

TRADE LIBERALIZATION AND RELATED ISSUES

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1. Introduction

Prior to the Uruguay Round, GATT (General Agreement on Tariffs and Trade) negotiations have focused primarily on manufactured goods. World trade has been liberalized through several rounds of negotiations under the auspices of the GATT. The GATT rules for agricultural products allow for both export subsidies and quantitative restrictions (e.g. a quota system) on imports (GATT 1985). However, in the Uruguay Round, agricultural trade problems have been one of the hot issues. Major GATT members are discussing key problems for agricultural trade, and are attempting to liberalize agricultural trade and reform domestic farm policies.

Many domestic and international aspects of Korean agricultural policy are expected to change if agreements arising from the GATT negotiation are implemented. The United States, in particular, is intent on liberalizing Korean import restrictions on grains and livestock products. Changes in Korean agricultural policy led by GATT negotiations will lead to changes in the terms of trade, shifts in the pattern of production and consumption, and ultimately to changes in investment and economic growth. These changes will be the source of much discussion and controversy in Korea.

The objective of this paper is to review the basis of the economic theory of GATT negotiations for agricultural products, and to provide some critics for the Uruguay Round. The theory of comparative advantage and gains from trade (GFT) is often used as a basis of economic theory for the pressure of trade liberalization. It will be useful to understand the basic theory of international trade and its weaknesses for further negotiations.

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II. Comparative Advantage

According to the principle of comparative advantage, economic efficiency is promoted by specialization. The optimum pattern of production and trade for a country is determined from a comparison of the relative opportunity cost of producing a given commodity with the relative price at which the commodity can be traded. Under perfect competition, the relative opportunity cost of a commodity is equal to its relative market price. Therefore, domestic market prices can be compared to international prices to determine comparative advantage under perfectly competitive conditions. A country will reduce production of goods which can be imported at lower relative prices, and will tend to specialize in the production of goods it can produce at lower relative cost than foreigners.

The classical and the Heckscher–Ohlin theories constitute two different explanations of the structure of comparative advantage. The Ricardo–Viner model of international trade is similar to the Heckscher–Ohlin model, but it has fixed factors (at least one fixed factor) in the model. Thus, the Ricardo–Viner model is usually applied to agricultural trade models because of the fixity of land.

In the classical model, comparative advantage is determined by differences in production functions (technologies). Labor theory of production is usually applied to this model (all factors of production is aggregated into labor). Demand conditions do not require homotheticity of tastes among agents and similarity of tastes between countries. The classical theory requires that both commodities are produced and consumed in both countries in autarkic equilibrium. A country exports commodities which have lower relative prices compared to importing countries.

In the Heckscher–Ohlin model, comparative advantage is determined by differences in factor proportions assuming similar consumer preferences and identical production technology in the trading countries (Chacholiades 1985). This implies that production technology can be more mobile than factor endowments such as capital, land, natural resources, and labor. Preferences of human beings are not much different. Under these assumptions, the Heckscher–Ohlin version of comparative advantage states that a country will benefit from trade by producing and exporting goods that use more of its relatively abundant factor of production. The country will import commodities using more of its relatively scarce factor of production.

Flanders (1969) argues that developing countries may be beneficial by importing agricultural products and exporting labor intensive manufactured goods. This argument is primarily based on the Heckscher–Ohlin model. Flanders assumes that agriculture is a capital (including

land)intensive industry. It is difficult to deny that agriculture is capital intensive or land intensive except for a few agricultural commodities. Exporters of agricultural products are mostly developed countries or land abundant countries ... the USA, EC, Argentina, Australia, etc.

This argument partly provides the theoretical basis for pressure of agricultural trade liberalization for land scarce and labor abundant countries. If a country has higher domestic relative prices compared to world market prices or has scarce capital or land endowments, it may be considered that the country has comparative disadvantage in agriculture. However, whether trade liberalization in agriculture contributes a country's development or hurts its welfare is not clear as it will be reviewed next.

III. Import Substitution and Export Promotion

The interaction between trade policy and economic growth has long been a subject of research and a source of debate. Two major schools of thought have evolved ... import substitution and export promotion as a development policy for developing countries. This section summarizes these arguments.

Many development economists like Krueger and Myint support export promotion rather than import substitution as an economic development strategy for developing countries. The major reasons for this policy recommendation are as follows. Economic growth would be optimal in the absence of distortions as the maximum gains from trade are obtained. Export promotion is an open economy oriented policy, hence, it is less distortive (Krueger 1980). Therefore, export promotion is closer to maintaining a liberal or less distortive economy and allows a nation to capture the gains from trade. Monopolistic conduct which reduces social welfare arises less frequently under export promotion because firms face competition from both domestic and foreign markets. Assuming labor abundant developing countries with technological changes which are biased toward capital intensive technology under import substitution, export promotion would increase demand for labor more than import substitution. Export promotion can capture returns to scale economies and earn foreign exchange, thereby, releasing balance of payments bottlenecks which cause great difficulties to most developing countries. Finally, wasteful rent seeking behavior arises less frequently under export promotion (Krueger 1980).

Export promotion is an outward oriented economic policy. Export promotion aims to maximize gains from trade for economic development. To promote exports, governments generally introduce undervalued exchange rates and various export subsidies. An undervalued ex-

change rate is an implicit *ad valorem* export subsidy and import tariff. Importation is discouraged by undervalued exchange rates. The government can apply more liberal trade policies. Opening up trade may stimulate economic growth through the effects such as the gains from trade, releasing foreign exchange bottlenecks, and the indirect effects of freer trade. The principle of comparative advantage is more likely to be applicable in export promotion policy (Krueger 1980).

Import substitution, on the other hand, is an internally oriented development policy. Defence of import substitution mainly depends on the argument of disparities in foreign trade elasticities between developing countries and developed countries and instability in world markets (Flanders 1969, Prebisch 1959, and Diaz-Alejandro 1978).

In import substitution, the government usually employs overvalued exchange rates and very restrictive trade policies to protect domestic industries and excessive imports. Overvaluation of domestic currency is an implicit *ad valorem* export tax and import subsidy. The government then needs to restrict imports to offset the implicit import subsidy. Thus, restrictive tariffs and quantitative restrictions are commonly applied. It was the common policy in the 1950s and 1960s in developing countries. Trade policy becomes more restrictive and biased toward foreign exchange saving options over time. Import substitution policies diverge further from the optimality criterion or free trade prices over time.

IV. Gains from Trade(GFT)

A traditional question in the trade and development area is whether free international trade contribute or hurt a country's growth and development. This has been analyzed extensively based on the question; Under what circumstances does free trade increase GNP (Kindleberger 1962)? To answer this question, the concept of the gains from trade in distorted and undistorted economies has to be examined.

In order to evaluate the effects of changes in trade policies on an open economy, it is necessary how the pattern of trade and gains from trade are determined and interact. Under the assumption of the undistorted economy, pure trade theory can demonstrate the proposition that trade can potentially make everyone better off as compared with no trade (Diaz-Alejandro 1978).

A rigorous proof of the existence of the gains from trade is provided by Samuelson(1950). Without applying any comparative advantage concepts, Samuelson shows the gains from trade using the revealed preference approach. Samuelson's proof of the gains from trade is as follows.

For given equilibrium prices, the resulting optimal quantities of commodities produced and factors utilized maximize the algebraic difference between total value of output and total factor cost. Given equilibrium prices, any other output and factor combinations result in equal or lower net return compared to optimum input-output combinations. This is equivalent to the following inequality :

$$P_1 Y_1' - W_1 A_1' \geq P_1 X_0' - W_1 A_0'$$

Where, P denotes a price vector. Y denotes a production vector. A denotes a vector for factors of production. W denotes a vector for factor prices. X denotes a consumption vector. Let subscripts 0 and 1 denote alternative vectors ... 0 for autarky and 1 for free trade. A superscript denotes transpose of vectors.

From the condition that the total value of imports must equal exports, or that the total value of goods produced must equal the total value of goods consumed, we can replace production Y with consumption X . This gives :

$$P_1 X_1' - W_1 A_1' \geq P_1 X_0' - W_1 A_0'$$

When free trade occurs, an individual is confronted with commodity and factor prices of P_1 and W_1 . Subject to these prices one's most preferred position with respect to consumption and factor supply is shown by one's behavior to be X_1 and A_1 . This combination is preferred in an ordinal sense to X_0 and A_0 . If the individual was in a true maximum position at the free trade prices, it must follow from the inequality that (X_1, A_1) is better than (X_0, A_0) .

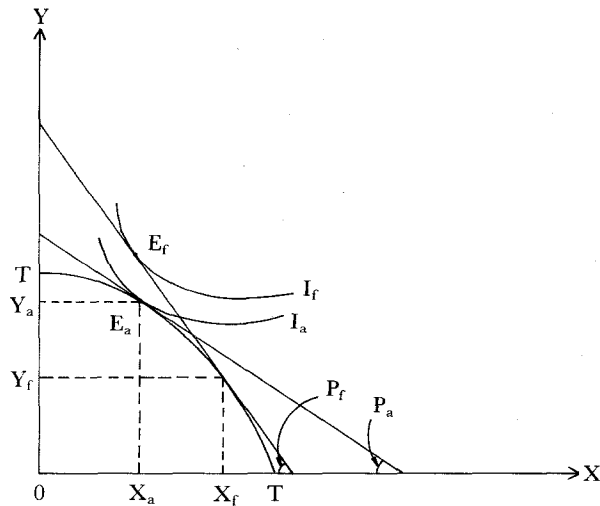
From this condition, Samuelson established the following theorem :

The introduction of outside prices differing from those which would be established in our economy in isolation will result in some trade and as a result every individual will be potentially better off than he would be at the prices which prevailed in the isolated state.

The gains from trade in a perfectly competitive economy can also be shown in a two-good general equilibrium model. In Figure 1, TT represents a transformation curve or production possibility frontier (PPF) of the economy. At a given price P_a , the economy produces and consumes X_a of good X and Y_a of good Y (domestic production is equal to domestic consumption). E_a represents an autarkic equilibrium.

When the economy is liberalized and faces a different price of P_f , optimum production for X and Y becomes X_f and Y_f , respectively. In this case, optimum consumption occurs at E_f . This implies that the economy exports X and imports Y at a world price P_f . As a result, the economy can obtain higher social welfare of I_f compared to I_a from free trade.

FIGURE 1 Gains from Trade and Gainers and Losers



Gains from trade arguments do not imply that everyone is better off from trade except in very special circumstances such as identical agents in the economy. When all members of the economy are not identical, trade may make some people worse off. In Figure 1, producers of good X , for instance, may be better off from trade because the price and production of good X increase from P_a and X_a to P_f and X_f , respectively. Producers of good Y may be worse off because the price and production of good Y decrease from P_a and Y_a to P_f and Y_f , respectively. However, there are potential gains from trade because the gains from trade can be redistributed by means of lump-sum transfers such that gainers compensate losers and make everyone better off, at least theoretically. In general, gains from trade arguments rest on the principle of potential compensation of gainers by losers (Coyle, et. al. 1986).

V. Distortions and Welfare

So far in this paper, gains from trade are discussed in an undistorted or in a perfectly competitive economy. In reality, there usually exist distortions in an economy. For example, government set prices, quantitative restrictions, tariffs and subsidies on agricultural trade commonly exist

in developing and developed countries. Gains from trade in a distorted economy are ambiguous.

There has been debate in trade theory concerning the foreign trade policy when the economy is characterized by domestic distortions (Bhagwati and Ramaswami 1963). For example, Haberler (1950) shows the possible inferiority of free trade to no trade in the presence of domestic production distortions. Hagen (1958) also presents the possible inferiority of free trade in the presence of wage differential in the economy.

These arguments on the domestic distortions and gains from trade are well summarized in Bhagwati (1982). Bhagwati defines two sets of distortions, endogenous and policy-imposed distortions. Endogenous distortions may arise when the economy is characterized by market imperfections under a policy of *laissez-faire*. Policy-imposed distortions arise due to policy choices which is different from endogenous phenomena. The reasons for the existence of such policy-imposed distortions are either autonomous (historic) or instrumental. Autonomous distortions may be a historic accident. Instrumental distortions are imposed to achieve non-economic objectives.

Pareto optimality conditions for an undistorted economy can be derived from the utility maximization subject to given constraints like technology, endowments and preferences. Distortions are additional constraints in this maximization problem. Utility is maximized at the point where marginal rate of transformation (*MRT*) equals to marginal rate of substitution (*MRS*).

In an open economy, the economic system has to satisfy further the first order conditions for an economic maximization including the equality of foreign rate of marginal transformation (*FMRT*). Thus, in an open economy, the optimality condition becomes: $MRT = MRS = FMRT$.

Distortions cause a deviation from the optimality conditions. If only one distortion is present in an economy, reductions in the degree of the distortion are welfare increasing until the distortion is fully eliminated. For example, if there exists a tariff in the economy, the optimality condition has inequality between *FMRT* and *MRT*: $FMRT \neq MRT = MRS$. A reduction in the degree of the distortion (tariff) will increase welfare by making the economy to maintain a closer optimality condition.

If more than one distortion is present in the economy, reduction in the degree of one or some of (and not all of) the distortions will not necessarily increase social welfare. For example, consider the case where there is producer subsidy combined with a tariff without monopoly power in trade. This situation generates the optimality condition: $FMRT \neq MRT \neq MRS$. In this case, successive reductions in the tariff

will not necessarily improve welfare because reductions in one inequality, e.g. $FMRT \neq MRT$, may increase the other inequality, e.g. $MRT \neq MRS$. The theory of second best also says that if there exist distortions, the other Pareto optimality conditions may be no longer desirable. In short, the effects of reduction or elimination of one or some of distortions are ambiguous in a real world where multiple distortions exist.

VI. Conclusions

The effects of policy changes on the optimal allocation of scarce factors are among the major questions of development policy. The principle of comparative advantage and associated gains from trade provide the motives for policy liberalization. However, these arguments are favored to developed countries where the economy is less distortive or closer to perfect competition. Developing economies are more distortive or less competitive than developed countries.

In a real economy with multiple distortions, the gains from trade identified by economic theory may not be captured if only some policies are liberalized. So far, economic theory does not clarify the gains from trade in a real world where multiple policy rules intervene perfect competition. In a real world, trade negotiations are still based on political and economic power.

International trade is considered as exchange of goods between countries. To discuss the gains from trade or gains from exchange of goods between countries or individuals, voluntariness must be the basis of exchange of goods. If exchange occurs voluntarily, exchangers' utility will be as good as that under no exchange. It does not need any proof. Trade negotiations must not be a pressure using political and economic power, and should respect voluntariness.

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