

PASCN Discussion Paper No. 99-03

Impact of Trade Reforms in the Asia-Pacific Region

Erlinda M. Medalla



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Impact of Trade Reforms in the Asia-Pacific Region

Erlinda M. Medalla*

I. Introduction

Even before APEC was conceived, the Philippines has been starting to implement trade reforms as part of its strategy to transform the country into a globally competitive economy. The main significance of what APEC has done is to strengthen the government's resolve and commitment to continue with the reforms, and possibly accelerate and deepen the implementation of these reforms. Thus, the Individual Action Plan (IAP) the Philippines submitted to APEC is set within the overall trade and industrial framework the government has chosen to adopt.

The objective of this paper is to assess what these reforms have been and what impact they have on the Philippine economy. As such, the paper starts in Section 2 with a brief review of what the reforms have been. This is followed by a discussion in Section 3 of the impact of these reforms on the economy as a whole and the manufacturing sector in particular using the results of the more recent PIDS studies on trade and industrial policy. The analysis on the economy-wide impact of trade reforms is a simulation of results isolating the effects of trade reforms. The study on the manufacturing sector is empirical in nature but it focuses on the competitiveness of firms and industries. These have been taken as indications of the potential of the manufacturing sector, how it is likely to perform in the new, more open trade regime. The paper then looks briefly at the Philippine export performance in Section 4. Finally, Section 5 adds some APEC regional trade perspective to the discussion.

II. Brief Review of Past Trade Policy Reforms

From the post-war period to the present, the Philippines has undergone major changes in its trade policy regime. In general, five stages/periods could be traced in its trade policy reform experience. The first is the pre-reform era of highly trade-restrictive and protectionist policy regime covering the post-war period up to the 1970s, supporting the inward-looking import-substitution strategy at that time. This is followed by the first major trade reforms during the first half of the 1980s -- the 1981-85 Tariff Reform Program, which brought down all tariff range to within 50 percent from highs of 100 percent tariff rates. The third period saw the major import liberalization episodes in 1986-88, soon after the EDSA revolution and under the Aquino Administration. During this period, imports for more than 1400 items were liberalized, bringing down the percentage of import restricted items to less than 10 percent. The fourth period is the second phase of the Tariff Reform Program narrowing down the tariff range to mostly within 30

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percent. This was implemented by the Aquino Administration under Executive Order 470 (EO 470) over a five-year period from 1991 to 1995. Finally, the fifth major period is the third phase of the Tariff Reform Program under EO 264 which is being implemented by the Ramos Administration over five years from 1996 to 2000. This would further narrow down the range to within 3 and 10 percent (excluding some agricultural products) by year 2000.

Before trade reforms started to be implemented in the 1980s, the Philippines has had more than three decades of highly protectionist and restrictive trade regime, characterized by escalating tariffs and import restrictions generally on finished products.

Such a regime created biases and unintended results which became embedded in the system. To summarize, the past-protracted protectionist trade policy resulted in three major biases.

- a. The protection structure (of high tariffs and tariff escalation) resulted in an import-dependent import-substituting policy. The low tariffs on imported inputs made them artificially cheaper discouraging backward linkages, inherently penalizing downstream industries and encouraging the use of imported inputs. The high tariff on imported finished products, on the other hand, promoted finishing stage, assembly type of industries. Thus, industries like textile, paper, cosmetic production, which was heavily dependent on imported inputs, grew, until they were constrained by the limited domestic market.
- b. Exports, on the whole, were penalized by the highly protectionist trade policy. The protectionist trade regime inevitably defends a lower exchange rate, which acts as a general penalty to exports.
- c. The protection structure artificially cheapened capital, encouraging greater capital intensity.

Recognizing more fully the adverse effects of past policies, the government started to undertake the first major trade reforms in 1981 with the passing of the 1981-85 Tariff Reform Program. Such reforms, followed through in the succeeding periods, are among the most basic reforms aimed at attaining global competitiveness, improved resource allocation and sustained economic growth. By ridding the market of distortions, trade liberalization would espouse greater reliance on the market, foster competition, and provide an even playing field which would induce to reveal and encourage to develop industries with real comparative advantage. The 1981-85 TRP brought down all the tariff rates to within the zero-to-50 percent range, reducing substantially both the average tariff and the variation in tariff protection across industries.

The Aquino administration implemented more trade reforms reducing import restrictions (mainly in the form of import licensing requirements or outright import ban) from 1986 to 1989, and narrowing the tariff range with the implementation of EO 470. From 1986 to 1989, import restrictions on some 1,471 PSCC lines were lifted. This reduced the number of regulated items as a percentage of total number of PSCC lines

from around 32 percent in 1985 to only 8.0 percent by the end of 1989. From 1989 to 1990, there was practically a lull in trade reforms when the country experienced severe difficulties caused by the December 1989 coup attempt, the oil price hike resulting from the Gulf war and a series of natural disasters. A few more items have been liberalized since then, bringing down the percentage of regulated items to less than 5 percent. (See Table 1)

Table 1
ANNUAL REMAINING REGULATED COMMODITIES

Year	No. of PSCC Lines Subject to Restrictions	% Regulated Items (as to Total PSCC Lines)
Total PSCC Lines	5,632	100.00
1970	1,307	23.21
1980	1,820	32.32
1985	1,802	32.00
1986	827	14.68
1987	653	11.59
1988	598	10.62
1989	470	8.35
1990	463	8.22
1991	439	7.79
1992	160	2.84
1993	253	4.49
1994	246	4.37
1995	222	3.94
1996	161	2.86

There were some tariff adjustments to cushion the effects somewhat of the removal of these import restrictions. The tariff changes, however, were generally temporary and minimal, resulting only in a slight increase in the average tariff.

Then, the second phase of the tariff reform program started to be implemented with the passing of EO 470 in 1991. This further narrowed down the tariff range, with the majority of the tariff lines falling within the 3 to 30 percent range by the year 1995. (See Table 2) Outside this range there were 43 number of lines coming in at zero rate and 208 lines with 50 percent tariff. The duty-free items were mainly capital goods and included cement. Those with 50 percent tariff were mainly agricultural products and industrial products covered by the BOI local content programs.

The Ramos Administration kept the trade liberalization program in its policy agenda, deeming it in line with its policy thrust towards global competitiveness. This is consistently enunciated in the Medium-Term Development Plan. Some of the earlier EOs and Central Bank Memos passed by the Ramos administration have been meant to liberalize trade further. This included EO 1, EO 2, EO 5, EO 8, and EO 61 among the

executive orders and CB Circulars 1347, 1356 and 1365 among the Central Bank Circulars. There has been some wavering in the implementation of these further trade reforms, with the suspension then revisions in executive orders and CB Circulars issued. Nonetheless, the intent to continue with the trade reforms remained. As early as a year before the completion of EO 470, the Tariff Task Force created at the time has started discussions about implementing reforms toward a lower and more uniform tariff structure by the year 2003. Indeed, the first major step toward this intent has been undertaken with the passing of EO 264. EO 264 constitutes the third phase of the Tariff Reform Program, which would further narrow down the tariff range to within 3 and 10 percent by the year 2000 for industrial products. The EO also virtually removed all zero duties, raising the floor tariff rate to 3 percent. For agricultural products, tariffication of QRs and the setting of minimum access volume of imports were implemented with the passing of EO 288, EO 313 and EO 328. Out-quota tariff rates for some of the affected products were raised to as high as 100 percent. By the year 2000, the ceiling tariff rate will still be as high as 65 percent. The majority of tariff lines cluster around 3 and 10 percent (See Table 2).

Table 2
FREQUENCY DISTRIBUTION OF TARIFF RATES

Rate Level %	Pre-Reform*	81 - 85 TRP**		Pre-E.O. 470 1990	E.O. 470				E.O. 264	
		1981	1985		1992	1993	1994	1995	1995	2000
Number of H.S. lines										
Specific	2	2	2	0				0	0	0
0	1	3	3	33	43	43	43	43	0	0
3	0	0	0	0	277	304	304	285	1,938	2,933
5	2	14	14	42	11	16	16	16	14	0
10	319	380	334	1,635	1,971	1,948	1,957	1,957	892	1,789
15	0	0	0	0	3	6	32	26	0	0
20	204	282	335	1,273	743	885	912	1,036	996	787
25	0	0	0	0	30	102	132	19	0	1
30	218	194	284	1,226	850	1,042	1,013	1,971	1,561	73
35	0	0	0	7	102	47	622	0	8	7
40	5	87	100	544	376	667	32	0	37	13
45	0	0	0	2	624	0	0	0	2	43
50	203	151	331	1,431	531	501	498	208	90	18
55	0	0	0	0	0	0	0	0	0	1
60	0	59	0	0	0	0	0	0	0	50
65	0	0	0	0	0	0	0	0	0	7
70	119	139	0	0	0	0	0	0	0	0
75	0	2	0	0	0	0	0	0	0	0
80	0	58	0	0	0	0	0	0	0	0
90	0	29	0	0	0	0	0	0	0	0
100	228	2	0	0	0	0	0	0	0	0
Total	1,301	1,402	1,403	6,193	5,561	5,561	5,561	5,561	5,538	5,722

On the whole, the reforms starting in the 1980s brought about substantial changes, greatly altering the price and incentive structure across industries.

III. Impact of Trade Policy Reforms

Studies under the PIDS Development Incentives Assessment (DIA) noted improvements in the tariff and protection structure brought about by the series of trade policy reforms. The average level of Effective Protection (EPR)¹ and the variation across industries has gone down significantly since the pre-reform period. Table 3 presents the average EPR across major sectors for the years 1983, 1985, 1990 and 1995 to illustrate more clearly the changes in the protection structure arising from the major trade reforms.

As Table 3 indicates, the average EPR declined from 44.2 in 1983 to 29.4 in 1990, to 24.1 in 1995. The gap in EPRs specially between agriculture and industry and between the exporting sector and the import-substituting sector has been significantly reduced. Furthermore, although exports remain penalized by the protection structure, the degree of penalty has declined.

Table 3
EFFECTIVE PROTECTION RATES

Description	1983	1985	1989/90	1995
03-96 All sectors	44.2	38.0	29.4	24.1
Importables	87.4	76.0	57.0	47.0
Exportables	-4.0	-4.5	-1.4	-1.4
03-21 Agriculture, Fishing & Forestry	11.3	9.2	3.2	2.4
Importables	90.9	76.5	35.3	31.2
Exportables	-8.7	-7.8	-4.9	-4.9
03-13 Agriculture	24.2	19.5	9.8	9.4
Importables	88.4	76.4	31.7	30.4
Exportables	-4.4	-5.9	0.0	0.0
28-96 Manufacturing	64.7	55.9	45.5	37.3
Importables	88.1	77.0	61.2	50.0
Exportables	3.1	0.1	3.8	3.8

A more recent study by Tan (1997), shows further decline up to year 2000 in the average EPR, for the economy as a whole and for almost all sectors, with full implementation of EO 264. (Refer to Table 4) By year 2000, the average EPR for the whole economy will be down to 14.6 percent. However, although showing continuing trends, there occurs a switch in the relative protection between agriculture and manufacturing starting in 1996. That is, the average EPR for agriculture has become higher than that for manufacturing – 21.8 percent for agriculture and 18.2 percent for

¹The EPR is a measure of net protection considering the tariffs on both output and inputs. It is the percentage difference between "protected" domestic value added (value added given the tariff on both output and inputs) and free-trade value added (value added without tariffs).

manufacturing in 1996. Thus, agriculture has become the relatively more protected sector. This is primarily due to the tariffication of QRs in agricultural products under EO 313.

Table 4
WEIGHTED EFFECTIVE PROTECTION RATES

Description	1988	1992	PRE95	POST95	2000
0-169 All sectors	21.9	25.1	17.7	17.4	14.6
Importables	36.2	41.0	29.1	28.5	23.4
Exportables	-4.7	-4.5	-3.5	-3.2	-1.6
1-27 Agriculture, Fishing & Forestry	19.4	19.6	18.7	18.4	14.7
Importables	31.1	31.8	29.6	29.1	23.1
Exportables	-1.9	-2.6	-1.3	-1.2	-0.8
1-23 Agriculture	22.3	22.4	22.1	21.8	20.4
Importables	35.9	36.1	35.5	35.0	32.7
Exportables	-0.9	-0.7	-0.6	-0.5	-0.4
38-169 Manufacturing	24.3	28.9	18.5	18.2	15.7
Importables	38.4	44.9	29.2	28.6	23.9
Exportables	-6.3	-5.7	-4.7	-4.3	-2.1

More importantly, the studies under the PIDS DIA project also provide empirical evidence on the positive impact of these trade reforms on competitiveness. The results of the DIA Project show that for the whole manufacturing sector, the DRC/SER (domestic resource cost as a ratio to the shadow exchange rate)² went down from around 1.7 in 1983 to around 1.5 in 1988. This is clearly an indication of an increase in the overall level of competitiveness of the manufacturing sector. To illustrate further, the share of establishments whose DRC/SER ratio fall within the range of zero and one (i. e., those with allocative efficiency) rose substantially between 1983 and 1988, in terms of both value of output and number of firms. In terms of value of output, the share of efficient firms increased significantly from 18.8 percent in 1983 to 39.5 percent in 1988. (Refer to Table 5)

Another important finding of the DIA Project is that there was a significant correlation between DRC and EPR in 1983 but none in 1988. (See Table 6) This implies that the protection structure, which has been entrenched prior to the trade reforms, encouraged resource allocation towards the more inefficient (higher-cost) sectors (in

²The measure of efficiency used in this project is the ratio of the domestic resource cost (DRC) to the shadow exchange rate (SER). The former indicates the value of domestic resources used to produce a unit of net foreign exchange while the latter indicates how society truly values foreign exchange. Thus, a ratio of one, or less than one, indicates efficiency since the activity is using domestic resources, whose cost is lower than value of the net foreign exchange it earned or saved. The lower the DRC/SER ratio, the higher the allocative efficiency.

terms of allocative efficiency measured by DRC). The absence of correlation in 1988 indicates some restructuring, with the economy responding to the new set of incentives brought about by trade reforms. For both years, however, DRC was positively correlated with capital intensity and negatively correlated with labor productivity. The former implies that the more capital-intensive sectors were also usually associated with higher DRCs while the latter indicates that labor productivity is an important determinant of comparative advantage. These results, especially the latter, are not really surprising. It merely confirms that labor is where the country's comparative advantage lies. The more interesting result is that, in addition, there was also a very significant correlation between the change in EPR and the change in DRC/SER between the two years. (Refer to the lower part of Table 6) While this regression result should not be taken as an absolute indicator of the impact of trade reforms, it strongly suggests that indeed, trade reforms have been a major factor in the improvement of competitiveness of manufacturing industries.

Table 5
RESOURCE ALLOCATION AND EFFICIENCY

DRC/SER Range	Efficiency Classification	Share in Production Value (%)		
		1983	1988	1992
0 < DRC/SER < 1	Highly efficient	18.84	39.51	43.95
1.0 < DRC/SER < 1.5	Efficient-Mildly Inefficient	28.75	22.76	29.48
1.5 < DRC/SER < 2.0	Inefficient	12.30	14.68	8.36
DRC/SER > 2.0	Highly Inefficient	39.58	21.77	18.07
Average DRC/SER		1.72	1.54	1.21

Table 6
REGRESSION RESULT

(Dependent Variable - DRC)							
Independent Variables	C o e f f i c i e n t s			t - v a l u e s			
	1983	1988	1992	1983	1988	1992	
EPR	1.2*	-0.32	124*	8.85	-0.84	2.63	
Capital Intensity	0.073*	0.0065*	0.0074*	3.24	3.45	2.11	
Labor Productivity	-0.52*	-0.51**	-0.0003**	-2.89	-1.91	-2.11	
Level of significance	1983 & 1988		1992	R ²	0.43	0.09	0.31
	* : 0.01 % to 0.90 %		* : 1%				
	** : 5.1 % to 10%		** : 5%	F	31.68	4.15	4.13

Changes in DRC/SER vs. Changes in 1+EPR			
	EPR Coefficient	t-value	Level of significance
1983-1988	1.36	5.8	0.1 %
1988-1992	0.68	2.4	2.5%

The findings from the DIA Project also reveal evidence which points to a significant deconcentration of manufacturing industries taking place between 1983 and 1988. (See Table 7) This is reflected in the sharp decline in the four-plant value added concentration ratio at the 3-digit PSIC level. Also there were no significant signs of shut downs of plants or massive unemployment. On the contrary, there was a substantial increase in the number of firms. Furthermore, the large majority of new entrants into industries were relatively small-scale plants. While the number of manufacturing plants increased by 63 percent from 1983 to 1988, employment grew by only 21 percent. This led to a significant decline in the average employment size of manufacturing plants from 122 to 75 workers per plant during the period. (Refer to Table 8) The compositional shift toward smaller plants served to reduce the large-scale bias of Philippine manufacturing industries, which presumably would have had positive employment and income distribution effects.

A more recent study has been undertaken by Pineda (1997) using the 1992 Annual Survey of Manufacturing (ASM). Except for some aspects, especially with respect to

small and medium enterprises (SMEs), the trends continued. (Refer back to 5) Overall, competitiveness improved, indicated by a further lowering of the estimated DRC for manufacturing to just slightly more than 1.2. Furthermore the share in value added of industries with estimated DRC lower than one increased. Finally, there was also a significant correlation between the change in DRC (this time between 1992 and 1988) and the change in EPR. Hence, further trade reforms continued to bring about increased competitiveness in manufacturing industries.

Table 7
4-PLANT CONCENTRATION RATIOS OF
MANUFACTURING INDUSTRIES

PSIC Code	Industry Description	1983	1988
311	Food Processing	82	59
312	Food Manufacturing	48	53
313	Beverages	64	72
314	Tobacco	96	96
321	Textiles	37	29
322	Wearing apparel except fo	26	18
323	Leather and leather produ	73	52
324	Leather Footwear	66	34
331	Wood and cork products	35	38
332	Furniture except metal	30	18
341	Paper and paper products	74	57
342	Printing and publishing	52	43
351	Industrial chemicals	65	72
352	Other chemicals	61	55
353	Petroleum refineries	100	100
354	Petroleum and coal produ	96	76
355	Rubber products	82	69
356	Plastic products	32	24
361	Pottery, china, and earthe	97	75
362	Glass and glass products	73	80
363	Cement	43	39
369	Other non-metallic produc	65	56
371	Iron and steel	75	65
372	Nonferrous metal product	84	100
381	Fabricated metal products	59	58
382	Machinery except electric	50	66
383	Electrical machinery	65	57
384	Transport equipment	79	80
385	Professional and scientific	98	100
386	Metal furniture	58	57
390	Miscellaneous manufactu	72	54
	Average	70	63

There were, however, some disturbing signs with respect to SMEs. (See Table 9) They appear to have lost some comparative advantage. It should be noted, however, that the 1992 estimates are based on ASM while the earlier estimates are based on a Census of Establishments. While this could, on part, possibly explain the trend, the more likely explanation is the power crisis experienced during the period. The larger establishments dealt better with the power crisis, in general because they can better afford the cost of alternative sources of energy (e. g. generator sets). This is in sharp contrast with what happened in the earlier period examined, 1983 to 1988, for this period of economic crisis, SMEs seemed to have in general coped better than the larger establishments, as indicated by the large increase in the number of SMEs and the decline in their estimated average DRC.

Table 8
MANUFACTURING SECTOR INDICATORS

<i>Policy Indicators</i>	1983	1988	1992
Average DRC/SER	1.72	1.54	1.21
Number of Manufacturing Plants a/	5,733	11,488	11,764
Total Employment a/	700,895	856,951	968,628
Workers per Plant	122	75	82
Total Fixed Assets (Million Pesos) a/ Constant (1985) prices c/	13,301	13,380	20,163
Fixed Assets per Plant (Million Pesos) Constant (1985) prices c/	2.320	1.165	1.714
Fixed Assets per Worker (Million Pesos) Constant (1985) prices c/	0.019	0.016	0.021
Census Value Added per Plant (Million Pesos) Constant (1985) prices b/	18.794	9.631	12.594
Census Value Added per Worker (Million Pesos) Constant (1985) prices b/	0.154	0.129	0.153

Table 9
SIZE STRUCTURE AND EFFICIENCY OF MANUFACTURING INDUSTRIES

	D R C / S E R		
	1 9 8 3	1 9 8 8	1 9 9 2
A L L M A N U F A C T U R I N G	1 . 7 2	1 . 5 4	1 . 2 1
S M A L L	2 . 0 2	1 . 2 9	1 . 3 8
M E D I U M	1 . 8 6	1 . 2 9	1 . 2 4
L A R G E	1 . 6 8	1 . 6 4	1 . 1 8

More insights could be gleaned by looking at the results for the three-digit PSIC sectors. (refer to Table 10) In 1983, before substantial trade reforms were implemented, there was a very wide variation in DRCs across sectors, which already hides wide variations between subsectors and between firms within sectors. The consumer goods production had the lowest average DRC, but still quite high at around 1.43. This would have been surprising if it were not for the fact that the garments sector, footwear and furnitures belong to this group. These sectors were among the strongest exporters during the period.

Table 10
DRC/SER RATIOS OF MANUFACTURING INDUSTRIES

CLASSIFICATION	D	R	C / S	E	R
	1983	1988	1988	1992	1992
TOTAL MANUFACTURING	1.72	1.54	1.54	1.21	1.21
CONSUMER GOODS	1.43	1.06	1.06	1.18	1.18
INTERMEDIATE GOODS	1.81	1.87	1.87	1.23	1.23
CAPITAL GOODS	2.24	1.48	1.48	1.23	1.23

Such a wide variation clearly indicates an inefficient allocation of resources, since resources would have been put into better use if more of the resources were used in activities with low DRC/SER ratio and less resources for those with high DRC/SER ratio. The more widely divergent are the ratios, the more inefficient would be the allocation of resources. This is more or less the picture of the kind of resource allocation bred by the overall protectionist trade policies in the past three decades before the reforms.

Clearly, it will benefit the economy if we transfer resources from inefficient activities to the efficient ones. The first step to do this is to level the DPR. While trade liberalization may increase imports and restrict the market for locally produced goods, it also increases competition and induces greater efficiency among domestic producers. Wide variation in DRC across firms within an industry was also found. Trade liberalization could induce the inefficient firms to become more efficient or shut down. Either way, the effect is for the DRC for the industry to go down. At the same time, trade liberalization would lead to export expansion or the expansion of the more efficient industries. The overall effect in the long run is the levelling of DRCs across and within the industries, and thus a more efficient allocation of resources, and a higher level of efficiency.

This is, indeed what appeared to have happened. Not only has there been a reduction in the average DRS/SER ratio for manufacturing, there was also a clear levelling off in the ratio across sectors. Large reduction in the ratio could be noted for the capital goods from 2.24 in 1983, down to 1.48 in 1988 and even further down to 1.23 in 1992. The most improved sectors were industrial chemicals, coal, and rubber products, completely transforming from highly inefficient to efficient sectors. There was a slight increase in DRC for intermediate goods from 1.81 in 1983 to 1.87 in 1988, but this improved substantially to

1.23 in 1992. There was also a decline in the average DRC/SER ratio for consumer goods in 1988. However, the ratio increased in 1992, due largely to the deterioration in food sectors which were probably most affected by the power crisis during that time. More important to note is the more uniform DRC, which indicates a better allocation of resources. Hence, not only was there an improvement in the competitiveness of industries, there was improved allocation of resources as well.

We see a leveling of DRCs across sectors indicating a better allocation of resources. But what is more telling is the trend in the percentage share in value added. In almost all cases, the share of the sectors whose DRCs went down increased while the share of the sectors which exhibited a rise in DRCs declined. (See Table 10a) This is an even more robust indicator that indeed the resource allocation was improving.

Table 10a
SHARE OF VALUE ADDED OF MANUFACTURING INDUSTRIES

SIC CLASSIFICATION	Percent Share		
	1983	1988	1992
CONSUMER GOODS	33.04	41.99	37.94
311 Food	8.15	10.70	7.80
312 Other food	9.64	11.12	5.91
313 Beverages	6.04	4.19	10.58
314 Tobacco	4.73	7.59	6.08
322 Apparel	3.03	6.66	6.50
324 Footwear	0.53	0.18	0.36
332 Furn. & fixt., exc. metal	0.88	1.52	0.66
386 Furniture & fixtures, metal	0.04	0.03	0.05
INTERMEDIATE GOODS	44.87	43.35	40.05
321 Textiles	5.03	5.38	3.49
323 Leather products	0.14	0.15	0.26
331 Wood products	4.53	2.83	1.44
341 Paper products	2.35	3.09	2.40
342 Printing, publishing	0.77	0.81	1.48
351 Industrial chemicals	2.78	4.53	4.24
352 Other chemicals	7.89	10.54	13.34
353 Petroleum refining	15.31	7.70	4.78
354 Coal products	0.04	0.12	0.09
355 Rubber products	1.54	2.09	2.49
356 Plastic products	1.51	1.68	1.39
361 Pottery & china	0.29	0.41	0.30
362 Glass products	0.70	1.68	0.57
363 Cement	1.32	1.65	2.67
369 Other nonmetal mineral product	0.69	0.70	1.11
CAPITAL GOODS	21.50	13.67	21.04
371 Iron & steel	8.99	1.56	4.11
372 Nonferrous metal basic product	0.52	1.43	1.87
381 Fabricated metal products	1.40	1.15	1.61
382 Machinery except electrical	0.92	1.02	1.06
383 Electrical machinery	6.20	6.58	9.80
384 Transport equipment	3.43	1.66	2.45
385 Professional equipment	0.05	0.27	0.14
390 Other manufacturing	0.58	0.97	0.94

Turning now to the economy-wide impact of trade reforms, Tan (1997) analyzed the effects of the reforms (particularly EO 264) on the economy using an I/O-based trade model (patterned after Chung Lee). Her results show positive output effects with or without exchange rate adjustment. (Refer to Tables 11 and 12) Growth in output would increase by around 0.4 to 0.75 percent (for low and high elasticity assumptions respectively) due to trade reforms under EO 264. Most benefited is the exportable sector, which could grow by around 4 to 8 percent. This is brought about mainly by the improved relative prices facing the sector with trade reforms. However, under fixed real exchange rate, there is a very slight (around 0.03 to .06 percent) decline in income growth, attributed mainly to a decline in the growth in manufacturing value-added. This implies a reallocation of resources to sectors with relatively lower value-added ratio. The effects on the growth in both output and value-added for agriculture are positive. This is mainly because EO 264 maintains protection in agriculture while lowering industrial tariffs substantially to 10 percent and below. With exchange rate adjustment, and constraining the trade deficit to within 2 percent of GDP, growth in both output and income rises with trade reforms under EO 264, and for both sectors. This highlights the complementary role of the exchange rate in trade reforms.

Table 11
EFFECTS OF TRADE REFORM ASSUMING FIXED EXCHANGE RATE

	A	B	C	D
OUTPUT	0.40	0.60	0.75	1.04
<i>Importables</i>	-1.16	-2.99	-2.09	-5.55
<i>Exportables</i>	4.27	8.71	7.85	15.80
AGRICULTURE	0.51	-0.75	0.82	-1.20
<i>Importables</i>	0.46	-5.03	0.74	-8.05
<i>Exportables</i>	1.27	4.94	2.03	7.91
MANUFACTURING	1.03	0.78	1.92	1.47
<i>Importables</i>	-1.11	-3.64	-2.08	-6.83
<i>Exportables</i>	5.51	10.06	10.33	18.87
INCOME	-0.30	1.36	-0.06	2.44
<i>Importables</i>	-2.21	-0.76	-4.02	-1.34
<i>Exportables</i>	3.40	8.22	6.20	14.78
AGRICULTURE	0.58	-0.67	0.92	-1.08
<i>Importables</i>	0.48	-5.06	0.77	-8.10
<i>Exportables</i>	1.26	4.94	2.01	7.90
MANUFACTURING	-0.06	3.06	-0.12	5.75
<i>Importables</i>	-2.65	-0.68	-4.97	-1.28
<i>Exportables</i>	4.53	9.74	8.49	18.26

Tan (1997) also simulated the effects of moving towards a uniform five percent tariff (Scenarios B and D of Table 11, and Scenarios F and H of Table 12). Output growth for the economy increases by around 0.6 to 1.04 under fixed exchange rate and around 1 to 1.5 percent under flexible exchange rate. This points to the benefits of having

a uniform tariff structure vis-a-vis maintaining protection in agriculture. Or put

in another way, this indicates one of the costs of maintaining protection in agriculture amidst trade reforms. However, the growth in agriculture is reduced (for all cases) with reforms towards uniform five percent. Clearly, there are trade-offs which must be recognized.

Table 12
EFFECTS OF TRADE REFORM ASSUMING FLEXIBLE EXCHANGE RATE

	E	F	G	H
Change in Real Exchange Rate ($r1/ro$) 1/	0.2	1.0	0.0	0.6
OUTPUT	0.49	0.98	0.75	1.50
<i>Importables</i>	-0.99	-2.30	-2.09	-4.73
<i>Exportables</i>	4.44	9.48	7.85	16.72
AGRICULTURE	0.58	-0.45	0.82	-0.89
<i>Importables</i>	0.58	-4.59	0.74	-7.58
<i>Exportables</i>	1.37	5.42	2.03	8.41
MANUFACTURING	1.21	1.57	1.92	2.44
<i>Importables</i>	-0.92	-2.89	-2.08	-5.91
<i>Exportables</i>	5.71	10.95	10.33	19.96
INCOME	0.05	1.71	-0.06	2.87
<i>Importables</i>	-2.05	-0.08	-4.02	-0.53
<i>Exportables</i>	3.57	8.97	6.20	15.66
AGRICULTURE	0.66	-0.35	0.92	-0.73
<i>Importables</i>	0.60	-4.62	0.77	-7.64
<i>Exportables</i>	1.36	5.41	2.01	8.40
MANUFACTURING	0.13	3.88	-0.12	6.75
<i>Importables</i>	-2.47	0.10	-4.97	-0.31
<i>Exportables</i>	4.73	10.62	8.49	19.35

Note also that in the case of a uniform five percent reform, income growth increases by even more than the increase in output growth at around 1.36 to 2.44 percent. This implies a reallocation of resources, on average, towards sectors with higher value-added ratios. In all cases, growth in both output and income increases.

Positive effects of the trade reforms were also noted at the more micro level in the industry studies undertaken by PIDS under the PTTAF project. Tecson (1997) cited that almost all the responding firms claim to “**adopt or intensify cost-cutting measures and productivity improvements**” as a result of the on-going trade reforms. “**Continuous quality upgrading**” was also the answer to many, in terms of, for example, more new products and line extensions for existing products. Another response was “**improvement in production technology.**” This meant, for most respondents, increased investments in fixed assets, as in the case of a paper company (Tipco) which increased capacity, and Concepcion Industries which diversified to two-way radios. Other responses included: “**greater investment in training, intensification of and fine-tuning of marketing**

strategy, and exportation.” On the whole, the firms were optimistic that they could cope in the new more open trading environment.

There were, of course, also some negative adjustment costs noted. Among the more visible and often cited negative effect of the trade reforms is the closing down of two major tire companies - Sime Darby and Philtread - which claim to have knuckled down under the pressure of trade liberalization. However, the two firms were later bought by the remaining two companies, which could very well be an indication that, indeed, industrial restructuring is happening. The less efficient firms are giving way to the more efficient ones.

IV. Philippine Export Performance

A principal objective of the Philippine trade reforms is to reduce, if not eliminate, the bias against exports inherently arising from the past protectionist policy. While studies show that the manufacturing sector has been responding well to trade reforms, a logical question is how this has been translated in terms of actual export performance.

As Table 13 indicates, the export sector on the whole has performed well, with a growth rate averaging at more than 20 percent during the period 1993-96. The performance of manufactured export sector is even better, with manufactured exports growing by an average of almost 24 percent during the same period. The machinery and transport equipment exhibited the highest growth rate at around 47 percent during the same period, followed by electrical equipment/semi-conductors which grew on average by around 38 percent. The garments sector has slowed down in the 1990s, but another good performer is the textile sector, with exports growing on average by around 21 percent during the period.

Table 13
AVERAGE ANNUAL GROWTH RATE OF EXPORTS

Commodity	86-88	89-92	93-96
Coconut Prods.	8.0	4.7	7.9
Sugar and Prods.	-23.7	13.4	15.2
Fruits and Vegetables	6.2	5.3	7.2
Other Agro-based Prods.	21.8	-2.0	4.5
Forest Prods.	9.8	-30.3	-1.6
Mineral Prods.	15.2	-4.0	5.8
Petroleum Prods.	22.2	5.1	19.2
Manufactures	20.0	13.9	23.8
Electrical Equipment.	13.6	16.9	38.2
Garments	28.9	13.0	3.3
Textiles	23.9	14.5	21.5
Footwear	17.3	17.4	5.7
Travel goods & handbag	30.3	28.4	24.3
Wood Manufactures	22.6	10.2	8.1
Furnitures & fixtures	31.2	-0.1	12.9
Chemicals	22.4	1.8	7.4
Non-metallic mineral mft	15.7	25.2	4.9
Machinery & transport e	30.9	55.8	47.0
Processed foods & beve	21.4	4.9	11.4
Misc. M frd. articles, nes	17.7	12.6	7.9
Others	23.9	12.8	17.1
Special Transactions	80.0	38.0	45.3
Re-Exports	55.6	6.5	38.5
TOTAL	15.5	8.6	20.3

These trends resulted in a dramatic shift in the composition of exports during the past decade. (See Table 14) The share of agriculture and primary products declined. On the other hand, the share of manufactured exports (starting out in 1970 at less than 7 percent) grew from around 55 percent in 1985 to around 70 percent in 1990 to more than 83 percent in 1996. At the same time, the distribution of exports within the manufacturing exports has become less uneven. In particular, the concentration on exports of electrical equipment has gone down substantially to a share in total exports of less than 12 percent from a high of almost 22 percent in 1992.

Thus, on the whole, the trade reforms have been accompanied by a creditable export performance.

Table 14
PERCENT DISTRIBUTION OF EXPORTS

Commodity	86-88	89-92	93-96
Coconut Prods.	9.30	6.16	4.66
Sugar and Prods.	1.47	1.43	0.70
Fruits and Vegetables	4.98	4.07	3.01
Other Agro-based Prods.	6.96	5.29	3.47
Forest Prods.	4.03	1.27	0.25
Mineral Prods.	10.00	8.19	5.17
Petroleum Prods.	2.19	1.65	1.12
Manufactures	58.82	70.69	79.56
Electrical Equipment.	19.80	25.08	39.83
Garments	17.77	21.16	16.03
Textiles	1.03	1.15	1.19
Footwear	1.03	1.40	1.26
Travel goods & handb.	0.28	0.52	0.56
Wood Manufactures	1.07	1.26	0.85
Furnitures & fixtures	2.24	2.19	1.64
Chemicals	4.31	3.23	2.06
Non-metallic mineral m	0.41	0.73	0.64
Machinery & transport	1.02	2.07	4.31
Processed foods & be	2.40	2.51	1.98
Misc. M frd. articles, ne	1.42	1.63	1.33
Others	6.05	7.75	7.88
Special Transactions	0.22	0.24	0.57
Re-Exports	2.02	0.99	1.49
TOTAL	100.00	100.00	100.00

V. Implications of APEC Regional Trade Liberalization

The previous sections show the positive impact of trade reforms on the economy in terms of increased competitiveness of the manufacturing sector, better resource allocation and good export performance. The next question is what are the implications on the impact of trade reforms within the context of an APEC regional trade liberalization.

In general, the fact that the Philippine trade reforms are set within a wider regional trade liberalization in APEC could only enhance the expected benefits of the reforms indicated in the earlier sections of the paper. In particular, it implies that the more outward orientation effected by the reforms will be complemented by a more open global market. In addition, this takes on special meaning if we consider that this more open APEC market is also fast growing.

Table 15 shows world trade more than doubled from around US \$2,000 billion in

1980 to around US \$5,000 billion in 1995. APEC trade, on the other hand, more than tripled during the same period from around US \$635 billion worth of imports to more than US \$2,000 billion. As a result, the share of APEC imports grew from around 31 percent in 1980 to 43 percent in 1995. The share of APEC exports grew by similar amounts. Furthermore, intraregional trade was growing as well. Table 16 shows that the share of intraregional exports of the Asia-Pacific region grew from 33 percent in 1975 to 45 percent in 1992. All these figures indicate a very dynamic region which the Philippines could tap into.

Table 15
WORLD TRADE

	1980		1985		1995	
	Billion US\$	% Share	Billion US\$	% Share	Billion US\$	% Share
WORLD						
Import (C.I.F.)	2,066	100.00	2,012	100.00	4,999	100.00
Export (F.O.B.)	2,021	100.00	1,943	100.00	4,926	100.00
APEC						
Import (C.I.F.)	635	30.71	769	38.24	2,153	43.07
Export (F.O.)	590	29.20	690	35.51	2,055	41.73
ASEAN						
Import (C.I.F.)	64	3.07	64	3.18	341	6.83
Export (F.O.)	71	3.51	71	3.67	313	6.35
EU						
Import (C.I.F.)	852	41.23	727	36.13	1,896	37.92
Export (F.O.)	759	37.58	713	36.69	1,991	40.43

Turning now to the Philippines' trade with the APEC economies, Table 17 shows a lion's share in Philippine trade coming from or going to other APEC countries. The share has also been expanding. The share of Philippine exports going to APEC grew from around 71.5 percent in 1980 to 76.0 percent in 1995. Likewise, the share of Philippine imports from APEC rose from around 62.3 percent to 70.0 percent for the same period.

Table 16
INTERREGIONAL AND INTRAREGIONAL EXPORTS OF THE ASIAN AND PACIFIC REGION

Year	Total exports to the world	Exports to the ESCAP region	Percentage share of intraregional trade	Percentage share of interregional trade
1975	140.10	46.65	33.3	66.7
1990	779.42	339.53	43.6	56.4
1991	872.90	395.04	45.3	54.7
1992	961.98	435.23	45.2	54.8

Table 17
PHILIPPINE TRADE

	1980		1985		1995	
	(Mil US \$)	% Share	(Mil US \$)	% Share	(Mil US \$)	% Share
PHILIPPINE EXPORTS BY DESTINATION						
WORLD	5,788	100.00	4,629	100.00	17,252	100.00
USA	1,593	27.53	1,661	35.87	6,245	36.20
JAPAN	1,540	26.61	876	18.93	2,747	15.93
APEC	4,140	71.52	3,579	77.31	13,112	76.01
ASEAN	380	6.57	530	11.46	2,195	12.72
EU	1,034	17.86	749	16.18	2,922	16.94

In general, these indicators imply opportunities the Philippines could exploit which have been enhanced by the more open trade regime in the Philippines and in the region. In particular, the more open trade regime in the region would lead to greater integration and globalization of production network which could stimulate further growth in the more competitive and dynamic sectors of the Philippine economy.

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