Perspectives on Agricultural Export State Trading Enterprises in the WTO Trade Negotiations

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I. INTRODUCTION

Governments often use state trading enterprises (STE) to implement government policies aimed at stabilizing and/or increasing income of farmers and/or securing low food prices for consumers. By granting the STEs (many times exclusive) privileges to import/export and/or purchase from domestic suppliers, the government may be creating entities that can generate efficiency and trade distortionary effects. STEs have been brought to the center of attention because of their potential for anti-competitive activities in the world and domestic agricultural markets and their potential to circumvent the disciplines achieved in the Uruguay Round of GATT (General Agreement on Tariffs and Trade). Prevalence of STEs in the countries that recently have been or are likely soon to become members of WTO (China, Russia, and other transition economies) has increased the intensity of the discussion.

GATT recognizes state trading enterprises as legitimate participants in agricultural trade, while identifying guidelines for their behavior. Rules on state trading are contained in Article XVII of the GATT 1994 plus in other Articles with provisions directly or indirectly applicable to STEs. The state trading enterprises are defined as “governmental and non-governmental enterprises, including marketing boards, which have been granted exclusive or special rights or privileges, including statutory or constitutional powers, in the exercise of which they influence through their purchases or sales the level or direction of imports of exports” (WTO 1994). The definition is broad enough to include also non-governmental firms that are granted special privileges that may provide an advantage over other firms. Thus, it is not the ownership but the special privileges that matter for a trading firm to be identified as an STE. WTO members are required to self-report on the existence of STEs in their countries.

Obligations under the WTO for state trading exporters include (IATRAC, 2001):

- Nondiscrimination (STE should not discriminate among targets of exports)
- No quantitative trade restrictions
- Observing export subsidy commitments (cannot exceed levels of export subsidies allowed under WTO commitments)
- Transparency (so that the actions of STE can be evaluated)
- Sales must be made in accordance with commercial practices

Most of these requirements can be subject to criticisms. What constitutes “commercial practices”? What information has to be reported so that an STE is not placed at a competitive disadvantage? Is there a time limit on how long any information can be held proprietary? These points will need to be made clearer in the WTO rules.

The chief rationale for establishing and maintaining agricultural export STEs is their role to countervail the market power of processors, wholesalers and traders in the domestic and foreign markets that may be represented by a few dominant firms. For this purpose, STEs are granted exclusive rights to exports and often an exclusive right to purchase and/or sell in the domestic market. Competitive domestic production is pooled and marketed through one channel, enabling the farmers to benefit from economies of scale in marketing and quality control and improved terms of trade in the domestic and potentially in world markets. In addition to increasing farmers’ income, STEs can stabilize producer income through price pooling and management and disposal of stocks. Thus, the major policy objectives STEs are mandated to pursue are exercise of market power and price stabilization. Their implied goals may also be to
redistribute income, support producers or consumers (or both). Thus, any attempt to reform STEs is likely to be faced with political resistance from the affected countries.

The purpose of this paper is to summarize issues relevant for export state trading enterprises and identify an analytical framework to analyze their effects on welfare and trade. We analyze the effects of a hidden export subsidy through price pooling and compare the trade and welfare effects to the ideal of competitive markets. We highlight the differences in the comparative results if the benchmark is instead a private imperfect competitor(s). Similarly, we analyze the effects of the STE exercising market power through price discrimination only (with no price pooling). Then, STE issues relevant to competition policy in agricultural markets are discussed. Next, we summarize the factors necessary to be considered in constructing an analytical framework for an STE. Finally, we offer suggestions for policy improvements as well as amendments to WTO rules on STEs that may limit their potential detrimental effects on competition and trade distortions and help monitor them.

II. TRADE DISTORTIONS

Hidden export subsidy: Price discrimination with price pooling

Extensive literature exists that analyzes the effects of an export STE with monopoly or oligopoly power in the domestic and/or export markets (Schmitz et al. 1981, Sumner, Krishna and Thursby, 1990). However, the literature ignores the widely used practice of export STEs of price pooling. Here the state trader collects supplies from producers but delays payments until after all the sales are complete. The price paid to the farmers is a blended price (minus marketing costs) from the entire domestic and export sales. By being able to sell at different prices in markets with different elasticities and redistribute the revenues to producers through a higher pooled price, the STE can provide an implicit export subsidy. Alston and Grey (1997) and then Fulton et al. (1999) and Schluep and de Gorter (2000) supply the analysis of a price pooling scheme by considering its welfare and trade distortionary effects in a small country. Understanding of these effects and their measurement is important in order to monitor country’s compliance with the bound levels of subsidies set by WTO.

The literature shows that price pooling leads to over-exports relative to the competitive outcome. The exports are higher than under price discrimination only and also higher than under an equivalent explicit taxpayer financed subsidy (Schluep and de Gorter). Farmers are better off than under competition but at a net loss to society. Price pooling scheme is also more costly to the society than the taxpayer financed subsidy. Social welfare can be higher under STE if imperfectly competitive private traders are considered as an alternative to the STE (Fulton et. al.). These results also hold for a large country.

Figure 1 depicts price discrimination with pooling for a small country, where the state trading exporter has a single desk status (exclusive right to purchase and sell in the domestic market as well as in the world market). The state trader pools the production from farmers and pays them a blended price, which is determined as the average price for all sales (domestic and exports). As a monopoly in the domestic market, STE can price discriminate between sales in the domestic and export markets. The optimal quantity sold domestically (Q_d) is determined by equating the domestic marginal revenue (mr) with its marginal revenue in the world market (P_w). The resulting domestic price is P_d. The domestic price and the world price are weighted by the respective domestic and export sales and are averaged. This average price must equal the producer price (P_b) that results in the total production (Q_s) that equals the total amount sold to the two markets. With domestic sales and price set, Q_d and hence exports (X_1), are determined as an intersection of the average revenue curve (AR) with the domestic supply curve s. By pooling the revenues from the domestic sales (P_dQ_d) and from exports (P_wX_1), STE is able to pay a blend price calculated as the average price from all sales P_n=(P_dQ_d + P_wX_1)/Q_s.
Figure 1: Price discrimination with pooling (small country export STE)
Exports are now higher than under competition because the domestic sales contracted, while more is produced at a higher blend price. In addition, the export subsidy causes a dead-weight cost equal to the triangle $SP_BP_w$.

Schluep and de Gorter make an important point that the export subsidy through pooling is a consumer financed subsidy and compared to a taxpayer financed subsidy (an explicit subsidy of $P_B - P_w$), pooling is more trade distortionary. Exports are $X_2$ under the former and $X_1$ under the latter. Taxpayer financed export subsidy causes total production to increase by the same amount as under pooling (because the price to farmers is the same under both scenarios) but curtailing domestic sales under pooling leaves a larger proportion of the production to be exported.

Thus, in a small country, price discrimination with pooling always causes over-exports relative to the competitive outcome. Price discrimination itself using the market power in the domestic market results in over-exports when STE is facing a flat world supply curve. However, the consumer financed export subsidy through pooling causes even larger expansion due to the higher blend price producers receive.

Farmers are better off with an STE relative to a competitive outcome but the society is worse off. The loss to consumers plus the deadweight cost is larger than the gain to farmers. Since the world welfare is not affected by the additional exports from the small country, the lower domestic welfare causes the welfare of the world to decrease too.

Next, trade distortions caused by the actions of an STE have to be compared to an appropriate alternative. What market structure would replace the STE if it were eliminated? Veeman et al. argue that agricultural trade is conditioned for an oligopoly market structure. Fulton et al. (1999) show that social welfare with a producer welfare maximizing export STE can be higher if imperfectly competitive private traders were to replace the STE. McCorriston and MacLaren (2000) and in OECD (2001) show that such an STE will tend to export more than a private profit maximizing enterprise. Figure 2 illustrates these points. For simplicity, the figure is drawn under the assumption that the private trader has the same degree of domestic market power as the STE. Thus, the domestic price and quantity sold and processors surplus are the same. However, as the private firm maximizes its profits as an intermediary and cannot price pool, the price farmers receive is now lower at $w$ and the total quantity produced is $Q_d$. STE was able to raise the price to farmers to $P_B$ and enable a larger quantity to be exported. The welfare loss to farmers $P_Bbfw$ is larger than the gain to the private firm $P_daedfw$. The triangle cdf is a dead-weight cost to the society.

A large country STE practicing price pooling will have similar results on welfare and trade as an STE in a small country. STE can increase or decrease both domestic and global welfare, depending on the underlying structure of the model. To the extent that price pooling leads to over-exports relative to competitive outcome, the export price is lower, benefiting consumers/processors in importing countries. Domestic processors suffer from higher domestic prices. If the STE’s ability to raise domestic prices is high and the domestic sales are a large proportion of total production, STE can result in lower welfare.

Figure 3 depicts price discrimination with price pooling in a large country. $D$ and $d$ represent excess demand of the world market and the domestic demand, respectively. The large country STE first sets the domestic quantity and price, $Q_d$ and $P_d$, respectively. The effective excess demand curve is now $D'$, which is $D$ shifted by the amount $Q_d$. Total production is determined by the intersection of the average revenue curve $AR$ with the supply curve $s$. Note that with each additional unit of exports, the country’s terms of trade deteriorate. Thus, STE has to find the optimal amount of exports that will maximize producers’ surplus from exporting. $P_w$ is the resulting world price on the shifted excess demand curve $D'$.

**Price discrimination only**

Price discrimination without pooling also provides incentives for domestic producers in a small country to over-export, however by less than if pooling is present (see Figure 1). The same result may not hold
for a large country. If the country where the STE operates is a significant player in the export market, it
may be able to influence the terms of trade by contracting exports relative to competitive levels. The
exercise of market power is likely to be inconsistent with over-exporting. The lower level of exports can
raise the world price if the country with the STE is a major player in the export market. Competing
exporters as well as farmers in the importing countries thus may be better off. If the STE can price
discriminate among different export markets, it may raise the price in some markets and lower it in
others. Thus, in some markets farmers may be better off than under competition and in others,
consumers would benefit. If markets are contestable (other exporters behave competitively and/or their
entry and exit is easy), STE’s ability to price discriminate is limited. Also, price discrimination increases
the world welfare relative to the imperfectly competitive outcome without price discrimination. A
private trader might also price discriminate if markets are separable and products non-substitutable. The
degree must be determined, to which the government sanction for the STE to control the domestic and
export markets gives extra market power.

A producer welfare maximizing STE that can price discriminate between the domestic and the world
markets will maximize the following objective function¹:

\[ \pi = P_d(Q_d) \cdot Q_d + P_w(X) \cdot X - C(Q_s) \quad \text{subject to} \quad Q_s = Q_d + X. \]

The first order conditions dictate that

\[ \frac{P_d}{1 - \eta_d} = C'(Q_s) \quad \text{and} \]
\[ \frac{P_w}{1 - \eta_w} = C'(Q_s) \]

and the market with higher elasticity (usually the world market) is charged a lower price than the inelastic
market.

Figure 4 illustrates the case when exercising market power in the export market causes a contraction of
exports relative to competitive free trade levels. The STE maximizes producer welfare by increasing
price through reducing the exported quantity. A large country state trading exporter with a single desk
status will use his market power in both the domestic and import markets by contracting the domestic
sales to \( Q_d \) and the exports to \( X \) from the free trade levels of \( Q_{df} \) and \( X_f \). \( X \) is determined by the
intersection of the marginal revenue curve (MR) corresponding to the excess demand curve of the
importing country (ED) and the excess monopoly supply curve of the exporting country (Ems)². The
latter is determined as the difference between the supply and marginal revenue curves in the exporting
country. Sales prices in both the domestic and foreign markets are higher than under free trade, \( P_d \) for
domestic sales and \( P_X \) for exports. The free trade price is \( P_f \). Thus, STE improves producer welfare in the
domestic market and farmers in the importing country also benefit from the higher price. Exercise of
market power is inconsistent with expanding exports.

When a large country STE has to compete with domestic local traders and processors, but still has an
exclusive right to export, the STE maximizes profits with the domestic price as given:

\[ \pi = P_d \cdot Q_d + P_w(X) \cdot X - C(Q_s) \quad \text{subject to} \quad Q_s = Q_d + X. \]

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¹ For simplicity, we assume that STE has monopoly power in the domestic as well as world markets.

² If STE was a part of oligopoly in the domestic and/or world markets, ‘perceived marginal revenue’ would be relevant for
determining the equilibrium rather than the actual marginal revenue. ‘Perceived marginal revenue’ lies between the actual
marginal revenue and the demand curve and its slope depends on the degree of STE’s market power.
The first order condition 2) changes to $P_d = C'(Q_d)$ and 3) remains the same. The first order conditions implicitly determine the domestic and the world price. In Figure 4, the domestic price is now lower than the free trade price. The producer welfare from domestic sales and exports are maximized at the level of exports $X'$, determined by the intersection of the excess supply curve from the domestic country $E_s$ and the marginal revenue in the importing country $MR$, corresponding to its excess demand. The price charged for exports is $P'_X$ and the domestic price is now a single price for suppliers and buyers at $P'_d < P_d$. Domestic sales are larger by $Q'_d Q'_d$. Thus, having to compete with domestic local traders reduces domestic producer welfare relative to both the competitive outcome and a single desk STE equilibrium. Thus, allowing private local traders to compete with the STE may be inconsistent with a political objective of producer welfare maximization that an STE may be mandated to pursue.

When a single desk STE is able to price discriminate in multiple export markets, it may charge higher or lower prices in different markets, than the competitive free trade price. Thus, under-exports (relative to competitive levels) would occur in the markets with low excess demand elasticities and over-exports in the ones with highly elastic demand.

The objective function 1) can be generalized to $n$ markets with different elasticities:

$$\pi = P_d (Q_d) \cdot Q_d + \sum_{j=1}^{n} P_{X_j}(X_j) \cdot X_j - C(Q_s) \quad \text{subject to } Q_s = Q_d + \sum_{j=1}^{n} X_j.$$  

The first order conditions for the domestic market 2) remains the same, while there are $n$ additional conditions (one for each export market):

$$j) \quad P_{X_j}(1 + \frac{1}{\eta_{X_j}}) = C'(Q_s) \quad \text{for } j = 1,\ldots,n$$

Figure 5 depicts the case for $n=2$, when exports to the importing country 1 sell at a lower than competitive free trade price. The price discriminating exports are determined by the intersection of the sum of the marginal curves in the two importing countries ($MR_{1+2}$) with the excess monopoly supply ($E_{ms}$). Quantity $X_1$ will be sold at $P_{X_1}$ in the importing country 1 and quantity $X_2$ will be sold at $P_{X_2}$ in the importing country 2. Note that $P_{X_1}$ is lower than the competitive free trade price $P'_d$.

In order for the STE to be able to exert market power, certain conditions have to be satisfied. Barriers to entry and exit must exist, close substitutes must not exist or are controlled by the state trader, and resale between markets can to be prevented. If entry and exit of potential competitive firms is easy, markets are said to be contestable. Under the threat of potential entry of new competitors, the incumbent firm behaves competitively in a contestable market. If the exercise of market power is difficult to assess, contestability can be used as a criterion for judging whether the market power is really a relevant concern.

*Other special privileges*

STEs may receive other privileges not available to private sector, thus placing private traders at a competitive disadvantage. These may include discounts on transportation and storage rates not available to private traders, preferential interest rates from the government, tax benefits, preferential foreign exchange, etc. To the extent that these privileges decrease the marketing and operational costs of the STE they indirectly increase exports.

Another privilege an STE may be granted that is not available to private traders is the underwriting of STE’s losses by the government. Perception of risk for an STE is distorted if the government guarantees the state trader against bankruptcy. STE may take on higher risk pricing strategies, like more aggressive
export strategies leading to higher exports. One unwanted result may be a higher probability of the use of predatory pricing.

**Marketing costs and efficiency of STE**

As any public institution, STEs may be plagued with inefficiencies and high costs. Examining efficiency of STE is mostly a domestic issue, however to the extent that high costs may decrease exports, it might be of interest to WTO.

Marketing costs and efficiency of the Canadian Wheat Board (CWB) were examined in multiple studies. Kraft, Furtan, and Tychmiewicz (1996) and Schmitz et al. (1997) show that CWB earned significant rents from exercising market power due to its single-desk status in wheat and barley. Carter and Loyns (1996) and Carter et al. (1998) argue that producers' interests were harmed due to large marketing costs and inefficiencies of CWB.

**Lack of transparency**

Lack of transparency makes it difficult to investigate the trade distortionary effects of STEs. STE as a public agency that handles exports can provide protectionist and trade distortionary measures in ways that are not easily recognizable. However, private traders by virtue of not being publicly traded do not necessarily provide more information on their activities. Thus, more information should be required from STEs but only to the extent that their competitive position is not compromised in any market. Reporting requirements on a STE should be comparable to those applied to its competitors in any market (Veeman et al. 1999).

**III. INFLUENCE OF STEs ON MARKET COMPETITION**

STE issues are also often linked to competition policy. To the extent that competition policy affects the potential for market power in each country, it is also relevant for STEs. Imperfect competition may arise in countries with lax competition policy. Export state trading enterprises, by virtue of their exclusive rights to export and maybe also to buy and sell in the domestic market, may behave as imperfect competitors.

A number of analysts (Robertson et al., 1997; MacLaren and Josling, 1999) have argued that STEs should be brought under the discipline of competition policy. Most national competition policies are inadequate because they exclude STEs from their provisions. And by granting exclusive rights to purchases and sales, the government raises entry and exit barriers and thus compromises contestability of the market. Low market contestability makes it possible for the state trader to exercise market power. WTO code is currently not explicitly dealing with imperfect competition and market power issues.

Various policy objectives of an export STE may limit the extent to which the STE will exercise its market power in the domestic and the world markets. If producer support is the main policy objective, STE will not want to implement an export tax. Optimal export tax raises domestic social welfare but income is redistributed from producers to consumers. Export subsidy achieves the proper income redistribution (from consumers/processors to producers), it is, however, inconsistent with the exercise of market power in the world market (if a large country). Exports need to be reduced for the price to be raised in the world market, while the export subsidy expands the exported quantity. Export subsidy through price discrimination resolves the conflict but is costly to consumers and the society (Schluep and de Gorter, 2000).

Price discrimination is often automatically associated with monopoly/monopsony power and is deemed anti-competitive. However, price discrimination does not necessarily decrease welfare. In industries where monopolies are unavoidable, price discrimination reduces inefficiencies that are a result of output restrictions. In addition, price discrimination does not always make competing exporters worse off.
(Paddock, 1998). For close substitutes, the seller practicing price discrimination loses market share in the inelastic market where he/she raises the price. The increased returns may benefit both exporters.

Price discrimination is anti-competitive if the state trader uses it to predatory price and thus prevents a potential competitor from entering the market. STE can do so because the government often underwrites the losses of the state trader.

To the extent that the price pooling option is not available to private traders, it may give the STE a competitive advantage. By being able to delay payments to farmers, price pooling gives producers greater discretionary power in international markets. Resulting smoothing of price over the course of the year, regardless of the time of delivery, may be an attractive feature for producers. However, if other risk management alternatives exist (e.g. futures markets, or domestic support policies), the price stabilizing function of price pooling may not offer a competitive advantage.

In determining the degree to which STE should be required to curb their price discriminating practices, the likely course that private traders would take must be considered. Private traders may also possess market power and may be able to price discriminate. The question is, what market structure would replace the STE? Veeman et al. argue that agricultural trade lends itself to an oligopolistic structure and STEs would most likely be replaced by multinational private traders. Agricultural traders need proprietary assets to be successful; i.e., networks for gathering market intelligence, trained personnel with specialized knowledge of the international market and logistic systems, etc. These assets are intangible and excludable and can be used in many places at the same time. The possibility to use these assets in many places at the same time provide increasing returns to scale for the trading firm and create natural multinational monopolies/oligopolies. Private multinationals are also likely to price discriminate as conditions for price discrimination mostly exist in the international agricultural market (markets with different elasticities, limited potential for resale, etc.)

IV. ANALYTICAL FRAMEWORK

In order to determine the potential of an STE for competition and trade distortionary effects, analytical framework needs to be specified for each case individually. Following issues need to be considered in order to correctly analyze effects of an export STE (listed in Table 1 in the Appendix):

Effect of export STEs

1. Objective function of the export STE

Do they maximize producer welfare, consumer welfare or their own welfare as an intermediary? Or maybe sales? Or does the state trader have some other political agenda? Identifying the goal STE is pursuing is the first step in being able to determine welfare and trade effects of an STE as well as the effects when trade liberalization occurs.

2. Instruments used to achieve its goals.

Does a producer state trader use price discrimination only to maximize producer profits, or do they also use price pooling? Comparing the domestic and world price in the country with the STE can help determine if price discrimination or price discrimination with pooling is taking place. Schluep and de Gorter (2000) analyze the trade distortions and export subsidy equivalents for price discrimination only and price discrimination with pooling. They show that the latter is a consumer financed export subsidy and should be subject to the WTO reduction commitments. In addition, price discrimination with pooling is costlier and more trade distorting the producer financed export subsidy (using price discrimination only).
3. Extent of exclusiveness of rights in the domestic market = market contestability

Does the STE have an exclusive right to procure domestic production and a single desk authority in exports/imports and domestic sales? Or do they have to compete for supplies and maybe sales with domestic private firms? A single desk status would give STE a monopoly (or monopsony or both) power in the domestic market. Their behavior will be different than if the state trader has to compete with other private traders or processors in the domestic market. Analysis may have to incorporate a mixture of public and private firms, where the public firm is likely to have a different objective other than profit maximization.

The degree of difficulty for private traders to enter and exit the market determines market contestability. If market is contestable, the incumbent firms (STE) will behave competitively. The threat of potential entrants forces the incumbent to price at average cost. Contestability can be assured by removing barriers to entry (trade barriers) for foreign firms or by strict competition policy that would ensure pricing at average cost even for natural monopolies. Granting of exclusive rights to purchase and sell in the domestic and world markets can create an effective barrier to entry.

4. Market structure that the STE is competing with in the export market

Are the foreign competitors oligopolies or competitive traders? Although an STE usually has an exclusive right to export, it does not indicate the degree of market power it has in the world market. The number of firms and their ability to compete with the STE determine the behavior and the extent of the market power of the state trader in the importing country.

5. Market structure that the STE is facing in the domestic market and in the world market when selling the product.

The market structure the STE is facing determines its bargaining power when selling the primary agricultural product to domestic processors and traders in the importing country.

STE will be able to achieve a higher price for its sales if the importers are competitive than if they possess market power.

6. STE’s market share in the world export market

The export market share determines whether the analysis is that for a small or a large country. Small country exporter cannot influence the world price but large country exporter can. Thus, a large country STE can affect the domestic as well as world welfare. Trade distortion caused by a small country state trader does not significantly affect the world price or the amount of exports and thus should not be of concern to any of its competitors. It is the large country exporting STEs only (like Canadian Wheat Board, Australian Wheat Board, New Zealand Dairy Board) that may pose a threat to competing exporters in terms of influencing the terms of trade.

7. Nature and level of trade barriers in the importing country

If the importing country imposes quantitative restrictions or tariff rate quotas with quota binding and a high level of out-of-quota tariff, STE may not be able to attain their optimal level of exports into the country.

8. Appropriate benchmark to compare the STE distortions to

What market structure would replace an STE if it were to be removed? Welfare and trade distorting effects are often proposed to be measured against the benchmark of perfect competition. However, it is not necessarily true that private traders that would replace an STE would be competitive. Veeman et al. (1999) and others argue that agricultural trade is characterized as imperfectly competitive with a few firms competing. Thus, oligopolistic structure is likely to emerge in place of an STE. Social welfare would always increase for perfect competition in a small country, but could increase or decrease if
oligopoly were to replace STE (Veeman et al., 1999). In a large country, STE could use its negotiating power to improve the terms of trade.

The above criteria yield a great number of combinations. Veeman et al. analyze the effect of an export STE for some of the combinations of market structures, degrees of competitiveness of the STE in the domestic market and the degree of influence of the STE on world prices. The model considers three markets: domestic country (i.e. the country with STE), foreign country competitors in exports, and the rest of the world, which imports the traded product. Due to an extensive list of possible combinations, they restrict their analysis to only some of these. STE is assumed to maximize producers welfare through price pooling.

Their major conclusions include the welfare sub optimality of STE in a small country relative to perfect competition in trading but not necessarily relative to oligopolistic traders. The latter also holds for a STE in a large country regardless of the alternative market structure the STE is compared to.

Thus, in a small country, the welfare loss to processors (buyers of the product sold by STE) exceeds the gain by farmers from a higher pooled price when it is assumed that removal of STE would result in competitive structure of the domestic trading sector. Relative welfare gains and losses due to STE relative to oligopolistic traders (i.e. multinationals assumed to handle trade instead of STE) depend on the difference in the degree of bargaining power between STE and oligopoly when negotiating prices with domestic processors.

Export STE and trade liberalization

The general concern with an export STE is that they provide means of protection and unfair trade that current WTO rules do not account for. Thus, even if further liberalization of trade through traditional policy instruments (lowering tariffs and/or expanding quota) occurs, the presence of STE may still hinder export competition and provide unfair market power and protection to the domestic group that STE represents.

McCorriston and MacLaren (2001) analyze the effect of STE with trade liberalization. They specify a model with two competing exporting countries - domestic and foreign. The foreign exporters are always private traders and the domestic traders are in turn private and then represented by an STE. It is assumed that the foreign country supports its exports through an export subsidy, while the domestic country through an STE when STE exists. Authors conclude that liberalization through lowering the export subsidy in the foreign country will always decrease the exports as well as the export share of the foreign country and the decrease is a function of the degree of competition among the trading firms. The reduction in exports is smaller if the exporting trader firms are imperfectly competitive. If the exports are handled through an STE in the domestic country, the decreases in both the exports and export share of foreign country are magnified.

Just et al. (1979) analyze the implications of an export STE on exports and domestic social welfare. Their model consists of two countries – domestic exporting country and foreign importing country. The authors show that under the assumption of a monopoly power of the STE in both the domestic and foreign markets, the objective function of maximizing producer welfare results in lower total production, but higher exports than socially optimal. Social optimality can be achieved by imposing a consumer subsidy. A regulation to charge the same price to domestic processors as it pays to its producers would induce the STE to export even more, further lowering domestic social welfare. Again, social optimality can be achieved by imposing an export tax.

Measuring trade distortions

For competition and trade distorting effects of STEs to become a part of WTO negotiations, the extent of distortion needs to be measured. Dixit and Josling (1997) suggest that distortionary effects can be measured by straightforward calculation of export subsidy equivalents. However, this approach assumes
that the benchmark to which we are comparing the distortion is perfect competition and that the import market is perfectly competitive (McCorriston and MacLaren, 2002). Opponents argue and considerable evidence exists that world agricultural markets are more suitably characterized as oligopolies (Veeman et al. 1999). Thus, it is the ‘perceived’ elasticities not the actual ones that matter for measuring export subsidy equivalents. The perceived elasticities will depend on the degree of market power in the markets and are difficult to measure.

Empirical models have to account for the nature of competition as well as the mixture of objectives if STE competes with private trades. Objectives of STEs and private traders most likely differ. When measuring the magnitude of the distortionary effect due to STE activities, a realistic market structure of private traders has to be considered as a benchmark (most likely oligopoly).

Dixit and Josling (1997) and Veeman et al. attempt to classify STEs into categories ranked according to their potential to distort trade. Dixit and Josling use trade balance, market control, policy regime, product range and ownership and management structure as criteria to classify STEs into four types according to their potential to distort trade. Veeman et al. mostly use the degree of contestability to categorize STEs into three color boxes. In addition to the above listed criteria they examine effective barriers to entry and exit in order to determine the box into which an STE belongs. McCorriston and MacLaren dispute the usefulness of such categorization. They quote the example of the Canadian Wheat Board that is placed the least trade distorting ‘Type 4’ in Dixit and Josling and in the most trade distorting ‘green box’ in Veeman et al.

V. SUGGESTIONS FOR WTO REQUIREMENTS

State trading enterprises can be very heterogeneous entities, given their different objectives and environments in which they operate. WTO should aim to collect the information necessary to investigate the welfare and trade impacts of STEs on a case by case basis. Once it is determined that these effects are significantly large and distortionary, the WTO may require the STE to modify its behavior and/or encourage introduction of measures that would curb the distortionary behavior; e.g., allowing private traders to compete in the domestic market. Or it may continue to encourage dispute settlement procedure as it does now. We compile a list of suggested WTO requirements that will serve this purpose. Some of these are already contained in the WTO questionnaire and some are proposed additions.

1. Reporting requirements

   In the context of competition policy

Information necessary to determine contestability of markets and thus determine if the use of market power is an issue: number of competitors, market shares, barriers to entry and exit, degree of substitutability of product or control of STE over the substitutes.

Information necessary to determine if the state trader price discriminates: sales prices in the domestic market and in different export markets. However, it also needs to be determined if price discrimination may be welfare improving and if private traders would not practice price discrimination too. In the case of the consumer financed export subsidy (added revenue from the higher domestic price is used to subsidize exports), it must be determined if the domestic market is large enough to cause a significant expansion in exports.

Information needed to determine if the STE faces the same risks as private firms: is STE owned by the government or at least, does the government underwrite state trader’s losses?

Information on other privileges granted to the STE: transportation and storage rates, borrowing rates from the government, tax benefits, preferential foreign exchange, etc.
In the context of the analytical framework

Information needed to determine the objective of the STE. Does the STE aim to maximize producer welfare, consumer welfare, or their own profits as an intermediary? Or is the objective to maximize sales? Or some other political objective?

Information needed to determine the competition the STE faces in the domestic market, determine contestability of the domestic market. The number of firms, their market shares, exclusivity of the right to buy and sell in the domestic market, to export, etc.

Information needed to determine the competition the STE faces in the export market. The number of foreign exporting firms, their market shares, etc.

Information needed to determine the market power the STE is facing in the importing country. Number of trading firms, information needed to determine contestability of the import market.

Information needed to determine what market structure would arise to replace the export STE. Monopoly, monopsony or both, oligopoly or competitive private traders? Veeman et al. argue that agricultural trade lends itself to an oligopolistic market structure with multinational private traders.

General

Globalization of markets raises concerns whether domestic competition policies are adequate.

Paddock (1998) and MacLaren and Josling (1999) suggest that the anti-competitive practices that are also available to private firms should be considered under international competition policy. These include price discrimination, predatory and monopoly behavior. Pooling, which is not available to private firms, should be addressed in the rules on STEs.

II. Requirements for improved trade and competition

Cottier and Mavroidis contend that WTO rules should not be generalized to all STEs and they should not be prescriptive. Otherwise, they will meet with resistance or avoidance. If country governments want to grant exclusive rights to state (or private) traders, they should be able to do so. Rather, international trade law should provide incentives to dismantle monopolies created by such exclusive rights. Countries themselves should decide this issue. It is not the rights per se that are a problem. It is their abuse that matters.

We do not agree with the contention of the irrelevance of the ownership of the STE. Cottier and Mavroidis write “whether or not state trading is undertaken by means of public or private capital formation should not be legally relevant. Whether exclusive rights are allocated and exercised by public entities or licensed to private but exclusive operators should not matter.” (p. 400). It is true that public and private monopolies can exercise market power due to exclusiveness of rights. However, public state trader may receive additional advantages such as preferential transportation and storage rates, and other subsidies. Losses of a state trader are often underwritten by the government, which guarantees them against bankruptcy. An STE may be willing to undertake riskier anti-competitive and distortionary strategies (e.g. predatory pricing).

International competition policy could address the abuse of market power by state traders but also private monopolies. Or incentives should be provided to harmonize competition policies in individual countries.

Thus, each state trader case should be examined individually to determine if excessive abuse occurred. If an STE is found to have significant welfare and trade distortionary effects, WTO should have in place a set of rules and recommendations to curb the behavior of the state trader. First, WTO should continue to develop structures and procedures of dispute settlement and enforcement. Second, recommendations could be made to increase contestability of the markets. Removing the single desk status of an export
STE and allowing them to compete with private traders should make markets more contestable. Even if the private sector is imperfectly competitive, this should decrease the overall market power of the traders by increasing the number of firms competing. Countries should not be allowed to limit access of private traders through quantitative restrictions or prohibitive tariffs. If private firms are subject only to non-prohibitive tariff restrictions, they can discipline the pricing behavior of the STE and increase contestability.

VI. BIBLIOGRAPHY


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APPENDIX

Table 1: Factors for Construction of Analytical Framework

1. Objective function of the export STE
   - Maximize producer welfare
   - Maximize consumer welfare
   - Maximize welfare as an intermediary
   - Other

2. Instruments used to achieve the goals.
   - price discrimination (taxpayers financed export subsidy)
   - price discrimination with pooling (consumer financed export subsidy)

3. Extent of exclusiveness of rights in the domestic market
   for producer welfare maximizing STE:
   - monopoly in the domestic market and exclusive right to export (single desk status)
   - oligopoly in the domestic market and exclusive right to export
   - perfect competition in the domestic market and exclusive right to export
   For consumer welfare maximizing STE:
   - monopsony in the domestic market and exclusive right to export
   - oligopsony in the domestic market and exclusive right to export
   For maximizing profits of the intermediary:
   - monopoly/monopsony in the domestic market and exclusive right to export
   - oligopoly/oligopsony in the domestic market and exclusive right to export

4. Contestability of the domestic market
   - contestable – perfect competition
   - not contestable – market power possible

5. Market structure that the STE is competing with in the export market
   - oligopoly foreign exporters
   - competitive foreign exporters

6. Market structure that the STE is facing in the importing country
   - monopsony
   - oligopsony
   - perfect competition

7. STE’s market share in the world export market
   - small country
   - large country

8. Appropriate benchmark to compare the STE distortions to
   - monopoly private trader
   - monopoly/monopsony private trader
   - oligopoly private traders
   - oligopoly/oligopsony private traders
   - competitive traders