We can compute for the unit value of Philippine import groups from each ASEAN country vis-a-vis unit values of imports from the world. Symbolically, the price differential (PD) can be computed as follows:

$$(1)\quad PD = \frac{(M_{vij}/M_{qij}) - (M_{viw}/M_{qiw})}{(M_{viw}/M_{qiw})},$$

$$\text{if } M_{vij}/M_{qij} > M_{viw}/M_{qiw}$$

or

$$(2)\quad PD = \frac{(M_{viw}/M_{qiw}) - (M_{vij}/M_{qij})}{(M_{vij}/M_{qij})},$$

$$\text{if } M_{viw}/M_{qiw} > M_{vij}/M_{qij}$$

where:

M_{vi} = import value of the ith import group,

M_{qi} = import quantity of the ith import group,

j = subscript for import from ASEAN countries,

w = subscript for import from the world.

Formula (1) would be used if imports from the ASEAN have higher prices (unit values) and formula (2), if they have lower prices compared to imports from the world. In effect, formula (1) would indicate the price disadvantage of imports from the ASEAN against the world, and (2) the price advantage of imports from the ASEAN against the world. Even

so, if the imports from ASEAN vis-a-vis the world have almost equal unit values, the ASEAN imports can be considered to have been equally-priced compared to imports from the world. Here, the unit values are rounded to their nearest peso value.

At a seven-digit SITC level, the Philippines imports from one or more of its ASEAN partners. With four partners, the number of import groups as well as unit values per seven-digit SITC item may therefore vary from one to four. Within some SITC import groups, the unit value of each import group from the ASEAN countries may be lower, higher, or equal to the unit value of import from the world. For example, in 1975 the imported ASEAN material rubber and similar natural gums (SITC 231-01.00) had unit values that were higher (Indonesia), equal (Malaysia), or lower (Singapore) than the imports from the world. Thus, even within a given import group, ASEAN can be a cheaper and/or dearer source of Philippine imports.

Exorbitant differences in unit values, to be sure, may argue against price comparison of imports from ASEAN vis-a-vis the world. We are not in a position, however, to determine the cut-off price differential(s) so as to disregard imports having unit value differences above such cut-off level(s). As already noted, this merely suggests that it is extremely difficult to determine whether a freer ASEAN trade would cause trade creation or diversion. If we ignore, however, the excessive unit value differentials, say about 300 percent

or over, the remaining import unit values can still serve as indicators of which sources are cheaper or dearer.

Based on the 1975 import data, Table 8 summarizes the ASEAN-world unit value differentials of Philippine import groupings at the seven-digit levels reclassified at the one-digit SITC level. Of the 352 import groups from the other ASEAN countries, 15 or 4.3 percent had almost the same prices compared to those from the world; 138 or 38.5 percent had lower prices; and 199 or 57.2 percent had higher prices. The initial finding, therefore, indicates that in 1975, ASEAN partners were more expensive sources for a greater number of Philippine import groups.

Among the lower-priced ASEAN imports, many items (110 or 82 percent) were manufactured imports; chemicals (SITC 5) to miscellaneous transactions (SITC 9). Similarly, many higher-priced ASEAN imports (179 or 89.9 percent) were manufactured ones. On the aggregate, however, the number of lower-priced ASEAN import groups was noticeably less than the number of their higher-priced counterparts. Within each manufactured import cohort (SITC 5-9), all import cohorts had more groups with higher-than lower-priced ASEAN imports. In contrast, some non-manufactured import groups like crude material imports (SITC 2) and animal, vegetable oil and fats (SITC 4) exhibited more number of groups with lower- than higher-priced ASEAN imports.

Table 8

ASEAN-WORLD UNIT VALUE DIFFERENTIALS OF PHILIPPINE IMPORT GROUPS FROM ASEAN COUNTRIES, ACCORDING TO COMMODITY CLASSIFICATION, 1975

SITC Code	Commodity	Equally-Priced ASEAN Imports		Lower-Priced ASEAN Imports		Higher-Priced ASEAN Imports	
		Number of Import Group	Percent to Total	Number of Import Group	Percent to Total	Number of Import Group	Percent to Total
0	Food	3	0.86	9	2.59	12	3.45
1	Beverages/Tobacco	0	0.0	0	0.0	1	0.29
2	Crude Materials, Inedible except fuel	6	1.72	8	2.30	2	0.57
3	Mineral Fuels, Lubricants	2	0.57	5	1.44	5	1.44
4	Animal, Vegetable oils and fats	1	0.29	2	0.57	0	0.0
5	Chemicals	1	0.29	16	4.60	27	7.76
6	Mfd. goods classified by materials	1	0.29	22	6.32	32	9.19
7	Machinery & Transport Equipment	0	0.0	45	12.93	65	18.68
8	Miscellaneous Mfd. materials	1	0.29	19	5.46	37	10.63
9	Miscellaneous Transactions	0	0.0	12	2.30	18	5.17
	Sub-Total	15	4.31	138	38.51	199	57.18

Source of Raw Data: National Census and Statistics Office, Foreign Trade Statistics, 1975.

Viewed differently, Table 9 presents the distribution of Philippine ASEAN import groups in 1975 arranged according to price differential classes. Many ASEAN products had more than 10 percent price differential compared to world imports. Only 35 or 10 percent of the total number of ASEAN import groups had price differentials of less than 10 percent, and the rest had substantial price differentials. At the extreme end, in 27 ASEAN import groups, the world prices were more than 300 percent of the ASEAN prices, while in 55 import groups the ASEAN prices were more than 300 percent of the world prices. At any rate, Table 9 shows that higher-priced ASEAN imports were concentrated at the high price differential classes.

Tables 8 and 9 imply a more likely trade diversion effect on Philippine imports of an ASEAN trade liberalization. Or perhaps they suggest that the on-going item-by-item ASEAN tariff negotiation may still lead to net trade creation provided that selected lower-priced ASEAN imports would deserve earlier voluntary tariff cuts.

For further analysis, however, Table 10 presents the country's ASEAN import groups according to import expenditures during 1975. Unlike the results of the price comparison based on the number of import groups, Table 10 reveals that a greater part of Philippine imports from ASEAN were spent on products of nearly equal prices compared to imports from the world. Of the $128.7 million imports from its ASEAN partners, $75.7 million or about 59 percent were spent on

Table 9

DISTRIBUTION OF PHILIPPINE IMPORT GROUPS FROM ASEAN COUNTRIES, ACCORDING TO PRICE DIFFERENTIAL
1975

Price Differential (in percent)	Lower-Priced ASEAN Imports		Higher-Priced ASEAN Imports	
	No. of Import Groups	% to Total	No. of Import Groups	% to Total
Lower than 10%	16	4.6%	18	5.1%
10-49	41	11.7	31	8.1
50-99	23	6.6	35	10.0
100-149	18	5.1	19	5.4
150-199	6	1.7	15	4.3
200-249	3	0.9	10	2.9
250-300	4	1.1	16	4.6
More than 300	27	7.7	55	15.7
SUB-TOTAL	138	38.9	199	56.7

Source of Raw Data: National Census and Statistics Office, Foreign Trade Statistics, 1975.

Table 10

ASEAN-WORLD UNIT VALUE DIFFERENTIALS OF PHILIPPINE IMPORTS FROM ASEAN COUNTRIES ACCORDING TO IMPORT EXPENDITURES, 1975

SITC Code	Commodity	Equally-Priced ASEAN Imports		Lower-Priced ASEAN Imports		Higher-Priced ASEAN Imports	
		Expenditures	Percent to Total	Expenditures	Percent to Total	Expenditures	Percent to Total
0	Food	$ 863,287	0.67%	$ 20,254,830	15.74%	$ 13,931,099	10.83%
1	Beverages/Tobacco	-	-	-	-	3,799	0.003
2	Crude Materials, Inedible except fuel	1,631,930	1.27	196,808	0.15	113,934	0.09
3	Mineral Fuels, Lubricants, related materials	73,128,542	56.83	2,838,312	2.21	3,285,667	2.55
4	Animal, Vegetable oils and fats	31,847	0.02	291,403	0.23	-	-
5	Chemicals	2,700	0.002	496,314	0.39	1,813,050	1.41
6	Mfd. goods classified by materials	671	0.001	1,017,834	0.79	2,632,773	2.05
7	Machinery and Transport Equipment	-	-	790,504	0.61	2,922,218	2.27
8	Miscellaneous Mfd.	3,454	0.003	70,830	0.06	743,400	0.58
9	Miscellaneous transactions	-	-	434,471	0.34	11,775,060	9.15
	Sub-Total	$ 75,662,431	58.8%	$ 26,391,306	20.51%	$ 26,621,000	20.70%

Source of Raw Data: National Census and Statistics Office, Foreign Trade Statistics, 1975.

major items considered of equal unit value. On the other hand, $26.4 million or only 20.5 percent were spent on ASEAN goods of lower prices and $26.6 million or 20.7 percent were spent on ASEAN imports which were priced higher than imports from the world.

Within the equally-priced category, mineral fuels (SITC 3) absorbed $73 million or nearly 57 percent of the total Philippine expenditures on ASEAN imports in 1975. Next, crude materials (SITC 2) accounted $1.6 million or 1.3 percent. And the remaining import groups shared very small percent of the total expenditures on equally-priced ASEAN imports.

For comparison, on the lower-priced category food (SITC 0) accounted $20.2 million or about 16 percent of the total ASEAN imports. In addition, a substantial portion of the country's expenditures on lower-priced ASEAN imports were on mineral fuels (SITC 3) of about $2.8 million or 2.2 percent of its total ASEAN import expenditures. While the rest of the import groups shared less than $.5 million or less than one percent each, manufactured goods (SITC 6) and machinery and transport equipment (SITC 7) accounted about $1.02 and $.8 million respectively.

Similarly, on the higher-priced ASEAN imports, most import expenses went to food (SITC 0), about $13.9 million or 11 percent of the total ASEAN imports. Again, mineral fuels (SITC 3) sizably accounted $3.3 million or 2.6 percent, and manufactured imports

(SITC 5 to 7) absorbed some $7.3 million or 5.7 percent of total ASEAN imports. And about $26.6 million spent on higher-priced ASEAN imports (9 percent of total ASEAN imports) involved miscellaneous transactions (SITC 9).

Table 11 presents the distribution of Philippine expenditures on imports from the other ASEAN countries in 1975 rearranged according to some price differential classes . On the lower-priced ASEAN imports, about $21 million (or 16 percent of the total expenditures on ASEAN imports) was spent on goods with world price greater by less than 10 percent. And $3.9 million (or 3 percent of the total ASEAN imports) was spent on ASEAN items having world prices greater by 10 to 49 percent compared to the ASEAN prices. While the rest of the expenditures on lower-priced ASEAN imports were on items having world prices higher by 50 to 300 percent compared to ASEAN's only about $.5 million were spent on ASEAN items having world prices higher by more than 300 percent against ASEAN prices.

On the other hand, about $18.9 million (or 15 percent of total ASEAN import) was spent on ASEAN imports with prices higher by less than 10 percent compared to world prices. Like the expenditures on lower-priced ASEAN imports, the expenditures on the higher-priced ones monotonically decreased as the price differentials widened up to the 200 to 249 percent class. Unlike the expenditures on lower-priced ASEAN imports, however, those on the higher-priced ones were substantially

Table 11

DISTRIBUTION OF PHILIPPINE EXPENDITURES ON IMPORTS FROM ASEAN COUNTRIES, ACCORDING TO ASEAN-WORLD PRICE DIFFERENTIAL, 1975

Price Differencial (in percent)	Lower-Priced ASEAN Imports		Higher-Priced ASEAN Imports	
	Expenditures	% to Total	Expenditures	% to Total
Lower than 10%	$20,935,284	16.2	$18,855,580	14.7
10-49	3,867,760	3.0	1,970,309	1.5
50-99	574,520	0.4	1,857,980	1.4
100-149	326,899	0.3	749,755	0.5
150-199	111,368	0.1	888,132	0.7
200-249	6,139	0.5	109,147	0.1
250-300	22,307	0.02	1,564,877	1.2
More than 300	499,059	0.4	816,531	0.6
SUB-TOTAL	$26,343,336*	21.91	$26,632,311*	20.7

*Sub-total not equal with that in Table 10 due to rounding.

Source of Raw Data: National Census and Statistics Office, Foreign Trade Statistics, 1975.

greater than $.5 million in each price differential class, except those at the 200-249 percent level. Moreover, about $1.5 million was spent on ASEAN imports having prices 250 to 300 percent greater than world prices. Lastly, about $.8 million went to ASEAN imports having prices of more than 300 percent of the world's. If we consider imports having less than 10 percent price differentials as equally-priced ASEAN imports, however, we can conclude that most of the country's total expenditures (about 90 percent) were on competitively priced ASEAN imports.

For sure, Tables 8 to 11 present price differentials during 1975 only, but to determine whether ASEAN imports were cheaper or dearer requires price comparison over a long period. Very likely, few ASEAN import groups had consistent price advantage or disadvantage (in absolute or relative terms) compared to imports from elsewhere. Table 12 presents the ASEAN imports during 1975 at the seven-digit SITC level that had consistent relative price positions (not absolute differentials) based on 1970 imports. Of the 199 higher-period ASEAN products in 1975, only 35 import groups ($2,960,000 imports values) consistently registered higher prices compared to world prices. Of the 133 lower-priced ASEAN, only 19 ASEAN imports ($1,442,600) had persistent lower prices vis-a-vis the world's. And only one ASEAN import group, petroleum crude (valued at $62,774,500) had nearly equal ASEAN-world prices. Lastly, the price differentials of some of these import items were too

Table 12

PHILIPPINE IMPORTS FROM ASEAN COUNTRIES DURING 1975 WITH CONSISTENT RELATIVE ASEAN-WORLD PRICE DIFFERENTIAL POSITION BASED ON 1970 IMPORTS ACCORDING TO COMMODITY CLASSIFICATION

SITC Code	Commodity	Import Expenditures in 1975 (in $1,000)	Tariff Rate	Price Differential in 1975 in percent
	HIGHER PRICED ASEAN IMPORTS			
121-01.01	Lead tobacco wrappers, unstripped	$ 3.8	30%	58.4%
521-02.01	Tar oils & other chem. from coal, petroleum & natural gas	17.8	10	84.2
541-09.45	Other veterinary biologicals (inc. animal semen)	6.0	20	62.0
551-01.09	Other essential oils for the manufacture of medicine	11.4	50	6.7
552-01.19	Toilet preparations	0.6	100	72.2
621-01.03	Tire mfg. & repair materials except camelback	4.3	30	20.3
621-01.11	Plates, sheets, strips & profile shapes of unhardened rubber	124.0	50	60.4
665-01.09	Other bottles & containers & stoppers of common glass	6.9	50	150.0
665-09.01	Laboratory, medical, surgical, dental & hygienic glassware	0.5	20	29,407.7
687-01.01	Ingots, slabs and pigs	1,845.3	10	1.8
699-18.01	Locks, padlocks, spring, livebolt latches & parts thereof	1.4	30	147.6

(Continuation of Table 12)

SITC Code	Commodity	Import Expenditures in 1975 (in $1,000)	Tariff Rate	Price Differential in 1975 in percent
699-21.17	Flexible tubular containers	28.9	50	275.0
699-29.23	Stoppers, bottle caps, capsules and other packing accessories	19.2	30	58.5
711-05.13	Internal combustion diesel & semi-diesel engine parts for trucks	116.5	10	60.9
716-03.05	Earth excavating, levelling, boring & extracting machinery	65.7	10	102.9
716-08.03	Machinery for cutting for mfg. paper or paperbook articles	83.5	10	101.9
716-13.62	Weighing machinery	8.5	20	5438.1
716-15.01	Taps, cocks, values & other appliance for regulating flow of fluids through pipes	10.1	10	326.1
716-15.02	Shafts, gearing, gearboxes, flywheels and other transmission eqt. for machinery	44.0	10	41.7-519.5
721-05.09	Other parts of telephone & telegram apparatus	1.6	30	375.0
721-07.01	Electrical starting & ignition eqt. for internal combustion engines	3.0	30	127.8
721-07.02	Electrical lightning & signalling eqt., demisters for cycles & motor vehicles	5.0	30	16.2-223.2
721-19.18	Parts of electrical machinery & apparatus	10.2	50	218.5-257.6

(Continuation of Table 12)

SITC Code	Commodity	Import Expenditures in 1975 (in $1,000)	Tariff Rate	Price Differential in 1975 in percent
732-02.02	Motorcycles and side cars, complete	0.5	70	477.2
861-03.09	Other surgical, medical, vet. & dental instrument	2.0	10	2681.8
861-09.01	Engineering & surveying instruments	86.6	10	774.4
861-09.19	Measuring, controlling and Scientific instruments	30.35	20	561.3-2937.4
891-01.03	Tape recorder incl. combination, sound recorders & amplifiers	0.3	70	9.1
892-09.02	Other advertising matters and catalogues	0.9	10	101.3
892-09.19	Other printed matters	9.1	100	12.9
892-09.10	Other books, printed	376.1	10	160.4-467.7
899-14.08	Golf Clubs	36.2	20	141.4
	Sub-Total	2,960.25		
	LOWER PRICED ASEAN IMPORTS			
292-07.02	Cutting, ships, line trees, & other plants	1.3	50	22.2%
313-04.03	Lubricating preparations of oil or greases	7.8	20	48.3
313-05.03	Wax, paraffin	723.5	20	11.8-26.7
412-01.06	Palm oil, crude	287.7	30	4.2

(Continuation of Table 12)

SITC Code	Commodity	Import Expenditures in 1975 (in $1,000)	Tariff Rate	Price Differential in 1975 in percent
511-09.55	Phosphates, hypophosphites & phosphates	6.0	10	103.3
599-02.05	Herbicides & other similar preparations	1.0	20	1200.0
663-01.09	Other grinding, polishing wheels of natural stones	7.2	20	81.6
663-03.05	Friction materials of asbestos for trucks, buses & ind. machines	0.3	50	471.1
699-21.13	Casks, drums, cans, boxes & similar containers of aluminum	2.9	50	125.0
711-04.01	Aircraft engines	10.7	10	1.7
711-05.12	Gasoline & kerosene engine parts for trucks, buses & ind. machines	143.7	10	91.0
716-13.15	Rubber-processing & rubber products mfg. machinery	78.2	30	120.8
716-13.33	Cigarette & cigar-making machinery	65.7	30	2271.2
732-06.09	Chassis, frames & other parts for trucks	94.2	20	185.0
863-01.03	Two-dimensional films, multicolored	1.4	₱2.00/lm	18.6-350.0
863-01.04	Cinematographic films, exposed for educational, tech. & scientific use	2.5	₱0.30/lm	75.0

(Continuation of Table 12)

SITC Code	Commodity	Imports Expenditures in 1975 (in $1,000)	Tariff Rate	Price Differential in 1975 in percent
892-01.03	Textbooks, workbooks and supplementary readers for elementary	0.2	10	117.4
892-01.04	Technical & Scientific books	8.3	10	84.1
	Sub-Total	1,442.6		
	EQUALLY PRICED ASEAN IMPORTS			
312-01.01	Petroleum, crude	$62,774.5	20	
	Total	67,177.35		
	Percentage of ASEAN Imports	.05%		

Source of Raw Data: National Census and Statistics Office, Foreign Trade Statistics 1975 and 1970.

1972 Revised Tariff and Customs Code of the Philippines as amended by Presidential Decree 34, Executive Order Nos. 414, 423-424.

exhorbitant such that we can conclude that most of them were not really homogeneous.

7. Item-by-Item Tariff Cut

To evaluate the impact of the ASEAN item-by-item approach towards lower tariff, we focus on individual import groups offered voluntarily by the Philippines for tariff cuts. Using the methods used earlier, we determine whether the selected items would lead to sizable import expansion, trade creation or diversion.

To begin with, we have reclassified the 150 BTN items fo far offered by the Philippines for tariff cuts into three-digit SITC import groupings. Certainly, at the four-digit BTN levels almost all of the commodities offered by the Philippines for voluntary tariff cuts were of minor importance. Many items (about 110 or 73.3 percent of the selected 150) were not even imported by the Philippines from the other ASEAN countries, and in some items, no import was at all recorded in 1975. At the three-digit SITC levels, Table 13 shows that of the selected imports during 1975 the share of ASEAN products to Philippine total imports was on the average only .08 percent. Among the selected items, the percentage of imports from ASEAN partners vis-a-vis the world ranged from .001 percent (electrical items SITC 721) to 8.9 percent (mineral imports). Moreover, the aggregate value of the selected 150 items as percentage of Philippine imports from ASEAN had been very small at 1.32 percent of the $128.7 million imports in 1975.

Table 13

IMPORTS DURING 1975 ON THE SELECTED ITEMS OFFERED BY THE PHILIPPINES FOR VOLUNTARY 10% TARIFF CUT

SITC Code	Philippine Voluntary Offers	Imports from the world ($1,000)	Imports from ASEAN ($1,000)	Percentage Share of ASEAN to total imports
032	Fish & fish preparations canned or not canned	$ 33,376.0	$ 64.8	0.194%
074	Tea and mate	224.6	7.1	3.161
075	Spices	1,020.4	0.8	0.078
231	Crude rubber, inc. synthetic and reclaimed	6,877.0	148.0	2.152
272	Crude minerals, excl. coal, petroleum, fertilizer matts and precious stones	7,995.4	246.7	3.086
283	Ores of non-ferrous base netaks and concentrates	578.7	317.3	54.830
292	Crude vegetable materials, inedible	6,659.7	16.5	0.248
521	Mineral tar and crude chem. from coal, petroleum and nat. gas	200.1	17.8	8.896
541	Medicinal and pharmaceutical products	34,553.8	24.5	0.070
629	Rubber manufactured	17,963.1	8.6	0.048
663	Mineral manufactures excl. clay and glass	11,013.7	1.7	0.015
663	Mineral manufactures excl. clay and glass	11,013.7	7.2	0.065
663	Mineral manufactures excl. clay and glass	11,013.7	80.0	0.726

(Continuation of Table 13)

SITC Code	Philippine Voluntary Offers	Imports from the world ($1,000)	Imports from ASEAN ($1,000)	Percentage Share of ASEAN to total Imports
699	Manufactures of metals	$ 93,823.9	$ 37.3 19.2	0.021
699	Manufactures of metals	93,823.9	11.1	0.012
714	Office machinery	26,461.3	0.5	0.002
716	Mining, construction and other industrial machinery	438,157.0	83.5	0.019
716	Mining, construction and other industrial machinery	438,157.0	78.2	0.018
721	Electric machinery, apparatus and appliances	156,944.0	31.3 0.8	0.020
721	Electric machinery, - ratus and appliances	156,944.0	0.8	0.001
861	Scientific, medical measuring and controlling inst. and apparatus	22,233.4	9.3	0.043

Source of Raw Data: National Census and Statistics Office, Foreign Trade Statistics, 1975.

Based on whatever available higher import elasticity estimates (Sicat 1969), Table 14 shows that with 10 percent tariff cut the import expansion effects of the selected items ranged from .64 percent to 31.4 percent. The estimates represent about $.07 million additional increase in total import values of the 150 items. In terms of aggregate value, the expansion of the selected commodities would represent only about 1.63 percent of the Philippine total expansion on ASEAN imports under the 10 percent across-the-board tariff reduction scheme.

The negligible expansion of imports can be mainly explained by the negligible shares of the selected items in the total value of Philippine ASEAN imports. As stated, the selected 150 items in 1975 accounted only 1.32 percent of the total Philippine expenditures on ASEAN products. In addition, these items had comparatively low tariff rates. Such low estimates on import expansion, however, were obtained with the use of higher estimates on import elasticities (Sicat 1969). Surely, the small tariff reduction of 10 percent seems not sufficient to initiate sizable import expansion.

More important, using the same formula on price differentials, Table 15 presents ASEAN-world price differentials of the proposed preferential items that were imported in 1975. Of the 40 items imported in 1975, 19 items had world prices higher by 5.7 to 4,952 percent of the ASEAN prices. On the other hand, 21 items had prices higher by 42 to 23,114 percent compared to world prices. Based on

Table 14

ESTIMATED EXPANSION EFFECTS OF THE SELECTED ITEMS OFFERED BY THE PHILIPPINES FOR VOLUNTARY 10% TARIFF CUT, 1975

SITC Code	Philippine Voluntary Offers	Tariff Rates	Elasticity (%)	Expansion Effect (in percent)
032	Fish & fish preparations, canned or not canned	10	-8.20	7.46
074	Tea and mate	70	-6.36	26.08
075	Spices	50	-6.36	20.99
231	Crude rubber, ink synthetic and reclaimed	20	-8.90	14.24
272	Crude minerals, excl. coal, petroleum, fertilizer materials, precious stones	10	-5.42	4.93
283	Ores of non-ferrous base metals and concentrates	10	-5.42	4.93
292	Crude vegetable materials, inedible	20	-3.25	2.96
521	Mineral tar & crude chem. from coal, natural gas and petroleum	10	-3.25	2.96
541	Medicinal & pharmaceutical products	20	-3.25	5.20
629	Rubber manufactured articles	50	-9.50	31.35
663	Mineral manufactures excl. clay and glass	10	-5.42	4.93
663	Mineral manufactures excl. clay and glass	20	-5.42	8.67

(Continuation of Table 14)

SITC Code	Philippine Voluntary Offers	Tariff Rates	Elasticity (%)	Expansion Effect (in percent)
699	Manufactures of metals	30	-5.42	12.47
699	Manufactures of metals	20	-5.42	8.67
714	Office Machinery	20	-0.70*	1.12
716	Mining, construction & other industrial machinery	10	-0.70*	0.64
716	Mining, construction & other industrial machinery	30	-0.70*	1.61
721	Electric machinery apparatus & appliances	30	-0.70*	1.61
721	Electric machinery apparatus & appliances	50	-0.70*	2.31

*Based on Bautista's estimate on one-digit SITC 7 level, Sicat's estimates on capital good import-elasticities are not theoretically satisfactory.

Source of Raw Data:

National Census & Statistics Office, Foreign Trade Statistics, 1975; Tariff and Customs Code of the Philippines as amended by Presidential Decree No. 34.

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Sicat, G.P. (1969) "Import Demand and Import Substitution in the Philippines, 1953-1963," Discussion Paper No. 69-2, IEDR-U.P. School of Economics, January.

Table 15

ASEAN-WORLD UNIT VALUE DIFFERENTIALS
OF THE SELECTED ITEMS OFFERED BY PHILIPPINES
FOR VOLUNTARY 10% TARIFF CUT

SITC Code	Commodity	Imports from ASEAN ($1,000)	Tariff Rate (in percent)	Unit Value Differential (in percent)
	HIGHER PRICED ASEAN IMPORTS			
521-02.01	Tar oils & other crude chemicals from coal	17.8	10%	84.2
541-09.22	Veterinary medicine for the eradication of pests	24.5	20	71.9
663-02.09	Abrasive paper & cloth coated with synthetic abrasives	1.7	20	318.0
699-29.23	Stoppers, bottle caps, screw cap type	19.2	30	58.5
721-04.23	Resistors and barreters	37.3	50	350.0
074-01.01	Tea	7.1	70	80.5
032-01.14	Sardines	64.8	10	25.6
032-01.05	Cuttlefish, canned	483.1	100	42.0
231-01.00	Pre-vulcanized natural rubber latex	148.0	20	24.6
716-13.72	Liquid filters, except for motor vehicles			23,114.8
716-06.03	Paper & paperboard cutting machine, machine for making paperboard bags and boxes	83.5	10	101.9

(Continuation of Table 15)

SITC Code	Commodity	Imports from ASEAN ($1,000)	Tariff Rate (in percent)	Unit Value Differential (in percent)
714-01.01	Standard typewriters, electric	5.2	20	43.2
716-13.81	Moulds for metal on metallic carbides Moulds for non-metals	7.1	20	1,861.8
	Sub-total	899.3		
	LOWER PRICED ASEAN IMPORTS			
714-02.01	Adding machines	5.0	20	63.2
714-02.07	Cash registers with totalling device	0.5	20	231.3
716-03.12	Cement mixers of capacity of four bags and above	0.5	30	2,976.7
721-05.01	Intercommunication sets, telephone type	0.8	30	101.3
861-02.03	Photographic cameras & photographic flashlight apparatus	9.3	30	271.8
292-03.04	Shellac	16.5	20	33.5
032-01.14	Sardines (incl. anchovies sardine style)	64.8	10	67.3
231-01.00	Pre-vulcanized natural rubber latex	148.0	20	21.3
663-01.09	Grinding & polishing wheels and stones	7.2	20	81.6
669-29.02	Pedal cycle chains not over 114 links of iron or steel	11.1	20	36.5

(Continuation of Table 15)

SITC Code	Commodity	Imports from ASEAN ($1,000)	Tariff Rate (in percent)	Unit Value Differential (in percent)
714-01.03	Standard typewriters, non-electric	0.5	20	10.3
716-13.15	Rubber working machinery and	78.2	30	120.8
716-13.81	Moulds for metal or metallic carbides Moulds for non-metal	7.1	10	124.3/5.7/ 200.9
721-01.01	Generators, 10kw. and over	31.3	30	226.5/1420.4/
721-05.01	Telephone switching equipment	0.8	30	101.3
721-19.11	Electrical instruments for measuring, regulating electrical quantities excl. supply meters	4.2	50	311.6
629-02.02	Rubber droppers	8.6	50	20.0
	Sub-total	394.4		

Source of Raw Data: National Census and Statistics Office, Foreign Trade Statistics, 1975.

import values, however, about $899,300 or 69.5 percent of total Philippine expenditures on the proposed preferential items were spent on lower-priced items while about $394,400 or 30.5 percent were spent on higher-priced items.

8. Some Implications

Contrary to the U.N. (1974) report, which is perhaps the stronghold of the ASEAN trade liberalization scheme, the limited and selective approach towards freer regional trade may not provide the "quickest way of expanding markets of individual countries" and more so not a safe and short way to the "rationalization of the productive structure of ASEAN economies." For one thing, the item-by-item negotiations on tariff reduction are unable to considerably expand ASEAN imports. Data on the Philippines indicate that the selected 150 items involved only a few insignificant imports. And the import values of preferential items were very negligible to rationalize Philippine industries. Furthermore, the slow progress towards freer ASEAN trade is obstructed by the nominal tariff cut of merely 10 percent on the few items.

In the meantime, to take advantage of the item-by-item tariff compromise, Philippine negotiators should begin first with items that are cheaper to obtain from the ASEAN. If economic planners want to enhance the trade creating effects of the ASEAN item-by-item tariff

reduction program, they must look closer at the price differentials of ASEAN vis-a-vis non-ASEAN sources. But since the ASEAN-world price differentials have been very unstable, it seems that an item-by-item, step-by-step tariff reduction scheme may hardly lead to a net trade creation. Thus tariff negotiators should painstakingly review numerous price behaviors not only during one or two years but on a long-term perspective. Lastly, they should look into the expansion effects of tariff reduction on selected ASEAN imports to determine the size of trade creation or diversion that could be realized.

Given the problems of the item-by-item scheme, however, an across-the-board tariff slash may turn a better trade liberalization alternative. Aside from a greater import expansion, an across-the-board tariff reduction may result to a net trade creation for the Philippines because the country spent, on the whole, greater amount on equally- and lower- than higher-priced ASEAN items. More important, an across-the-board tariff reduction means equal reduction in the "effective protection rates." In-general, equal rate of protection on value-added of Philippine industries should be a major feature of a rational industrial policy matrix. Thus, in addition to its simplicity (in contrast to the expensive rounds of tariff negotiations on item-by-item, quid pro quo basis), an across-the-board tariff slash would be nearer a solution to rationalize the Philippine industries.

Despite the advantage of an across-the-board against item-by-item tariff reduction, the high and uneven Philippine tariff walls, however, may remain the single biggest obstacle to substantially expand Philippine intra-ASEAN industrial trade, and nationalize the country's industries. The 10 percent tariff concession across-the-board, for instance, seemed inadequate to cause substantial trade expansion and consequently resource reallocation in the ASEAN region. Yet a greater than 10 percent tariff deduction, while inducing greater trade expansion, may lead to distortionary effective protection rates. The equi-proportionate reduction of Philippine tariff walls may result to more unequal effective protection rates in the ASEAN context. Unequal protection levels are likely to result because the original Philippine tariff rates are, to start with, unequal. Thus a gradual across-the-board tariff reduction towards a free trade area may appear a second best solution to the dilemma of a limited Philippine intra-ASEAN trade liberalization.

Although an ASEAN free trade area implies equal effective protection rates (zero), the proposal, however, may lead to industrial polarization. The Philippines is not as industrialized as Singapore or Malaysia, but it is more industrially advanced than Indonesia or, perhaps, Thailand. Many argue that with the elimination of intra-ASEAN tariffs some industries in the economy will surely be harmed or might even perish. A closer look at ASEAN tariff structures, however, implies that the fear of industrial polarization has no

economic basis. Certainly the proposed 10 percent across-the-board annual tariff cut is too gradual a move towards an ASEAN free trade area. And Philippine imports from the other ASEAN countries have very high tariff levies, with an overall rate of 30 percent. This high tariff wall implies that an annual tariff slash of 10 percent across-the-board will reduce tariff on ASEAN imports to nearly zero levels only after 30 years. Such a long period is more than sufficient for infant industries to turn really competitive, otherwise there is no economic rationale for protection. Of course, some industries have lower tariff protection which may mean that their protective period is short under an ASEAN free trade area. These lowly protected industries, however, are considered less "infant" since they get lower protection. At any rate, the gradual elimination of tariff protection will open up the Philippine industries only to ASEAN competitors. Philippine firms should be gradually exposed first to ASEAN competition before they are eventually exposed to a liberal global trade.

9. Suggestions for Future Research

Certainly our conclusion are preliminary, and new studies may lead to different policy implications. Accordingly, we suggest that further research be undertaken on the ASEAN trade aspects. As part of the research agenda, studies of comparative advantage of each ASEAN economy in some competing industries like sugar, chemicals, and other manufacturing sectors be initiated to shed light on the prospect of

regional specialization. Perhaps the "domestic resource costs" of major ASEAN industries can be estimated. Such estimates are very relevant specifically in assessing ASEAN comparative advantages. Moreover, studies on the role of transnational corporations in the ASEAN region are very timely insofar as ASEAN states should formulate joint policies regarding foreign investment.

On closely related topics, there should be deeper analyses unto the implication of intra-ASEAN trade liberalization to include studies on higher forms of economic integration like free trade area and customs union. Someone should also look into the effects of the other forms of preferential trading arrangements particularly the liberalization of nontariff measures. We have also to determine the effects of the intra-ASEAN trade liberalization on the extra-ASEAN trade particularly with U.S., Japan, E.E.C., and third world nations. On top of all, research efforts should focus on the indirect, long-run effects of alternative trade liberalization schemes.

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