

Austria, Myrna S.

**Working Paper**

## The Philippines in the Global Trading Environment: Looking Back and the Road Ahead

PIDS Discussion Paper Series, No. 2002-15

**Provided in Cooperation with:**

Philippine Institute for Development Studies (PIDS), Philippines

*Suggested Citation:* Austria, Myrna S. (2002) : The Philippines in the Global Trading Environment: Looking Back and the Road Ahead, PIDS Discussion Paper Series, No. 2002-15, Philippine Institute for Development Studies (PIDS), Makati City

This Version is available at:

<https://hdl.handle.net/10419/127794>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



**Philippine Institute for Development Studies**  
*Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas*

## The Philippines in the Global Trading Environment: Looking Back and the Road Ahead

*Myrna S. Austria*

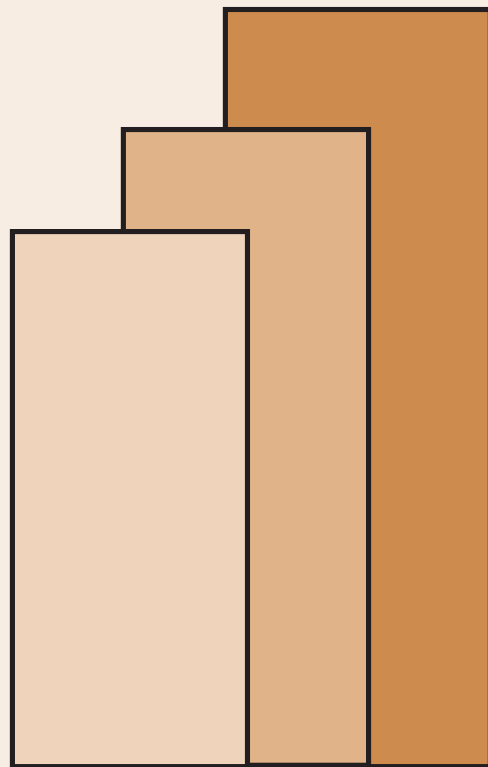
**DISCUSSION PAPER SERIES NO. 2002-15**

*Service through policy research*

The *PIDS Discussion Paper Series* constitutes studies that are preliminary and subject to further revisions. They are being circulated in a limited number of copies only for purposes of soliciting comments and suggestions for further refinements. The studies under the *Series* are unedited and unreviewed.

The views and opinions expressed are those of the author(s) and do not necessarily reflect those of the Institute.

Not for quotation without permission from the author(s) and the Institute.



**November 2002**

For comments, suggestions or further inquiries please contact:

**The Research Information Staff**, Philippine Institute for Development Studies  
3rd Floor, NEDA sa Makati Building, 106 Amorsolo Street, Legaspi Village, Makati City, Philippines  
Tel Nos: 8924059 and 8935705; Fax No: 8939589; E-mail: [publications@pidsnet.pids.gov.ph](mailto:publications@pidsnet.pids.gov.ph)  
Or visit our website at <http://www.pids.gov.ph>

# **THE PHILIPPINES IN THE GLOBAL TRADING ENVIRONMENT**

## **Looking Back and the Road Ahead**

### **Abstract**

The government has implemented substantial trade and investment policy reforms during the last two decades following a three-track approach involving unilateral, regional and multilateral modalities towards freer trade and investment. The reforms resulted to improvements in domestic resource allocation, increased productivity, increased competitiveness of manufacturing industries, expansion of exports and the increased integration of the country in the global market. Yet the growth of the industry sector, particularly manufacturing, has not been as robust as many had expected, leading some sectors to question the reforms. This requires some hard thinking but at the same time pose a great challenge to policymakers.

The experience of the country during the past two decades shows that getting the most out of international trade is not just a matter of shift away from exports of primary commodities to exports of manufactures. This paper argues that the effect of international trade on the country's economic growth depends largely on how much of that trade is linked to the domestic economic activity. In effect, the fundamental policy issue for the government is not one of more or less trade liberalization, but how best to extract from the country's participation in the global trading system the elements that will promote economic development, especially now that the global trading environment is becoming much more complex than what it was two decades ago. This paper addresses this issue, including the opportunities as well as the challenges that lie ahead for the country under the emerging more complex global trading environment.

**Keywords:** trade and investment, globalization, international trade, industrial policy, regional trading arrangements, economic integration, market positioning, regional cooperation, regionalism

## Table of Contents

	Page
Abstract	i
Table of Contents	ii
List of Tables	iii
List of Figures	v
List of Appendices	vi
List of Boxes	vii
1. Introduction	1
2. Philippine Industrial Policy Environment, 1977-2001	2
3. Impact of Policy Reforms	10
4. The Emerging Global Trade Policy Environment	25
5. The Road Ahead: Challenges and Opportunities for the Philippines	36
6. Summary and Conclusions	41
References	42

## List of Tables

Table	Title	Page
1	Frequency distribution of tariff rates, 1980-2004	3
2	Average nominal tariff rate, 1975-2004 (%)	4
3	Regulated commodities, 1991 and 1996	4
4	MFN and preferential tariff rates, Philippines, 1993-2001	7
5	Scope of binding, WTO and AFTA, 1996-2001 (%)	8
6	Scope and level of tariff bindings in the WTO, by product group, Philippines	8
7	Average effective protection rates, 1985-2004 (%)	12
8	Resource allocation and efficiency, 1983, 1988 and 1994	12
9	Percentage distribution and growth rate of merchandise exports, 1975-80, 1980-90 and 1990-2000	14
10	Revealed comparative advantage based on factor intensity, Philippines, 1975,1980,1985,1990, 1995 and 1998.	15
11	Manufactured products which the Philippines has comparative advantage, 1980-1999 (based on estimates of RCA)	15
12	Market positioning of manufactured exports, ASEAN, 1991-1999 (%)	16
13	Market positioning of manufactured exports, Philippines, 1991-1999	17
14	TFP growth rate, by industrial regime	18
15	Share of Philippines in intra-ASEAN and intra-APEC trade (%)	20
16	Intra-industry trade index for manufactures, Philippines with ASEAN and APEC, 1990, 1995 and 1999	21
17	Distribution of GDP, by sector, 1975-2000 (%)	22
18	Distribution of value-added, manufacturing, 1975-2000 (%)	24

19	Bilateral and regional trading arrangements in East Asia	29
20	Import-weighted MFN average tariffs of selected developed economies, by product group (%)	31
21	Bound tariffs on industrial products by stage of processing, selected developed economies	32
22	Initiation of anti-dumping investigations by level of development of reporting and affected economies, 1995-1999	33
23	Initiation of anti-dumping investigations, Philippines, 1993-1999	33
24	Non-tariff barriers to Philippine exports of manufactures	33

## List of Figures

Figure	Title	Page
1	Ratio of international transactions to GDP, 1975-2001	13
2	Composition of exports, 1975-2000 (%)	14
3	Philippine trade with ASEAN and APEC, 1991-1999	19
4	Annual growth rate of GDP, by sector, 1975-2000 (1985 prices)	22
5	Manufactured exports and imports and manufacturing value-added, Philippines, Malaysia and Thailand, 1975-1998	23
6	Ratio of exports in manufactures and value-added in manufacturing to GDP, Philippines, Malaysia and Thailand, 1975-1998 (%)	25
7	Garments imports of US and Canada from the Philippines and Mexico, 1991-1999	30
8	Distribution of Philippine exports, by destination (1985-1999)	36
9	How to respond to RTAs?	40

## **List of Boxes**

<b>Box</b>	<b>Title</b>	<b>Page</b>
1	Market positioning classification	16
2	The evolution of economic integration	28



## **List of Appendices**

Appendix	Title
1	Scope of bindings, average bound and applied rates, industrial products, Selected WTO members
2	Revealed comparative advantage of manufactured exports, Philippines, 1977-1999
3	World market shares, major manufactured exports, Philippines, 1991 and 1999 (%)
4	Share of Philippines in China's imports of SITC Codes 751-778, 1995-1999 (%)
5	Intra-industry trade index by commodity, by partner countries, Philippines, 1990, 1995, and 1999 (%)
6	Import-weighted MFN average tariffs of selected developing economies, by product group (%)
7	Bound tariffs on industrial products by stage of processing, selected developing economies

# **The Philippines in the Global Trading Environment: Looking Back and the Road Ahead\***

Myrna S. Austria\*\*

## **1. Introduction**

The government has implemented substantial trade and investment policy reforms geared towards opening up the economy during the past two decades. It has also pursued an outward-oriented industrialization strategy by promoting exports in the world market. Economic theory says that liberalization stimulates economic activity, fosters competition, promotes efficiency through better allocation of resources, and increases productivity. More economic activity means more jobs and increase in income. Increase in efficiency and productivity means lower costs of production that translates to lower prices.

The reforms have succeeded in delivering some of the promised benefits. However, they have not produced a significant change in industrial growth. In particular, the growth of the manufacturing sector has not been as robust as many has expected. The contribution of the sector to the country's gross domestic product hardly changed at 25 percent for the periods 1980-1990 and 1990-2000. This is a big contrast to the experience of other developing economies where industrial reforms resulted to the expansion of the manufacturing sector. Such a sluggish performance for the country, despite the reforms, has indeed become a question and a puzzle to many. This requires some hard thinking but at the same time pose a great challenge to policymakers.

Opening up the economy has not been without costs nor has it been painless. Industries that have not been able to adjust to the new environment have been marginalized. But this is not surprising as there will always be losers and gainers in the process of global integration. Getting out of the system, as those who have questioned the wisdom of the policy reforms have suggested, is not the solution either. The challenge now for the government is how best to extract from the country's participation in the global trading system the elements that will promote economic development, especially now that the global trading environment is becoming much more complex than what it was two decades ago.

The objectives of this paper are as follows: (i) to review the industrial policy environment during the past twenty-five years; (ii) to analyze the impacts of the policy reforms on the economy; (iii) to analyze the emerging global trading environment; and (iv) to identify the challenges as well as the opportunities that lie ahead for the country under the emerging global trading environment.

---

\* Paper presented during the Perspective Paper Symposium Series *on Competition Policy, Trade and Regional Cooperation* held 10 September 2002. The scope of the paper is limited only to trade in industrial goods. Trade in agriculture is dealt with in a separate paper in this series of forum.

\*\* Senior Research Fellow, Philippine Institute for Development Studies and at the same time Director, Philippine APEC Study Center Network (PASCN) Secretariat. The author would like to acknowledge the excellent research assistance provided by Dorothea Lazaro and Michael Diza.

The paper is organized as follows. Section 2 reviews the industrial policy environment during the past twenty-five years. This is followed by an analysis of the impacts of the policy reforms in Section 3. Section 4 discusses the emerging global trading environment, focusing in particular on the major issues confronting developing countries, like the Philippines, that could affect their trade policy framework in this new millennium. Section 5 identifies the challenges as well as the opportunities for the country under the much more complex emerging global trading environment. Section 6 presents the summary and conclusions.

## **2. Philippine Industrial Policy Environment, 1977-2001**

Industrialization has always been a major development goal for the Philippines since its independence. This goal was carried out through trade and investment policies. The country has in fact undergone several trade and investment policy regimes in its pursuit of industrialization. In the 1950s up to the 1970s, trade and investment policies have been highly restrictive and protectionist in support of the country's inward-looking import-substitution industrialization strategy. High tariffs and import controls were the main policy instruments to protect domestic industries from foreign competition. At the same time, the exchange rate was highly overvalued. Investment incentives, on the other hand, came in the form of tax exemptions, tax credits and tax deductions. The pattern of protection was highly uneven with high protection for finishing/assembly operation and low protection for raw materials, intermediate goods and capital goods production. This adversely affected the efficient allocation of resources by creating bias in favor of import-competing manufacturing industries over exports and agriculture, and consumer goods over capital and intermediate goods. The end result was an imperfectly competitive industry structure characterized by unrealized scale economies and poor economic performance.

Unable to keep pace with the fast growing economies in the region, there were mounting pressures, both from internal and external sources, for the country to undergo industrial restructuring. This prompted the government to undertake major reforms beginning in the 1980s, signaling a major paradigm shift toward greater openness and outward-oriented industrialization strategy. Trade and investment policies have since been made gradually liberal and open. This was carried out in various stages involving unilateral, regional and multilateral liberalization.

### **Unilateral Liberalization**

**Trade liberalization.** Since 1981, the country has been implementing a progressive reduction in tariffs through the Tariff Reform Program (TRP) to reduce the overall level of protection and the dispersion of tariff protection within and across sectors and industries. The reform was aimed at improving the efficiency in the allocation of resources, attaining global competitiveness and sustaining economic growth. As Medalla (2002:140) puts it,

“By ridding the market distortions, trade liberalization would espouse greater reliance on the market, foster competition, and provide an even playing field which would encourage the development of industries with real comparative advantage”.

The first phase of the reform (TRP I), was implemented in 1981-85, where tariff rates were reduced from a peak of 100 percent to a maximum of 50 percent (Table 1). The overall nominal tariff was also reduced from 41.4 percent in 1980 to 27.6 percent in 1985 (Table 2). TRP was temporarily put on hold during the second half of the 1980s because of the political and balance-of-payments crises prevailing at that time. During the period 1986-1989, however, the country implemented the Import Liberalization Program (ILP), designed to gradually lift non-tariff restrictions on imports, mainly import licensing requirements and outright import bans. The program resulted in the reduction of regulated items from 32 percent of the total PSCC lines in 1985 to 7.8 percent in 1991 (Table 3). By 1996, only 3 percent remained regulated.

Table 1. Frequency distribution of tariff rates, 1980-2004

Tariff rate (%)	Number of tariff lines						
	1980	1985	1990	1995	2000	2002	2004
0	3	3	33		318	326	183
1						927	928
3				1,938	2,704	1,910	2,028
5	14	30	42	14	111	548	2,356
7					579	830	3
10	349	562	1,637	892	947	441	7
15					408	498	-
20	258	532	1,273	996	464	5	-
25					-	-	-
30	202	460	1,224	1,561	61	41	75
35			7	8	2	10	3
40	80	165	544	37	11	31	44
45			2	2	30	8	-
50	182	544	1,431	90	18	32	13
55					1	4	-
60	60				46	25	-
65					7	4	-
70	137				-	-	-
75	2				-	-	-
80	58				-	-	-
90	30						
100	2				-	-	-
Specific duties	2	2	4	4	-	-	-
Total	1,379	2,298	6,197	5,542	5,707	5,640	5,640

Source: Tariff Commission, various annual reports.

Tariff reform resumed under TRP II with the implementation of Executive Order (EO) 470 in 1991. The maximum tariff rate was still 50 percent. However, there was a big drop in the number of tariff lines accorded the 50 percent rate (Table 1). Average nominal tariff rate also went down from its level of 27.6 percent in 1985 to 15.9 percent in 1995 (Table 2). Manufacturing registered the largest decline of 48 percent (from 27.09 to 14 percent). Agriculture, on the other hand, only had a

moderate reduction (22 percent) because sensitive agricultural products continued to be protected by tariffs of 50 percent. This phase ended in 1995.

Table 2. Average nominal tariff rate, 1975-2004 (%)

Sectors	1975	1980	1985	1990	1995	2000	2002	2004
Agriculture	67.16	61.95	35.86	34.61	27.99	14.60	12.17	9.33
Mining	19.89	18.38	15.72	14.24	10.79	3.27	2.84	2.84
Manufacturing	41.42	39.07	27.09	27.10	14.00	6.99	5.03	3.34
Overall	44.32	41.37	27.60	27.84	15.87	8.06	6.02	4.19

Source: Tariff Commission.

Table 3. Regulated commodities, 1991 and 1996

Commodity Group		Total no. of lines	1991	1996
0	Food and live animals	739	127	10
1	Beverages and tobacco	71	0	0
2	Crude materials	481	2	1
3	Mineral fuels	59	18	18
4	Animal and vegetable oil	59	0	0
5	Chemicals	678	63	32
6	Manufactured goods	1,568	10	14
7	Machinery and transport equipment	1,013	154	23
8	Miscellaneous manufactures	874	12	11
9	Commodities, n.e.s.	90	53	52
Total		5,632	439	161

Source: de Dios (1998).

The current round of tariff reform, TRP III (1996-2003), aims at a uniform tariff rate of 5 percent by 2004, except for a few 'sensitive commodities'. Towards this end, a series of Executive Orders were issued to gradually restructure the economy, namely, EO 189 (machinery and capital equipment), EO 204 (garment and textiles), EO 264 (industrial products), EO 288 (nonsensitive agricultural products), and EO 311 (tariffication of quantitative restrictions in agricultural commodities). Since 1996, tariff rates have been clustered at 3 percent (Table 1). Average nominal tariff is expected to go down from 15.9 percent in 1995 to 4.2 percent by 2004 (Table 2).

**Investment liberalization.** Just as the country's trade regime underwent significant reforms during the last two decades, so has the investment regime. The government has sought greater foreign investment by expanding areas and industries open to foreign investors. Prior to 1991, eligibility for 100 percent foreign equity was subject to the approval of the Board of Investments (BOI). However, the passing of Republic Act (RA) 7042, known as the Foreign Investment Act of 1991, liberalized

foreign investment by allowing foreign equity participation of up to 100 percent in all areas, except those specified in the Foreign Investment Negative List (FINL). In 1996, further legislation was passed allowing greater participation in previously prohibited sectors. This, in effect, shortened the foreign investment negative list. Restrictions on foreign direct investment (FDI) are now limited to those reserved for Filipino nationals by virtue of the constitution or specific legislation (Negative List A); and to those related to defense, risk to health and morals, and small and medium enterprises (Negative List B).

Also, a comprehensive incentive system exists for both domestic and foreign investment in the country. The investment incentives consist of the incentives under the Omnibus Investment Code (OIC) and incentives under the export processing zones and special economic zones. During the past two decades, there have been two OICs, the 1983 OIC covering the period 1983-1986, and the 1987 OIC covering the period 1987 up to the present. An enterprise can apply for incentives under the OIC if it invests in preferred areas of investment listed in the Investment Priorities Plan (IPP), an annual list of preferred economic activities encouraged by the government through the granting of fiscal incentives.

The incentives under the two investment codes are very similar and come in the form of income tax holiday, tax credits, income tax deductions and non-fiscal incentives. The difference comes in terms of tax and duty exemptions on imported capital goods and accompanying spare parts that was present only under the 1987 code. Likewise, the 1987 incentives are uniform for both exporters and non-exporters, whereas the previous 1983 code was biased in favor of exporters, primarily to mitigate the bias against exports that existed under the former protectionist regime.

On the other hand, enterprises operating in export processing zones and special economic zones enjoy an integrated package of incentives, streamlined government procedures and physical facilities that are not available outside of the zones. The incentives include: (i) exemptions from the payment of duties and taxes for capital equipment, raw materials and supplies, local taxes and licenses; (ii) tax deductability of labor training expenses, organizational and operating expenses; (iii) tax credits on supplies and materials and domestic capital equipment; (iv) tax holidays for 6 years for pioneer firms; 4 years for non-pioneer firms; and 3 years for expansion firms; (v) after the income tax holiday, a special 5 percent tax on gross income, in lieu of all national and local taxes; and (vi) other incentives available under the 1987 OIC. There are four export processing zones and 63 special economic zones located in strategic regions/provinces all over the country. The most notable among these are the Subic Free Port, Clark Special Economic Zone and the CALABARZON growth area.

In general, Medalla (2002) found that the investment incentives and trade policy are mutually reinforcing in that the activities under the IPP have higher effective protection rate. Likewise, FDI policy is also consistent with the overall investment incentive system in that the IPP activities are open to FDI.

**Exchange rate policy.** The exchange rate affects the price competitiveness of exports and imports. One major shortcoming of the trade reform was the lack of adjustment of the exchange rate in the face of trade liberalization. Reductions in tariff

protection and import restrictions have not been complemented by a consistent exchange rate policy that favors (or is neutral to) exports. The real effective exchange rate depreciated by 31.1 percent during the period 1982-1988; and this helped enhance the competitiveness of the export sector during the early phase of the reforms. However, from 1989 to 1996, the real effective exchange rate continuously appreciated because of the increase in foreign investment. The overvaluation of the currency was inconsistent with the adjustment called for by trade liberalization. It penalized exports and encouraged the growth of imports. Although the ASEAN economies all experienced an appreciation of their currency, the Philippines appreciated the most in the 1990s resulting in the loss of its competitiveness vis-à-vis its major competitors in the region (Intal 1997). The major depreciation experienced by the ASEAN economies in 1997 and 1998 was a long overdue correction of the appreciation of the Philippine peso.

The government has also lifted several restrictions on the foreign exchange. Prior to the foreign exchange deregulation in 1992, exporters are required to remit their foreign exchange earnings through the domestic banking system and could only retain 2 percent of their receipts. After deregulation, however, exporters were no longer required to sell their foreign exchange receipts to banks and could retain them 100 percent. Moreover, foreign exchange can now be freely sold and purchased outside of the banking system, in the parallel foreign exchange market.

### **Regional and Multilateral Liberalization**

The country's commitment to greater trade and investment liberalization and opening up the economy is further manifested in its membership in multilateral and regional trading arrangements in the 1990s, namely the World Trade Organization (WTO), the ASEAN Free Trade Area (AFTA), and the Asia Pacific Economic Cooperation (APEC). The country's move towards regional and multilateral liberalization came as a response to the growing integration of economies around the world. It should be emphasized that the unilateral liberalization efforts that started in the 1980s made it possible for the country to enter this phase of its international trade policy. That is, by fostering domestic efficiency where resources are allocated according to the country's comparative advantage, the unilateral liberalization policies enable the industries to prepare for global competition. This is important as economic integration presupposes that participating economies have already attained a high level of competitiveness and maturity in their production structure (Onguglo and Cernat 2000). As industries become competitive, they require bigger markets to realize economies of scale. Multilateral and regional trading arrangements then become important as they provide the country greater market access. At the same time, however, they pose greater challenge for industries to become globally competitive.

**World Trade Organization (WTO).** The country's accession to the WTO was ratified by the Senate in 1994. More than market access, the benefits to the country from its membership to the WTO come in terms of fair competition, and transparency, stability and predictability of the global trading system. Fair competition is promoted by the most-favored nation (MFN) principle, where trading partners are not allowed to discriminate between their trading partners, and national treatment principle, where domestic and foreign products, services and nationals are

treated equally. Transparency is promoted by requiring all members to notify the WTO of their policies and practices. Finally, predictability and stability are promoted by the binding of members of their commitments.

In terms of market access, there is really no further liberalization accomplished under WTO since the country committed to bind tariffs at rates higher than what was accomplished under TRP (Table 4). A bound tariff refers to the tariff level that a WTO member commits not to exceed. The applied rate however is lower than TRP, because sensitive agricultural products were excluded from the WTO.

Table 4. MFN and preferential tariff rates, Philippines, 1993-2001

Year	TRP <sup>a</sup>	WTO <sup>b</sup>		APEC <sup>b</sup>	AFTA-CEPT
	Unilateral	Bound <sup>c</sup>	Applied <sup>d</sup>	Applied <sup>d</sup>	Preferential <sup>e</sup>
1993	23.50				
1994	19.72				
1995	15.87				
1996	15.55				
1997	13.43	32.50	12.11	12.11	9.07
1998	10.69	31.85	9.44	9.44	7.34
1999	9.98	30.05	9.05	9.05	6.83
2000	8.06	27.59	6.92	6.92	4.53
2001	7.71	27.53	6.70	6.70	3.87

Notes: <sup>a</sup>based on average nominal tariff rate; <sup>b</sup>based on MFN rates; <sup>c</sup>based on simple average bound tariff rate; <sup>d</sup> based on simple average applied tariff rate excluding sensitive agricultural products; <sup>e</sup> based on simple average applied preferential tariff rates.

Source: Tariff Commission.

Over the years, the overall scope of bindings has gone up reaching 67.5 percent in 2001<sup>1</sup> (Table 5). Across products, the scope of bindings differs considerably (Table 6). All tariff lines under agriculture were bound. Scope of bindings for textiles and clothing, non-electrical machinery and chemicals were also relatively large but very low for fisheries. Industrial products like construction-related materials, petrochemicals, passenger automobiles and automotive parts, and pulp and paper were not committed for binding.

The level of bindings was also relatively high, with agriculture having the highest (Table 6). The binding rate for industrial products was set at 10 percentage points above the 1995 applied rate. For information technology products, the country committed, under the WTO Information Technology Agreement (ITA), to bind tariffs at zero for 188 IT product lines by 2000 and 47 product lines by 2005.

In terms of industrial products, the country had the smallest percentage of bound tariff lines among the ASEAN although the country's average bound rate is well within the range of these countries (Appendix Table 1). Likewise, the country's average applied tariff rate of 6.7 percent is not far compared with some countries in Asia, although much lower compared to some African and Latin American countries.

<sup>1</sup> Scope of bindings refers to the percentage of tariff lines bound in the WTO.



Table 5. Scope of bindings, WTO and AFTA, 1996-2001 (%)

Year	AFTA	WTO
1996	91.55	63.37
1997	87.73	64.96
1998	92.05	65.73
1999	95.26	65.79
2000	96.15	66.73
2001	98.69	67.54

Source: Tariff Commission.

Table 6. Scope and level of tariff bindings in the WTO, by product group, Philippines.

Product group	Scope of binding (%)	Level of binding (%)			
		up to 10%	11-20%	above 20%	above 40%
Agriculture, excl. fish	100.0	3.1	6.2	90.4	68.2
Textiles and clothing	98.6	0.6	4.7	94.7	2.0
Non-electric machinery	71.8	20.2	66.3	13.5	2.7
Chemicals	71.3	17.4	69.6	13.0	3.1
Electric machinery	58.1	35.1	31.4	33.5	22.6
Minerals	41.9	45.2	20.7	34.1	20.0
Wood, paper, furniture	37.6	21.6	28.0	50.4	8.0
Leather, rubber footwear and travel goods	36.4	16.2	22.1	61.7	42.6
Transport equipment	32.5	35.8	43.4	20.8	7.5
Metals	31.4	12.7	38.7	48.5	7.3
Fisheries	5.5	30.0	0.0	70.0	40.0
Petroleum, energy	0.0	0.0	0.0	0.0	0.0
Other manufactures	46.0	33.8	30.3	35.9	25.5

Source: BTR-DTI (2001), Tables 1 and 2.

In terms of trade rules, the country has committed to abide by the agreements covering the shift in customs valuation to the transaction value system, trade defense measures (anti-dumping, countervail and safeguards), and trade-related intellectual property rights. The government has passed several laws to support the implementation of the trade rules. On customs valuation, RA No. 8181 was passed authorizing the shift from home consumption value to transaction value in the year 2000. On the trade defense measures, an anti-dumping law (RA 7843) was passed in December 1994 and amended (RA 8752) in 1999; the law on countervailing measures (RA 8751) was passed in 1999; and the law on safeguards (RA 8800) was passed in 2000. On intellectual property rights, RA No. 8293 was passed in 1998 providing for the compliance of the country with the Trade Related Intellectual Property Rights (TRIP) agreement. The implementation of these trade rules contributed to greater transparency, improved predictability and better governance in the country (DTI 2001).

**Asia-Pacific Economic Cooperation (APEC).** Strictly speaking, APEC is not a preferential trading arrangement as it aims to achieve a free trade within the area, not a free trade area. That is, APEC's long-term goal is to achieve a free and open trade and investment in the Asia-Pacific region no later than 2010 for its

developed member economies and 2020 for its developing member economies through a three-pillar agenda of trade and investment liberalization, trade and investment facilitation and economic and technical cooperation. Its institutional arrangement follows market initiatives as exemplified by its principle of open regionalism. In its narrow sense, open regionalism means that the region will not introduce measures that will discriminate countries and regions outside of APEC (Soesastro 2002). Hence, APEC is consistent with and supportive of the framework of the multilateral trading system under the WTO.

Open regionalism is best illustrated by APEC's concerted unilateralism approach to liberalization. Under the scheme, each member economy prepares its own liberalization program and implement them according to its own pace or schedule and domestic rules. However, member economies watch the implementation of each other's liberalization program and this builds pressure for each member to implement its own program. The program is implemented through the Individual Action Plans (IAPs) and the Collective Action Plan (CAP). These mechanisms map out concrete steps and actions towards the achievement of APEC's goal. As such, they promote transparency in the liberalization process.

On market access, the country did not commit beyond its WTO commitments (Table 4). On investment, the country has committed to the APEC's Non-binding Investment Principles (NBIP), which covers more investment measures compared to the narrow range of operational restrictions brought under the discipline of the WTO's Agreement on Trade-Related Investment Measures (TRIMs)<sup>2</sup> (Austria 2001). APEC's Menu of Options, which the government refers to when updating its IAP, also covers more areas not included in the WTO's General Agreement of Trade in Services (GATS) and Agreement on Trade-Related Intellectual Property Rights (TRIPS)<sup>3</sup>. APEC has made a difference in promoting investment liberalization and in facilitating the flow of investment in the country. This can be seen from the improved levels of transparency and openness of the country's investment regimes. The country has also participated in economic and technical cooperation programs, like trainings, organized by APEC to build the government's capacity to implement its WTO commitments.

**ASEAN Free Trade Area (AFTA).** The country is one of the six original ASEAN signatories to AFTA when it was established in 1992. The objective of AFTA is to increase ASEAN's competitive edge as a production base for the world market. The mechanism for achieving this is through the Common Effective Preferential Tariff (CEPT) scheme, where intraregional tariffs will be reduced to 0-5 percent within a 15-year time period beginning in 1993.

Over the years, however, AFTA has taken significant leaps towards its goal (Austria and Avila 2001). First, the deadline has been continuously accelerated from

---

<sup>2</sup>APEC's *Non-binding Investment Principles* are principles for strengthening the efficiency of investment administration, eliminating investment obstacles, and establishing a free and open investment environment in the region. They are non-binding in nature and absent of customary provisions that specify procedures with respect to exceptions and reservations.

<sup>3</sup>The *Menu of Options* is a list of policy measures from which member economies may voluntarily select a number of options for inclusion in their IAPs in order to advance towards creating a free and open investment regime.

the original date of 2008 to 2003 and finally to 2002 (with later implementation dates for its newer members: Vietnam, Burma, Laos and Cambodia). Second, the coverage of the CEPT has been widened, by including into the scheme products that were originally excluded, like unprocessed agricultural products. Third, AFTA has also widened its scope beyond the CEPT scheme by including other measures to complement and supplement the removal of tariffs and other barriers to trade. These initiatives include harmonization of standards, reciprocal recognition of tests and certification of products, and removal of barriers to foreign investment. Finally and the most important, AFTA's original goal of 0-5 percent ending tariff rates was deepened by targeting a zero ending tariff rates on all products by 2010 for the original six members and by 2015 for the four new members. This new goal of zero tariffs will indeed make the region a free trade area.

AFTA has enhanced the country's trade policy thrust since the CEPT commitments are lower than TRP (Table 4). As a result of the integration of more products into the CEPT, the country's inclusion list has substantially expanded since the inception of CEPT in 1993. Almost 99 percent of the country's tariff lines are already included into the scheme in 2001 (Table 5).

To conclude Section 2 of the paper, the liberalization process has not been easy. Advocates of free trade had always lobbied for a liberalized regime. On the other hand, the business class whose interests had always been safeguarded during the protectionist regime naturally resented the move for reforms. Until now, there are sectors that are aggressively lobbying for exemption from or postponement of the tariff reductions. One good feature of the series of trade reforms, however, was the commitment of the government, under various administrations, to the reform process. Fear of policy reversals during the various crises the country went through did not materialize. There were tariff adjustments but these were temporary<sup>4</sup>. The country's commitments to the WTO, APEC and AFTA are a big factor in this regard. The country's commitments enabled the government to "lock in" domestic economic reforms. The legal commitments as well as the rules and disciplines governing the regional trading arrangements as well as the multilateral trading system have prevented the country from taking protectionist measures and policy reversals in times of crisis and difficult economic periods.

### **3. Impact of Policy Reforms**

Trade and investment policies influence relative prices, and hence the allocation of resources and pattern of production. With liberalization, resources are shifted away from protected import-substituting industries to export oriented industries, thereby increasing the size of the traded goods sectors relative to the rest of the economy. As a result, the share of international trade (exports and imports) in domestic output increases. The reallocation of resources according to comparative advantage is expected to yield efficiency gains, and ultimately an increase in income.

---

<sup>4</sup> For example, tariffs were temporarily raised in 1999 (EO 63) to alleviate the difficulties faced by domestic industries adversely affected by the financial crisis in 1997-1998. The applied tariff rates of some 694 tariff lines (for chemicals, textiles, metals and machinery) were raised to a level at or below those bound in the WTO in 1999, after which they were reverted back to their old rates (WTO 1999).

The relationship between trade, industrialization and economic growth, however, is more complex than what is described above. Whether or not the expansion of trade and the closer integration of an economy to the global trading system result to faster economic growth depend on a host of factors. The development experience of successful economies, like the newly industrializing economies (NIEs)<sup>5</sup>, points to the importance of the dynamism of the product traded in the world market and the link of trade in domestic economic activity. Trade in products that have strong link in domestic economic activity (i.e. high value added) and at the same time have the potential for global demand expansion (i.e. dynamic) leads to faster growth and income.

After two decades of trade and investment policy reforms, different sectors in the economy still ask whether the reforms had been beneficial to the country. What has been the impact of the reforms? Several studies have been done on the issue. The most notable of these are the studies done by Medalla and Power (1986), Medalla, et.al. (1995 and 1996), Pineda (1997), Tan (1994 and 1997) de Dios (1998) and Medalla (2002). These studies focused on the impact of the reforms during the 1980s up to the early 1990s. This section of the paper highlights the findings of these studies and offer additional insights on the impact of the reforms, particularly during the 1990s.

**Resource allocation and efficiency.** The series of trade reforms improved the structure of protection (Table 7). The average level of effective protection rate (EPR)<sup>6</sup> declined significantly from 38 in 1985 to 14.1 in 2001. This is expected to go down further to 10.8 by 2004. The gap in EPR between agriculture and manufacturing has narrowed down in 2000. However, because of the tariffication of quantitative restrictions in agricultural products, the EPR for agriculture will increase by 5 percentage points by 2004, making the sector more protected than manufacturing. The studies by Tan (1994 and 1997) also showed that the gap in EPR between exportables and importables has also been significantly reduced.

One significant impact of the trade reforms is the increase in the overall competitiveness of the manufacturing industry, as measured by the ratio of the domestic resource cost with the shadow exchange rate (DRC/SER)<sup>7</sup>. The DRC/SER ratio went down from 1.7 in 1983 to 1.2 in 1994 (Table 8). Furthermore, the share of the highly efficient and efficient firms in the value of production went up substantially from 1983 to 1994, indicating a better allocation of resources.

---

<sup>5</sup> The NIEs include South Korea, Taiwan, Singapore and Hong Kong.

<sup>6</sup> Effective protection rate (EPR) is defined as the percentage excess of domestic value added at protected prices over value added at free trade prices.

<sup>7</sup> DRC measures the social cost of domestic resources used per unit of foreign exchange earned or saved by an activity. SER, on the other hand, represents the opportunity cost of domestic resources used in all activities producing tradable goods, or the social cost of earning foreign exchange. The DRC/SER ratio, therefore, measures an activity's efficiency in earning or saving foreign exchange. A ratio of 1 or less than 1 indicates efficiency since the activity is using domestic resources whose cost is lower than the value of the net foreign exchange it earned. The lower the ratio, the higher the efficiency is.

Table 7. Average effective protection rates, 1985-2004 (%)

Sectors	1985	1990	1995	2000	2001	2002	2003	2004
Agriculture	9.20	23.63	22.00	14.84	15.68	20.76	20.60	20.08
Mining	6.10	1.67	1.43	0.43	0.36	0.33	0.39	0.42
Manufacturing	55.90	31.02	23.09	17.78	14.31	12.41	11.26	9.94
Overall	38.00	27.86	21.91	16.30	14.10	12.62	11.77	10.76

Note: EPR are weighted average based on book rates.

Source: Tariff Commission.

Table 8. Resource allocation and efficiency, 1983, 1988 and 1994

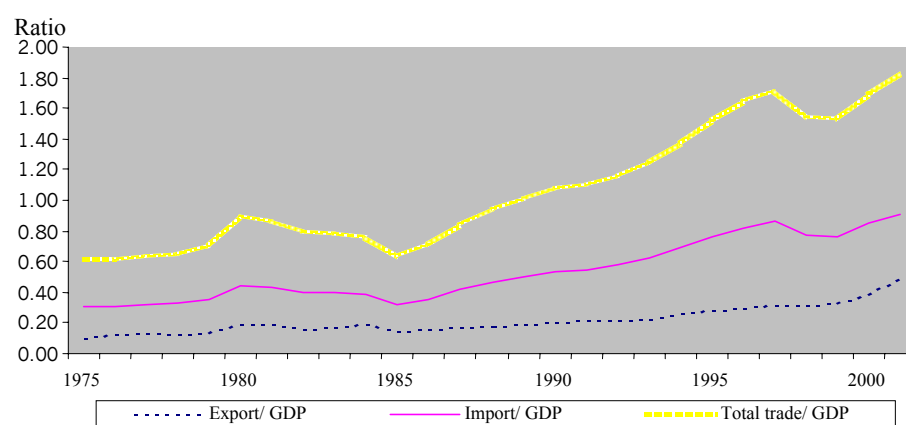
DRC/SER	Efficiency classification	Share in production value (%)			Share in number of establishments		
		1983	1988	1994	1983	1988	1994
0 DRC/SER < 1.0	Highly efficient	18.8	39.5	41.6	19.6	30.2	22.4
1.0 < DRC/SER < 1.5	Efficient to mildly inefficient	28.7	22.8	37.9	17.2	27.7	40.5
1.5 < DRC/SER < 2.0	Inefficient	12.3	14.7	7.6	14.2	13.0	16.3
DRC/SER > 2.0	Highly inefficient	39.6	21.8	12.9	46.0	26.6	20.8
Average DRC/SER		1.7	1.5	1.2			

Sources: Pineda (1997), Medalla (2002).

**Exports performance.** The ratio of the country's international transactions to GDP has been increasing since 1985, a clear indication of the growing openness of the economy (Figure 1). For the period 1975-2000, exports grew on the average by 8.8 percent per year. Throughout the period, however, there have been considerable differences in the growth rates of individual products (Table 9). This reflects the considerable change in the composition of exports. The share of traditional exports (like coconut, sugar, forest products, mineral products, abaca and tobacco) has gone down from three-fourths of total exports in 1975 to less than 5 percent in 2000 (Figure 2). On the other hand, the share of nontraditional exports (like semiconductors and garments) has gone up from less than one-fourth of total exports in 1975 to 95 percent in 2000. In particular, the semiconductors and electronic microcircuits, finished electrical machinery, and garments have become the country's leading exports in the 1990s, with their combined average annual share increasing from 13.4 percent in 1975-1980 to almost 51 percent in 1990-2000 (Table 9). It should be noted, however, that the growth of garments exports has been declining since the 1980s. As will be discussed later, much of the decline could be explained by the decline in the country's share in the US market due to NAFTA.

Other emerging export products for the country in the 1990s also include office machines and automated and processing machines, telecommunication and small recording equipments, unconsign electrical machinery, textile fibers and road vehicles and parts. These products are among the top products included in "others" in Table 9.

Figure 1. Ratio of international transactions to GDP, 1975-2001



Source: National Income Accounts, NSCB.

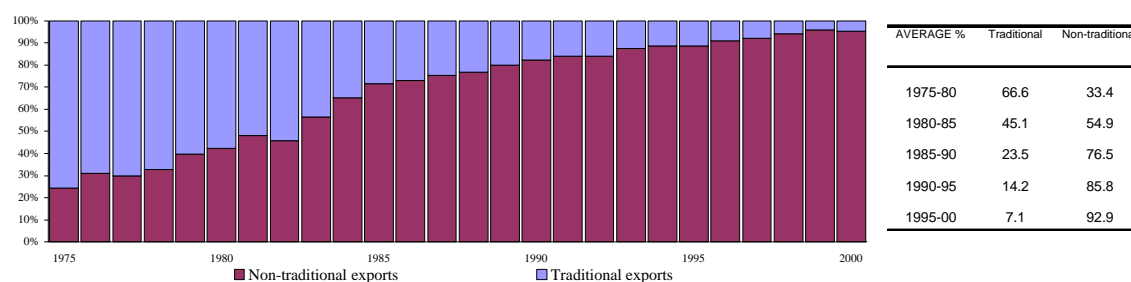
Table 9. Percentage distribution and growth rate of merchandise exports, 1975-80, 1980-90, 1990-2000.

Product	Growth rate (1985 prices, %)			Average annual share (%)		
	1975-80	1980-90	1990-00	1975-80	1980-90	1990-00
MERCHANDISE EXPORTS	21.0	2.0	9.9	100.0	100.0	100.0
Principal Merchandise Exports	11.6	3.7	9.7	70.8	68.5	66.5
Semiconductors and electric microcircuits	64.0	8.9	10.2	5.6	17.6	27.9
Finished electrical machinery						7.8
Garments	41.4	13.1	3.7	7.8	14.9	14.7
Crude coconut oil	11.6	0.9	2.9	12.6	7.4	2.6
Gold from copper ores	-3.1	-5.1	19.4	2.5	2.3	1.2
Bars, rods of copper			5.8		1.9	1.7
Banana and plaintains	2.2	-1.0	6.8	2.5	1.5	1.3
Centrifugal sugar	9.8	-19.0	5.0	13.1	2.9	0.6
Shrimps and prawns	9.7	25.7	-6.8	0.5	1.9	1.4
Canned pineapple	13.2	-0.6	1.7	1.7	1.2	0.6
Iron agglomerates		1.5	-2.1	2.4	2.9	0.5
Dessicated coconut	3.1	-0.4	0.2	2.1	1.5	0.5
Copra oil, cake & meal	12.5	1.1	-1.2	1.8	1.6	0.3
Prepared tuna	147.6	14.9	-8.2	0.3	1.2	0.4
Copper concentrates	2.7	-9.8	-15.0	9.2	2.8	0.8
Others	41.3	-0.1	10.3	29.2	31.5	39.9

Note: Among the top products included in "others" are: (1) office machines and automated and processing machines; (2) telecommunication and small recording equipment; (3) textile fibers; (5) road vehicle and parts.

source: National Accounts of the Philippines, NSCB

Figure 2. Composition of exports, 1975-2000 (%)



Source: Philippine Statistical Yearbook, various issues

The changing composition of exports is also reflected in the shifts in revealed comparative advantage (RCA). In terms of factor intensity, the country had a comparative advantage in agriculture-intensive products in the 1970s and 1980s, as shown by the RCA indicator<sup>8</sup> of greater than 1 (Table 10). However, over the years, the country has been losing its comparative advantage in these products, as the RCA indicator has been consistently declining. On the other hand, the country has slowly gained a comparative advantage in labor-intensive products, as shown by the increasing RCA indicator. By the second half of the 1990s, these are the only types of products for which the country has a comparative advantage..

Table 10. Revealed comparative advantage based on factor intensity, Philippines, 1975,1980,1985,1990,1995 and 1998.

	1975	1980	1985	1990	1995	1998
Agriculture Intensive	3.825	2.890	2.342	1.724	1.277	0.687
Capital Intensive	0.052	0.142	0.152	0.173	0.241	0.156
Labour Intensive	0.219	0.515	0.613	0.825	1.728	2.071
Minerals Intensive	0.653	0.726	0.547	0.691	0.616	0.206

Note: RCA >1 indicates comparative advantage while RCA <1 indicates the opposite.

Source: NAPES database

In general, the comparative advantage of manufactured exports is increasing (Table 11). In terms of specific products, the country's comparative advantage is in wood (SITC 63), pottery (SITC 66), office machines, electrical and non-electrical machinery (SITC 71 and 72), clothing (SITC 84), developed cinema film (SITC 86), and travel goods and handbags (SITC 83). What is worrisome though are the falling RCAs of most of these products since 1995.

A number of factors could explain the change in the composition of exports and comparative advantage. The relatively low-income elasticity of demand for primary products played a major role in the steady decline in the share of agricultural

<sup>8</sup>  $RCA_{ij} = (x_{ij}/X_{ij}) / (X_{iw}/X_{ww})$ , where  $x_{ij}$  refers to product  $i$  exported by country  $j$ ;  $X_{ij}$  refers to country  $j$ 's total exports;  $X_{iw}$  refers to the total world exports of product  $i$ ; and  $X_{ww}$  refers to total world exports. In other words, RCA is the share of specific product in total exports of a country relative to the share of the same product in world trade. A ratio of greater than 1 indicates that a country has a comparative advantage in that product while a ratio of less than 1 indicates the opposite.

and mineral products in the country's exports. Likewise, under the WTO agreements, barriers to trade in industrial products, except textile and clothing, have been lowered more than those to trade in agricultural products, making market access for the latter more restricted.

Table 11. Manufactured products which the Philippines has comparative advantage, 1980-1999 (based on estimates of RCA)

SITC Code	Description	1980	1985	1990	1995	1996	1997	1998	1999
631	Veneers, plywoods, etc.	9.010	5.430	2.940	0.206	0.262	0.260	0.164	0.033
632	Wood manufactures	2.905	5.153	5.887	2.005	2.725	1.857	1.403	1.258
666	Pottery	1.076	0.624	2.521	3.417	2.752	2.488	2.022	1.600
714	Office machines	0.013	0.004	0.236	2.126	2.755	3.215	2.899	4.433
722	Electric power machines	0.014	0.163	0.258	0.730	0.649	0.949	1.633	1.361
723	Electric distributing machines	0.140	0.001	4.769	5.402	4.240	3.846	2.614	3.079
724	Telecommunications equipment	0.207	0.097	1.141	2.014	1.838	1.591	1.147	0.912
729	Electrical machinery; NES	0.442	1.835	1.470	4.195	5.496	6.200	7.810	5.761
821	Furniture	0.055	0.044	0.195	1.861	1.513	1.314	1.047	1.182
831	Travel goods, handbags	0.101	0.107	0.236	3.794	4.012	4.138	3.964	3.905
841	Clothing not of fur	0.273	0.390	0.987	3.964	3.770	2.845	2.319	2.024
863	Developed cinema film	0.097	0.145	0.086	5.068	6.545	2.684	2.576	2.323
864	Watches and clocks	0.008	0.041	0.128	3.964	2.219	1.350	1.383	2.074
899	Other manufactured goods	5.853	6.642	6.715	3.195	2.536	2.035	1.507	1.079
931	Special transactions	9.512	24.581	18.437	0.271	0.000	0.010	0.008	0.639
Manufactured exports		0.652	0.877	0.938	0.993	1.088	1.116	1.128	1.133

Note: See Appendix Table 2 for the estimates of RCA for all manufactures.

Source: NAPES database

The big shift of the country's exports to semiconductors and microcircuits in the 1990s, however, was driven not by the traditional comparative advantage theory, but by intra-industry trade, a new trade theory that emerged in the 1980s. Intra-industry trade is a function not only of factor endowments but also of economies of scale and transaction costs. The rapid development of transportation and information and communication technology and the reduction in trade and investment barriers facilitated the international production sharing of transnational companies (TNCs) in certain products. Production sharing is done by separating the labor-intensive segments of technologically complex production processes from the capital- and skill-intensive segments and locating these in different countries, which are linked through international subcontracting or outsourcing arrangements. Such arrangements allow TNCs to exploit the comparative advantage specific to the production of a particular component, and differences in labor costs across developing countries.

The international production network was considered to be a crucial factor in the rapid expansion of trade in such products as computers and office equipment, telecommunications, video and audio equipment, semiconductors, and clothing, and in the rising market share of developing countries, like the Philippines, for these products (UNCTAD 2002). As will be discussed later, however, the impact of such a production strategy to the economic growth of developing countries depends to a



large extent on how much of the activities of the TNCs are linked to domestic economic activity.

The country is in a relatively strong position in terms of the market positioning of its exports compared to the other ASEAN economies. This is based on product market shares and the growth in product markets (See Box 1). Products that are growing and dynamic in world trade (optimal position) accounted for about 61.6 percent of the country's exports in the 1990s (Table 12). However, products that are growing in world trade but for which the country is losing its market share accounted for almost 30 percent (lost opportunity position). On the other hand, products that are in the vulnerable and restructuring positions accounted for less than 10 percent of total exports.

### Box 1. Market positioning classification

Share of country's exports in world trade	Share of products in world trade	
	Rising (dynamic)	Falling (stagnant)
Rising (competitive)	I Optimal	III Vulnerable
Falling (non-competitive)	II Lost opportunity	IV Restructuring

Source: World Bank (1997)

A country is considered competitive in a product if its world market share is growing, and a product is considered dynamic if its trade is growing faster than the average for all products. This results in four types of commodity classification. Quadrant I is the optimal solution, since a country is increasing its market share in dynamic products; Quadrant II is the worst position, since a country is losing market shares in dynamic products; Quadrant III is a vulnerable position, since a country is increasing its share in a stagnant product; and Quadrant IV is a position where a country needs some restructuring away from stagnant products.

Table 12. Market positioning of manufactured exports, ASEAN, 1991-1999 (%)

Country	Optimal	Lost Opportunity	Vulnerable	Restructuring	Total
Philippines	61.60	29.71	3.83	4.86	100.00
Indonesia	28.22	33.28	32.15	6.35	100.00
Malaysia	62.29	6.87	25.91	4.93	100.00
Thailand	37.51	19.13	28.59	14.78	100.00
Singapore	56.73	16.72	13.34	13.21	100.00

Source: Author's estimates based on PC-TAS.

Most of the products that fall under the “optimal and lost opportunity” positions (Table 13) are included in the world’s most dynamic products in 1980-1998 based on the UNCTAD (2002) report<sup>9</sup>. The same UNCTAD report (2002) shows that most of the dynamic products in world trade are also the ones most affected by the global production process through the international production networks. As shown in Appendix Table 3, the country has indeed increased its share in the world market for semiconductor products (SITC 75, 76, 77) between 1991 and 1999.

The country could improve its position in the world market by increasing its share in dynamic products for which it is losing its market share. The country actually has a comparative advantage in some of the products under the “lost opportunity” position. Such products account for about 30 percent and 15 percent of total exports in 1991 and 1999, respectively. In particular, the country has a comparative advantage in clothing (Table 11), but the country’s share in the world market went down substantially between 1991 and 1999 (Appendix Table 3).

**Productivity.** Past studies have shown that total factor productivity (TFP) growth in the country has been low compared to that of other ASEAN members. The country experienced positive productivity growth in the early 1950s but this has been declining and even registered negative growth in some periods (See for example the studies by Sanchez (1983), Patalinghug (1984), Austria (1992) and Cororaton and Caparas (1999). Part of the reason for the poor productivity performance was attributed to the inward looking industrial policies of the country that prevented the efficient allocation of resources.

However, recent estimates of productivity growth show that performance improved during the policy reform period (Table 14). Productivity growth was negative during the trade protectionist regime of 1965-1970. It improved during the period 1970-1980, partly because of the export promotion efforts in the late 1970s. The productivity growth worsened again during the period 1980-1986. While this period covered the first phase of the Tariff Reform Program, it was also a period of macroeconomic and political crises for the country. The crisis brought uncertainty to the trade regime and unpredictability to the incentive structure. Such uncertainty caused industries to be reluctant to incur the sunk cost of adjustments and hence, failed to adjust their productive capacity and production strategies to the new trading environment.

The trade and investment liberalization period of 1986-1996, on the other hand, is characterized by a significant improvement in TFP growth. TFP growth is much higher, however, if the energy crisis period of 1990-1992 is excluded. Although the period 1986-1996 covered two government administrations, the commitment for trade and investment reforms was more credible and stable. Hence, these paved the ways for an environment where firms and industries adjusted their productive capacities in response to the emerging trading environment, both local and international (Austria 2002a).

---

<sup>9</sup> The most dynamic products in world trade fall into four categories, namely: (i) electronic and electrical goods (SITC 75, 76, 77); (ii) textiles and clothing (SITC 61,65,84); (iii) products characterized by high R&D expenditures and high technological complexity (SITC 5, 86); and (iv) primary commodities, non-alcoholic beverages and cereals (SITC 261, 111, 048).

Table 13. Market positioning of manufactured exports, Philippines, 1991-1999

OPTIMAL			LOST OPPORTUNITY		VULNERABLE		RESTRUCTURING	
Code	Product Description	Average annual value	Code	Product Description	Average annual value	Code	Product Description	Average annual value
075	SPICES	419.0	071	COFFEE AND COFFEE SUBSTITUTES	3,708.5	016	MEAT AND EDIBLE MEAT OFFAL, SALTED	65.0
098	EDIBLE PRODUCTS AND PREPARATIONS	30,488.0	091	MARGARINE AND SHORTENING	544.0	017	MEAT AND EDIBLE MEAT OFFAL, PRESERVED	400.0
533	PIGMENTS, PAINTS, ETC	4,146.5	111	NONALCOHOLIC BEVERAGES	3,237.0	022	MILK , CREAM AND MILK PRODUCTS	948.5
551	ESSENTIAL OILS AND FLAVOR MATERIALS	1,667.0	422	FIXED VEGETABLE FATS AND OILS	321,352.5	023	BUTTER, FATS AND OILS DERIVED FROM MILK	8.5
553	PERFUMERY, COSMETICS, OR TOILETTRIES	11,357.0	431	ANIMAL OR VEGETABLE FATS AND OILS	10,720.5	024	CHEESE AND CURD	273.0
579	WASTE, PARINGS AND SCRAP, OF PLASTICS	1,608.0	515	ORGANO-INORGANIC COMPOUNDS, ETC	267.0	025	BIRDS' EGGS AND EGG YOLKS	74.0
581	TUBES, PIPES AND HOSES OF PLASTICS	377.0	524	INORGANIC CHEMICALS	493.0	047	CEREAL MEALS AND FLOURS	55.0
621	MATERIALS OF RUBBER	2,599.5	541	MEDICINAL AND PHARMACEUTICAL PRODUCTS	1,058.0	048	CEREAL PREPARATIONS; STARCH	15,950.0
629	ARTICLES OF RUBBER	10,055.5	542	MEDICAMENTS	13,848.0	054	VEGETABLES, ROOTS, ETC	18,686.0
657	SPECIAL YARNS, TEXTILE FABRICS, ETC	24,914.0	554	SOAP, CLEANSING AND POLISHING PREPS	18,072.5	073	CHOCOLATE AND OTHER FOOD PREPARATIONS	453.0
699	MANUFACTURES OF BASE METAL	31,808.5	562	FERTILIZERS	79,979.5	074	TEA AND MATE	219.0
713	INTERNAL COMBUSTION ENGINES AND PARTS	14,589.5	574	POLYACETALS AND OTHER RESINS	357.5	511	HYDROCARBONS AND THEIR DERIVATIVES	2,518.0
714	ENGINES AND MOTORS, NONELECTRIC	12,952.0	593	EXPLOSIVES AND PYROTECHNIC PRODUCTS	5,480.5	523	METALLIC SALTS AND PEROXYSALTS	676.0
718	POWER GENERATING MACHINERY AND PARTS	178.0	598	MISCELLANEOUS CHEMICAL PRODUCTS	30,979.5	531	SYNTHETIC ORGANIC COLORING MATTER	2,155.0
743	AIR OR GAS COMPRESSORS PUMPS AND FANS	12,072.5	612	MANUFACTURES OF LEATHER	959.0	571	POLYMERS OF ETHYLENE, IN PRIMARY FORMS	1,795.5
752	AUTOMATIC DATA PROCESSING MACHINES	1,662,405.0	634	VENEERS, PLYWOODS	30,191.0	573	POLYMERS OF VINYL CHLORIDE ETC	9,149.5
759	OFFICE MACHINES PARTS AND ACCESSORIES	594,535.5	635	WOOD MANUFACTURES	122,801.5	575	PLASTICS, IN PRIMARY FORMS	3,280.5
771	ELECTRIC POWER MACHINERY AND PARTS	41,964.5	642	PAPER AND PAPERBOARD	27,358.5	591	INSECTICIDES AND SIMILAR PRODUCTS	1,582.0
772	SWITCHING ELECTRICAL APPARATUS ETC	352,240.0	655	KNITTED OR CROCHETED FABRICS	8,927.5	592	STARCHES, INULIN AND WHEAT GLUTEN	642.5
773	EQUIPMENT FOR DISTRIBUTING ELECTRICITY	361,914.0	658	MADE-UP ARTICLES, OF TEXTILE MATERIALS	58,740.5	597	PREPARED ADDITIVES FOR MINERAL OILS ETC	33,227.5
778	ELECTRICAL MACHINERY AND APPARATUS	53,438.5	664	GLASS	17,932.5	625	RUBBER TIRES, TUBES	20,330.5
783	ROAD MOTOR VEHICLES	1,804.5	671	PIG IRON AND SPIEGELEISEN ETC	6,524.0	641	PAPER AND PAPERBOARD	31,704.5
785	MOTORCYCLES AND CYCLES	32,365.5	694	NAILS, SCREWS, NUTS AND SIMILAR ARTICLES	4,901.5	651	TEXTILE YARN	20,416.0
831	TRUNKS, SUITCASES ETC	104,279.0	696	CUTLERY	2,755.0	653	WOVEN FABRICS OF MANMADE TEXTILE MAT'L	1,581.0
871	OPTICAL INSTRUMENTS AND APPARATUS	11,030.0	716	ROTATING ELECTRIC PLANT AND PARTS	2,576.0	654	WOVEN FABRICS OF OTHER TEXTILE MATERIALS	12,977.5
873	METERS AND COUNTERS	963.5	749	MACHINERY NONELECTRIC PARTS ETC	9,242.0	661	LIME, CEMENT CONSTRUCTION MATERIALS	5,248.0
884	OPTICAL GOODS	16,818.5	764	TELECOMMUNICATIONS EQUIPMENT	443,914.5	663	MINERAL MANUFACTURES	5,689.0
893	ARTICLES OF PLASTICS	57,591.5	776	VALVES AND TUBES; SEMICONDUCTOR DEVICES	2,687,532.0	665	GLASSWARE	41,961.5
931	SPECIAL TRANSACTIONS AND COMMODITIES	8,964,875.0	781	MOTOR CARS AND OTHER MOTOR VEHICLES	263.0	666	POTTERY	2,302.0
971	GOLD, NONMONETARY	83,271.5	811	PREFABRICATED BUILDINGS	30,188.5	674	IRON AND NONALLOY STEEL PRODUCTS	169.5
			813	LIGHTING FIXTURES AND FITTINGS	10,785.5	676	IRON AND STEEL BARS	37.0
			821	FURNITURE AND PARTS THEREOF	266,408.5	678	IRON AND STEEL WIRE	7,006.5
			841	MEN'S APPAREL OF WOVEN TEXTILE FABRICS	277,302.5	691	METAL STRUCTURES AND PARTS	3,536.0
			842	WOMEN'S APPAREL OF WOVEN TEXTILES	380,424.0	692	METAL CONTAINERS FOR STORAGE	17,792.5
			843	MEN'S APPAREL, KNITTED OR CROCHETED	144,764.0	697	HOUSEHOLD EQUIPMENT OF BASE METAL	102.5
			844	WOMEN'S APPAREL, KNITTED OR CROCHETED	152,834.5	722	TRACTORS	4,586.5
			845	ARTICLES OF APPAREL,TEXTILE FABRICS	452,661.0	723	CIVIL ENGINEERING PLANT AND EQUIPMENT	3,296.5
			846	CLOTHING ACCESSORIES, TEXTILE FABRICS	41,391.0	724	TEXTILE AND LEATHER MACHINERY, AND PARTS	952.0
			872	INSTRUMENTS FOR MEDICAL PURPOSES	5,744.5	725	PAPER MACHINERY, PARTS	209.5
			881	PHOTOGRAPHIC APPARATUS AND EQUIPMENT	9,426.0	726	PRINTING AND BOOKBINDING MACHINERY	1,910.5
			894	BABY CARRIAGES, TOYS ETC	160,638.0	727	FOOD-PROCESSING MACHINES	20,323.0
			899	MISCELLANEOUS MANUFACTURED ARTICLES	180,516.5	728	MACHINERY AND EQUIPMENT SPECIALIZED	499.0
						731	MACHINE TOOLS	8,040.0
						735	PARTS AND ACCESSORIES FOR MACHINE TOOLS	812.5
						737	METALWORKING MACHINERY	27,561.0
						741	HEATING AND COOLING EQUIPMENT AND PARTS	2,922.5
						742	PUMPS FOR LIQUIDS	3,152.5
						744	MECHANICAL HANDLING EQUIPMENT	626.0
						745	NONELECTRICAL MACHINERY AND TOOLS	27.5
						746	BALL OR ROLLER BEARINGS	3,764.0
						747	TAPS, COCKS, VALVES AND SIMILAR APPLIANCES	1,707.5
						748	TRANSMISSION SHAFTS AND CRANKS ETC	15,789.0
						751	OFFICE MACHINES	38,654.0
						761	TV RECEIVERS	74,344.0
						762	RADIO-BROADCAST RECEIVERS	19,687.5
						775	HOUSEHOLD TYPE EQUIPMENT	212.5
						782	MOTOR VEHICLES	226,165.5
						784	PARTS AND ACCESSORIES FOR MOTOR VEHICLES	28,701.0
						793	SHIPS, BOATS AND FLOATING STRUCTURES	12,696.0
						812	SANITARY, PLUMBING AND HEATING FIXTURES	6,035.0
						874	MEASURING, CHECKING APPARATUS	155.5
						882	PHOTOGRAPHIC SUPPLIES	4,240.5
						891	ARMS AND AMMUNITION	5,772.5
						892	PRINTED MATTER	491.5
						895	OFFICE AND STATIONERY SUPPLIES	386.5
						896	WORKS OF ART, ANTIQUES	38.5
						961	COIN, NOT BEING LEGAL TENDER	
Average Annual Value of Exports ('000 US\$)		12,498,728.5			6,027,801.0			776,891.0
% Distribution		61.60			29.71			3.83
								4.86

Note: Manufactured exports includes processed food.

Source: Author's estimates based on PC-TAS.

Table 14. TFP growth rate, by industrial regime.

Period	Industrial regime	TFP estimate (%)
1960-1965	Decontrol	0.185
1965-1970	Trade Protection	-0.186
1970-1980	Trade Protection	0.093
	Export Promotion	
1980-1986	Trade Protection - TRP, Phase 1	-2.89
	Macroeconomic crisis	
	Political crisis	
1986-1996	Trade liberalization	0.93
	Investment liberalization	2.12 *
	Foreign exchange liberalization	
	Energy crisis	

\* excluding 1990-1992.

Source: Austria (2002a).

**Regional integration.** Because of the country's membership in AFTA and APEC, the country has been increasingly integrated into these two regions. The reduction in trade and investment barriers under the AFTA and APEC frameworks plays a crucial role in the increasing integration.

One crude measure of integration is the trade shares. These two regional groupings have increased their share in Philippine trade in the 1990s. APEC, in particular, plays a major role since the country's major trading partners (USA and Japan) are also members of APEC. More than three-fourths of the country's exports and imports occur in APEC, and this has been growing significantly during the 1990s (Figure 3).

On the other hand, the country is rapidly being integrated with the ASEAN because of AFTA. The share of the ASEAN in the country's trade has been significantly increasing since 1993. Between 1991 and 1999, the share of the ASEAN in the country's exports actually doubled while their share in imports increased by 5 percentage points. Also, while the share of the country in intra-ASEAN and intra-APEC trade is small, this has been consistently increasing (Table 15).

A better measure of regional integration is the intra-industry trade index (IIT). The index measures the amount of trade within a commodity. An increasing index indicates deepening of integration since it reflects an increase in the division of labor combined with a reduction in transaction costs. The increasing integration of the country into the APEC and ASEAN regions in the 1990s is supported by the increasing IIT index (Table 16). In terms of individual economies, rapid integration of the country occurred with China, South Korea and Taiwan. These are the economies where the increase in the index was highest. This finding is consistent with the development experience in the 1990s of South Korea and Taiwan when they

relocated the labor-intensive segment of their production processes to the low-wage ASEAN economies due to the increase in their wage rates<sup>10</sup>.

Figure 3. Philippine trade with ASEAN and APEC, 1991-1999

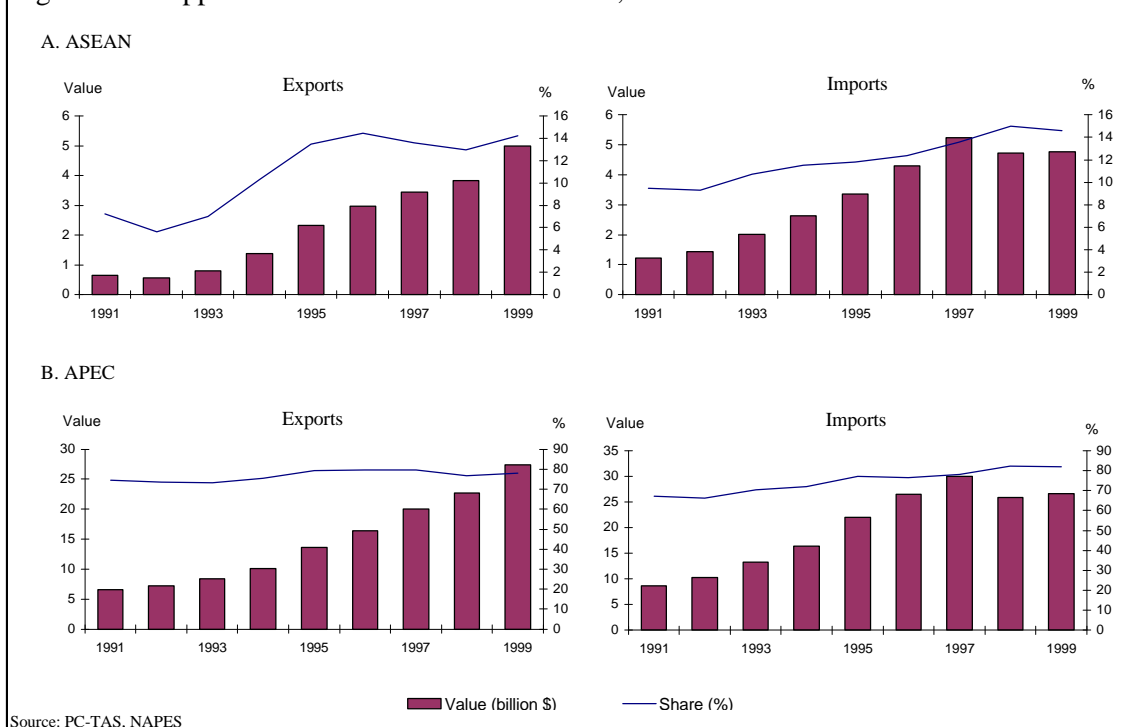


Table 15. Share of Philippines in Intra-ASEAN and Intra-APEC Trade (%)

Year	Intra- ASEAN		Intra-APEC	
	Exports	Imports	Exports	Imports
1991	1.97	4.11	0.82	1.04
1992	1.52	4.29	0.74	0.95
1993	1.77	4.90	0.78	1.11
1994	2.18	5.10	0.80	1.18
1995	2.94	5.21	0.89	1.27
1996	3.58	6.19	1.02	1.46
1997	4.10	7.40	1.17	1.57
1998	5.51	8.19	1.42	1.43
1999	6.56	8.03	1.59	1.36

Source: PC-TAS.

<sup>10</sup> Among the NIEs, South Korea and Taiwan were the most successful in upgrading their domestic production capability from the assembly of imported components to the domestic production of high-value added components. South Korea is most successful in the textile and clothing industry and Taiwan, in the computer industry.

Table 16. Intra-industry trade index for manufactures, Philippines with ASEAN and APEC, 1990, 1995 and 1999.

Partner Countries	1990	1995	1999
<b>ASEAN</b>	<b>48.8</b>	<b>47.5</b>	<b>55.5</b>
Brunei	1.2	-	-
Indonesia	23.4	23.0	17.3
Malaysia	34.1	46.3	47.8
Singapore	44.0	49.7	55.6
Thailand	35.7	25.2	56.6
Vietnam	0.1	-	-
<b>APEC</b>	<b>52.0</b>	<b>53.9</b>	<b>68.6</b>
Australia	23.3	24.5	32.2
Canada	20.4	21.8	11.4
Chile	0.0	1.4	0.4
China	6.2	13.8	59.7
Hong Kong	42.6	42.8	45.4
Japan	32.0	32.4	46.7
Korea, Republic of	11.8	25.2	33.2
Mexico	10.1	4.2	1.7
New Zealand	14.2	12.8	15.8
Papua New Guinea	3.1		
Taiwan	19.4	35.9	58.7
USA	43.5	50.0	59.5

Notes: (i) ASEAN includes Brunei, Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam; (ii). APEC includes the ASEAN and the countries listed thereunder; (iii) No data for Peru and Russia; (iii) See Appendix Table 5 for the intra-industry trade index for individual products.

Source: NAPES database

Likewise, the Philippines, along with the other ASEAN, had become an important source of inputs for China's industries on semiconductors, telecommunications, and computers and office equipment, which the latter re-exports to the US. The share of the Philippines in China's imports of these products has been rising since 1995 (Appendix Table 4). At the same time, however, China has become a major source of the country's imports of labor intensive consumer items. Some sectors fear the accession of China to the WTO since China is one of the country's competitors in labor-intensive products. The index shows, however, that even before its accession to the WTO, China has been playing a significant role in the country's trade.

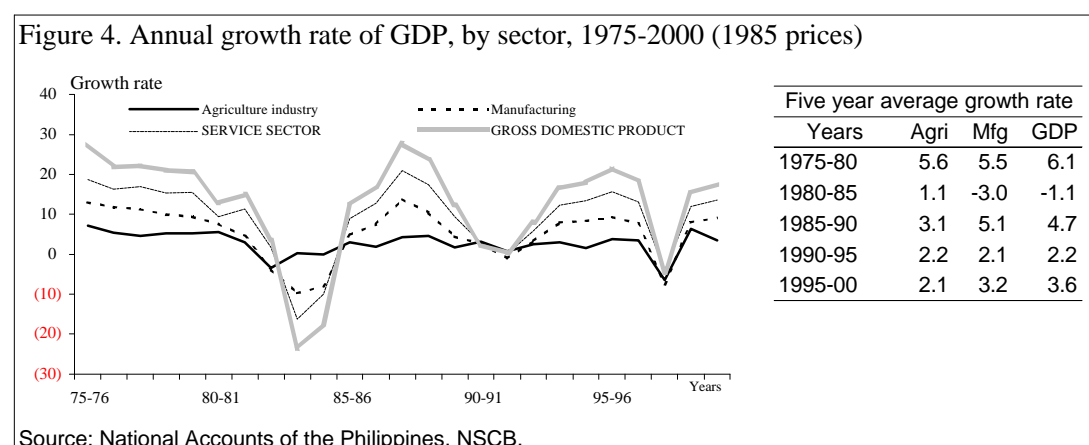
In terms of individual products, a general pattern of integration can also be observed (Appendix Table 5). Intra-industry trade is high in semiconductors and electrical machineries between the Philippines and the ASEAN economies, Taiwan, Hong Kong, South Korea, Japan and the United States. The integration occurred most rapidly with the ASEAN as shown by the high increase in the index between 1990

and 1999. Since 1995, intra-industry trade between the Philippines and China has also been increasing in these same products.

In general, the kind of integration the country is experiencing is a manifestation of the tri-lateral nature of trade and investment linkages among the economies in Northeast Asia, Southeast Asia (and China) and North America. That is, parts and components are produced in Northeast Asia, assembled in Southeast Asia and China and then exported in North America.

**Production and output.** While the reforms have improved resource allocation, increased the competitiveness of industries, expanded exports, raised productivity and increased the integration of the economy to the global market, they have not produced significant change in industrial growth. In particular, the growth of the manufacturing sector has not been as robust as many had expected (Figure 4). The share of manufacturing to GDP has even gone down during the reform period (Table 17). This is in contrast to the experience of the NIEs where the rapid expansion of their exports was accompanied by the faster growth of the manufacturing sector.

The experience of the country has left many sectors, policymakers, researchers, as well as the industries themselves, puzzled. Medalla (2002) argued that the main possible reason is that the industrial sector is still in the process of adjustment and restructuring; and that the government failed to implement outright the complementary reforms, especially with the exchange rate. But then again, the explanation raises another question as to when the benefits will ultimately be manifested in the economy.



This paper puts forward additional, if not alternative, explanation to the issue. The paper argues that the benefits of greater liberalization and outward orientation depend on how much of international trade is linked to the economy's domestic economic activities. As shown in Figure 5, the growth in the country's manufacturing exports, has not been accompanied by the concomitant increase in domestic manufacturing value added, but rather, by rapid expansion in manufacturing imports. This could be explained by the participation of the country in international production networks. The role of the country, like many of the developing countries, has been limited to the labor-intensive low-skill assembly stages of the production chain of otherwise high-technology products. This has given rise to manufacturing exports

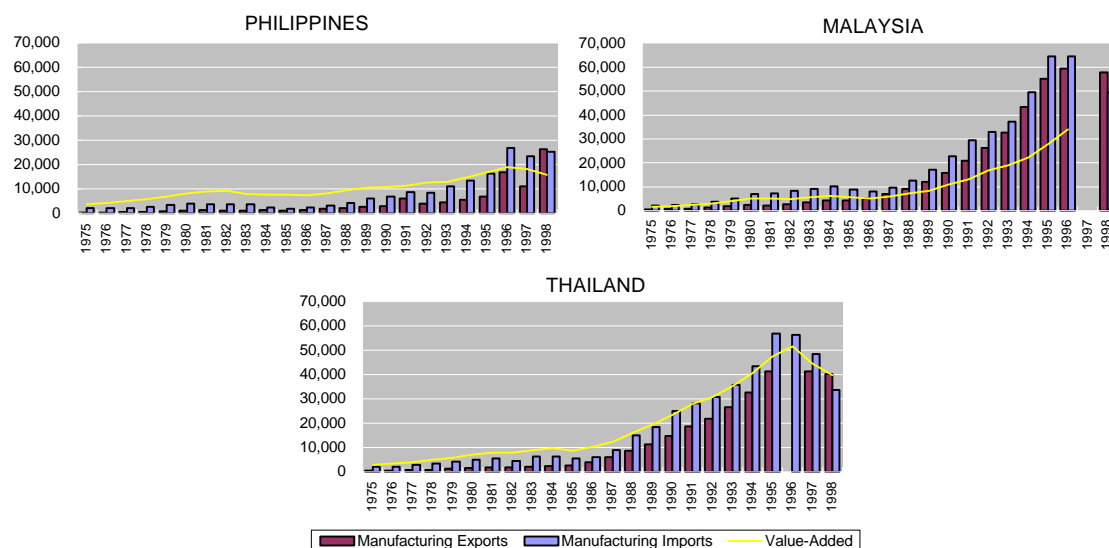
that are highly import-dependent and hence, the domestic value added is minimal<sup>11</sup>. Going back to Table 13, the bulk of the country's manufactured exports belong to these types of products.

Table 17. Distribution of GDP, by sector, 1975-2000 (%)

INDUSTRY	1975-80	1980-85	1985-90	1990-95	1995-00
AGRI.FISHERY,FORESTRY	24.31	23.24	23.73	22.41	20.49
Agriculture industry	20.66	21.05	22.17	21.85	20.31
INDUSTRY SECTOR	39.74	39.35	35.11	34.82	35.19
Manufacturing	27.86	26.34	25.30	25.16	24.98
SERVICE SECTOR	35.95	37.40	41.16	42.77	44.32

Source: National Accounts of the Philippines, NSCB

Figure 5. Manufactured exports and imports and manufacturing value-added, Philippines, Malaysia and Thailand, 1975-1998 (million dollars)



Source: World Bank, World Development Indicator

While the country is producing dynamic products whose trade is rapidly expanding in the world market, their link to domestic activity is very limited. Of particular concern is SITC 931 (special transaction and commodities not classified in kind). These include products that are manufactured from materials imported on consignment basis.

Semiconductors and electrical machinery, which contributed an average of 35.7 percent per year in total exports during the 1990s (Table 9), contributed only 6.7

<sup>11</sup> An important part of the value added accrues to foreign owners of capital, know-how and management.



percent to total value added in manufacturing (referred to as electrical machinery in Table 18). On the other hand, food manufactures which accounted for only about 8 percent of total exports during the same period contributed 36 percent to total value added, indicating that the industry has more linkages to the rest of the economy than the assembly activities in electrical machinery.

Table 18. Distribution of value-added, manufacturing, 1975-2000(%)

INDUSTRY/INDUSTRY GROUP	1975-80	1980-90	1990-2000
Food manufactures	43.91	43.39	36.13
Beverage industries	2.29	3.65	3.93
Tobacco manufactures	3.16	3.19	2.62
Textile manufactures	5.19	4.09	2.74
Footwear wearing apparel	4.02	4.77	5.77
Wood and cork products	3.71	2.49	1.54
Furniture and fixtures	1.49	1.31	1.26
Paper and paper products	1.09	1.07	1.04
Publishing and printing	1.35	1.30	1.48
Leather and leather products	0.12	0.09	0.09
Rubber products	1.81	1.55	1.17
Chemical & chemical products	7.04	6.65	6.23
Products of petroleum & coal	10.86	12.05	17.22
Non-metallic mineral products	2.79	2.34	2.88
Basic metal industries	1.55	2.50	2.29
Metal industries	2.24	2.09	2.21
Machinery except electrical	1.25	1.19	1.42
Electrical machinery	1.77	3.16	6.66
Transport equipment	3.24	1.56	1.14
Miscellaneous manufactures	1.11	1.57	2.17
Total Manufacturing	100.00	100.00	100.00

Source: National Accounts of the Philippines, NSCB

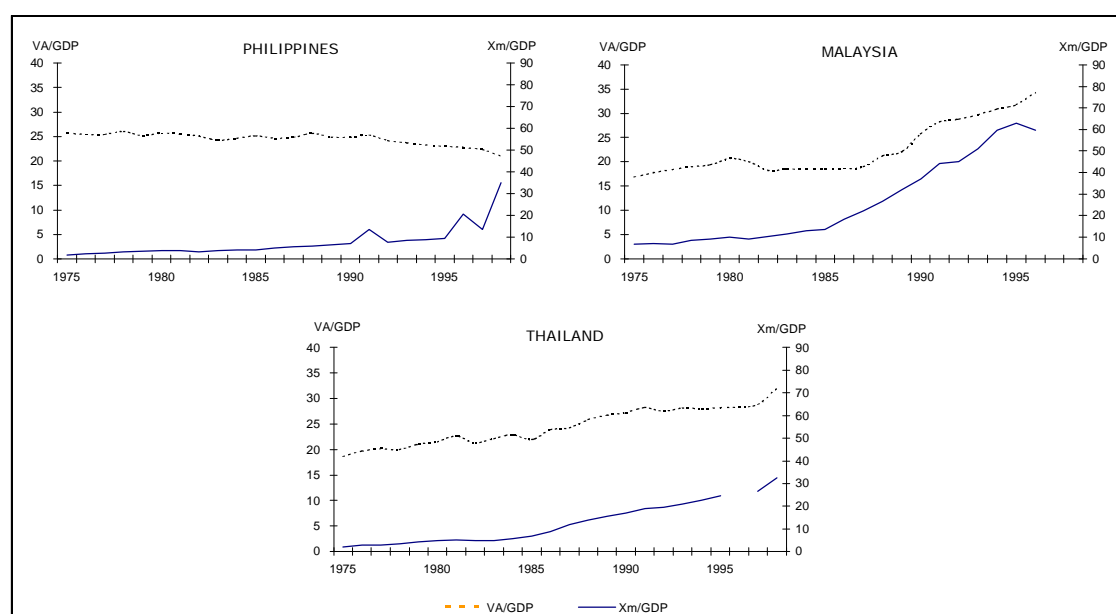
The experience of the country is again in contrast to the experience of the NIEs, particularly South Korea and Taiwan. While these countries have also participated in international production networks, they have managed to move away from the assembly of imported components and towards the skill- and technology-intensive segment of the production chain. They were able to do this by improving their domestic production capabilities by developing their local supplier's base in the manufacture of even the most sophisticated key components (Austria 2000; UNCTAD 2002). Hence, the pattern of their integration into the global trading system was a major determinant in the success of their industrialization.

Malaysia and Thailand are also involved in international production networks but the impact on their economies is quite different with the experience of the Philippines. For these two economies, manufacturing exports and imports were growing pretty close with the manufacturing value added in the 1970s up to the early 1980s (Figure 5). In the 1990s, however, manufacturing value added exhibited a very strong growth, and this was due in part to the establishment of local suppliers, although based on foreign ownership (UNCTAD 2002). For Thailand, the manufacturing value added even exceeded manufacturing exports and imports. This is in contrast to the Philippines where manufacturing value added exceeded

manufacturing exports and imports by a large margin in the 1970s until late 1980s. In the 1990s, however, this margin has been narrowing down; and manufacturing imports was also growing much faster than manufacturing exports.

This is also reflected in the ratios of manufactured exports and value added to GDP. Thailand, Malaysia and the Philippines all registered a relatively constant ratio of manufactured exports to GDP at less than 5 percent in the 1970s until the mid-1980s (Figure 6). Starting 1985, however, the ratio started to increase, with Malaysia demonstrating the fastest growth. The ratio was also accompanied by an increasing ratio of manufacturing value added to GDP in Malaysia and Thailand but not for the Philippines, where it was relatively unchanged throughout most of the 1970s and 1980s and was declining in the 1990s.

Figure 6. Ratio of exports in manufactures and value-added in manufacturing to GDP, Philippines, Malaysia and Thailand, 1975-1998 (%)



Source: World Bank, World Development Indicator

#### 4. The Emerging Global Trade Policy Environment

The global trading environment has substantially changed over the last two decades. Many developing countries have pursued outward oriented strategies and closer integration into the global economy as part of their main development strategy. As Whalley (1999a:7) aptly puts it,

“The late 1980s and early 1990s saw the most extensive and far reaching trade liberalization ever achieved globally, and it was undertaken unilaterally (not negotiated multilaterally) and by the developing countries”.

This is in contrast to the trading landscape prior to the 1980s during which time the developing countries have sought preferential treatment on their exports to developed countries while protecting their own domestic markets. The preferential treatment was based on the argument that their balance of payments problems made it

impossible for them to liberalize their trade regimes, as liberalization would only widen their trade deficits (Whalley 1999b; Grether and Olarreaga 1998). This is commonly referred to as the “special and differential treatment” provision of the GATT. Developing countries also used this provision in pursuing a common negotiating strategy as a group as a way of addressing their common problems, which they argued are unique of their developing country status.

In the late 1980s, however, there has been a change in mindset for most of the developing countries as they have pursued unilateral liberalization. Hence, during the Uruguay round negotiations, there was a shift away from the common negotiating position strategy as developing countries pursued their own individual country interests, even if these run counter to other developing countries’ interests<sup>12</sup>. Trade liberalization resulted to the expansion of trade of developing countries and to their closer integration in the global economy during the past two decades.

After two decades, the global trade environment is yet again seeing a sharp change. This section of the paper discusses the major policy areas that are shaping the global trading environment, which the developing countries, like the Philippines, are confronted with in this new millennium.

**The rise of regionalism.** While the world is becoming increasingly integrated because of the intensive trade liberalization in different parts of the globe, regional trading agreements (RTAs) are also on the rise (WTO 2000; WTO 2001a; Das 2001; Whalley 1999a). RTA is not actually something new for it has always been a feature of the post-war global trading system. Article XXIV of the GATT and Article V of the GATS permit the formation of RTAs, where parties to the agreement grant each other preferential tariff treatment on a reciprocal basis provided that certain conditions are met<sup>13</sup>. By its nature, such arrangement discriminates against non-members. RTAs are therefore exceptions to the most-favored nation (MFN) principle of the WTO<sup>14</sup>.

The first wave of regionalism came in the 1950s and 1960s and is said to have first occurred with the formation of the European Free Trade Area (EFTA) in 1959 following the formation of the European Economic Community. Soon after, developing countries of Latin America and Africa formed their own RTAs. However, these RTAs did not succeed, except for the EFTA, primarily because the USA, the largest trading economy, was originally opposed to regionalism and promoted instead multilateral free trade through the GATT.

---

<sup>12</sup> An example is when Argentina argued for the global liberalization in grains and beef, and Thailand in rice, even if net importing developing countries were opposed to it (Whalley 1999a).

<sup>13</sup> The conditions for the formation of RTA under Article XXIV includes: (i) the establishment of a free trade area among members within a reasonable period of time; (ii) the reduction of tariffs to zero and the elimination of other restrictive regulations on substantially all trade between the participants; and (iii) duties and other regulations to third countries are not raised. On the other hand, the conditions under Article V of GATS include: (i) substantial sector coverage (in terms of number of sectors, volume of trade affected and modes of supply with no *a priori* exclusion of any modes); and (ii) absence or elimination of substantially all discrimination through elimination of existing discriminating measures and/or prohibition of new of more discriminatory measures.

<sup>14</sup> The *most favored nation (MFN) principle* means that member countries of the WTO cannot discriminate between their trading partners. A favor, say a lower tariff rate for a particular product, that is granted to one member have to be granted to all the other members.

Regionalism came into force again in the late 1980s with the formation of the EU's Single Market and with the US abandoning its anti-regionalism stance and formed the US-Canada Free Trade Area and North American Free Trade Area (NAFTA). The formation of the EU and NAFTA created a domino effect reviving old RTAs and forming new ones in Latin America and Africa (like Mercusor, Andean Community). The Asia-Pacific came in quite late with the formation of AFTA in 1992 and APEC in 1989.

However, the first and second waves of regionalism are very distinct in character. The first was inward-looking and shallow integration, involving mostly tariff reductions. The second wave, on the other hand, is outward-looking seeking for greater and faster liberalization; involves deeper integration, going beyond tariff reductions; and non-exclusive, as one country can simultaneously be a member of more than one RTAs (Box 2). The slow progress of the multilateral negotiation at the WTO, in fact, is said to have contributed to the rise of the new regionalism. And recently, the failure to launch a new WTO round at the Seattle Ministerial Meeting in 1999, and the failure of the Early Voluntary Sectoral Liberalization (EVSL) initiative of APEC, also in 1999, strengthened the formation of RTAs almost everywhere around the globe<sup>15</sup>.

Most WTO members are party to at least one regional trading agreement. As of July 2000, there were 204 RTAs, 70 percent of which are currently in force. Intra-RTA trade accounts for about 43 percent of world trade in 2000 (WTO 2001a). Major developments occurred in the past 2 or 3 years. These include the launch of negotiations for the formation of the Free Trade Agreement of the Americas (FTAA), linking the North and South American economies; and EU forging free trade agreements (FTAs) with Africa, Latin America and the emerging economies of Europe and Central Asia. East Asia has also been caught with regionalism in recent years. Table 19 shows the proliferation of bilateral trading arrangement initiatives across the region in various stages of formation.

The proliferation of RTAs has raised concerns over their effects on the trade environment as well as on the trading system. The usual question of whether RTAs are building blocs or stumbling blocs to the rules-based multilateral trading system under the WTO have been greatly debated in the literature<sup>16</sup>. Whether an RTA brings about a gain in welfare or not depends on the balance between trade diversion and trade creation. Trade diversion occurs when an inefficient firm inside the RTA is able to gain market access because of the preferential agreement, at the expense of an efficient firm from a non-member of the RTA. On the other hand, trade is created when efficient firms inside the RTA are able to expand their market shares at the expense of inefficient firms from non-members. The overall impact depends on the net effect of trade creation and trade diversion.

However, there is a general consensus that RTAs of the second wave offer faster and deeper liberalization than is possible at the multilateral level; and that,

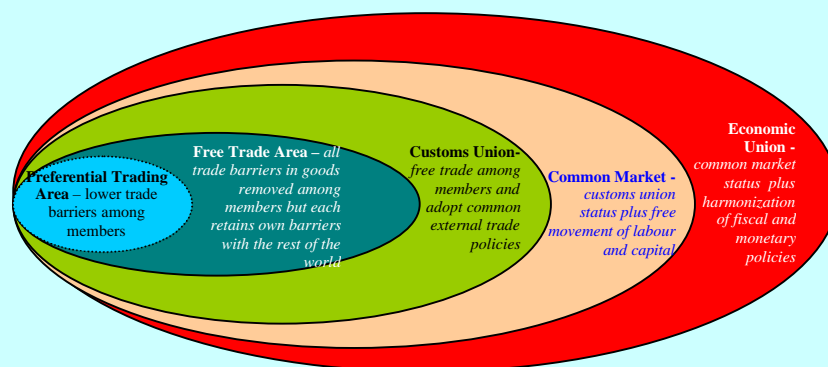
---

<sup>15</sup> The study by Grether and Olarreaga (1998) supports the argument that countries that engage in RTAs are seeking for faster liberalization. The study shows that countries that engaged in preferential trade in the 1980s and early 1990s were relatively closed economies while countries with a large share in preferential trade in the 1990s are relatively more open.

<sup>16</sup> See for example Krueger (1999), Laird (1999), Ethier (1998), Baldwin (1997), and Bhagwati (1992).

liberalization at the regional level can serve as a prerequisite or an aid to achieving multilateral consensus at the WTO. As Baldwin (1997) has said, “regionalism is half of the wheel of liberalization going around the globe”. The Information Technology Agreement (ITA) best illustrates this where it was initially launched in APEC before it was brought to the WTO<sup>17</sup>.

## Box 2. The Evolution of Economic Integration



Sources: Low (2000); Das (2001)

Regional trading arrangements (RTAs) can take various forms, either as preferential trade area, free trade areas, custom unions, common market or economic union. Under preferential trade area, trading partners grant partial preferential tariff reductions to each other. In a free trade area, members eliminate all tariffs and non-tariff barriers among themselves, but each member can set its own tariff rates on non-members. Customs union is free trade area but members adopt a common external tariff on non-members. Common market goes beyond custom union by allowing free movements of factors of production. Finally, economic union involves integrating national economic policies, like fiscal and monetary policies.

RTAs differ in configuration, either bilateral (agreement between two parties) or plurilateral (agreement among three or more parties). More complex agreements occur when one (or more) of the parties is an RTA itself or all parties are themselves distinct RTAs.

RTAs also differ in scope. The simplest form takes the exchange of preferences on a number of limited products among the parties. The more complex ones go beyond tariff elimination to include services, investment, competition policy, government procurement, intellectual property rights, etc.

However, as one country can be a member of more than one RTA, the overlapping RTAs can increase the risk of inconsistencies in trading rules among the RTAs that can lead to implementation problems<sup>18</sup> (WTO 2001a). Such inconsistencies can cause systemic risk on the functioning of the WTO by rendering future efforts to develop consistent multilateral rules difficult, if not impossible. The different rules of origin among RTAs best illustrate this point.

<sup>17</sup> The Information Technology Agreement (ITA) provides for the elimination of tariffs on IT products by 2000, with extended transition for some products.

<sup>18</sup> The ground rules under Article XXIV of the GATT and Article V of the GATS suffer from systemic issues rendering them ineffective in imposing discipline in the RTAs.

Table 19. Bilateral and regional trading arrangements in East Asia

Partners	Type of Arrangements	Status	Year
ASEAN	Free Trade Area	Implemented	1993
Singapore-New Zealand	Closer Economic Partnership	Implemented	2001
Singapore-Japan	New Age Economic Partnership	Signed	2002
Singapore-EFTA	Free Trade Area	Signed 11 April 2002, to be implemented in January 2003	2002
South Korea-Chile	Free Trade Area	Under negotiations	1998
South Korea-US	Free Trade Area	Under negotiations	2001
Singapore-Mexico	Free Trade Area	Under negotiations	1999
Singapore-Australia	Free Trade Area	Under negotiations	2000
Singapore-Canada	Free Trade Area	Under negotiations	2001
Singapore-US	Free Trade Area	Under negotiations	2000
Singapore-Chile	Free Trade Area	Under negotiations	2000
AFTA-Australia-New Zealand	Closer Economic Relations	Official discussion/ study	1999
ASEAN-China	Free Trade Area	Official discussion/ study	2001
ASEAN +3	Free Trade Area	Official discussions	2000
ASEAN-Japan	Comprehensive Economic Partnership	Official discussions	2002
ASEAN-South Korea	Free Trade Area	Official discussions	
Japan-Chile	Free Trade Area	Official discussion/ study	2001
Japan-Mexico	Free Trade Area	Official discussion/ study	1998
Japan-South Korea	Free Trade Area	Official discussion/ study	1998
Japan-South Korea-China	Free Trade Area	Official discussion/ study	
South Korea-Mexico	Free Trade Area	Official discussion/ study	2000
South Korea-New Zealand	Free Trade Area	Official discussion/ study	2000
South Korea-Australia	Free Trade Area	Official discussion	2000
Hongkong-New Zealand	Closer Economic Partnership	Official discussion	2001
Japan-Canada	Free Trade Area	Proposal/ study	2000
Japan-Thailand	Closer Economic Partnership	Proposal/ study	2002
Pacific 5	Free Trade Area	Proposal	1998
Singapore-Taiwan	Free Trade Area	Proposal/ study	2002
South Korea-China	Free Trade Area	Proposal/ study	
South Korea-Thailand	Free Trade Area	Proposal/ study	2001
Thailand-Croatia	Free Trade Area	Proposal	2001
Thailand-Czech Republic	Free Trade Area	Proposal	2001
US-Philippines	Free Trade Area	Proposal	2002

Notes: EFTA – Switzerland, Iceland, Liechtenstein, Norway  
 ASEAN – Thailand, Singapore, Indonesia, Malaysia, Philippines, Brunei, Cambodia, Vietnam, Myanmar, Laos  
 Pacific 5 – Singapore, Australia, New Zealand, USA and Chile  
 ASEAN +3 – ASEAN, Japan, South Korea and China  
 AFTA – ASEAN Free Trade Area

Source: Austria (2002b)

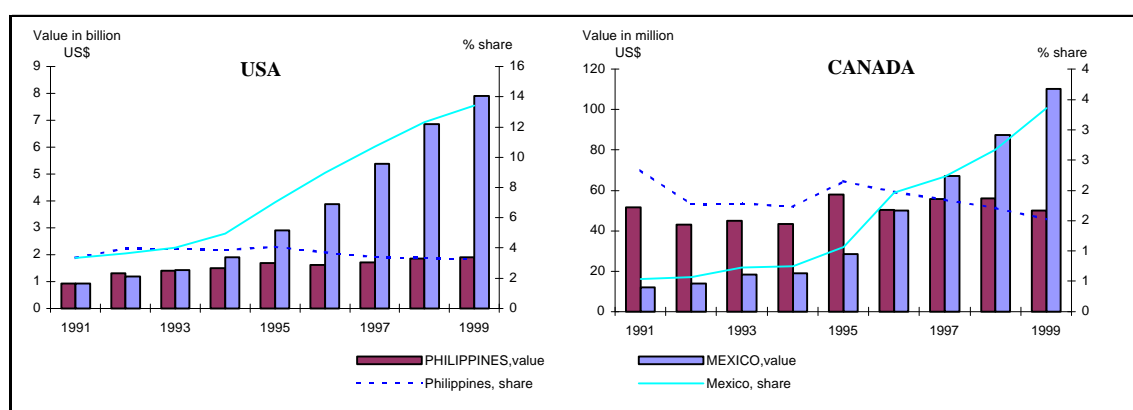
Whether or not RTAs can work hand in hand with the multilateral trading system remains an open question. What is more pressing at this stage, however, are the implications for the policy options of developing countries. Given that RTAs are expected to continue their spread across the globe, developing countries are concerned that unless they will join they will be left out. This concern becomes more justified when considering that their major trading partners are the ones leading the formation of RTAs and that their competitors are already members of one or more RTAs. There is a growing awareness that any developing country will be faced with discriminatory

deals from any RTA of which it is not a member but of which its competitors and major trading partners are members.

On the domestic front, the proliferation of RTAs has brought many new competitors for the Philippines, both for its export markets and sources of FDI. This include Mexico in NAFTA, the Andean Community and MERCUSOR in Latin America, and the emerging economies in Central and Eastern Europe, which are being slowly integrated with the EU through bilateral FTAs. These countries have the same major export markets and sources of FDI as the Philippines namely, the United States, Japan and the EU. They have also become the new sources of cheap labor. Hence, the Philippines will be faced with discriminatory deals from any RTAs of which its competitors and its major export markets are members.

Already, the country is experiencing a decline in its share of exports of garments in the US and Canada, basically because of NAFTA (Figure 7). Under NAFTA's rules of origin, garments coming from Mexico that use imported inputs from the US and Canada can enter these markets free from duties.

Figure 7. Garments imports of US and Canada from the Philippines and Mexico, 1991-1999



Source: PC-TAS

**Tariff peaks and tariff escalation.** As a result of the exchange of concessions in the Uruguay Round, the average tariffs (bound and applied) on industrial goods in developed countries have generally gone down (Appendix Table 1). Nonetheless, there are variations across products. Developing countries still face tariff peaks and tariff escalation in developed countries for most of their manufactured exports. Tariff peaks are usually found in labor-intensive manufactures like textiles, clothing, leather and travel goods and footwear<sup>19</sup> (Table 20). The same categories of products are also affected by tariff escalation where the tariff rate increases with the level of processing (Table 21). Tariff escalation affects resource allocation. For developing countries, they will find moving to higher stages of processing difficult as their final products face high tariffs in developed countries.

For clothing and textiles, in addition to tariff peaks and escalation, there is also the slow pace of elimination of quota or quantitative restrictions under the Agreement on Textiles and Clothing (ATC), which replaced the Multifibre Agreement under the

<sup>19</sup>Tariff peaks are also found in agricultural and food products in the EU and Japan.

GATT. The Agreement calls for the gradual elimination of restrictions in three stages starting 1995 up to 2004 and the full integration of these products into the rules and disciplines of the WTO in 2005. Elimination of quota has been modest; and most developing countries are concerned that quotas have not been removed on products that are of commercial interest to them (WTO 2001b). This leaves the bulk of trade affected by quota to be liberalized only at the end of the phase out period. There are concerns that the removal of the remaining quotas might be delayed given the results of studies on the impact of the removal of quotas on importing countries (UNCTAD 2002). If fact, there is a fear of what might replace ATC in 2005, causing some uncertainty for exporters of developing countries.

Table 20. Import-weighted MFN average tariffs of selected developed economies, by product group (%)

Importing economy	Manufactures (SITC 5-8 less 68)	Textiles (SITC 65)	Clothing (SITC 84)	Leather and travel goods (SITC 611,612,831)	Footwear (SITC 85)	Computers and office equipment (SITC 75)	Telecom, audio and video equipment (SITC 76)
Australia	4.7	10.3	21.9	5.1	12.6	0.1	4.5
Canada	3.2	10.0	18.3	5.1	15.1	0.0	0.8
European Union	3.5	8.2	11.7	4.1	11.2	0.1	3.7
Japan	2.2	5.9	11.7	10.3	17.4	0.0	0.0
New Zealand	3.7	3.6	14.2	3.4	10.4	0.1	0.7
United States	3.0	8.1	12.0	8.7	12.8	0.0	0.9

Source: UNCTAD (2002), Table 4.3

For the case of the Philippines, Table 20 and Table 21 show that indeed the Philippines suffers from tariff peaks and tariff escalation in its major exports markets of clothing and leather goods and handbags (US, Canada, Japan, EU and Australia).

#### **Trade defense instruments and product regulations as barriers to trade.**

Developing countries have been experiencing an increase in the application of trade defense instruments and product regulations against their exports since 1995. Anti-dumping is the most commonly used trade defense instrument, where duties are charged to imports that seemed to be dumped or exported below cost. Almost 50 percent of anti-dumping actions initiated by developed countries between 1995 and 1999 are directed to developing countries (Table 22). It should be noted, however, that developing countries have also been increasing their use of anti-dumping in recent years, not only against developed countries but also against each other. Table 23 shows that anti-dumping measures initiated by developing countries for developed countries and developing countries are almost equal in proportion.

Likewise, product regulations such as sanitary and phytosanitary (SPS) measures and product standards, such as packaging and labeling requirements, have also been increasingly used to meet public policy objectives related to health, safety and environment. The diverse standards and technical regulations among developed countries, along with the corresponding testing procedures for compliance, limit market access and raise production and testing costs for developing countries. Such



measures, however, are applied more by developed countries and to agricultural products more than industrial products.

Table 21. Bound tariffs on industrial products by stage of processing, selected developed economies

Import Markets	Wood, pulp, paper and furniture	Textiles and clothing	Leather, rubber, footwear and travel goods	Metals	Chemicals and photographic supplies	Transport equipment	Non-electric machinery	Electric machinery	Mineral products and precious stones and metals	Manufactured articles not elsewhere specified	Fish and fish products
Canada											
Raw materials	0.2	2.5	0.3	0.1					2.7		0.6
Semi-manufactures	0.9	11.1	5.7	1.7	4.7				1.0		0.3
Finished products	1.9	14.5	10.3	5.2	3.9	6.8	3.6	5.2	4.4	4.2	4.6
United States											
Raw materials	0.0	2.8	0.0	0.8					0.6		0.7
Semi-manufactures	0.7	9.1	2.3	1.1	4.1				1.3		1.7
Finished products	0.7	9.1	11.7	2.9	2.3	2.7	1.2	2.1	5.3	3.0	4.0
European Union											
Raw materials	0.0	2.6	0.1	0.0					0.4		11.2
Semi-manufactures	1.0	6.6	2.4	1.2	5.2				2.4		13.3
Finished products	0.5	9.7	7.0	2.8	3.4	4.7	1.8	3.3	3.7	2.7	14.1
Norway											
Raw materials	0.0	0.1	0.0	0.0					0.2		
Semi-manufactures	0.2	7.8		0.3	3.0				0.0		
Finished products	0.6	9.5	4.4	2.5	2.9	3.3	2.7	2.7	1.0	2.0	30.9
Australia											
Raw materials	0.3	1.5	11.5	0.6					2.4		0.4
Semi-manufactures	7.0	22.9	22.0	0.8	9.8				6.0		0.0
Finished products	8.9	35.7		11.8	7.6	15.1	9.1	13.3	11.1	7.0	3.2
Japan											
Raw materials	0.1	2.6	0.1	0.0					0.2		5.2
Semi-manufactures	1.9	5.9	10.4	1.0	2.9				0.5		10.4
Finished products	0.6	8.3	20.7	0.9	1.0	0.0	0.0	0.2	1.8	1.1	7.9

Source: WTO (2001b).

The above measures (trade defense measures and product regulations) have been increasingly taking center stage in recent years because they have been used in an arbitrary and protectionist manner. Developed countries are using these measures as contingent protection to restrict the effect of tariff liberalization (WTO 2001b). Since these barriers are less transparent than tariffs, they are much more difficult to deal with. These measures can have chilling effects on trade and recently, they have become the source of trade disputes. Anti-dumping investigations impose costs to both producers and traders. Product regulations can cause uncertainty as they sometimes involve outright bans on exports.

The Philippines have initiated 20 anti-dumping actions during the period 1993-1999 and the trend has been increasing (Table 23). Table 24 shows the non-tariff barriers encountered by the country in manufactured exports. None of the cases,

however, was filed with the WTO. Some of the cases have been resolved, and it was by settlement with the countries involved.

Table 22. Initiation of anti-dumping investigations by level of development of reporting and affected economies, 1995-1999

Initiating economies	Affected economies			Total
	Developed countries	Developing countries	Transition economies	
A. Number of Investigations				
Developed countries	126	244	129	499
Developing countries	252	258	201	711
Transition economies	4	0	4	8
All members	382	502	334	1,218
B. Distribution (%)				
Developed countries	25	49	26	100
Developing countries	35	36	28	100
Transition economies	50	0	50	100
All members	31	41	27	100

Source: WTO (2001b).

Table 23. Initiation of anti-dumping investigations, Philippines, 1993-1999

1993	1994	1995	1996	1997	1998	1999	Total
1	7		1	2	3	6	20

Source: WTO (2001b)

Table 24. Non-tariff barriers to Philippine exports of manufactures.

Country	Product	Type of NTB	Status
United States	Textiles, clothing	Rules of origin	Resolved in 1999
	Bras, knit tops	Classification	Unresolved
Australia	Food sauces	SPS	Resolved in June 2000
Korea	Floppy disk drives	Labelling	Resolved in 1996
	Pharmaceuticals	Entry barrier	Resolved in 1999
European Union	Milk	SPS	Unresolved
	Canned tuna	SPS	Unresolved
	Food products	SPS, environmental	Unresolved

Note: SPS means sanitary and phytosanitary measures

Source: BITR-DTI (2001), Table 5.

**Non-trade issues in the WTO.** The WTO has increased its efforts to link trade to a variety of other international concerns. In the last Uruguay Round, areas like intellectual property rights and environment have been included in the negotiating agenda as affecting trade. WTO has further broadened these areas to include competition policy, investment, government procurement and trade facilitation in the

current round. Under the Doha agenda, these areas are considered for possible “future negotiations” in the sense that negotiations will only be launched if a consensus is reached on the modalities of negotiations during the ministerial meeting scheduled for 2003 (UNCTAD 2002)<sup>20</sup>. But nonetheless, developing countries are already cautious on proposals to bring these areas into the negotiating table, for fear that they could be used as trade barriers against them, similar to their experience in linking trade with environment and labor. As with environment and labor, the possible trade restraints from these new issues could potentially hinder the growth prospects of developing countries. Likewise, non-trade issues will involve heavy structural adjustment costs for developing countries and are also highly politicized.

**A fallacy of composition?** As presented in the early part of this section of the paper, the extensive unilateral trade liberalization around the globe among the vast majority of developing countries resulted to the rapid growth of exports of labor-intensive low-skill manufactures. This is particularly true of the middle-income developing countries like the ASEAN-Four<sup>21</sup> (the second-tier NIEs) and Mexico. Recently, however, there is a growing concern that expansion of exports of labor intensive exports will result to a sharp drop in prices. This problem is known as the *fallacy of composition*, which means that,

“...on its own, a small developing country can substantially expand its exports without flooding the market and seriously reducing the price of the products concerned, but this may not be true for developing countries as a whole, or even for large individual countries such as China and India. A rapid expansion in exports of labor intensive products involves a potential risk that the terms of trade will decline to such an extent that the benefits of any increased volume of exports may be more than offset by losses due to lower export values, giving rise to immiserizing growth” (UNCTAD 2002:114)<sup>22</sup>.

The concern is based on the argument that the rapid growth of labor-intensive exports was not accompanied by a higher income growth in the markets for these products (the developed countries), and that new barriers to trade have emerged, as discussed above. In other words, the market is shrinking. As more and more developing countries pursue outward oriented development strategy, capitalizing on their large labor supply and low wage rates, export growth may not be sustained sufficient enough to replicate the growth experience of the NIEs. Evidence shows that some developing countries that have pursued export-oriented strategy have yet to see the fruits for their endeavors (Whalley 1999a).

---

<sup>20</sup> The agenda agreed in Doha for the new WTO round include three major areas, namely: (i) matters for *immediate negotiations* (negotiations on agriculture, services, industrial goods, environment, trade defense measures, dispute settlement and RTAs); (ii) matters for *future negotiations*, depending on whether a consensus will be reached regarding modalities of negotiations to be decided in 2003 (investment, competition policy, government procurement and trade facilitation); and (iii) matters for *further examination* in relevant WTO bodies (special & differential treatment, relationship between trade and finance, transfer of technology, implementation issues, and problems encountered by small and vulnerable economies) (UNCTAD 2002).

<sup>21</sup> ASEAN-Four includes Indonesia, Malaysia, Philippines and Thailand.

<sup>22</sup> This differs from the original concept of the fallacy of composition (Prebisch-Stinger hypothesis) where focus is on the characteristics of the products traded (primary commodities vs manufactures). The shift is now with the characteristics of the trading parties (developing countries vs developed countries), focusing on their differences in technological capacity, and absence or presence of labor surplus (UNCTAD 2002).

There are signs already that developing countries exporting labor-intensive manufactures (like clothing, electronic products, footwear and leather goods) are experiencing deterioration in their terms of trade (UNCTAD 2002). Such was not the case for the NIEs during the same stage of their industrialization when they were also producing labor-intensive products. There is also evidence that there might be a risk of excessive global competition in markets for labor-intensive manufactures as more and more developing countries pursue export-oriented strategy.

This emerging phenomenon will have implications on the development strategy of developing countries. A deteriorating terms of trade will affect their capacity to import essential goods for their development. The danger of the fallacy of composition happening will be greatly reduced depending on how fast the more advanced developing countries (like the ASEAN-Four and Mexico) can upgrade and shift their production structure to high-value added products in order to give room to new developing country exporters of labor-intensive products. Also, as shown earlier in Table 20 and Table 21, except for semiconductors, the labor-intensive exports are faced with tariff peaks and tariff escalation in developed countries. Hence, an increase in market access in developed countries for these products can also reduce risk of fallacy of composition.

**South-south trade.** One important feature of the trading world during the last two decades has been the growing trade of developing countries with each other, or the so-called *South-south trade*. In other words, developing countries have become important markets for each other's products. Their exports to each other in the 1990s grew much faster at an average rate of 10 percent than their exports to developed countries, which grew at an average rate of 6.5 percent. As a proportion of their total exports, their exports to each other increased from 28 percent in 1990 to about 36 percent in 2000 (WTO 2001:51). This indicates that south-south trade could be an important source of trading opportunities for developing countries in the years ahead.

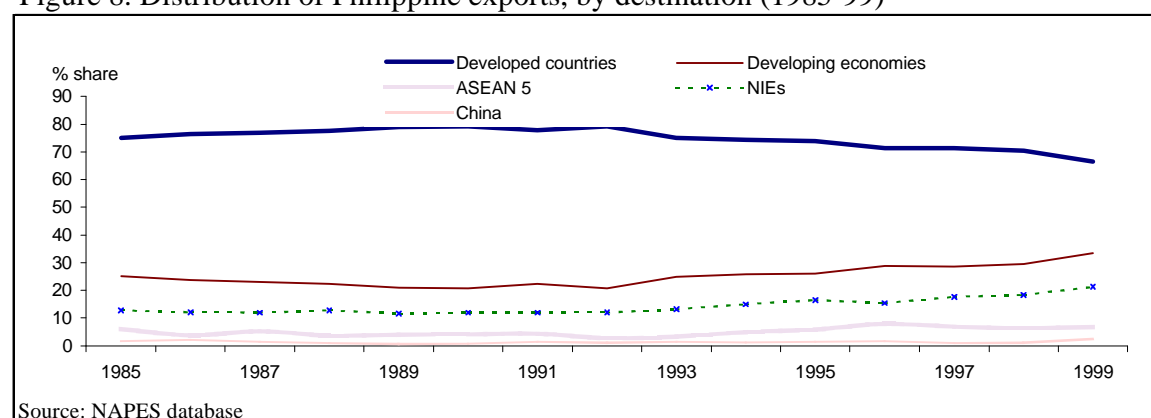
Again, the increasing South-south trade is attributed to the international production networks of TNCs. Much of the intra-developing country exports is dominated by manufactures, a large part of which are in semiconductors, and office and telecommunications equipment.

For the Philippines, much of this south-south trade occurred with the ASEAN, NIEs and more recently, China (Figure 8). This is also supported by the rapid increase in intra-industry trade between the country and these countries, as shown earlier in Table 16.

**The China challenge.** China's accession to the WTO is expected to create a significant change in the global trade and investment environments. Its huge market presents opportunities for exporters to enter or expand commercial interests. At the same time, however, given its success in the exports of labor-intensive manufactures, China is a threat to many developing countries, including the Philippines. Its accession to the WTO means less restrictions to its exports. Its major markets (US, Japan and EU) happen to be the markets of other developing countries as well. Furthermore, given its low wage rate, China is also highly competitive in labor-intensive assembly operations of high technology products and hence, a great

attraction to FDI in simple processes of otherwise high-technology activities of international production networks.

Figure 8. Distribution of Philippine exports, by destination (1985-99)



The possible impact of China's entry to the WTO will not be something new to the country. As discussed earlier in Table 16, even before the accession of China to the WTO, China's intra-industry trade with the Philippines has already been increasing. Competition is expected to intensify and the strategy for the country to be able to compete with China is product specialization and differentiation (Palanca 2001).

## 5. The Road Ahead: Challenges and Opportunities for the Philippines

What are the implications of the emerging global trade environment to the Philippines? What are the stakes for the country? The fundamental policy issue for the government is not one of more or less trade liberalization, but how best to extract from the country's participation in the global trading system the elements that will promote economic growth and development. The country's experience during the past two decades has shown that getting the most out of international trade is no longer just a matter of shift away from exports of primary commodities to exports of manufactures. The key is in upgrading the existing pattern of production and trade in such a way that more of the productive activities generating trade are done at home.

There are risks with continuing the existing pattern of production and trade, i.e. reliance on the low-skill, labor-intensive production segment of the production process of TNCs. One, it involves the type of FDI that is highly mobile as cost advantages can be easily lost due to wage increases or to the emergence of more attractive locations. In other words, there will always be competing locations for these types of products, as the labor cost in the country becomes relatively more expensive (as is already evident among the country's emerging competitors like China, Vietnam, India and Mexico). Indeed, the wage rates in the country are becoming less and less attractive given the growing competition among developing countries to attract this type of FDI. In fact, the intense competition could lead to a race to the bottom in wage cuts and other incentives to attract FDI. Two, a greater share of the country's exports is highly vulnerable to the cyclical demand downturns for these types of products, like the recent decline in the global demand for semiconductor products. Three, there is the risk of being locked in into the current

structure if local technological upgrading is not pursued (UNCTAD 2002). Being involved in the labor-intensive production chain does not automatically result to a spillover of the technology that is required to be able to move up in the production chain. This could hinder the development of the domestic supply capability and hence, limits the long-term competitiveness of the industry.

Given the above, two areas need to be addressed, namely (i) the need to diversify exports; and (ii) how to make the country's participation in international production networks create greater impact on the economy.

On the first, diversification of exports reduces the dependence of the country's exports on the decision of the TNCs. It thus increases the autonomy of the country in formulating policies and strategies that emphasize national capabilities and goals.

On the second, the key to making the country's participation in international production networks create greater impact on the economy is technological upgrading. The country's exports need to graduate from low-skill labor-intensive manufactures to high-skill high value added manufactures. This means replacing imported parts and components with domestically produced ones thus raising the value-added content of output and exports. In other words, support industries should be developed to supply the required inputs. However, technology upgrading requires a well-devised FDI policy. This requires an FDI where the country could extract technologies from the TNCs that would complement, rather than substitute, efforts to develop and strengthen domestic capacity.

However, both diversification of exports and technological upgrading require good infrastructure. It may well be that the kind of FDI the country is attracting is a response to the kind of infrastructure the country have. The lack of good infrastructure (particularly transport, ports, power, etc.) limits FDI to types of industries that do not have strong linkages with the rest of the economy, as the lack of infrastructure raises the cost of production, making industries unable to compete in the export market.

Discussed below are the opportunities as well as the strategies under three major areas confronting the country in the years ahead.

### **The WTO Doha Round**

The Fourth Ministerial Meeting of the WTO in Doha in November 2001 launched the conduct of the new WTO round<sup>23</sup>. The negotiations are expected to conclude no later than 1 January 2005. As outlined in the Doha agenda, the scopes for negotiations are services, agriculture and the remaining industrial products.

For industrial products, is there scope for further reductions in tariffs? As shown earlier in Appendix Table 1, the scope of bindings for the country's major trading partners are already high (US and the EU have 100% binding; Japan,

---

<sup>23</sup> Although the term "negotiating round" is not used, the procedural arrangements are similar to those employed in the Uruguay Round.

Australia, Japan and South Korea are almost 100%), including the share of bound duty-free tariff lines. Likewise, the average bound and applied rates are already low.

However, the existing tariff peaks and tariff escalation in the country's major markets for textiles, clothing, footwear, and leather and travel goods (Tables 20 and 21) provide considerable scope for negotiations for reciprocal exchange. For clothing and textiles, the elimination of the ATC by 2005 also provides opportunity for negotiations. It should be emphasized that tariff reductions are not part of the ATC and that existing tariffs for textiles and clothing are considerably higher than other industrial products. Success in the negotiation of this unfinished business on tariffs present opportunities for expanding market access for the country.

On the other hand, the country should also be prepared to give concessions to its trading partners, particularly the developed countries. They may seek to raise the country's scope of bindings (currently at 67.5%) and lower the level of binding so as to lower the gap between the bound (27.5%) and applied rates (6.7%), which is still large. There is really no cost for the country if it were to raise its scope of bindings. Also, tariffs for some of the country's industrial products are still relatively high.

Furthermore, the termination of the ATC in 2005 would mean that the country's garments industry will be up for increased competition in the world market. Garment exporters will no longer be assured of the markets they originally enjoyed because of quota allocation. By 2005, quota allocation will be abolished and the global market will be up for the taking by the best suppliers who can provide quality and reasonably priced clothing.

In terms of negotiating strategy, the inclusion of services and agriculture in the current round would permit some cross-sectoral negotiation. This implies that the negotiating strategy on one sector or product should take into account the possible implications it will have for concessions in other sectors or products. The country can also make use of the special and differential treatment provision, especially on sensitive products. In contrast to the Uruguay Round, the Doha meeting has brought back the S&D treatment as a feature of the negotiations. In fact, S&D treatment permeates the Doha text. The unequal distribution of the benefits of the Uruguay Round between the developed and developing countries has brought the issue of development back into the international trade debate. The country should therefore coalesce with other developing countries, especially with the ASEAN, on issues that are of common interest so as to increase its leverage in the negotiations.

On trade rules, the country could use the Doha round to review the principles and disciplines on the use of trade defense measures and product regulations so as to avoid further abuse of their use.

Non-trade issues, like competition policy, investment, government procurement and trade facilitation, could be more complex for the country, however. The country should make use of the AFTA and APEC processes to arrive on its negotiating position on these matters. As will be discussed below, APEC has long standing program on these same issues.

## **South-South trade**

The increasing trend of South-south trade is expected to continue given the increasing role of international production networks in international trade. For the country to be able to strengthen its position and expand its exports of manufactures to other developing countries, it needs to negotiate, under the current WTO round, the reduction of the high tariffs, tariff peaks and tariff escalation still existing among developing countries (Appendix Table 6 and Appendix Table 7). The country should, of course, be prepared to the same. It is said that the risk of fallacy of composition will be reduced if developing countries will lower their tariff barriers that affect exports of other developing countries (UNCTAD 2002).

The country should exploit the opportunities available in China. With China's great attraction to FDI, the Philippines can be a good source of imported inputs (electrical machinery) for the labor-intensive segment of the production chain of TNCs in China. This could be achieved only with lower tariffs in China.

Furthermore, while the country exports the same labor-intensive manufactures as other developing countries, the key is product differentiation and specialization, focusing on improving product quality and standards.

## **Regionalism**

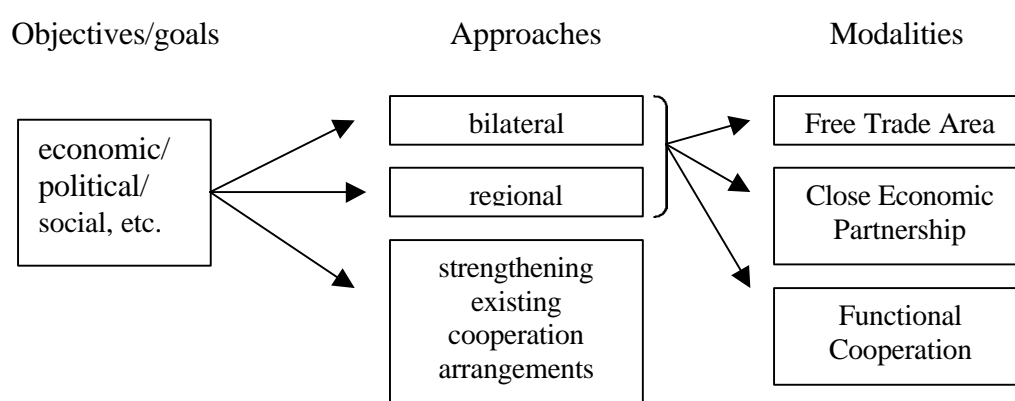
With the current WTO round, not much liberalization is expected to occur in APEC. No member economy would be willing to make voluntary reductions in its barriers to trade when concessions can be made in the much larger and binding WTO. It is expected that the APEC process during the period of the WTO negotiations (2002-2005) will be used to building consensus on the Doha agenda that will advance the interests of APEC's membership. APEC has long-standing work programs on the Doha agenda on competition policy, investment, trade facilitation and government procurement. In particular, APEC has already reached a degree of consensus in these areas through its adoption of the APEC Principles to Enhance Competition and Regulatory Reform, the APEC Non-Binding Investment Principles (NBIP), the APEC Trade Facilitation Principles, and the Non-binding Principles on Government Procurement. Hence, APEC can push WTO to make use of its achievements and progress in these areas. The Philippines can therefore make use of the APEC process to build its negotiating position in these areas.

Another challenge now facing the Philippines is how to respond to the rising regionalism beyond its current participation in the ASEAN-AFTA. The proliferation of RTAs creates pressure for nonmembers and the Philippines is not exempted. The issue of a US-Philippines FTA has been raised recently. Likewise, the ASEAN as a group have taken steps toward RTAs, as shown earlier in Table 19. The most recent of these moves is the agreement last year between the ASEAN and China to establish a free trade area by 2010, followed by the proposal of Japan early this year to look into the possibility of an ASEAN-Japan Comprehensive Economic Partnership. There is also the proposal for an ASEAN Plus Three FTA (South Korea, China and Japan) or an East Asian Free Trade Area. Any move of the ASEAN to enter into a preferential trading agreement with one or more countries or with other RTAs will have implications on the country's trade and investment policy.



How should the country proceed? Negotiating for RTAs could involve a lot of resources (financial, manpower and time). Figure 9 illustrates a very simple process, looking at three important areas that should be considered before embarking into any trading arrangements: objectives/goals, approach and modalities. First, the country should have clear objectives or goals in its participation in trading arrangements. That is, what does it want to achieve? The goals could be economic, political, social, etc. After establishing the goals/objectives, it should then identify the approach that could best serve those objectives/goals. It could be bilateral, regional through the ASEAN or simply strengthening existing cooperation arrangements (like ASEAN, APEC or ASEM). If the approach is bilateral or regional, the modalities will define how to reach those objectives/goals, i.e. either through a free trade area, closer economic partnership or relation, a functional cooperation arrangement or other modalities. It may well be that the objective could be achieved through a functional cooperation arrangement, like the existing financial cooperation of the ASEAN+3.

Figure 9. How to respond to RTAs?



Considering however, that the country is too small to have leverage to negotiate on its own, it would be in its best interest if it were to respond regionally through the ASEAN. A problem may arise, however, if the ASEAN members would rather want to move individually. Singapore, for example, has been very aggressive in seeking for RTAs.

However, whether the approach is bilateral or regional, the country's participation in trading arrangements requires three things. First, it must be consistent with the WTO rules. What this means is that the trading arrangement should be consistent with Article XXIV of GATT and Article V of GATS. Second, it must be consistent with APEC and AFTA for it not to undermine the credibility of the country's commitments to these regional cooperation. Third, it should call for commitments that are beyond current commitments in AFTA and APEC for it to contribute to global liberalization. This means that since the country is aiming for a free trade area by 2010 under AFTA and by 2020 under APEC, its participation in trading arrangements cannot be less than a free trade area with a timeframe no longer than APEC's and AFTA's.

## 6. Summary and Conclusions

The government has implemented substantial trade and investment policy reforms during the past two decades following a three-track approach involving unilateral, regional and multilateral modalities towards freer trade and investment. The policy reforms are a step in the right direction. The country's experience points to the importance of domestic policies that foster efficiency and competitiveness before one can participate in regional and multilateral integration and face global competition. The unilateral efforts at liberalization eliminated the inefficiency arising from the past protectionist regime. The result was the improvement in the overall competitiveness of domestic industries, enabling the country to participate in regional trading arrangements such as AFTA and APEC, and in multilateral arrangement, the WTO.

However, while the reforms resulted in positive impacts in resource allocation, competitiveness, productivity and exports, these were not accompanied by a comparable growth of manufacturing output, leading some sectors to question the reforms. The experience of the country during the past two decades brought important policy lessons. The experience shows that getting the most out of international trade is not just a matter of shift away from exports of primary commodities to exports of manufactures. This paper argues that the effect of international trade on the country's economic growth depends largely on how much of that trade is linked to the domestic economic activity. The rapid expansion of what appears to be high-technology exports should not be taken at face value, as they were produced under the low-skill labor-intensive import-dependent segment of the production chain of the international production networks of transnational companies.

This is not to deny, however, that the country benefited from this type of exports, or the so-called first generation exports. The strategy was in fact necessary during the country's early stage of industrialization, enabling it to use its surplus labor. However, markets alone cannot be relied upon to create that dynamic relationship between trade and economic growth. There is a need to employ strategic policies to establish a strong link between trade and the domestic economy.

The country therefore needs to graduate to the next level of the international production chain and produce the so-called second generation exports, i.e. high value added technology-intensive products. This shift requires a well-devised foreign direct investment policy and technology upgrading. The latter is crucial if the country were to take advantage of the opportunities available in the international trading environment and meet the challenges head on. The government needs to act fast because given the technological race, opportunities for the country to upgrade to the technological ladder have become much more difficult.

The policy lessons pose a great challenge to policymakers, especially given the much more complex global trading environment. The global trading system is becoming more and more multi-tiered than multilateral given the proliferation of bilateral and regional trading arrangements. The new environment offers new challenges as well as opportunities. The challenge for the government is how best to aggressively pursue such opportunities and address the challenges.

## REFERENCES

- Austria, Myrna S., 1992. Aggregate Productivity in the Philippine Economy. Unpublished PhD Dissertation. Australian National University.
- \_\_\_\_\_, 2000. Competitiveness of the Philippine IT Industry: What Lies Ahead. *Philippine Journal of Development* 27 (2): 105-148.
- \_\_\_\_\_, 2001. APEC's Commitments on Investment. in Richard Feinberg and Ye Zhao. (eds), Chapter 3, *Assessing APEC's Progress: Trade, Ecotech and Institutions*. Institute of South East Asian Studies, Singapore.
- \_\_\_\_\_, 2002a. Productivity Growth in the Philippines After the Industrial Reforms in Josef Yap. (editor), Chapter 6, *The Philippines Beyond 2000: An Economic Assessment..* Philippine Institute for Development Studies, Makati City.
- \_\_\_\_\_, 2002b. East Asian Regional Cooperation: Approaches and Processes. Paper presented at the International Conference on East Asian Cooperation: Progress and Future Agenda. 22-23 August 2002, Beijing, China.
- \_\_\_\_\_, and John Lawrence V. Avila, 2001. Looking Beyond AFTA: Prospects and Challenges for Inter-regional Trade. *Philippine Journal of Development*. 28 (2): 143-166.
- Baldwin, Richard E., 1997. The Causes of Regionalism. *The World Economy*. 20 (7): 865-888.
- Bhagwati, Jagdish, 1992. Regionalism versus Multilateralism. *The World Economy*. 15 (5): 535-555.
- Bureau of International Trade Relations (BITR-DTI) 2001. The Philippines in the World Trade Organization. Paper presented at the Philippines and the WTO Forum, 30-31 August 2001, Pasay City.
- Cororaton, Caesar B. and T. Caparas, 1999. Total Factor Productivity of the Philippine Manufacturing Industries. *Journal of Philippine Development*. 22 (2): 303-390.
- Das, Dilip K., 2001. Regionalism in a Globalizing World: An Asia-Pacific Perspective. CSGR Working Paper No. 80/01. Centre for the Study of Globalisation and Regionalisation (CSGR), University of Warwick, United Kingdom.
- De Dios, Loreli, 1998. "Impediments to Trade in the Philippines," in *Impediments to Trade in APEC: The Case of China, Indonesia and Philippines*. APEC Study Center Institute of Developing Economies, Tokyo, Japan.

- Ethier, Wilfred J., 1998. The New Regionalism. *The Economic Journal*, Royal Economic Society, United Kingdom. pp. 1149-61.
- Grether, Jean-Marie and Marcelo Olarreaga, 1998. Preferential and Non-preferential Trade Flows in World Trade. Staff Working Paper ERAD-98-10. World Trade Organization, Geneva.
- Intal, Ponciano, 1997. Sustaining the Philippine Economic Resurgence. Paper presented at a symposium in honor of Dr. Gerardo Sicat and Dr. Jose Encarnacion, Jr. Philippine Institute for Development Studies, September 23-25, 1997, Makati City.
- Krueger, Anne O., 1999. Are Preferential Trading Arrangements Trade-Liberalizing or Protectionist? *Journal of Economic Perspectives*. Volume 13 (4): 105-124.
- Laird, Sam, 1999. Regional Trading Agreements: Dangerous Liaisons? *The World Economy* 22(9):1179-1200.
- Low, Linda, 2000. Political Economy of Regional Trading Arrangements in the Context of Multilateral Trading System in Asia, Department of Business Policy, National University of Singapore. Available at <http://www.fba.nus.edu.sg/fba/mscphd/0038.pdf>
- Medalla, Erlinda, 2002. "Trade and Industrial Policy Beyond 2000: An Assessment of the Philippine Economy" in Josef Yap, (ed.), Chapter 3, *The Philippines Beyond 2000: An Economic Assessment*. Philippine Institute for Development Studies, Makati City.
- \_\_\_\_\_, et. al., 1995. *Catching Up with Asia's Tigers*. Vol. I. Philippine Institute for Development Studies, Makati.
- \_\_\_\_\_, 1996. *Catching Up with Asia's Tigers*. Vol. II. Philippine Institute for Development Studies, Makati.
- Onguglo, B. and L. Cernat, 2000. Development Issues Arising from Large Economic Spaces and Options for Developing Countries. Paper presented at the 2000 APEC Economic Outlook Symposium, July 24-25, 2000, Manila.
- Palanca, Ellen, 2001. *China's Economic Growth and the ASEAN*. Philippine APEC Study Center Network and the Philippine Institute for Development Studies, Makati.
- Patalinghug, Epictetus, 1983. Market Concentration in Philippine Food, Home Appliance and Textile Industries. *Philippine Review of Economic and Business*. 20(2):215-233.
- Pineda, Virginia S., 1997. Effects of the Uniform Five Percent Tariff on Manufacturing. PTTAF-PSC, Tariff Commission and Philippine Institute for Development Studies, Project No. 95-04. Makati City.

- Sanchez, A. 1983. Philippine Capital Stock Measurement and Total Factor Productivity Analysis, Unpublished PhD Dissertation, University of the Philippines.
- Soesastro, Hadi, 2002. APEC's Overall Goals and Objectives, Evolution and Current Status. Paper presented at the 2002 APEC Study Center Consortium Meeting, Merida, Mexico, 22-24 May 2002.
- Tan, Elizabeth, 1997. Effects of the Uniform Five Percent Tariff Using the Chunglee Model. PTTFAP-PSC, Tariff Commission, and Philippine Institute for Development Studies, Project No. 95-04. Makati City.
- United Nations Conference on Trade and Development (UNCTAD), 2002. *Trade and Development Report, 2002*. UNCTAD/TDR/(2002).Geneva.
- Whalley, John, 1999a. Developing Countries in the Global Economy: A Forward Looking View. *CSGR Working Paper No. 36/98*. Centre for the Study of Globalisation and Regionalisation (CSGR), University of Warwick, United Kingdom. July 1999.
- \_\_\_\_\_, 1999b. Special and Differential Treatment in the Millenium Round. *CSGR Working Paper No. 30/99*. Centre for the Study of Globalisation and Regionalisation (CSGR), University of Warwick, United Kingdom. May 1999.
- World Bank, 1997. *Philippines Managing Global Integration*. Background papers. Report No. 17024-PH.
- World Trade Organization (WTO), 1999. *Trade Policy Review: The Philippines*. Washington, D.C.: World Trade Organization.
- \_\_\_\_\_, 2000. *Mapping of Regional Trade Agreements*. Committee on Regional Trade Agreements. WTO Document WT/REG/W/41. Geneva.
- \_\_\_\_\_, 2001a. *Overview of the Developments in the International Trading Environment*. Annual Report by the Director-General, WTO Document WT/TPR/OV/7. Geneva.
- \_\_\_\_\_, 2001b. *Market Access: Unfinished Business*. *Special Studies 6*, Geneva.

Appendix Table 1. Scope of bindings, average bound and applied rates, industrial products, selected WTO members

Import markets	Share of bound lines (%)	Average bound rate (%)	Average applied rate	
			Bound duty free-lines level (%)	Year
North America				
Canada	99.6	5.2	4.4	2000
United States	100.0	3.9	4.1	2000
Latin America				
Argentina	100.0	31.0	13.4	2000
Chile	100.0	25.0	9.0	2000
Columbia	100.0	35.5	11.2	2000
Costa Rica	100.0	44.6	4.7	2000
Mexico	100.0	34.8	15.6	2000
Peru	100.0	30.0	13.0	1998
Western Europe				
European Union	100.0	4.1	4.5	2000
Iceland	93.2	9.7	2.5	1998
Norway	100.0	3.4	3.3	1998
Switzerland	98.9	1.8	2.3	2000
Turkey	36.3	42.6	8.0	1999
Central and Eastern Europe				
Czech Republic	100.0	4.3	4.8	1998
Hungary	95.4	7.4	7.4	2001
Slovak Republic	100.0	4.3	4.4	2000
Asia				
Australia	95.9	14.2	4.7	2001
Hong Kong, China	23.5	0.0	0.0	2001
Indonesia	93.2	38.9		
Japan	99.2	3.5	3.9	2000
Korea, Republic of	90.4	11.7	7.5	2000
Macau, China	9.9	0.0	0.0	1997
Malaysia	61.8	17.2		
Philippines	67.5	27.5	6.7	2001
Singapore	65.5	4.6	0.0	2000
Thailand	67.9	27.5		
Africa				
Cameroon	0.1	17.6	17.6	1999
Chad	0.4	17.6	17.6	1999
Gabon	100.0	15.5	17.6	1999

Source: WTO (2001b); Tariff Commission

Appendix Table 2. Revealed comparative advantage of manufactured exports, Philippines, 1977-1999

SITC Code/ Commodity	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
011 MEAT FRSH CHILLD FROZN	0.012	0.013	0.015	0.015	0.025	0.023	0.010	0.015	0.005	0.010	0.007	0.007	0.005	0.013	0.014	0.001	0.001	0.000	0.001	0.000	0.000	0.001	0.000
012 MEAT DRIED SALTD SMOKD	0.016	0.008	0.024	0.007	0.007	0.004	0.011	0.000	0.000	0.004	0.001	0.006	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000
013 MEAT TINNED NES OR PREPD	0.074	0.098	0.090	0.092	0.030	0.026	0.009	0.001	0.011	0.006	0.001	0.001	0.001	0.001	0.003	0.005	0.004	0.008	0.032	0.008	0.036	0.017	0.000
022 MILK CREAM	0.101	0.175	0.107	0.144	0.119	0.130	0.184	0.027	0.020	0.012	0.021	0.007	0.018	0.004	0.004	0.009	0.007	0.002	0.001	0.005	0.030	0.008	0.000
023 BUTTER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.003	0.001	0.000
024 CHEESE CURD	0.002	0.010	0.015	0.004	0.009	0.008	0.006	0.006	0.007	0.007	0.006	0.005	0.004	0.003	0.010	0.002	0.002	0.006	0.013	0.008	0.006	0.004	0.000
031 FISH FRESH SIMPLY PRESVD	2.154	2.512	2.818	3.402	2.583	2.164	2.256	2.014	3.106	3.616	4.119	4.901	4.566	4.363	4.477	3.433	3.498	3.234	2.487	1.924	1.587	1.453	1.361
032 FISH ETC TINNED PREPARED	0.193	1.027	1.087	3.571	6.242	6.589	7.071	6.012	6.176	5.247	5.514	7.360	8.085	7.022	6.806	5.593	6.033	6.072	5.448	3.758	3.195	2.692	3.529
046 WHEAT ETC MEAL OR FLOUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
047 MEAL FLOUR NONWHEAT	0.000	0.005	0.000	0.000	0.000	0.000	0.014	0.001	0.005	0.000	0.000	0.005	0.003	0.003	0.012	0.016	0.020	0.016	0.032	0.015	0.014	0.021	0.000
048 CEREAL ETC PREPS	0.247	0.285	0.276	0.324	0.375	0.533	0.533	0.506	0.544	0.533	0.551	0.421	0.433	0.389	0.338	0.292	0.449	0.457	0.383	0.420	0.445	0.288	0.294
053 FRUIT PRSRVD PREPD	9.905	8.679	9.171	9.566	9.064	10.465	8.751	8.396	11.081	10.877	9.048	7.282	7.607	7.140	7.301	6.430	6.774	5.654	5.850	3.788	3.458	2.564	3.333
055 VEG ETC PRSVD PREPD	0.081	0.443	0.085	0.155	0.420	0.368	0.143	0.169	0.156	0.143	0.114	0.091	0.076	0.090	0.104	0.576	0.715	0.518	0.300	0.097	0.080	0.051	0.167
061 SUGAR HONEY	20.726	8.648	7.968	13.553	16.301	19.326	15.177	14.883	14.050	7.089	4.333	3.415	4.377	5.043	5.334	3.759	4.089	2.099	1.532	2.256	1.484	1.287	1.100
062 SUGAR PREPS NONCHOC	1.535	1.238	0.596	0.647	1.584	1.500	1.876	1.520	1.574	1.807	2.233	2.159	1.968	1.660	1.703	1.604	1.090	0.865	0.699	1.058	0.864	0.647	0.429
071 COFFEE	1.253	1.184	1.228	1.175	1.497	1.821	1.643	2.228	2.314	3.101	1.232	1.589	1.484	0.418	0.275	0.152	0.110	0.248	0.207	0.075	0.055	0.031	0.042
072 COCOA	0.575	0.346	0.563	1.298	3.461	5.446	2.545	0.694	0.869	0.963	0.986	1.134	1.547	2.063	1.820	1.218	1.088	1.195	0.968	0.875	0.733	0.541	0.300
073 CHOC AND PRODS	0.089	0.136	0.021	0.096	0.242	0.105	0.031	0.142	0.081	0.037	0.055	0.041	0.044	0.024	0.022	0.031	0.019	0.032	0.039	0.137	0.118	0.095	0.000
111 NONALC BEVRGS NES	0.004	0.009	0.001	0.002	0.002	0.010	0.010	0.022	0.000	0.103	0.514	0.164	0.240	0.232	0.707	0.334	0.255	0.299	0.161	0.117	0.132	0.122	0.100
112 ALC BEVRGS	0.122	0.108	0.073	0.055	0.142	0.144	0.112	0.111	0.099	0.111	0.113	0.123	0.145	0.160	0.222	0.136	0.109	0.107	0.124	0.100	0.079	0.052	0.214
411 ANIMAL OILS FATS	0.138	0.133	0.220	0.734	0.604	0.223	0.517	0.271	0.854	1.419	0.335	0.161	0.151	0.222	0.478	0.488	0.218	0.092	0.020	0.007	0.001	0.002	0.000
421 FIXED VEG OILS SOFT	0.000	0.000	0.000	0.000	0.000	0.000	0.274	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.007	0.000	0.000	0.000	0.000	0.053
422 FIXED VEG OIL NONSOFT	58.423	77.856	65.741	49.648	51.795	46.234	52.490	39.710	31.499	48.404	53.355	40.437	36.734	40.596	28.392	37.262	23.805	22.032	23.881	17.577	15.695	13.355	7.313
431 PROCESD ANML VEG OIL ETC	0.855	0.907	1.221	0.611	0.398	0.424	0.511	5.568	5.501	2.722	3.667	3.435	2.727	2.522	1.898	1.722	1.349	1.387	2.840	1.239	1.317	0.640	0.833
512 ORGANIC CHEMICALS	0.285	0.334	0.308	0.498	0.538	0.597	0.486	0.591	0.561	0.621	0.543	0.521	0.464	0.384	0.271	0.223	0.177	0.148	0.128	0.104	0.093	0.073	0.078
513 INORG ELEMNTS OXIDES ETC	0.032	0.025	0.039	0.012	0.013	0.025	0.011	0.070	0.537	0.597	0.978	0.684	0.968	0.904	0.950	0.425	0.325	0.238	0.090	0.079	0.276	0.207	0.306
514 OTHR INORGANIC CHEMLS	2.621	2.202	3.800	0.139	0.315	0.343	0.182	0.082	0.059	0.103	0.092	0.081	0.062	0.042	0.062	0.038	0.072	0.193	0.174	0.302	0.079	0.075	0.050
515 RADACTIVE ETC MATRL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.008	0.000	0.000
521 COAL PETROLEUM ETC CHEMS	0.000	0.000	0.000	0.000	0.003	1.574	0.715	0.527	1.433	1.401	0.678	2.502	0.000	0.000	0.000	0.000	0.000	0.000	0.232	0.000	0.000	0.000	0.250
531 SYNT DYE NAT INDGO LAKES	0.005	0.029	0.043	0.046	0.039	0.038	0.195	0.023	0.033	0.005	0.000	0.012	0.004	0.009	0.014	0.071	0.037	0.072	0.020	0.092	0.066	0.016	0.000
532 DYES NES TANNING PRODS	0.187	0.335	0.198	0.253	0.204	0.201	0.168	0.072	0.090	0.077	0.076	0.094	0.097	0.120	0.158	0.171	0.121	0.122	0.062	0.093	0.089	0.061	0.000
533 PIGMENTS PAINTS ETC	0.099	0.036	0.035	0.017	0.017	0.025	0.047	0.013	0.007	0.012	0.027	0.038	0.048	0.038	0.039	0.061	0.094	0.092	0.087	0.090	0.081	0.043	0.024
541 MEDICL ETC PRODS	0.126	0.121	0.131	0.139	0.141	0.166	0.149	0.127	0.156	0.114	0.086	0.063	0.072	0.083	0.087	0.081	0.094	0.086	0.053	0.121	0.079	0.048	0.021
551 ESSENTL OIL PERFUME ETC	0.374	0.016	0.007	0.041	0.136	0.221	0.289	0.270	0.320	0.479	0.305	0.277	0.296	0.134	0.082	0.065	0.113	0.095	0.116	0.115	0.079	0.058	0.000
553 PERFUME COSMETICS ETC	0.041	0.034	0.010	0.037	0.047	0.046	0.040	0.055	0.059	0.029	0.049	0.150	0.120	0.180	0.230	0.187	0.136	0.219	0.091	0.160	0.114	0.115	0.073
554 SOAPS CLEANING ETC PREPS	0.200	0.296	1.080	0.224	0.138	0.086	0.091	0.259	0.462	0.458	0.478	0.465	0.252	0.503	0.832	0.898	0.644	0.672	0.234	0.621	0.472	0.326	0.083
561 FERTILZRS MANUFACT	0.000	0.000	0.000	0.015	0.002	0.000	0.001	0.039	1.374	5.039	3.448	1.937	2.264	2.202	3.227	2.365	2.410	2.319	0.423	1.528	1.348	1.073	0.148
571 EXPLSVS PYROTECH PROD	0.351	0.570	0.391	0.687	0.650	1.295	1.025	1.100	0.858	1.054	0.878	0.752	0.954	1.195	1.381	1.046	1.176	1.390	0.478	0.432	1.152	0.663	0.667
581 PLASTIC MATRLS ETC	0.154	0.198	0.145	0.139	0.264	0.168	0.145	0.131	0.225	0.223	0.241	0.212	0.174	0.197	0.157	0.188	0.161	0.145	0.143	0.086	0.118	0.082	0.066
599 CHEMCLS NES	0.129	0.147	0.249	0.276	0.302	0.283	0.250	0.290	0.373	0.318	0.348	0.315	0.326	0.300	0.298	0.305	0.279	0.254	0.262	0.194	0.200	0.153	0.164
611 LEATHR	0.000	0.000	0.019	0.029	0.009	0.032	0.002	0.013	0.013	0.013	0.027	0.017	0.014	0.036	0.237	0.022	0.007	0.000	0.204	0.117	0.085	0.074	0.083
612 LEATHR ETC MANUFACT	0.164	0.293	0.175	0.145	0.215	0.194	0.102	0.038	0.305	0.621	0.362	0.328	0.576	0.642	0.734	0.334	0.201	0.099	0.442	0.415	0.133	0.083	0.083
613 FUR SKINS TAN DRSD				0.000						0.000	0.000	0.000	0.001	0.003	0.007	0.062	0.021	0.000	0.031	0.000	0.000	0.013	0.000
621 MATRLS OF RUBBER	0.015	0.041	0.024	0.021	0.027	0.042	0.133	0.028	0.030	0.017	0.017	0.040	0.108	0.218	0.132	0.097	0.119	0.077	0.026	0.096	0.066	0.063	0.077
629 RUBBER ARTICLES NES	0.052	0.028	0.030	0.013	0.019	0.027	0.056	0.030	0.044	0.102	0.141	0.138	0.177	0.207	0.292	0.173	0.171	0.170	0.203	0.179	0.172	0.252	0.313
631 VENEERS PLYWOOD ETC	6.491	9.330	10.288	9.010	9.284	6.831	7.233	5.352	5.430	4.991	4.581	4.257	2.409	2.940	1.882	1.233	0.565	0.390	0.206	0.262	0.260	0.164	0.033
632 WOOD MANUFACT NES	4.373	3.853	3.738	2.905	3.595	4.077	5.245	4.707	5.153	4.810	5.425	5.119	4.801	5.887	7.740	4.329	3.320	3.419	2.005	2.725	1.857	1.403	1.258
633 CORK MANUFACT	0.000	0.006	0.001	0.001	0.002	0.001	0.003	0.000	0.000	0.000	0.000	0.001	0.006	0.005	0.001	0.000	0.001	0.000	0.021	0.039	0.003	0.003	0.000
641 PAPER PAPERBRD	0.001	0.007	0.013	0.002	0.001	0.012	0.021	0															

673 IRON STEEL SHAPES	0.000	0.000	0.003	0.010	0.012	0.008	0.004	0.000	0.002	0.003	0.006	0.003	0.002	0.001	0.000	0.013	0.024	0.046	0.014	0.060	0.093	0.012	0.000
674 IRN STL UNIV PLATE SHEET	0.093	0.337	0.422	0.494	0.025	0.001	0.001	0.000	0.001	0.000	0.001	0.158	0.120	0.234	0.176	0.093	0.084	0.085	0.051	0.079	0.094	0.047	0.012
675 IRON STEEL HOOP STRIP	0.000	0.014	0.101	0.003	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.031	0.474									
676 RAILVY RAILS ETC IRN STL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.039	0.000	0.025	0.000	0.000
677 IRN STL WIRE EXCL W ROD	0.003	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.001	0.002	0.001	0.000	0.017	0.011	0.006	0.011	0.000
678 IRON STL TUBES PIPES ETC	0.003	0.007	0.046	0.037	0.020	0.004	0.045	0.004	0.014	0.013	0.033	0.051	0.029	0.318	0.444	0.143	0.511	0.385	0.144	0.504	0.089	0.056	0.256
679 IRN STL CASTINGS UNWORKD	0.158	0.337	0.456	0.560	0.839	0.623	0.391	0.440	0.400	0.274	0.333	0.174	0.158	0.079	0.386	0.304	0.550	0.434	0.093	0.271	0.313	0.241	0.125
691 STRUCT PARTS NES	0.165	0.208	0.232	0.384	0.192	0.202	0.141	0.119	0.058	0.057	0.468	0.388	0.077	0.162	0.205	0.125	1.503	0.210	0.144	0.902	0.475	0.134	0.654
692 METAL TANKS BOXES ETC	0.118	0.175	0.145	0.069	0.165	0.242	0.080	0.176	0.209	0.209	0.362	0.297	0.384	0.283	0.203	0.042	0.070	0.036	0.046	0.292	0.239	0.176	0.231
693 WIRE PRODS NONELEC	0.341	0.649	0.415	0.306	0.501	1.028	0.076	0.087	0.034	0.022	0.022	0.014	0.088	0.047	0.047	0.026	0.029	0.025	0.008	0.027	0.072	0.094	0.000
694 STEEL COPP NAILS ETC	0.010	0.002	0.000	0.003	0.001	0.004	0.001	0.005	0.004	0.005	0.011	0.005	0.011	0.151	0.376	0.055	0.028	0.100	0.232	0.267	0.205	0.122	0.238
695 TOOLS	0.036	0.062	0.086	0.086	0.111	0.138	0.172	0.235	0.250	0.228	0.092	0.053	0.060	0.060	0.060	0.035	0.029	0.044	0.140	0.155	0.132	0.128	0.194
696 CUTLERY	0.009	0.014	0.024	0.050	0.051	0.054	0.041	0.044	0.009	0.023	0.105	0.197	0.271	0.311	0.397	0.380	0.420	0.283	0.255	0.186	0.248	0.164	0.125
697 BASE MTL HHOLD EQPT	0.029	0.045	0.028	0.027	0.026	0.017	0.019	0.018	0.038	0.026	0.036	0.032	0.041	0.093	0.429	0.683	0.738	0.689	0.956	0.843	0.736	0.607	0.529
698 METAL MANUFACT NES	0.053	0.057	0.099	0.137	0.182	0.121	0.119	0.045	0.053	0.081	0.083	0.054	0.060	0.072	0.205	0.110	0.137	0.233	0.330	0.219	0.235	0.233	0.247
711 POWER MACH NONELEC	0.007	0.007	0.003	0.002	0.005	0.005	0.003	0.001	0.004	0.001	0.002	0.002	0.001	0.004	0.070	0.016	0.011	0.017	0.155	0.124	0.087	0.073	0.040
712 AGRIC MACH	0.001	0.000	0.014	0.047	0.005	0.001	0.004	0.003	0.016	0.006	0.003	0.007	0.000	0.005	0.009	0.002	0.000	0.001	0.001	0.020	0.013	0.022	0.000
714 OFFICE MACH	0.001	0.010	0.031	0.013	0.004	0.033	0.011	0.009	0.004	0.036	0.055	0.079	0.195	0.236	0.995	0.518	0.462	0.414	2.126	2.755	3.215	2.899	4.433
715 METAL WORK MACH	0.001	0.000	0.003	0.000	0.000	0.009	0.003	0.001	0.001	0.005	0.009	0.007	0.015	0.017	0.023	0.012	0.009	0.010	0.042	0.052	0.039	0.604	0.021
717 TEXTL LEATHER MACH	0.117	0.077	0.067	0.073	0.043	0.062	0.038	0.021	0.008	0.010	0.005	0.005	0.006	0.015	0.040	0.032	0.027	0.033	0.061	0.123	0.085	0.043	0.029
718 MACH FOR SPCL INDUST	0.063	0.043	0.048	0.045	0.042	0.173	0.050	0.048	0.042	0.042	0.049	0.072	0.055	0.057	0.059	0.033	0.038	0.044	0.092	0.154	0.108	0.094	0.048
719 MACH NES NONELEC	0.049	0.060	0.017	0.014	0.012	0.017	0.021	0.019	0.018	0.014	0.012	0.021	0.027	0.033	0.083	0.042	0.050	0.054	0.080	0.155	0.122	0.146	0.103
722 ELEC PWR MACH SWITCH	0.010	0.017	0.003	0.014	0.040	0.152	0.233	0.324	0.163	0.157	0.238	0.159	0.200	0.258	0.414	0.318	0.339	0.442	0.730	0.649	0.949	1.633	1.361
723 ELEC DISTRIB MACH	0.009	0.028	0.095	0.140	0.118	0.049	0.081	0.001	0.001	0.012	0.008	2.217	3.628	4.769	4.812	5.333	5.022	6.330	5.402	4.240	3.846	2.614	3.079
724 TELECOM EQPT	0.125	0.135	0.199	0.207	0.183	0.174	0.281	0.117	0.097	0.089	0.155	0.404	1.113	1.141	1.581	1.513	1.510	1.663	2.014	1.838	1.591	1.147	0.912
725 DOMEST ELEC EQPT	0.002	0.000	0.005	0.004	0.002	0.002	0.009	0.102	0.305	0.251	0.262	0.270	0.213	0.287	0.296	0.425	0.329	0.402	0.257	0.328	0.256	0.158	0.121
726 ELEC MEDCL XRAY EQPT	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.009	0.003	0.011	0.004	0.000
729 ELEC MACH NES	0.299	0.279	0.168	0.442	0.684	0.817	1.311	2.165	1.835	2.002	2.173	1.863	1.777	1.470	4.361	1.672	1.707	1.724	4.195	5.496	6.200	7.810	5.761
731 RAILWAY VEH	0.060	0.139	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.237	1.122	1.451	0.480	0.067	0.005	0.001	0.006	0.054	0.004	0.030	0.000
732 ROAD MOTOR VEH	0.048	0.071	0.102	0.084	0.089	0.056	0.062	0.062	0.053	0.066	0.103	0.021	0.027	0.030	0.036	0.065	0.102	0.142	0.089	0.165	0.169	0.130	0.063
733 ROAD VEH NONMTR	0.040	0.048	0.064	0.033	0.023	0.023	0.028	0.001	0.001	0.001	0.007	0.005	0.030	0.226	0.338	0.039	0.105	0.229	0.292	0.636	0.609	0.298	0.290
734 AIRCRAFT	0.022	0.001	0.000	0.003	0.019	0.000	0.000	0.006	0.003	0.009	0.009	0.002	0.014	0.010	0.047	0.001	0.000	0.003	0.016	0.065	0.123	0.051	0.025
735 SHIPS BOATS	0.022	0.049	0.026	0.044	0.020	0.017	0.010	0.007	0.018	0.016	0.037	0.004	0.004	0.007	0.012	0.001	0.002	0.014	0.385	0.034	0.518	0.075	0.053
812 PLUMB HEAT LGHT EQPT	0.229	0.467	0.357	0.029	0.039	0.056	0.045	0.039	0.039	0.065	0.058	0.120	0.141	0.136	0.441	0.400	0.420	0.425	0.843	0.335	0.272	0.230	0.625
821 FURNITURE	1.254	1.278	1.958	0.055	0.056	0.058	0.046	0.041	0.044	0.091	0.090	0.124	0.142	0.195	2.158	1.927	1.877	1.885	1.861	1.513	1.314	1.047	1.182
831 TRAVEL GOODS HBAGS	1.359	1.582	1.038	0.101	0.127	0.144	0.097	0.089	0.107	0.197	0.202	0.189	0.203	0.236	3.215	2.520	2.252	2.625	3.794	4.012	4.138	3.964	3.905
841 CLOTH NOT FUR	1.857	2.295	2.357	0.273	0.308	0.333	0.362	0.347	0.390	0.649	0.789	0.878	0.859	0.987	6.304	2.485	2.223	2.085	3.964	3.770	2.845	2.319	2.024
842 FUR ETC CLOTHES PROD	0.000			0.077	0.083	0.069	0.063	0.045	0.070	0.064	0.068	0.071	0.058	0.052	0.000	0.003	0.004	0.054	0.049	0.036	0.004	0.007	0.000
851 FOOT WEAR	0.544	1.462	1.642	0.077	0.090	0.119	0.083	0.069	0.086	0.119	0.127	0.151	0.172	0.192	1.852	1.489	1.559	1.730	1.764	1.200	1.122	0.740	0.515
861 INSTR APPARAT	0.013	0.202	0.161	0.018	0.027	0.031	0.026	0.019	0.022	0.029	0.028	0.044	0.043	0.050	0.206	0.094	0.116	0.176	1.018	0.630	0.494	0.416	0.879
862 PHOTO CINEMA SUPPLIES	0.000	0.016	0.001	0.013	0.012	0.011	0.010	0.009	0.012	0.051	0.011	0.017	0.012	0.014	0.002	0.001	0.005	0.011	0.007	0.003	0.024	0.008	0.000
863 DEVEL CINEMA FILM	0.102	0.078	0.106	0.097	0.136	0.218	0.157	0.066	0.145	0.085	0.085	0.078	0.115	0.086	4.957	5.985	5.180	7.669	5.068	6.545	2.684	2.576	2.323
864 WATCHES CLOCKS	0.168	0.529	0.667	0.008	0.010	0.015	0.026	0.032	0.041	0.110	0.149	0.165	0.114	0.128	1.662	0.009	0.017	0.014	3.964	2.219	1.350	1.383	2.074
891 SOUND RECORDERS	0.082	0.064	0.040	0.011	0.010	0.007	0.008	0.011	0.013	0.009	0.006	0.006	0.010	0.011	0.315	0.275	0.225	0.191	0.575	0.234	0.195	0.218	0.410
892 PRINTED MATTER	0.036	0.033	0.025	0.044	0.055	0.061	0.073	0.078	0.054	0.088	0.058	0.061	0.075	0.068	0.045	0.043	0.055	0.071	0.088	0.056	0.068	0.074	0.083
893 PLASTIC NES	0.194	0.305	0.422	0.049	0.055	0.060	0.050	0.037	0.037	0.050	0.052	0.049	0.057	0.063	0.462	0.394	0.387	0.390	0.619	0.548	0.463	0.367	0.355
894 TOYS SPORTING GOODS ETC	0.291	0.788	0.793	0.020	0.021	0.020	0.026	0.025	0.037	0.037	0.036	0.038	0.041	0.045	2.139	1.830	1.812	1.972	1.973	1.902	1.421	1.038	0.921
895 OFFICE SUPPLIES NES	0.017	0.033	0.015	0.034	0.050	0.045	0.037	0.026	0.060	0.088	0.084	0.087	0.081	0.084	0.018	0.046	0.075	0.176	0.133	0.768	0.086	0.029	0.071
896 WORKS ART ETC	0.036	0.028	0.014	0.053	0.108	0.108	0.077	0.155	0.905	0.138	0.134	0.131	0.078	0.080	0.006	0.006	0.016	0.022	0.047	0.051	0.112	0.013	0.167
897 GOLD SILVER JEWELRY	0.519	0.777	0.938	0.029	0.022	0.025	0.020	0.027	0.028	0.063	0.058	0.100	0.104	0.126	1.029	0.977	1.075	0.835	0.435	0.303	0.188	0	



Appendix Table 3. World market shares, major manufactured exports, Philippines, 1991 and 1999 (%)

SITC Code	Product Description	1991	1999
751	OFFICE MACHINES	0.006	0.245
752	AUTOMATIC DATA PROCESSING MACHINES AND UNITS	0.254	2.007
759	OFFICE MACHINES PARTS AND ACCESSORIES	0.339	0.916
761	TV RECEIVERS	0.106	0.284
762	RADIO-BROADCAST RECEIVERS	0.434	0.748
763	SOUND RECORDERS OR REPRODUCERS	0.098	0.037
764	TELECOMMUNICATIONS EQUIPMENT	0.556	0.370
771	ELECTRIC POWER MACHINERY AND PARTS	0.224	0.246
772	ELECTRICAL APPARATUS FOR SWITCHING ET AL	0.129	0.900
773	EQUIPMENT FOR DISTRIBUTING ELECTRICITY, N.E.S.	1.368	1.579
774	MEDICAL, SURGICAL, AND SCIENTIFIC APPARATUS	0.002	0.001
775	HOUSEHOLD TYPE ELECTRICAL AND NONELECTRICAL EQUIPMENT	0.076	0.078
776	VALVES AND TUBES; SIMILAR SEMICONDUCTOR DEVICES; PARTS	2.237	2.051
778	ELECTRICAL MACHINERY AND APPARATUS, N.E.S.	0.052	0.110
841	MEN'S OR BOYS' COATS, UNDERWEAR ETC. OF WOVEN TEXTILE FABRICS	2.110	0.703
842	WOMEN'S OR GIRLS' COATS, UNDERWEAR, ETC. OF WOVEN TEXTILES	2.378	1.085
843	MEN'S OR BOYS' COATS, SHIRTS, ETC. KNITTED OR CROCHETED TEXTILE FABRIC	3.846	1.858
844	WOMEN'S OR GIRLS' COATS, ETC. KNITTED OR CROCHETED	2.516	0.992
845	ARTICLES OF APPAREL, OF TEXTILE FABRICS	2.839	0.595
846	CLOTHING ACCESSORIES, OF TEXTILE FABRICS	0.898	0.298
848	ARTICLES OF APPAREL OTHER THAN TEXTILE FABRICS	1.449	0.229
651	TEXTILE YARN	0.099	0.189
652	COTTON FABRICS, WOVEN (NOT INCLUDING NARROW OR SPECIAL FABRICS)	0.065	0.020
653	WOVEN FABRICS OF MANMADE TEXTILE MATERIALS	0.045	0.135
654	WOVEN FABRICS OF OTHER TEXTILE MATERIALS	0.002	0.038
655	KNITTED OR CROCHETED FABRICS	0.137	0.120
656	TULLES, LACE, EMBROIDERY, RIBBONS, TRIMMINGS AND OTHER SMALL WARES	0.795	0.379
657	SPECIAL YARNS, SPECIAL TEXTILE FABRICS AND RELATED PRODUCTS	0.172	0.178
658	MADE-UP ARTICLES, WHOLLY OR CHIEFLY OF TEXTILE MATERIALS,	0.819	0.528
659	FLOOR COVERINGS, ETC.	0.079	0.063
931	SPECIAL TRANSACTIONS AND COMMODITIES NOT CLASSIFIED	0.002	10.607

source: Author's estimates based on PC-TAS.

Appendix Table 4. Share of Philippines in China's imports of SITC Codes 751-778, 1995-1999 (%)

SITC Code	Product Description	1995	1996	1997	1998	1999
751	Office machines	-	-	-	0.0642	0.3087
752	Automatic data processing machines	0.0652	0.1094	1.5077	1.9478	2.4247
759	Office machines parts and accessories	0.0425	1.3703	0.3235	1.2069	1.5523
764	Telecommunications equipment, NES	0.0227	0.0731	0.1138	0.2020	0.2046
771	Electric power machinery and parts	0.0077	0.1668	0.0781	0.1330	0.1603
772	Electric apparatus for switching etc.	0.0096	0.0450	0.0587	0.1389	0.2295
773	Electrical distribution equipment, NES	0.0716	0.0531	0.0679	0.1940	0.3926
776	Valves, transistors, semiconductor devices, etc.	0.1203	0.2250	0.4849	1.0367	2.6522
778	Electrical machinery and apparatus, NES	0.0958	0.0400	0.1600	0.3979	1.2406

Source: Author's estimates based on PC-TAS

Appendix Table 5. Intra-industry trade index by commodity, by partner countries, Philippines, 1990, 1995, and 1999 (%)

SITC Code	Description	AUSTRALIA			CANADA			CHINA			HONG KONG		
		1990	1995	1999	1990	1995	1999	1990	1995	1999	1990	1995	1999
711	Power machinery non-electric	0.48	0.01	0.11	0.00	0.00	0.02	0.00	0.04	0.10	0.01	0.09	0.77
712	Agricultural machinery	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.04	0.10	0.00	.	0.00
714	Office machines	0.14	0.94	0.22	0.82	0.23	0.02	0.00	0.23	0.70	0.91	0.94	0.51
715	Metalworking machinery	0.07	0.00	0.01	0.00	0.03	.	0.00	0.53	0.11	0.00	0.18	0.07
717	Textile, leather machinery	0.22	0.98	0.39	0.00	0.00	0.86	0.03	0.23	0.20	0.03	0.08	0.09
718	Machines for special industries	0.07	0.01	0.30	0.48	0.03	0.04	0.03	0.44	0.45	0.72	0.32	0.68
719	Machines NES non-electric	0.02	0.11	0.41	0.49	0.28	0.41	0.05	0.23	0.16	0.28	0.15	0.74
722	Elec power machine, switchgear	0.02	0.50	0.92	0.07	0.96	0.06	0.00	0.03	0.58	0.76	0.29	0.30
723	Elec distributing machine	0.97	0.08	0.03	0.00	0.50	0.02	0.00	0.32	0.91	0.43	0.46	0.29
724	Telecommunications equipment	0.60	0.57	0.84	0.77	0.80	0.36	0.00	0.09	0.40	0.42	0.60	0.88
725	Domestic electric equipment	0.59	0.00	0.07	.	0.15	0.38	0.00	0.01	0.00	0.96	0.11	0.09
726	Electro medical, x-ray equipment	0.00	0.07	0.04	.	0.57	.	0.00	0.00	0.14	0.00	0.78	0.08
729	Electrical machinery NES	0.33	0.46	0.19	0.36	0.11	0.11	0.14	0.78	0.95	0.59	0.68	0.50
731	Railway vehicles	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
732	Road motor vehicles	0.41	0.73	0.31	0.00	0.33	0.55	0.00	0.06	0.01	0.68	0.68	0.02
733	Road vehicles non-motor	0.06	0.32	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.02
734	Aircraft	0.19	0.03	0.55	0.00	0.00	0.01	.	.	0.05	0.00	0.28	0.98
735	Ships and boats	.	0.04	0.03	.	0.00	0.00	.	0.00	0.00	0.00	0.00	0.00
812	Plumbing, heating, lighting equipment	0.22	0.23	0.63	0.00	0.61	0.13	0.00	0.28	0.02	0.87	0.57	0.04
821	Furniture	0.00	0.11	0.12	0.01	0.13	0.09	0.00	0.20	0.04	0.46	0.49	0.26
831	Travel goods, handbags	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.10	0.17
841	Clothing not of fur	0.01	0.08	0.07	0.00	0.00	0.00	0.31	0.10	0.21	0.61	0.38	0.78
842	Fur etc clothes, products	.	.	0.00	.	0.00	0.00	.	0.00	0.00	0.00	.	.
851	Footwear	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.32	0.06
861	Instruments, apparatus	0.96	0.65	0.54	0.86	0.32	0.17	0.00	0.26	0.51	0.68	0.96	0.80
862	Photo, cinema supplies	0.00	0.00	0.00	.	.	.	0.00	0.00	0.00	0.60	0.01	0.12
863	Developed cinema film	0.00	0.00	0.07	.	.	.	.	0.00	.	0.00	0.04	0.00
864	Watches and clocks	0.00	0.25	0.08	.	0.03	0.00	0.00	0.02	0.00	0.00	0.86	0.41
891	Sound recorders, producers	0.33	0.11	0.28	0.10	0.46	0.07	0.00	0.03	0.68	0.07	0.12	0.97
892	Printed matter	0.04	0.08	0.26	0.10	0.11	0.87	0.10	0.55	0.21	0.01	0.05	0.08
893	Articles of plastic, NES	0.27	0.84	0.88	0.31	0.93	0.68	0.88	0.20	0.19	0.26	0.19	0.17
894	Toys, sporting goods, etc.	0.17	0.19	0.44	0.02	0.08	0.11	0.57	0.10	0.06	0.57	0.12	0.12
895	Office supplies NES	0.25	0.51	0.22	0.21	0.00	0.00	.	0.02	0.02	0.27	0.12	0.27
896	Works of arts, etc	0.00	0.00	0.41	.	1.00	0.00	.	0.00	0.00	.	0.69	0.13
897	Gold, silverware, jewelry	0.01	0.05	0.19	0.06	0.02	0.00	0.00	0.74	0.00	0.52	0.08	0.03
899	Other manufactured goods	0.12	0.08	0.23	0.01	0.01	0.04	0.01	0.13	0.01	0.20	0.21	0.11
931	Special transactions	0.57	0.03	0.00	0.39	0.68	0.10	0.07	0.03	0.00	0.55	0.55	0.77

SITC Code	Description	INDONESIA			JAPAN			SOUTH KOREA			MALAYSIA		
		1990	1995	1999	1990	1995	1999	1990	1995	1999	1990	1995	1999
711	Power machinery non-electric	.	0.95	0.09	0.01	0.07	0.11	0.00	0.08	0.47	0.00	0.72	0.85
712	Agricultural machinery	0.00	0.13	0.89	0.00	0.01	0.05	0.00	0.00	0.01	0.14	0.00	0.03
714	Office machines	0.02	0.40	0.20	0.10	0.88	0.76	0.13	0.78	0.13	0.00	0.28	0.69
715	Metalworking machinery	0.00	0.08	0.04	0.00	0.00	0.05	0.00	0.01	0.01	0.09	0.11	0.59
717	Textile, leather machinery	0.07	0.63	0.41	0.01	0.10	0.24	0.00	0.00	0.05	0.04	0.39	0.23
718	Machines for special industries	0.49	0.69	0.87	0.03	0.00	0.04	0.00	0.35	0.12	0.34	0.46	0.22
719	Machines NES non-electric	0.96	0.89	0.29	0.01	0.07	0.15	0.00	0.06	0.04	0.15	0.25	0.54
722	Elec power machine, switchgear	0.41	0.75	0.47	0.35	0.30	0.48	0.04	0.39	0.55	0.00	0.77	0.63
723	Elec distributing machine	0.00	0.00	0.07	0.84	0.84	0.58	0.00	0.06	0.11	0.00	0.44	0.95
724	Telecommunications equipment	0.38	0.54	0.01	0.40	0.95	0.81	0.04	0.18	0.27	0.81	0.55	0.48
725	Domestic electric equipment	0.84	0.31	0.10	0.35	0.36	0.28	0.00	0.13	0.02	0.96	0.34	1.00
726	Electro medical, x-ray equipment	.	0.00	.	0.00	0.08	0.09	0.00	0.00	0.09	.	0.31	0.82
729	Electrical machinery NES	0.00	0.36	0.02	0.35	0.26	0.48	0.26	0.76	0.47	0.22	0.78	0.50
731	Railway vehicles	.	.	0.00	0.35	0.07	0.08	0.00	0.00	0.00	0.00	.	0.00
732	Road motor vehicles	0.57	0.00	0.53	0.03	0.07	0.23	0.00	0.00	0.00	0.03	0.57	0.91
733	Road vehicles non-motor	.	0.00	0.00	0.73	0.58	0.90	0.00	0.01	0.02	0.00	0.00	0.00
734	Aircraft	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.67	0.92	0.00	0.00	0.30
735	Ships and boats	.	0.00	0.05	0.13	0.00	0.00	.	0.23	0.00	.	0.08	0.00
812	Plumbing, heating, lighting equipment	0.37	0.29	0.05	0.97	0.57	0.53	0.44	0.94	0.22	0.50	0.65	0.47
821	Furniture	0.18	0.36	0.11	0.07	0.31	0.27	0.42	1.00	0.42	0.31	0.11	0.47
831	Travel goods, handbags	0.00	0.00	0.27	0.01	0.03	0.03	0.83	0.98	0.09	0.00	0.78	0.97
841	Clothing not of fur	0.18	0.03	0.01	0.09	0.04	0.08	0.72	0.52	0.29	0.49	0.19	0.72
842	Fur etc clothes, products	.	.	0.00	.	0.00	0.00	.	0.05	.	.	.	.
851	Footwear	0.00	0.00	0.00	0.04	0.08	0.13	0.03	0.70	0.37	0.23	0.40	0.39
861	Instruments, apparatus	0.18	0.45	0.77	0.06	0.48	0.59	0.72	0.30	0.23	0.73	0.31	0.83
862	Photo, cinema supplies	.	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.10
863	Developed cinema film	.	.	0.00	0.00	0.69	0.93	.	0.12	0.00	.	.	0.00
864	Watches and clocks	.	.	0.99	0.07	0.98	0.84	0.00	0.87	0.94	.	0.30	0.16
891	Sound recorders, producers	0.13	0.44	0.00	0.00	0.61	0.27	0.03	0.44	0.97	0.01	0.48	0.71
892	Printed matter	0.00	0.80	0.59	0.05	0.47	0.48	0.00	0.01	0.01	0.90	0.24	0.34
893	Articles of plastic, NES	0.83	0.64	0.35	0.45	0.67	0.70	0.08	0.15	0.36	0.29	0.12	0.15
894	Toys, sporting goods, etc.	0.67	0.08	0.01	0.67	0.43	0.57	0.19	0.69	0.33	0.31	0.76	0.24
895	Office supplies NES	0.00	0.01	0.01	0.00	0.02	0.04	0.00	0.04	0.01	0.00	0.13	0.01
896	Works of arts, etc	.	0.13	.	0.01	0.00	0.04	.	.	.	.	0.56	0.00
897	Gold, silverware, jewelry	.	0.33	0.00	0.13	0.32	0.19	0.34	0.67	0.55	0.00	0.67	0.03
899	Other manufactured goods	0.16	0.50	0.91	0.36	0.42	0.50	0.64	0.40	0.13	0.03	0.85	0.71
931	Special transactions	0.24	.	0.01	0.88	0.48	0.55	0.20	0.00	0.00	0.41	0.70	0.81

SITC Code	Description	MEXICO			NEW ZEALAND			SINGAPORE		
		1990	1995	1999	1990	1995	1999	1990	1995	1999
711	Power machinery non-electric				0.00	0.00	0.00	0.00	0.23	0.04
712	Agricultural machinery				.	0.00	0.00	0.00	0.00	0.06
714	Office machines	0.00	0.00	0.01	0.00	0.13	0.05	0.42	0.95	0.70
715	Metalworking machinery	.	.	0.00	0.00	0.00	0.00	0.10	0.03	0.19
717	Textile, leather machinery	.	0.00	0.00	0.00	0.00	.	0.00	0.02	0.03
718	Machines for special industries	0.00	0.32	0.09	0.24	0.05	0.00	0.15	0.37	0.12
719	Machines NES non-electric	0.00	0.62	0.61	0.00	0.10	0.18	0.02	0.05	0.26
722	Elec power machine, switchgear	0.00	0.02	0.01	0.00	0.06	0.94	0.12	0.71	0.68
723	Elec distributing machine	0.08	0.01	0.00	0.00	0.00	0.44	0.00	0.41	0.65
724	Telecommunications equipment	0.00	0.01	0.00	0.92	0.42	0.74	0.50	0.52	0.52
725	Domestic electric equipment	.	0.97	0.77	0.00	0.00	0.00	0.67	0.61	0.80
726	Electro medical, x-ray equipment	.	0.00	.	.	.	.	0.00	0.00	0.10
729	Electrical machinery NES	0.00	0.01	0.01	0.39	0.10	0.06	0.94	0.66	0.62
731	Railway vehicles							0.03	0.00	0.00
732	Road motor vehicles	0.00	0.00	0.00	0.75	0.22	0.89	0.07	0.03	0.07
733	Road vehicles non-motor	.	.	0.00	.	0.00	0.00	0.00	0.00	0.08
734	Aircraft				0.00	0.00	0.00	0.00	0.20	0.54
735	Ships and boats				.	0.29	0.00	0.00	0.68	0.15
812	Plumbing, heating, lighting equipment	.	0.00	0.18	.	0.41	0.00	0.00	0.12	0.24
821	Furniture	0.00	0.00	0.03	0.00	0.04	0.01	0.85	0.84	0.98
831	Travel goods, handbags	.	0.00	0.00	0.00	0.03	0.00	0.33	0.60	0.60
841	Clothing not of fur	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.29	0.54
842	Fur etc clothes, products							.	0.00	.
851	Footwear	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.57	0.76
861	Instruments, apparatus	0.00	0.09	0.02	0.20	0.71	0.11	0.47	0.41	0.67
862	Photo, cinema supplies	0.00	0.00	0.00	.	0.00	0.00	0.00	0.00	0.00
863	Developed cinema film	.	0.00	0.00	.	0.00	.	.	0.00	0.50
864	Watches and clocks	.	0.00	0.00	.	0.13	0.18	0.00	0.84	0.11
891	Sound recorders, producers	0.03	0.00	0.00	0.00	0.60	0.22	0.05	0.86	0.86
892	Printed matter	.	0.00	0.01	0.50	0.55	0.88	0.13	0.10	0.09
893	Articles of plastic, NES	0.36	0.12	0.98	0.07	0.41	0.65	0.21	0.25	0.19
894	Toys, sporting goods, etc.	0.00	0.00	0.00	0.00	0.00	0.06	0.48	0.59	0.65
895	Office supplies NES	.	0.00	0.00	.	0.57	0.00	0.09	0.09	0.00
896	Works of arts, etc	.	0.40	0.00	.	0.00	0.09	0.00	0.15	0.90
897	Gold, silverware, jewelry	0.00	0.00	0.15	0.00	0.00	0.00	0.14	0.02	0.75
899	Other manufactured goods	0.00	0.16	0.00	0.01	0.00	0.08	0.62	0.81	0.72
931	Special transactions	0.26	0.20	0.00	0.49	.	0.00	0.73	0.10	0.11

SITC Code	Description	THAILAND			TAIWAN			USA		
		1990	1995	1999	1990	1995	1999	1990	1995	1999
711	Power machinery non-electric	0.00	0.00	0.02	0.00	0.00	0.50	0.02	0.09	0.06
712	Agricultural machinery	0.00	0.00	0.01	0.00	0.00	0.03	0.00	0.00	0.02
714	Office machines	0.66	0.15	0.82	0.76	0.99	0.99	0.44	0.47	0.15
715	Metalworking machinery	0.72	0.68	0.17	0.00	0.00	0.02	0.01	0.02	0.01
717	Textile, leather machinery	0.54	0.33	0.75	0.00	0.04	0.06	0.00	0.01	0.01
718	Machines for special industries	0.46	0.56	0.53	0.02	0.00	0.18	0.07	0.03	0.04
719	Machines NES non-electric	0.67	0.27	0.23	0.01	0.05	0.33	0.05	0.09	0.13
722	Elec power machine, switchgear	0.32	0.75	0.50	0.15	0.46	0.24	0.22	0.37	0.63
723	Elec distributing machine	0.01	0.93	0.51	0.00	0.02	0.07	0.27	0.30	0.29
724	Telecommunications equipment	0.56	0.81	0.77	0.25	0.29	0.85	0.36	0.66	0.41
725	Domestic electric equipment	0.36	0.57	0.52	0.67	0.22	0.11	0.62	0.14	0.09
726	Electro medical, x-ray equipment	.	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.01
729	Electrical machinery NES	0.15	0.57	0.47	0.60	0.67	0.63	0.95	0.92	0.97
731	Railway vehicles	.	0.01	0.91	0.00	0.01	0.00	0.56	0.25	0.51
732	Road motor vehicles	0.13	0.18	0.66	0.01	0.18	0.51	0.12	0.41	0.97
733	Road vehicles non-motor	0.00	0.01	0.00	0.00	0.00	0.02	0.20	0.87	0.86
734	Aircraft	0.00	.	0.00	0.00	0.00	0.00	0.01	0.01	0.23
735	Ships and boats	.	0.00	1.00	0.00	0.00	0.00	0.99	0.00	0.14
812	Plumbing, heating, lighting equipment	0.76	0.15	0.01	0.15	0.13	0.90	0.55	0.44	0.21
821	Furniture	0.57	0.04	0.03	0.89	0.56	0.27	0.05	0.16	0.09
831	Travel goods, handbags	0.00	0.00	0.08	0.54	0.27	0.61	0.00	0.01	0.01
841	Clothing not of fur	0.12	0.08	0.36	0.32	0.60	0.54	0.01	0.01	0.01
842	Fur etc clothes, products	.	.	.	.	0.55	0.00	.	0.82	0.00
851	Footwear	0.09	0.09	0.18	0.54	0.56	0.24	0.03	0.05	0.14
861	Instruments, apparatus	0.66	0.53	0.58	0.62	0.65	0.68	0.27	0.50	0.84
862	Photo, cinema supplies	.	0.06	0.14	0.00	0.00	0.02	0.01	0.25	0.09
863	Developed cinema film	.	0.00	0.07	.	.	0.00	0.23	0.11	0.29
864	Watches and clocks	0.00	0.02	0.86	0.00	0.12	0.40	0.03	0.15	0.29
891	Sound recorders, producers	0.10	0.07	0.92	0.00	0.96	0.96	0.87	0.99	0.88
892	Printed matter	0.00	0.12	0.27	0.07	0.04	0.22	0.05	0.22	0.21
893	Articles of plastic, NES	0.85	0.18	0.98	0.03	0.07	0.07	0.67	0.87	0.76
894	Toys, sporting goods, etc.	0.06	0.97	0.29	0.36	0.47	0.18	0.14	0.18	0.23
895	Office supplies NES	0.00	0.09	0.51	0.02	0.05	0.24	0.44	0.78	0.13
896	Works of arts, etc	.	0.00	.	1.00	0.29	0.83	0.00	0.49	0.87
897	Gold, silverware, jewelry	0.13	0.16	0.73	0.18	0.72	0.60	0.01	0.38	0.31
899	Other manufactured goods	0.05	0.84	0.60	0.30	0.17	0.05	0.06	0.05	0.15
931	Special transactions	0.53	0.29	0.06	0.36	0.29	0.83	0.70	0.75	0.80

Source: NAPES database

Appendix Table 6. Import-weighted MFN average tariffs of selected developing economies,  
by product group (per cent)

Importing economy	Manufactures (SITC 5-8 less 68)	Textiles (SITC 65)	Clothing (SITC 84)	Leather and travel goods (SITC 611,612,831)	Footwear (SITC 85)	Computers and office equipment (SITC 75)	Telecom, audio & video equipment (SITC 76)
<b>First-tier NIEs</b>	<b>1.8</b>	<b>1.7</b>	<b>1.2</b>	<b>0.7</b>	<b>0.4</b>	<b>0.9</b>	<b>1.2</b>
Hong Kong (China)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Republic of Korea	6.2	8.6	12.7	6.1	12.9	7.6	8.0
Singapore	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Taiwan Prov of China	3.3	5.4	13.2	3.7	6.4	0.4	3.7
<b>ASEAN -4</b>	<b>6.5</b>	<b>14.3</b>	<b>22.2</b>	<b>7.1</b>	<b>21.4</b>	<b>1.7</b>	<b>6.8</b>
Indonesia	6.7	11.6	19.2	3.9	18.4	1.8	11.4
Malaysia	5.8	17.7	19.5	7.5	25.4	0.1	6.7
Philippines	3.3	9.7	19.4	8.4	15.0	0.0	2.7
Thailand	10.3	17.4	31.1	9.3	37.4	5.8	11.4
<b>South Asia</b>	<b>26.7</b>	<b>20.5</b>	<b>22.3</b>	<b>24.6</b>	<b>34.7</b>	<b>15.7</b>	<b>21.7</b>
Bangladesh	21.7	34.8		16.9		2.4	17.2
India	31.4	38.3	39.7	27.8	40.0	18.0	28.0
Sri Lanka	5.4	1.0	11.2	13.3	24.1	0.5	3.0
<b>Other Asia</b>	<b>5.9</b>	<b>9.0</b>	<b>15.3</b>	<b>7.9</b>	<b>22.7</b>	<b>0.4</b>	<b>6.5</b>
China	5.8	8.9	14.9	7.9	14.9	0.1	6.2
Jordan	19.9	26.3	34.9	35.0	35.0	11.4	32.1
Turkey	5.8	8.6	11.8	7.4	23.5	2.3	6.3
<b>Latin America</b>	<b>14.1</b>	<b>19.0</b>	<b>28.3</b>	<b>19.3</b>	<b>22.8</b>	<b>8.5</b>	<b>14.9</b>
Argentina	15.3	20.1	22.8	19.0	33.0	6.9	11.8
Bolivia	9.0	10.0	10.0	10.0	10.0	10.0	10.0
Brazil	15.9	18.9	22.4	14.3	26.6	14.6	16.2
Chile	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Colombia	10.5	17.1	19.5	16.1	20.0	5.0	8.7
Costa Rica	3.9	7.6	13.9	9.0	13.9	0.0	4.1
Dominican Republic	17.8	21.1	27.1	22.0	23.6	10.0	14.1
El Salvador	5.5	14.7	23.9	8.6	20.0	0.0	1.7
Jamaica	10.0	4.1	19.1	17.1	18.6	0.0	5.2
Mexico	14.8	20.3	34.7	21.6	34.9	7.6	17.3
Paraguay	11.7	15.6	21.1	17.3	17.5	5.3	9.1
Peru	12.3	16.6	18.8	12.9	20.0	12.0	12.0
Uruguay	14.4	19.9	22.9	13.4	23.0	4.4	10.2
Venezuela	13.3	17.4	19.8	17.7	20.0	5.4	8.7
<b>North Africa</b>	<b>22.6</b>	<b>38.7</b>	<b>44.7</b>	<b>38.8</b>	<b>44.0</b>	<b>7.1</b>	<b>11.0</b>
Algeria	18.7	29.6	44.2	35.0	45.0	6.8	20.8
Egypt	17.6	31.0	38.4	30.0	40.0	9.2	13.3
Morocco	25.3	38.9	50.0	45.0	50.0	4.2	4.8
Tunisia	30.2	41.5	41.5	36.1	43.0	8.2	27.9
<b>Sub-Saharan Africa</b>	<b>14.7</b>	<b>19.1</b>	<b>33.1</b>	<b>23.5</b>	<b>25.9</b>	<b>14.7</b>	<b>20.3</b>

source: UNCTAD (2002), Table 4.3

Appendix Table 7. Bound tariffs on industrial products by stage of processing, selected developing economies

Import Markets	Wood, pulp, paper and furniture	Textiles and clothing	Leather, rubber, footwear and travel goods	Metals	Chemicals and photographic supplies	Transport equipment	Non-electric machinery	Electric machinery	Mineral products and precious stones and metals	Manufactured articles not elsewhere specified	Fish and fish products
<b>First-tier NIEs</b>											
Hong Kong (China)											
Raw materials	0.0	0.0	0.0	0.0					0.0		0.0
Semi-manufactures	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0
Finished products	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Republic of Korea											
Raw materials	2.1	8.1	9.4	1.2					5.6		17.8
Semi-manufactures	7.1	14.0	11.1	4.5	6.0				8.6		20.0
Finished products	3.6	24.5	19.8	13.2	8.2	24.6	11.1	16.1	14.9	11.4	22.5
Singapore											
Raw materials	4.2	6.8	6.3	0.0					0.3		10.0
Semi-manufactures	4.2	5.1	1.2	4.1	5.2				2.2		10.0
Finished products	1.8	9.6	3.0	2.1	4.6	4.4	4.3	4.9	1.4	1.2	8.8
<b>ASEAN-4</b>											
Indonesia											
Raw materials	38.3	40.0	39.0	40.0					39.5		40.0
Semi-manufactures	39.8	40.0	40.0	35.1	37.5				37.1		40.0
Finished products	39.9	39.8	39.8	38.7	37.2	58.5	36.6	38.7	40.0	36.9	40.0
Malaysia											
Raw materials	19.7	5.2	10.2	5.8					5.4		9.8
Semi-manufactures	19.7	19.6	21.1	12.0	14.7				13.3		20.4
Finished products	20.5	23.5	24.4	19.5	16.8	29.8	10.9	14.1	21.4	12.6	22.9
Philippines											
Raw materials	13.7	14.4	20.6	10.6					17.8		24.9
Semi-manufactures	32.5	25.7	27.1	18.8	20.8				30.3		50.0
Finished products	37.2	31.2	40.3	33.6	28.4	26.1	22.0	26.2	35.6	29.5	41.9
Thailand											
Raw materials	8.3	29.3	28.6	28.8					17.4		8.8
Semi-manufactures	22.3	27.6	34.7	21.4	29.7				27.9		6.9
Finished products	24.8	30.4	35.8	31.9	28.1	38.5	23.4	30.5	33.0	29.5	27.0
<b>South Asia</b>											
India											
Raw materials	25.1	39.1	37.0	29.0					38.5		60.5
Semi-manufactures	40.4	86.5	33.7	47.1	39.4				40.6		60.0
Finished products	81.1	93.8	96.3	82.1	61.1	53.9	36.2	44.8	58.0	72.4	106.6
Sri Lanka											
Raw materials	13.1	22.6	29.6	5.0					18.9		50.1
Semi-manufactures	31.9	40.2	43.8	9.1	11.3				11.9		50.0
Finished products	41.9	56.7	47.8	31.4	28.4	18.3	12.8	20.4	39.0	27.1	45.8
<b>Other Asia</b>											
China, Macau											
Raw materials	0.0	0.0	0.0	0.0					0.0		
Semi-manufactures	0.0	0.0	0.0	0.0	0.0			0.0	0.0		
Finished products	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turkey											
Raw materials	15.7	27.3	18.1	6.0					26.3		21.2
Semi-manufactures	39.2	74.2	87.6	24.5	27.0				35.8		25.0
Finished products	52.8	89.8	87.3	47.9	35.6	25.8	23.7	26.6	49.7	43.3	58.8



Import Markets	Wood, pulp, paper and furniture	Textiles and clothing	Leather, rubber, footwear and travel goods	Metals	Chemicals and photographic supplies	Transport equipment	Non-electric machinery	Electric machinery	Mineral products and precious stones and metals	Manufactured articles not elsewhere specified	Fish and fish products
<b>Latin America</b>											
Brazil											
Raw materials	20.2	35.0	34.3	35.0					34.3		35.0
Semi-manufactures	25.8	34.8	34.4	33.3	21.6				29.4		25.6
Finished products	31.1	34.9	35.0	33.4	26.2	33.6	32.6	31.9	34.8	33.5	34.5
Chile											
Raw materials	25.0	25.0	25.0	25.0					24.8		25.0
Semi-manufactures	25.0	25.0	25.0	25.0	25.0				25.0		25.0
Finished products	25.0	25.0	25.0	25.0	25.0	24.9	25.0	25.0	25.0	25.0	25.0
Colombia											
Raw materials	35.0	35.3	34.6	35.0					35.1		35.0
Semi-manufactures	35.0	35.0	35.0	35.0	35.0				35.0		35.0
Finished products	35.0	38.8	35.5	35.0	35.0	35.8	35.0	35.0	35.1	35.0	63.8
El Salvador											
Raw materials	36.4	40.0	40.0	26.3					39.1		42.4
Semi-manufactures	30.0	37.1	38.5	32.8	38.0				32.6		48.3
Finished products	39.7	40.0	42.4	39.9	36.7	35.8	32.6	34.6	39.2	38.2	55.2
Jamaica											
Raw materials	50.0	50.0	50.0	50.0					50.0		50.0
Semi-manufactures	50.0	50.0	50.0	50.0	50.0				50.0		50.0
Finished products	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	52.4
Mexico											
Raw materials	30.1	34.2	34.8	34.1					33.7		35.0
Semi-manufactures	34.1	35.1	34.7	34.4	35.1				33.6		33.0
Finished products	34.6	35.0	34.9	35.0	35.4	35.8	35.0	34.1	35.0	34.6	36.0
Venezuela											
Raw materials	31.8	34.7	34.9	35.0					33.8		33.4
Semi-manufactures	32.8	35.0	33.9	32.8	34.0				33.8		34.8
Finished products	34.6	34.9	34.6	34.4	34.3	33.6	33.2	33.9	34.6	33.4	33.5
<b>North Africa</b>											
Tunisia											
Raw materials	18.2	55.5	25.2	17.0					20.4		39.4
Semi-manufactures	36.2	55.2	35.4	22.6	24.9				26.9		43.0
Finished products	36.9	57.3	39.1	32.0	30.7	25.5	25.2	29.1	35.3	32.5	47.0
<b>Sub-Saharan Africa</b>											
South Africa											
Raw materials	1.2	12.5	12.7	0.0					4.3		22.7
Semi-manufactures	6.7	23.9	16.3	10.8	13.0				6.7		25.0
Finished products	15.5	36.6	27.0	20.0	16.7	23.3	12.0	17.4	16.8	14.8	21.4

Source: WTO (2001b)