HOW VALUABLE IS MFN TREATMENT TO THE PHILIPPINES?

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This paper attempts to measure the benefit to the Philippines of its availment of the WTO-MFN treatment. The methodology involves computing the reduction in the country's merchandise exports if the country loses MFN treatment, depicted in this paper as an increase by five percentage points of the tariff rates in the importing countries on such exports. The World Bank-UNCTAD's SMART computer program is used for this purpose. The forgone exports are then introduced as a shock to an applied general equilibrium model of the Philippines to calculate the income lost due to reduced exports. The result of this exercise does confirm that the country may stand to lose up to eighty percent of its export earnings. Even at a conservative loss of only twenty percent of its exports, in consideration of the possible bilateral deals that may continue MFN treatment on selected merchandise exports, the Philippines may forgo an income of nearly eight percent.

Introduction

A key argument of the Philippine government for ratifying the Uruguay Round Final Act and becoming a member of the World Trade Organization or WTO is to avail of the Most Favored Nation or MFN treatment (Philippine Senate, 1994). The MFN treatment is one of the fundamental principles underlying the multilateral trading system under the WTO. The principle requires that any advantage given to one WTO member country had to be given "immediately and unconditionally" to every other WTO member (Hudec, 1987).

This paper attempts to measure the benefit to the Philippines of its WTO MFN treatment. The methodology involves computing how much of its exports the Philippines may forego if it loses

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MFN treatment, represented by an exogenous increase of the various tariff rates levied on top Philippine exports by the country's key trading partners. For this purpose, this study uses the World Bank-UNCTAD's Software for Market Analysis of Restrictions to Trade or SMART computer program. This was designed to assist developing countries during the Uruguay Round in evaluating the benefits of the trade concessions made by their respective trading partners. The forgone exports are then introduced as a counterfactual scenario in an applied general equilibrium model of the Philippines to calculate the income and resource allocation changes due to reduced exports.

Benefits of A Trade Agreement

Why Governments Negotiate Trade Agreements

Governments that decide what trade policies should prevail in their respective customs territories tend to erect import barriers and at the same time to demand the removal of those trade barriers which their counterparts have erected against their exports to the latter's customs territories. These import barriers may take the form of ordinary customs duties, import bans, fixed import quotas, discretionary import licensing, voluntary export restraints, variable levies, or minimum import prices. To promote their exports, they may likewise subsidize their exports particularly in order to displace their competitors in export markets. Such typical mercantilist behavior of governments is consistent with the pursuit of a trade policy regime that maximizes income subject to protecting selected local industries.¹

A world with mercantilist governments is economically unstable. In these simultaneous maneuvers to maximize net trade using import restrictions and subsidized exports, trade frictions develop between governments. It is common to observe

¹ See for example Ludema (1991). Leidy and Hoekman (1993) describe an alternative analytical framework to trade negotiations that covers interest groups and negotiators.

that some of these worsen to the level of trade wars using as ammunition an array of import barriers.

One possible economic equilibrium for this mercantilist world is autarchy. An autarchic equilibrium has to be inferior to one arising from a voluntary exchange of relaxations or removal of import restrictions. The nearer governments are to complete autarchy, the more likely they find to be beneficial such exchange of each other's import barriers. From their respective arsenals comprising thousands of applied import restrictive measures, these governments are likely to find a package of measures that, once removed or relaxed, will provide net benefits to all concerned parties in the exchange.

It is the pursuit of more certainty in international trade and the appropriation of the mutual gains from voluntary trade that motivate governments to forge trade treaties. A trade agreement consists of a set of trade policy measures, norms of behavior and procedures that contracting parties are legally bound to implement or follow for the benefit of all the other contracting parties. The multilateral trade treaty under the WTO includes the most comprehensive. developed, and widely-encompassing trade agreements. These trade agreements, while products of optimizing mercantilist governments, minimize inadvertently the adverse consequences of mercantilism. For the mutually acceptable solutions to trade disputes to be found, there has to be a voluntary market opportunities between the exchange of governments representing two customs territories.

Unilateral Trade Liberalization

A small open economy (SOE) like the Philippines in a first best situation, would maximize its social welfare if it sets its trade protection of domestic industries down to zero. Under this policy regime, local industries specialize in export-oriented industries and home goods (those that are locally competitive over potential imported substitutes due to high shipping costs) and import importable goods. Local substitutes to imported goods continue to be produced up to a

volume where their marginal cost of production and transportation to markets are competitive with the border prices plus taxes of the imported articles.

To formalize this argument, consider a pure exchange economy that is endowed with an importable m and an exportable x. We denote this endowment vector with ω . Let $e(u, p_x, p_m)$ be the observed expenditure required to attain the welfare (u) of the SOE given the local prices of x and m. The prices of the importable is gross of the trade protection (t) that the government in the SOE maintains. The expenditure required is then the endowment valued in local prices or $e(u, p_x, p_m) = p_x \omega_x + p_m \omega_m = \overline{p}_x \omega_x + \overline{p}_m \omega_m + t\overline{p}_m \omega_m$.

The same welfare level, u, is attainable if endowments are valued at world prices: $e(u, \overline{p}_x, \overline{p}_m) = \overline{p}_x \omega_x + \overline{p}_m \omega_m$. Since $e(u, \overline{p}_x, \overline{p}_m) < e(u, p_x, p_m)$, then the SOE can improve its welfare u by Δu , if the government removes tariff protection. That is, $e(u + \Delta u, \overline{p}_x, \overline{p}_m) = e(u, p_x, p_m)$ and Δu has to be positive. Under this configuration, unilateral trade policy reforms would be adequate to make the SOE maximize its welfare, u. There is then no need to enter into a trade agreement with trading partners.

Restrictions Against SOE Exports

Unilateral trade liberalization may be inadequate to maximize SOE's welfare, if simultaneously its trading partners maintain a trade barrier against its exports there. One can then make a point that the removal of the trade barrier results in a Pareto superior equilibrium compared to that which is attained by a unilateral lifting of the trade protection.

The analysis of the the effect of a trade barrier of trading partners is similar to that for the case of the tariff protection. Let the SOE be referred to as A and the trading

partner that maintains the trade barrier, B. The SOE A does not maintain any trade protection. Given B's trade barrier, t^b , and assuming (to keep the discussion simple) that there is no one else to sell the exportable to, the local price of x has to decline to a level below the world price. That is, the relative local price of the exportable to the importable declines as in the case of tariff protection.

It therefore follows that $e^a(u^a', \, \overline{p_x}, \, \overline{p_m}) < e^a(u^a', \, p_x(t^b), \, \overline{p_m})$ where u^a is the welfare that is attainable by A given t^b . The SOE is thus better off if B removes the trade barrier against its exports and accordingly A can sell its exportable to B at world prices. The positive incremental utility, Δu^a , is computed from this equation: $e(u^a' + \Delta u^a, \, \overline{p_x}, \, \overline{p_m}) = e(u^a', \, p_x(t^b), \, \overline{p_m})$.

Under this scenario, the SOE A generates a demand for a trade agreement with B in order to remove t^b . If t^b is thus removed, then the SOE A would have benefited from the trade agreement up to $e(u^{a'} + \Delta u^a, p_x(t^b), \overline{p}_m) - e(u^{a'}, p_x(t^b), \overline{p}_m)$ pesos.

Simultaneous Trade Barriers

If the government in the SOE A maintains the import restriction, t^a , and faces a trade barrier in B, t^b , the trade depressing effect of import restriction, t^a , is aggravated by the export dampening effect of the trade barrier in B. In this scenario, unilaterally removing trade protection, t^a , while welfare improving, fails to bring the SOE to its highest possible welfare given world prices and its endowment. That is, $e^a(u^a, p_x, p_m) < e^a(u^a, p_x(t^b), p_m(1+t^a))$, where u^a is the welfare level under a policy regime involving t^a and t^b .

The gains to the SOE A from unilaterally reducing tariff protection, V^{aa} , equal to

$$e^a(u^{a^{\prime}} \,+\, \Delta u^a_{\ t^a},\ p_x(t^b),\ \overline{p}_m(1+t^a))\,-\, e^a(u^{a^{\prime}},\ p_x(t^b),\ \overline{p}_m(1+t^a))$$

where $\Delta u^a{}_{t^a}$ is the incremental utility attained from removing tariff protection in A. On the other hand, the

gains from negotiating successfully with B to remove t^b , V^{ab} , is equal to $e^a(u^{a'} + \Delta u^a{}_{t^b}, \; p_x(t^b), \; \overline{p}_m(1+t^a)) - e^a(u^{a'}, \; p_x(t^b), \; \overline{p}_m(1+t^a))$. The relative size of V^{aa} to V^{ab} depends upon the relative distortion of the import restriction, t^a , and the trade barrier in B, t^b .

The table below illustrates a hypothetical payoff matrix of a possible trade treaty negotiation involving the economies A and B. Let V^{bb} and V^{ba} be the corresponding values to economy B of the benefits arising from its unilateral removal of t^b and A's removal of its import restriction t, respectively. The payoff to A if it unilaterally removes t^a given that B fails to reciprocrate by removing t^b is V^{aa} and that to B is V^{ba} . This rises to $V^{aa} + V^{ab}$ for A if at the same time B removes t^b .

A Payoff Matrix

	B maintains t ^b	B removes t ^b	
A maintains ta	(No gain, No gain)	(Vab, Vbb)	
A removes t ^a	(V ^{aa} ,V ^{ba})	$(V^{aa} + V^{ab}, V^{ba} + V^{bb})$	

B's interest in removing t^b depends upon the sign of $V^{ba} + V^{bb}$. If B is likewise an SOE as A and V^{bb} is therefore positive, then it would remove t^b . However if V^{bb} is negative as may be the case if the terms of trade work in B's favor, then B may be willing to remove the trade barrier if V^{bb} is less than V^{ba} . Otherwise the strategy that it may want to pursue is to wait until the SOE A will unilaterally remove its import restriction for its own sake.

This is illustrated in Figure 1 showing the outcome of a tariff negotation between the SOE A and B. The outcome of a tariff negotiation may be shown with a gametheoretic tariff model.² In such a tariff game, the utility of both A and B depends upon the t^a and t^b . Both economies have respectively their best-response functions, R^a and R^b , defined as the tariff rate that one player sets

² McMillan's (1986) game-theoretic analysis for a tariff game is adapted here to consider an SOE player.

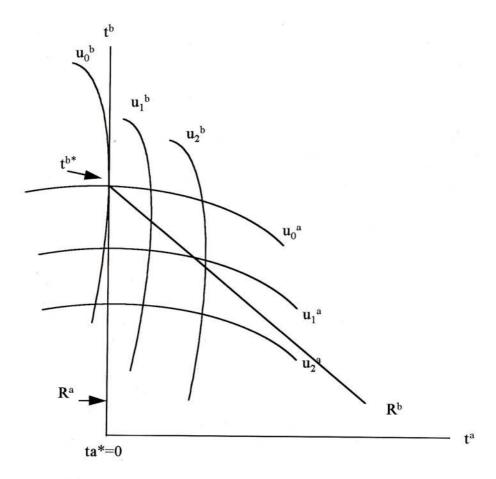


Figure 1 - Tariff Equilibrium Involving SOE A.

given the tariff rate of the other player that maximizes its utility. In the Figure, the indifference curves of this economy are constructed such that they intersect the corresponding best-response curves with a zero slope. $u_0{}^a < u_1{}^a < u_2{}^a$ and $u_0{}^b > u_1{}^b > u_2{}^b$.

A Nash-equilibrium defines the outcome of the tariff negotiation. The mutual consistency conditions holding in this equilibrium are: A's choice of tariff rate maximizes

its utility given the tariff of B that in turn maximizes B's utility given A's tariff. This occurs at the intersection of the two best-response curves. At this intersection, A's indifference curve is perpendicular to B's.

The Nash-equilibrium tariff rate of one economy is the reciprocal of the elasticity of the demand of the other economy for its exports. In the case of the SOE, the Nash-equilibrium tariff rate is therefore zero. While B sets t^b different from its optimal tariff rate, there is always gains from trade that can be appropriated between the two countries. For the SOE A, its dominant strategy is to set its tariff to zero.

Multilateral Trade Accord

To maximize utility, the SOE A should participate in a multilateral trade undertaking. This enables the SOE A to take advantage of the benefit arising from B's negotiation with some other trading partner C that is assured with such legal principles as the Most Favored Nation (MFN) treatment. This is illustrated in Figure 2. Figure 1 is reproduced as the left panel of Figure 2. In this left panel, the SOE A can only attain t^{b*} from B. In the right panel of Figure 2, trading economies B and C negotiate to reduce their respective tariff rates, t^b and t^c . Assuming both are non SOEs, then the Nash equilibrium is defined by t^{b**} and t^{c*} .

If such negotiation was purely bilateral, the SOE A would be unable to take advantage of t^{b**} . However if A, B, and C are all contracting parties to a trilateral trade accord whereby the MFN treatment principle prevails. legally entitled to benefit from the tariff is Without MFN treatment, outcome of B and C's negotiation. the SOE A can only avail of Vaa in the payoff matrix in treatment extended However with MFN Table 1. A, the SOE A avails of $V^{aa} + V^{ab}$, where V^{ab} incremental gain from B reducing its tariff rate from t^{b**} arising from its negotiation with C.

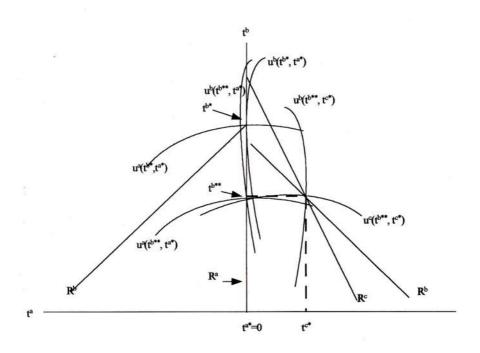


Figure 2 - Welfare Implications of MFN Treatment

trilateral accord illustrates the benefits which SOE's can avail under a multilateral trade accord such as that under the auspices of the WTO.

B's utility position with the SOE A is better under a bilateral setting than under a multilateral trade accord. For B to agree to the trilateral accord with MFN extended to indirect contracting parties, as A is in the B and

C tariff negotiation, it must be that B's gain in C reducing its tariff protection against B's exports is greater than its loss in extending MFN treatment to $A.^3$

Model With Sector-Specific Factors

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The discussion up to here points out how the SOE A can likely avail through multilateral trade agreements of lower tariff rates of non-SOE trading partners. Such benefits are unlikely to accrue in a bilateral trade setting since a non-SOE trading partner always gets what it wants by relying on A's voluntary unilateral removal of tariff protection. Central to this result is the feature of a pure-exchange model.

In a model involving production and sector-specific factors, reduction of tariffs causes adjustment problems to owners of sector-specific factors. If the specificity is absolute, these factor owners will advocate for the retention of tariff protection. This model in turn introduces a political benefit to policymakers in the SOE A to maintain the tariff protection. The SOE A may in this configuration seek an optimal tariff protection, the optimization viewed from a political-economy perspective. The optimal tariff rate t depends upon the extent of the political benefits policymakers can derive from maintaining t.

This concern is related to that when adjustment costs and transactions costs of using markets are significant. Even if resources were variable, they move to other sectors at some costs. These costs are for instance those of retooling capital equipment or retraining human resources. Even under a pure-exchange economy, the shift from

 $^{^3}$ Figure 2 should ideally be a three-dimensional graph involving t^a , t^b , and t^c . The indifference plane, in such a graph, for B should indicate B's improved utility position under the Nash-equilibrium with C with MFN extended to SOE A.

domestic market to export markets for exportables may be stymied by transactions costs in export markets. In both these instances, the initial costs of moving into the new regime may overwhelm the adjusting stakeholders that in turn prompts them to advocate for the retention of tariff protection.

Key Features of the WTO Multilateral Trade Treaty

Three features characterize the WTO multilateral trade agreements: they are non-discriminatory; they are the outcome of a voluntary exchange of concessions, and they are legally binding. The norm of non-discrimination is enshrined in the unconditional MFN treatment. Such an obligation is in Article I of the GATT 1947 Agreement. The MFN principle states that each WTO member should accord its most liberal applied import restriction policy to other WTO members, i.e. its border policy on imports coming from its most favored nation is extendible to the rest of the WTO.

In the case of tariff policies, the country's Tariff and Customs Code contains its MFN tariff rates that are applicable to all imports with origin in other WTO member countries. The principle further implies that the benefits of any unilateral tariff reductions are extendible to WTO member countries automatically. If the country reduces unilaterally its own tariff rates and apply these new tariff rates to a member of the WTO, then it has to provide the same tariff benefit to other WTO member countries.

The unconditional feature of the WTO's MFN treatment is a major innovation by the previous GATT.⁴ While MFN treatment clauses have had a seven-hundred-year history (Jackson, 1989), it has not been universally

⁴ This discussion on the MFN treatment is taken from Snape (1993).

Until 1922, the United States unconditional. MFN treatment conditionally, unlike in Europe where unconditional MFN treatment has been the rule. advantage in having unconditional MFN treatment is that it preserves rather than erodes the benefit from trade concessions that had been made in earlier trade negotiations. With this, concessions can be offered in consideration not only of the current but also of the future benefits that can be obtained in exchange for them. Johnson (1976) argued that while theory of the second best does not lead one to conclude for equal treatment of all foreign sources of supply, the unconditional MFN principle is an insurance that for as long as a government is a club member of good standing, say in the WTO, it is legally entitled to all the current and future benefits of such membership. Given this advantage, the principle then increases the likelihood that trade protection across the multilateral trading system will progressively be reduced. Otherwise under conditional MFN treatment, such trade protection may be sustained or even selectively increased.

A corollary to the principle is that any discriminatory protection policy by any WTO member country on imports coming from another WTO member is prohibited. If country A for instance increases its tariff rate on country B's fruit exports, then this country cannot legally do this without violating the MFN principle. Because country A is constrained to extend country B its most liberal trade policy that it applies to its fruit imports with origin from the other WTO member countries. This effectively constrains larger and more powerful WTO members from selectively using safeguard measures against the exports of smaller developing countries.

In a multilateral setup, the reciprocal trade concessions between bigger WTO member countries are extendible to smaller countries, without the latter reciprocating directly such concessions. For a long period of time, developing countries have enjoyed the benefits of multilaterally negotiated tariff reduction among the larger countries within the old GATT. It was only in the Uruguay Round

negotiation that many developing countries were expected to reciprocate the trade concessions made by the developed countries.

But the larger benefit of MFN treatment comes in the form of increasing the cost to the larger developed countries to apply discriminatory higher protection policy on imports with origin from smaller countries. In practice the MFN principle can be violated by the violating contracting party in pursuit of its national interest. The WTO member whose interest this discriminatory protection policy is targeted at has the legal right to raise this MFN violation to the dispute settlement process within the organization. Without this access to the dispute settlement process in the WTO, the smaller countries are compelled to take the discriminatory behavior of larger countries against them at a much larger cost to them.

The national treatment principle states that a WTO member must provide no less preferential internal policy treatment to the products of other WTO members within its customs territory as it provides its own domestic producers. A violation of the principle serves to be an effective trade barrier in the form of policy instruments other than border measures. For example, if value added tax rates are higher for imported products than for domestic products, then the former become expensive.

Reciprocity or the voluntary exchange of trade concessions, another norm, is important as well. The GATT had served as a forum whereby contracting parties exchange trade concessions among themselves. Tariffs had been the policy measures that contracting parties focused their negotiations on. For nearly fifty years, the GATT had sponsored seven trade negotiations. The outstanding outcome of these rounds of trade negotiations is to reduce tariff barriers particularly in developed countries.

Developing countries until recently have not been placed in a situation of them actively participating in these negotiations. In the Uruguay Round negotiation, these

countries had been asked to do so, starting with a concession of putting caps or bindings on their own tariff rates. There are also concessions that these countries agreed to provide in the matter of reducing tariff rates. Accustomed to being mere observers of multilateral trade negotiations in the past, the developing countries have become active participants of these multilateral trade negotiations.

The trade agreements under the WTO are legal contracts. A dispute settlement process is created in the WTO to resolve differences in the interpretation of the rights of each contracting party and to require WTO member countries to correct their respective trade policies found by the WTO dispute settlement body to violate the contractual rights of other WTO member countries, and to authorize trade sanctions to enforce the body's decisions. The legal character of the trade agreements raises the quality of the trade concessions that had been negotiated under the auspices of the GATT. Without such, trade by any other country are vulnerable commitments unilateral modifications or withdrawals thereof, thereby reducing the expected benefit to other contracting parties.

Evaluating MFN Treatment

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In order to measure the benefits of the MFN treatment accorded to the Philippines under the 1947 GATT agreement, the loss in exports is first estimated using World Bank-UNCTAD's SMART model.⁵ The model was developed to assist particularly developing countries in assessing the economic impact of the trade restrictions on their respective exports maintained by their trading partners. In the

⁵ See Laird and Yeats (1990) for the description of the model structure and data base used in SMART.

Philippines' case, the model was used to compute how much of its 1992 top exports might be lost because of the loss of MFN treatment.

Loss of MFN treatment is modeled in this analysis as a five percentage points increase in the tariff rates on Philippine exports as they enter their respective destination markets abroad. The higher tariff rates on only these exports increase the prices of these articles in their destination markets and reduce the volumes that are sold there. The articles covered are the top ten agricultural exports and the top 100 non-agricultural exports.

The following table below highlights the key assumptions used in the simulation of the loss in Philippine exports arising from withdrawal of the Philippines MFN privilege by its trading partners.

Key Assumptions Used in the Simulation

- ♦ Trading Partners abrogate their MFN obligations under GATT 1947 by increasing by 5 percentage points their tariff Rates on philippine exports (i.e. Philippine Loses MFN Treatment)
- ♦ Import Demand Elasticity is 5
- ♦ Substitution Elasticity is 10
- ♦ Base year is 1992

The reductions in export volumes corresponding to a five percentage points increase in the tariff rates maintained by the Philippines trading partners against its exports are substantial. In Table 1, these exports may be reduced from a low of 17 to a high of 88 percent. The average decline is 54 percent. About \$512 million involving the top ten agricultural exports are at stake. Hardest hit are crude coconut oil and prawn exports. Some \$175,700 worth of coconut oil exports may go to competitors while prawn and shrimp exports may lose about \$175,780. These numbers are 49 and 88 percent respectively of their base export values.

Table 2 shows the impact on the top forty nonagricultural exports if the Philippines loses MFN treatment. Nearly 85 percent of its nonagricultural exports may be lost to competitors, if Philippine exports are taxed five percentage points higher by its trading partners. Apparently groups of exported nonagricultural products may be completely wiped out. Topping this list are semi-conductor devices, integrated circuits and micro-assemblies, petroleum naptha, and cathodes and sections of cathodes of refined copper.

The reduction in all the top fifty commodity exports is 80 percent, implying that the problem can be serious. However, there are several factors that tend to mitigate the possible serious situation. The Philippines trading partners may opt to continue providing MFN treatment on a quid pro quo basis.

These export losses are then introduced as a shock to an applied general equilibrium model of the Philippine economy to evaluate the income loss to the economy. However, only 20 percent of the country's baseline exports in 1992 is considered, instead of the eighty percent, in recognition of the possible bilateral deals that the Philippines may still forge to minimize its economic loss. In designing the counterfactual experiment, all commodity exports are taxed an endogenous rate, the yield of which is assigned to the private consumer. The rate of the tax is then computed, as part of the solution, in a way that commodity exports decline by 20 percent.

⁶ The model is described in Clarete (1996). Applied general equilibrium models to estimate the value of trade concessions are increasingly used to estimate the value of trade concessions. See for example Hamilton and Whalley (1985) or Harrison, Rutherford and Wooton (1989). Ideally a global applied general equilibrium model should be used for this analysis.

Table 1 - The Impact of Losing MFN Treatment on Top Philippine Agricultural Exports (All Values in Million Dollars)

Table 2 - The Impact of Losing MFN Treatment on Top 40 Philippine Non-Agricultural Exports (Values are in Million Dollars)

Rank	Commodity	1992 Export Values	Export Reduction Due to Loss of MFN Treatment Enjoyed By Existing	
			%	Value
1	Semi-conductor devices	672.98	100.00	672.98
2	Finished electrical &			
	electronic mach., equipt.			
	& parts	357.40	94.00	335.43
3	Ignition wiring sets &			
	other wiring sets	259.34	76.00	196.84
4	Other electronic inte-			
	grated circuits & micro-			
	assemblies	250.06	100.00	250.06
5	Copper concentrates	124.72	71.00	88.34
6	Gold contained in copper			
	ores & copper concetrates	122.05	75.00	91.15
7	Other transmission			
	apparatus	118.57	98.00	115.87
8	Petroleum naphtha	101.24	100.00	101.24
9	Other semi-conductor			
	devices	87.50	100.00	87.5
10	Cathodes & sections of			
	cathodes of refined copper	81.96	100.00	81.96
11	Brassieres: mftd from			
	materials	74.72	95.00	70.68
12	Iron ore agglomerates	60.42	61.00	37.04
13	Baskets &basketware:			
	of vegetable plaiting			
	materials	57.66	98.00	56.71
14	Input or output units,			
	whether /not presented w/			
	the rest of a system	53.02	100.00	53.02

Table 2 (continued)

Rank	c Commodity	1992 Export Values	Export Reduction Due to Loss of MFN Treatment Enjoyed By Existing	
			%	Value
15	Gloves & mittans, of leather	49.30	51.00	24.93
16	Furniture: of rattan	46.89	100.00	46.89
17	Telephone sets	43.24	100.00	43.24
18	Other articles for Christmas	41.76	100.00	41.76
19	Jerseys, pullovers,		100.00	110
20	cardigans: synthethic fibers Other babies' garments & clothing accessories:	36.67	79.00	29.01
	synthetic fibers	33.42	59.00	19.78
21	Gloves and mittens,	00.12	00.00	13.70
	other than leather	31.33	12.00	3.88
22	Imitation jewelry, of other	01.00	12.00	0.00
	non-precious materials, n.e.s.	29.59	96.00	28.25
23	Trousers, bib & brace overalls	29.55	74.00	21.73
24	Other basketwork, wickerwork	27.78	87.00	24.24
25	Baseball & softball gloves	27.22	97.00	26.34
26	Other babies' garments &	222	01.00	20.04
	clothing accessories: of cotton	26.24	80.00	20.89
27	Wooden doors	25.33	99.00	25.04
28	Parts and accessories of the app.	20.00	00.00	20.04
	& eqt. of subgrps. 764.3 and 764.8	25.16	87.00	21.96
29	Other embroidered goods	24.48	63.00	15.36
30	Tennis, basketball, gym,	21.10	00.00	10.00
	training shoes and the like	24.36	81.00	19.68
31	Track suits (incl. jogging suits:	_1.00	01.00	10.00
	of synthetic fibers	23.40	78.00	18.27
32	Transistors-not photosensitive	20.10	10.00	10.21
	w/ a dissipation rate < 1 watt	20.84	100.00	20.84
33	Men's polo shirts & sportshirts,			
	of synthetic fibers	19.97	75.00	15.03

Table 2 (continued)

Rank	Commodity	1992 Export Values	Export Reduction Due to Loss of MFN Treatment Enjoyed By Existing	
			%	Value
34	T-shirts, singlets & other vests: of synthetic fibers, knitted			
	or crocheted	15.46	78.00	12.06
35	Seats of rattan or cane	14.57	100.00	14.57
36	Abaca pulp (chemical)	14.32	44.00	6.29
37	Other radio broadcast receivers combined w/ sound recording or reproducing apparatus	14.25	70.00	10.04
38	Petroleum oils & oils obtained from bituminous minerals, crude	13.92	83.00	11.51
39	Nightdresses & pajamas, women's or girls': of synthetic fibers	2.69	100.00	2.69
40	Liquefied petroleum gas	0.68	100.00	0.68
	TOTAL / AVERAGE	3084.08	84.03%	2763.86

Table 3 shows the effects on outputs and prices of the twelve producing sectors of the model. All commodity producing sectors shrink, with nonagriculture suffering far more than agriculture. Machineries decline by at least 40 percent. Textiles and garments will shrink to at least 30 percent its baseline size. The petroleum industries had the lowest percentage decrease in economic activity. Agricultural sectors decline as well, although theirs are at a one-digit level. Mining activity decreases by nearly 20 percent.

The prices of exportables and non-tradables generally fall, while those of importables rise. With reduced market abroad, exportables are diverted to the domestic market,

Table 3 - Economic Effects of A 20 Percent Reduction in Exports of Goods Due to Loss of MFN Treatment (percent change)

Sector	Output	Prices
Agricultural Crops	-6.89	-9.17
Livestock	-3.36	10.93
Fisheries	-9.59	-6.62
Natural Resources	-19.16	3.81
Agricultural Processing	-6.18	-6.27
Textiles/Garments	-31.17	10.93
Wood and Wood Products	-27.05	20.14
Chemical Products	-14.13	7.08
Petroleum	-0.11	3.05
Machineries	-42.84	32.64
Other Industries	-17.15	11.02
Services	10.60	-10.28
Foreign Exchange		33.64

causing their prices to go down. Since commodity exports decline, less foreign exchange is available for imports. The exchange rate has to rise in order to eliminate the trade deficit that cannot be financed with the exogenous capital inflows. The higher exchange rate would have induced additional exports, if not for the restriction in the model that the country can only sell up to 80 percent of its base-line exports due to the loss in MFN treatment. Thus prices of exportables decline relative to their respective world prices in terms of local currency. The prices of importables, on the other hand, have to rise because of the two-thirds depreciation of the exchange rate.

Services, the non-tradable in the model, absorb the resources that are reallocated away from tradables. The added resources increase the sector's supply capacity. Combining this with a general decline in demands due to

lower income may explain why the prices of nontradable services go down. Livestock is an agricultural sector in the model that is practically a non-tradable, explaining the relatively large drop in its prices.

The real income losses in the private and government sectors are shown in Table 4. These losses are the equivalent income variation associated with the 20 percent loss in exports. The total income of the households may fall by nearly nine percent of its base level. The income loss of the government is 2.6 percent of its base level. The weighted average of these income losses is 7.8 percent.

Table 4 - Real Income Effects of A 20 Percent Reduction in Exports of Goods Due to Loss of MFN Treatment (in billion pesos)

	Base Values	Simulation Values	Percent Change
Private Sector	827.38	752.94	-9.00
Government	190.13	185.20	-2.60
Total	1,017.51	938.14	-7.80

If the Philippine government did not ratify the GATT Uruguay Round treaty in 1994 and accordingly fails to become a member of the World Trade Organization in 1995, the economy could suffer an annual loss of nearly 8 percent of its gross domestic product. This loss is due to the expected decline in its commodity exports by about 20 percent of their 1992 levels. This estimate is based on the assumption that the capital inflows and foreign exchange remittances of the country's overseas contract workers would remain unchanged.

Membership in the WTO is a prerequisite to enjoying the MFN treatment privilege. The analysis conducted here

recognizes that MFN treatment could be provided to the country on a bilateral basis. There is, however, a substantive uncertainty associated with a bilateral MFN treatment. The treatment may be extended to the country in the form of a gift rather than a legal entitlement. That being so, the privilege can be withdrawn any time by its trading partners without the protection from the WTO. Trading partners may set conditions for their extension of MFN treatment to the Philippines. Such conditions in turn may constitute adjustment costs on the part of the Philippine economy.

Conclusion

This paper provided a measure of the benefit to the Philippines of the WTO MFN treatment. The country may forego nearly eight percent of its income if it loses MFN treatment. The analysis first computed the decline in the Philippines commodity exports if its key trading partners increase the tariff rates on such exports by five percentage points using World Bank-UNCTAD's SMART computer program. The forgone exports were then introduced as a shock to an applied general equilibrium model of the Philippines to calculate the income loss induced by reduced exports. This real income loss constituted this study's estimate of the value to the Philippines of its MFN treatment privilege.

The exercise conducted in this study does indicate the adverse consequences of losing MFN treatment. The country may lose about 80 percent of its export earnings. Even a consecutive loss of only 20 percent of its exports, in consideration of the possible bilateral deals that may occur, this translates to an income loss to the country of nearly eight percent. This figure is this paper's estimate of how valuable MFN treatment is to the Philippines.

The methodology described here takes off from one crucial assumption that loss of MFN treatment is automatically followed with increases in tariff rates. This paper has qualified this assumption in that bilateral extension

of MFN treatment is possible to the benefit of the grantee. While possible, such bilateral trade treaties are difficult to enforce and therefore unstable. When country B fails to abide by the terms of its trade pact with country A, there is no dispute settlement process that is good enough to deter such undesirable behavior. The recourse which the aggrieved country A can take in this situation is to unilaterally withdraw its concessions to B. The trade agreement breaks down and a trade war may develop.

the high contracting costs second drawback is inherent in a bilateral approach. Country A would have to negotiate with all its trading partners several trade pacts to govern the trades that flow between its customs territory and that of its trading partners, respectively. Such contracting costs may be too high as to deprive two customs territories of any trade pact. As a result, trade flows between the two countries are reduced or none may flow at all. Contracting costs may also arise due to the assymetry in economic size of potential contracting parties. A large economy, such as the United States, is a universal contractor, in that every other country (for as long as trading costs are reasonable) would like to contract with. But the universal contractor may not always be encouraged to negotiate and sign a trade pact with almost any government which wishes to negotiate one with it.

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