance. It is to be hoped that an agreement can be reached that will lead both to a reduction in trade distortions and to the full realization of the domestic gains from a more efficient allocation of resources.

NOTES

¹The views expressed are the responsibility of the author and do not necessarily reflect those of the OECD or its Member countries.

²These figures do not include estimates for Iceland and Turkey, which are full members of the OECD, nor for Yugoslavia, which takes part in some of the work of the Organization.

³The logical implication of the use of quotas to achieve reductions in support and export subsidies by net exporters is to move towards self-sufficiency, even if there would otherwise be net imports at free trade prices.

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