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Twenty Years after Philippine Trade Liberalization and Industrialization: What Has Happened and Where Do We Go from Here

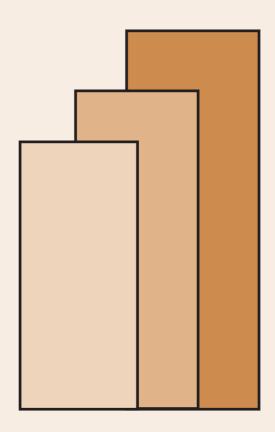
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EXECUTIVE SUMMARY

The paper aims to review our trade liberalization policy and its contribution to the country's industrial growth and performance. After more than twenty years of liberalization, the overall performance of the manufacturing industry has been weak, growth has been slow and contribution to value added and employment has been limited. Total factor productivity growth declined from 1996 to 2006. The industrial structure has remained "hollow" or "missing" in the middle and medium enterprises have never seriously challenged the large entrenched incumbents. The linkages between SMEs and large enterprises have also remained limited. SMEs have continued to face competitiveness problems along with difficulties in finance and market access. Trade indicators show the heavy concentration of Philippine exports on three major products groups: electronics, garments and textiles and auto parts. Within these major product groups, exports are highly concentrated in low value added and labor-intensive products sectors.

Our experience has shown that trade liberalization does not automatically lead to a competitive domestic market economy. Imports are effective in disciplining domestic manufacturing firms. However, to sustain the competitive gains derived from the presence of imports, the government has an important role to play particularly in creating and maintaining a competitive environment. The government needs to coordinate policies to implement continued liberalization in tandem with necessary support measures that will address the obstacles to the entry, exit and growth of domestic firms, particularly small and medium enterprises.

Moreover, to effectively benefit from trade reforms, the government should substantially increase investment spending and strengthen its weak institutional and regulatory environment. If market reforms are to have their intended effects, "behind the border" complementary policies that define the business environment must be addressed including investment in human capital, infrastructure, the quality of governance in the country, improve the investment climate, and boost the country's competitiveness to enable us to catch up with our neighbors.

For the manufacturing industry, there is a need to strengthen the domestic parts and suppliers sector, particularly small and medium enterprises, and deepen their linkage with domestic large enterprises and multinational companies. Equally important is for manufacturing industries particularly electronics to move up the value chain and diversify the export base. Hence, there is a need for strategic industrial policy and carefully designed subsidies that would target improvement of firm level competitiveness such as innovation and research and development activities and human resource development.

Key Words: Philippine manufacturing, trade liberalization, strategic industrial policy

TWENTY YEARS AFTER PHILIPPINE TRADE LIBERALIZATION AND INDUSTRIALIZATION: WHAT HAS HAPPENED AND WHERE DO WE GO FROM HERE

Rafaelita M. Aldaba¹

I. Introduction

In its quest for industrialization, the postwar Philippine economy adopted a complex array of protective policies, investment incentive measures, and regulatory controls (see Table 1). Being one of the most favored industries by policy makers, the manufacturing sector received heavy protection through high tariffs, quantitative restrictions and regulatory policies that effectively controlled prices, domestic supply, and market entry. However, after more than three decades of protectionism and import substitution, the policies failed to provide an efficient mechanism for allocating domestic resources in the economy. It left a legacy that implied not only high levels of industrial concentration that sheltered domestic markets and concentration of economic wealth among a small number of families and groups but also the lack of a culture of competition in the country.

Beginning in the early 1980s, the Philippine government was prompted to implement policy reforms consistent with the requirements of a competitive market environment. To increase competition, the trade regime was liberalized by removing tariffs and non-tariff barriers. This was accompanied by privatization and deregulation policies that changed the set of rules governing economic activities in the country. Reforms were initiated not only in the financial sector but also in utilities covering telecommunications, power, water, air transport, and shipping. Investment liberalization was also pursued by allowing foreign investment in sectors that were not specified in the Negative List. A new Omnibus Investment Code was legislated to simplify the investment incentive system. All these reforms were aimed at removing barriers to competition and promoting factor mobility and firm growth to secure both high and sustained economic growth and rapid poverty alleviation.

The trade reforms from the eighties till the early nineties were pursued on a unilateral basis. Towards the mid-1990s, the tariffication and removal of import restrictions on agricultural products was achieved through the General Agreement on Tariffs and Trade-World Trade Organization (GATT-WTO). The latter was ratified by the Philippine Senate in 1994. In more recent years, however, the uncertainty in the successful conclusion of the World Trade Organization (WTO)'s multilateral trade negotiations has led to a new wave of

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regionalism through the surge in free trade agreements. Since 2004, no major unilateral tariff changes have been made; mostly the tariff reductions carried out were those covered by the ASEAN Free Trade Area-Common Effective Preferential Tariff (AFTA-CEPT) scheme. The Philippines has been active in participating in free trade agreements. Table 2 presents a list of concluded, under negotiation, and proposed free trade agreements (FTAs) of the Philippines. Currently, the country has a total of 12 FTAs, seven are concluded (Japan-Philippines, ASEAN-Korea, ASEAN-China, AFTA, ASEAN-Australia and New Zealand, ASEAN-India and ASEAN-Japan), one is under negotiation (ASEAN-EU) and four are proposed.

Table 1: Major Trade and Investment Policies

Time Line	Policy Regime	Policy Description
1950s-1970s	Import Substitution Phase	-Protectionist measures such as high tariffs,
		import quotas & other non-tariff barriers
	Restrictive Investment Policy	-Restricted foreign ownership to 40% in non-
		pioneer industries; 100% eligibility for
		foreign investment subject to Board of
		Investments' approval
		-Complicated investment incentive system
1980s-1990s	Unilateral Trade Liberalization	-Trade Reform Program (TRP) I: reduced
	Period	tariff range from 70-100% to 0-50%
		-TRP II: reduced tariff range to 3-30%
		-TRP III: further tariff changes towards a 5%
		uniform tariff
	Investment Liberalization	-1987 Omnibus Investment Code (Board of
		Investments)
		-1991 Foreign Investment Act
		-Creation of Philippine Economic Zone
		Authority (1995), Subic Bay Metropolitan
		Authority (1992), & Clark Development
		Corporation (1993)
	Multilateral/Regional Trade	-GATT-WTO (1995)
	Liberalization	-AFTA-CEPT (1993)
2000s	Trade Facilitation	-Customs reforms (since mid-1990s)
		-Revised Kyoto Convention (2009)
		-National Single Window (2010)
	Regionalism/Bilateralism	-China-ASEAN (2004); ASEAN-Japan
	through Free Trade Agreements	(2008); ASEAN-Korea (2006); ASEAN-
		Australia New Zealand; ASEAN-India
		-Japan Philippines Economic Partnership
		Agreement (2007)
		-ASEAN+3, ASEAN+6 Talks

Table 2: Philippine Free Trade Agreements

Concluded	Under Negotiation	Proposed
Japan-Philippines Economic	ASEAN-EU Free Trade	East Asian (ASEAN+3) Free Trade
Partnership Agreement	Agreement	Agreement
ASEAN-Korea Comprehensive		Comprehensive Economic
Economic Partnership		Partnership for East Asian
Agreement		(ASEAN+6)
ASEAN-China Comprehensive		United States-Philippines Free Trade
Economic Partnership		Agreement
Agreement		

ASEAN Free Trade Agreement	Pakistan-Philippines Free Trade
	Agreement
Japan-ASEAN Comprehensive	
Economic Partnership	
Agreement	
ASEAN-India Comprehensive	
Economic Partnership	
Agreement	
ASEAN-Australia and New	
Zealand Comprehensive	
Economic Partnership	
Agreement	

Source: Asia Regional Integration Center, www.aric.adb.org

The main objective of this paper is to review our trade liberalization policy and its contribution to the country's industrial growth and performance. The paper is divided into four sections, section two provides an overview of the country's trade policy tracing the major changes from the 1950s to the present along with changes in investment policy and a brief discussion of liberalization in the services sector. Section three follows with an analysis of the country's overall economic performance focusing on growth, industry structure, employment, exports, imports, productivity growth, and industrial concentration. Section four summarizes the findings and recommendations of the paper.

II. Major Trade and Investment Policy Reforms: A Review

A. Import Substitution Regime: 1950s to late 1970s

In the face of a balance of payments (BOP) crisis in 1949, the Philippines imposed import and foreign exchange controls. Initially, the objective of the import control system was to ration foreign exchange based on "essentiality" criterion. However, focus shifted from mainly BOP considerations to the protection of domestic industries which signaled the adoption of an industrialization policy of import substitution. The controls were retained throughout the 1950s and soon, a protective system emerged through the maintenance of an overvalued currency defended by protective tariffs and quantitative restrictions.

In 1957, a protective tariff structure was adopted which reduced duties on raw materials, intermediate goods, and essential goods that were not domestically available and increased duties on non-essential, finished goods and items that could be produced domestically. This led to the familiar escalation of the tariff structure which remained until the late 1980s. By the end of the 1950s, the scope for further import substitution was largely exhausted and the country's foreign exchange reserves were severely depleted. The resulting BOP difficulties and export lobbies resulted in the devaluation of the peso and decontrol on imports.

The import decontrol program had initial strong positive effect on the BOP from 1960 to 1962; however, the rapid rise in imports and declines in the country's terms of trade led to another large BOP deficits towards the end of the 1960s. Eventually, the BOP crisis led to the floating of the peso in 1970. Import controls on consumer goods were restored which resulted in a tremendous increase in import restrictions imposed during this period. In the beginning of the 1970s, there were 1,307 product lines that were covered by import restrictions. By the end of the decade, this rose to 1,820 product lines that were subject to import bans, import quotas, and import licenses.

Combined with high tariffs, the system of import controls created a highly protective and restrictive trade structure. Apart from these protectionist measures; various fiscal, administrative and regulatory policies were introduced to support and promote domestic industries. These included the granting of fiscal incentives like accelerated depreciation, net operating loss carry-over, tax exemption on imported capital equipment, tax credit on domestic capital equipment, tax credit for withholding tax on interest, exemption from all revenue taxes except income tax, and targeted lending by the Development Bank of the Philippines along with the imposition of regulations and controls on entry in "crowded industries". While these instruments promoted and stimulated investments in the early stages of industrialization, over time they came to impose barriers to resource mobility and encouraged rent-seeking behavior.

In evaluating the import substitution policy experience of the manufacturing industry in the late seventies; Bautista, Power and Associates (1979) concluded that the protectionist policies pursued by the country since the 1950s failed to provide an efficient mechanism for allocating domestic resources in the economy. At the end of the 1970s, the restrictive trade regime created unintended effects that were characterized by three major biases: (i) it led to an import-dependent import substituting policy that discouraged backward linkages and encouraged the use of artificially cheap imported inputs; (ii) it penalized exports; and (iii) it artificially cheapened capital which promoted greater capital intensity among domestic industries (Medalla 2002).

B. Major Trade Policy Reforms in Manufacturing: Early 1980s to Present

Since the early 1980s, the Philippines has liberalized its trade policy by reducing tariff rates and removing import quantitative restrictions (see Table 3). The first tariff reform program (TRP 1) initiated in 1981 substantially reduced the average nominal tariff and the high rate of effective protection that characterized the Philippine industrial structure. TRP I also reduced the number of regulated products with the removal of import restrictions on 1,332 lines between 1986 and 1989.

The second phase of the tariff reform program (TRP II) was launched in 1991. TRP II

introduced a new tariff code that further narrowed down the tariff range with the majority of tariff lines falling within the three to 30 percent tariff range. It also allowed the tariffication of quantitative restrictions for 153 agricultural products and tariff realignment for 48 commodities. With the country's ratification of the World Trade Organization (WTO) in 1994, the government committed to remove import restrictions on sensitive agricultural products except rice and replace these with high tariffs.

The government initiated another round of tariff reform (TRP III) in 1995 as a first major step in its plan to adopt a uniform five percent tariff by 2005. This further narrowed down the tariff range for industrial products to within three and ten percent range and reduced the ceiling rate on manufactured goods to 30 percent while the floor remained at three percent. It also created a four-tier tariff structure: three percent for raw materials and capital equipment which were not locally available, 10 percent for raw materials and capital equipment which were locally available, 20 percent for intermediate goods, and 30 percent for finished goods.

Table 3: Major Episodes of Trade Policy Reform in the Philippines

Year	Trade Reform	Description
1980	Tariff Reform Program I EO 609 and EO 632-A (January 1981)	TRP 1 reduced the level and dispersion of tariff rates from a range of zero to 100 percent in 1980 to a range of 10 percent to 50 percent and removed quantitative restrictions beginning in 1981 and ending in 1985
1990	EO 413 (July 1990)	EO 413 aimed to simplify the tariff structure by reducing the number of rates to four, ranging from 3 percent to 30 percent over a period of one year, but was not implemented.
1991	Tariff Reform Program II EO 470 (July 1991)	TRP II reduced the tariff range to within a three percent to 30 percent tariff range by 1995
1992	EO 8	EO 8 tariffied quantitative restrictions for 153 agricultural products and tariff realignment for 48 commodities
1995	Tariff Reform Program III	
	EO 264 (August 1995) EO 288 (December 1995)	EO 264 further reduced the tariff range to three percent and ten percent levels, reduced the ceiling rate on manufacture goods to 30 percent while the floor remained at three percent, and created a four-tier tariff schedule: three percent for raw materials, 10 percent for locally available raw materials and capital equipment, 20 percent for intermediate goods, and 30 percent for finished goods EO 288modified the nomenclature and import duties on non-sensitive agricultural products
1996	EO 313 (March 1996)	EO 313 modified the nomenclature and increased the tariff rates on sensitive agricultural products
	RA 8178	RA 8178 lifted the quantitative restrictions on three products and defined minimum access volume for these products
1998	EO 465 (January 1998) EO 486 (June 1998)	EO 465 corrected remaining distortions in the tariff structure and smoothened the schedule of tariff reduction in 23 industries identified as export winners EO 486 modified the rates on items not covered by EO 465
	EO 400 (Julie 1998)	EO 400 mounted the rates on items not covered by EO 405
1999	EO 63 (January 1999)	EO 63 adjusted the tariff rates on six industries Freezing of tariff rates at 2000 level until 2001

2001	EO 334 (January 2001) EO 11 (April 2001) EO 84 (March 2002) EO 91 (April 2002)	EO 334 adjusted the tariff structure towards a uniform tariff rate of 5 percent by the year 2004 EO 11 corrected the EO 334 tariff rates imposed on certain products EO 84 extended existing tariff rates from January 2002 to 2004 on various agricultural products EO 91 modified the tariff rates on imported raw materials, intermediate inputs, and machinery and parts
2003	EO 164 (January 2003) EO 241 (October 2003) EO 264 (December 203)	EO 164 maintained the 2002 tariff rates for 2003 covering a substantial number of products EO 241 and EO 264 adjusted tariff rates on finished products and raw materials and intermediate goods, respectively.

Source: Aldaba (2005)

In 1996, Republic Act 8178 legislated the tariffication of quantitative restrictions imposed on agricultural products and the creation of tariff quotas. Tariff quotas impose a relatively lower duty up to a minimum access level (or in-quota rate) and a higher duty beyond this minimum level (or out-quota rate). This brought down the percentage of regulated items from about four percent in 1995 to three percent of the total number of product lines in 1996. By 1997, most quantitative restrictions were lifted, with the important exception of rice.

Executive Order 465 was legislated in January 1998 to further refine the tariff structure and gradually implement the tariff reduction on 23 industries identified as export winners. EO 486, a comprehensive tariff reform package, was signed to modify the rates on product lines not covered by EO 465. However, after six months, Executive Order 63 was issued to increase the tariff rates on textiles, garments, petrochemicals, pulp and paper, and pocket lighters. It also froze tariff rates at their 2000 levels. In January 2001, EO 334, which was to constitute TRP IV, was passed to adjust the tariff structure towards a uniform tariff rate of 5 percent by the year 2004, except for a few sensitive agricultural and manufactured items. This was never implemented as a series of executive orders were passed to either postpone or increase tariff rates on selected products. In 2003, a comprehensive tariff review was carried out which culminated in the legislation of Executive Orders 241 and 264. These twin Executive Orders modified the whole tariff structure such that the tariff rates on goods that are not locally produced goods were made as low as possible while the tariff rates on locally produced goods were adjusted upward.

C. Impact of Trade Policy Changes on the Effective Protection Structure

As discussed in the preceding section, significant progress was made to reduce tariffs and remove import restrictions from the 1980s up to the mid-1990s. It is evident from Table 4 that the overall level of tariff rates is already low. Average tariff rate for all industries is 6.82 percent as of 2004. Agriculture has the highest average tariff rate of 11.3 percent. Unlike the rest of the sectors where ad valorem tariffs are applied, tariff quotas are used in agriculture. The average for manufacturing is almost the same as the average for all sectors at 6.8 percent.

Fishing and forestry has an average rate of six percent while mining and quarrying is the lowest at 2.5 percent.

Table 5 shows the declining weighted average tariff rates by more detailed industry sector from 1988 to 2004. High tariffs on tobacco and garments were substantially reduced from the highest level of 50% in 1988 to 10 and 15%, respectively in 2004. Other highly protected manufacturing sectors like leather products, textile, and furniture also experienced the same. In terms of frequency distribution, Figure 1 shows that in 2004, more than 50% of total number of tariff lines were already clustered in the 0 to 3% tariff range while 29% were in the 5 to 10% range. 13% were in the 15 to 20% tariff range, 1% in the 25 to 35% tariff range, and 2% in the 40 to 65% tariff range. Between 2002 and 2004, the number of lines in the 15 to 20% tariff range fell but those in the 25 to 35% range increased.

Table 4: Average Tariff Rates: 1998-2004

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	1998	1999	2000	2001	2002	2003	2004
All Industries	11.32	10.25	8.47	8.28	6.45	6.6	6.82
Coefficient of	0.05	0.04	0.00	4.04		1.05	4.05
variation	0.96	0.91	0.99	1.04	1.17	1.06	1.07
% of tariff peaks	2.24	2.24	2.48	2.5	2.69	2.53	2.71
No. of tariff lines	7,366						7,382
Agriculture Coefficient of	15.9	13.2	11.5	12.3	10.4	10.4	11.3
variation	1.07	1.14	1.3	1.23	1.31	1.22	1.17
Fishing & forestry	9.4	8.9	6.7	6.7	5.8	5.7	6
Coefficient of variation	0.63	0.7	0.66	0.62	0.45	0.48	0.57
Mining & quarrying Coefficient of	3.3	3.3	3.1	3.2	2.8	2.7	2.5
variation	0.42	0.41	0.24	0.23	0.38	0.4	0.48
Manufacturing Coefficient of	11.38	10.35	8.5	8.28	6.39	6.57	6.76
variation	0.93	0.88	0.95	1	1.13	1.03	1.03

Table 5: Weighted Average Tariff Rates

PSIC	Description	1988	1994	1998	2002	2004
01	Growing of Crops	42	38	28	20	21
02	Farming of Animals	25	21	25	20	19
03	Agricultural and Animal Husbandry	30	19	3	3	2
05	Forestry, Logging and Related Activities	21	16	3	3	3
06	Fishing, Aquaculture and Service	35	29	12	7	7
10	Metallic Ore Mining	26	6	3	3	3
11	Non-Metallic Mining and Quarrying	16	11	4	3	3
15	Food Products &Beverages	36	32	29	21	21
16	Tobacco Products	50	50	20	7	10
17	Textile	41	33	16	9	11

18	Wearing Apparel	50	50	25	15	15
19	Leather, Luggage, Handbags and Footwear	46	44	19	8	11
20	Wood, Wood Products & Cork	36	27	15	7	8
21	Paper and Paper Products Publishing, Printing and Reproduction of	33	23	13	6	5
22	Recorded Media	23	18	17	7	6
23	Coke, Refined Petroleum & other Fuel	16	11	4	3	3
24	Chemicals and Chemical Products	27	19	8	4	5
25	Rubber and Plastic Products	37	29	14	8	9
26	Other Non-Metallic Mineral products	37	23	12	5	7
27	Basic Metals Fabricated Metal Products, Except	20	16	8	4	4
28	Machinery and Equipment	31	26	13	7	7
29	Machinery and Equipment, n.e.c.	23	13	5	2	2
31	Electrical Machinery and Apparatus, n.e.c. Medical, Precision and Optical Instruments,	31	19	8	4	4
33	Watches and Clocks	23	18	6	3	3
34	Motor Vehicles, Trailers and Semi-Trailers	34	25	17	12	12
36	Furniture	47	33	21	12	13
37	Manufacturing ,n.e.c.	37	26	11	5	6

Note, however, that lower level of tariff rates does not always imply that the tariff schedule is less distorting. The economic and trade distortions associated with the tariff structure depend not only on the size of tariffs but also on the dispersion of these tariffs across all products. In general, the more dispersion in a country's tariff schedule, the greater the distortions caused by tariffs on production and consumption patterns. Common measures of dispersion used are percentage of tariff peaks and coefficient of variation. Tariff peaks are represented by the proportion of products with tariffs exceeding three times the mean tariff while the coefficient of variation is the ratio of the standard deviation to the mean.

3,500 3,000 2,500 2,000 1,500 1,000 500 0 to 3 5 to 10 15 to 20 25 to 35 40 to 65 80

Figure 1: Frequency Distribution of Tariff Rates

As Table 4 shows, while the average tariff rate for all industries dropped from 11.32 percent in 1998 to 6.82 percent in 2004, tariff dispersion widened as the coefficient of variation went up from 0.96 to 1.07. The ad valorem tariffs for mining and quarrying as well as those for fishing and forestry show the most uniformity while those for agriculture and manufacturing exhibit the most dispersion. Growing of crops (21%) and farming of animals (19%) along with food manufacturing (21%) have the highest weighted average tariffs (see Table 5). The first two sectors are inputs to food manufacturing. Meanwhile, electrical and non-electrical machinery have the lowest average tariff rates ranging from 2 to 4%.

Table 4 also indicates an increase in the percentage of tariff peaks (tariffs that are greater than three times the mean tariff) from 2.24 in 1998 to 2.71 in 2004. The sectors with tariff peaks consisted mostly of agricultural products with in- and out- quota rates. The sectors with tariff peaks consisted of sugarcane, sugar milling and refining, palay, corn, rice and corn milling, vegetables like onions, garlic, and cabbage, roots and tubers, hog, cattle and other livestock, chicken, other poultry and poultry products, slaughtering and meat packing, coffee roasting and processing, meat and meat processing, canning and preserving fruits and vegetables, manufacture of starch and starch products, manufacture of bakery products excluding noodles, manufacture of animal feeds, miscellaneous food products, manufacture of drugs and medicines, manufacture of chemical products, and manufacture and assembly of motor vehicles.

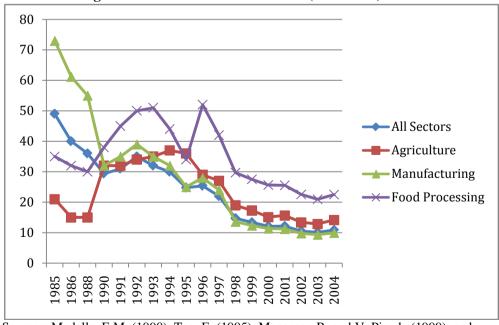


Figure 2: Effective Protection Rates (1985-2004)

Sources: Medalla, E.M. (1990), Tan, E. (1995), Manasan, R. and V. Pineda (1999), and Aldaba, R. (2005).

Compared to tariff rates, effective protection rates (EPRs)² provide a more meaningful indicator of the impact of the system of protection. EPRs measure the net protection received by domestic producers from the protection of their outputs and the penalty from the protection of their inputs. Figure 2 shows that average effective protection rates for all sectors declined from 49% in 1985 to 36% in 1988. In 1995, this further dropped to around 25% and to 15% in 1998 and to 10.9% in 2004.

Note that while the average effective protection rates for all sectors declined, substantial differences in average protection across sectors still prevail. With the tariffication of quantitative restrictions in agricultural products in 1996, a shift in relative protection occurred which resulted in higher protection for the agriculture sector relative to the manufacturing industry. Though the two sectors had almost the same EPR in 1993, in succeeding years, the agriculture sector received much higher protection than the manufacturing sector. In 1995, agriculture had an EPR of 36 percent while manufacturing had 25 percent. This gap was narrowed in 1997 as agriculture EPR dropped to 27 percent while manufacturing EPR was 24 percent. Within manufacturing, wide disparities in effective protection have also been present. Food processing has remained the most highly protected sub-sector over the last twenty years.

Table 6: Average Effective Protection Rate

	1998	1999	2000	2001	2002	2003	2004
All Sectors	14.75	13.41	12.13	12.18	10.55	10.11	10.88
Importable	25.64	23.45	21.21	21.11	18.82	18.05	19.09
Exportable	3.45	2.99	2.72	2.92	1.98	1.88	2.36
CV	2.82	2.91	3.21	2.19	2.13	2.23	2.27
Agriculture, Fishing, & Forestry	18.98	17.29	15.12	15.63	13.38	12.86	14.15
Importable	22.67	20.35	19.01	19.48	17.97	17.26	18.09
Exportable	15.36	14.29	11.31	11.85	8.89	8.55	10.30
CV	0.75	0.71	0.77	0.83	0.88	0.82	0.77
Mining	2.52	2.60	2.65	2.67	2.41	2.36	2.28
Importable	3.86	3.80	3.44	3.33	2.77	2.71	2.57
Exportable	2.01	2.15	2.35	2.42	2.28	2.23	2.17
CV	0.79	0.76	0.68	0.66	0.68	0.69	0.69
Manufacturing	13.61	12.34	11.37	11.23	9.79	9.36	9.96
Importable	27.30	25.10	22.48	22.17	19.53	18.72	19.87
Exportable	-1.57	-1.81	-0.96	-0.89	-1.02	-1.02	-1.04
CV	3.27	3.40	3.68	2.54	2.45	2.58	2.64

Source: Manasan, R. &V.Pineda (1999), Aldaba (2005).

Note: CV or coefficient of variation is the ratio of the standard deviation to the mean.

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² EPRs are rates of protection of value added, are more meaningful than actual tariff rates and implicit tariff rates (representing excess of domestic price of a product over its international price) since it is value added rather than the value of the product that is contributed by the domestic activity being protected.

Table 6 presents the average EPR for the years 1998 to 2004. Though the average EPR for all industries is already relatively low, protection continues to be uneven as indicated by the high levels of coefficients of variation particularly in manufacturing. After falling from 3.68 in 2000 to 2.54 in 2001, it increased to 2.64 in 2004. Among the major economic sectors, agriculture continued to enjoy the highest level of protection from 1998 to 2004. Protection of importables also remained relatively higher than exportables. Manufacturing exportables continued to register negative EPRs indicating that they are penalized by the system of protection.

Table 7 presents weighted average effective protection rates (EPRs) by more detailed industry sector. In 2004, the calculated EPRs ranged from negative rates to 35%. Export-oriented sectors such as machinery and equipment (-0.08%), and basic metals (-2%) were penalized by the system of protection as indicated by their negative EPRs (which may be due to tariffs on their inputs being higher than tariffs on the final outputs). The other penalized sectors were wearing apparel; leather; electrical machinery & apparatus, nec; medical precision and optical instruments; and other manufacturing sectors.

In absolute terms, the average EPR for all industries is already low. However, the average figures hide a lot of variation. The country's effective protection has continued to discriminate in favor of some industries and against others and in favor of sales in the domestic market against sales in other markets. This implies a strong incentive to misallocate resources. There are two elements of bias in the effective protection structure, one is the bias in favor of agriculture and food manufacturing and two, anti-export bias (artificial incentive to produce for the domestic market) or penalty imposed on exports as they continue to receive negative protection. That these industries have continued to survive suggests that they are economically efficient. This is in contrast to those sectors that have received relatively higher protection but have not exported to any significant extent. To address the problem of exporters being disadvantaged by the system of protection, the government has provided incentive mechanisms such as duty drawbacks, bonded manufacturing warehouses, and export processing zones to allow exporters duty-free importation of inputs.

Table 7: Average Effective Protection Rates

PSIC	Description	1988	1994	1996	1998	2002	2004
01	Growing of Crops	9.58	23.28	26.50	17.82	11.34	12.67
02	Farming of Animals Forestry, Logging and Related	16.55	12.27	12.63	40.38	35.67	35.11
05	Activities Fishing, Aquaculture and Service Activities Incidental to	-20.23	11.52	10.89	3.15	2.91	2.65
06	Fishing	5.24	19.30	4.66	11.11	5.99	6.66
10	Metallic Ore Mining Non-Metallic Mining and	0.16	-2.19	-1.25	2.16	2.44	2.33
11	Quarrying	17.20	14.02	6.16	3.30	2.37	2.19

15		Manufacture of Food Products						
Products	15		27.90	37.25	42.37	29.70	22.54	22.49
Manufacture of Textile Manufacture of Wearing Manufacture of Wearing								
Manufacture of Wearing Apparel	16	Products	61.12	52.68	31.00	20.02	6.57	11.21
Apparel	17	Manufacture of Textile	44.24	18.72	11.80	12.07	6.67	7.70
Tanning and Dressing of Leather; Manufacture of Luggage, Handbags and Pootwear Manufacture of Wood, Wood Products and Cork, Except Eurniture; Manufacture of Manufacture of Paper and Paper Including Products Furniture; Manufacture of Manufacture of Paper and Paper Including Printing and Reproduction of Recorded Media Reproduction of Recorded Ads.80 Reproducts Peroducts Products Manufacture of Coke, Refined Petroleum and other Fuel Products Manufacture of Chemicals and Chemical Products Manufacture of Rubber and Plastic Products Manufacture of Other Non- Metallic Mineral products Manufacture of Basic Metals Manufacture of Basic Metals Manufacture of Pabricated Metal Products, Except Manufacture of Machinery and Manufacture of Machinery and Manufacture of Machinery and Manufacture of Machinery and Manufacture of Machinery and Apparatus, n.e.c. Manufacture of Motor Vehicles, Manufacture and Repair of Manufacture and Repair of Furniture Manufacture and Repair of Furniture Manufacture and Repair of Furniture Manufacture and Repair of Manufacture and Repair of Furniture Manufacture and Repair of Manufacture of Motor Vehicles, Manufacture and Repair of		Manufacture of Wearing						
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Luggage, Handbags and Footwear O.77 22.09 13.19 -0.72 -0.85 -0.47								
Footwear 0.77 22.09 13.19 -0.72 -0.85 -0.47 Manufacture of Wood, Wood Products and Cork, Except 20 Furniture; Manufacture of Paper and Paper 21 Products 177.50 24.06 19.63 6.89 2.60 2.57 Publishing, Printing and Reproduction of Recorded 436.80 19.92 18.52 6.79 2.65 1.71 Manufacture of Coke, Refined Petroleum and other Fuel 23 Products 40.40 15.33 4.54 2.04 1.84 1.83 Manufacture of Chemicals and 24 Chemical Products 226.58 14.64 9.45 5.00 2.88 3.45 Manufacture of Rubber and 25 Plastic Products 40.08 25.79 19.80 2.87 0.77 0.88 Manufacture of Other Non- 26 Metallic Mineral products 48.03 25.72 13.62 14.00 5.34 7.00 Manufacture of Basic Metals 70.76 11.77 6.18 -2.41 -1.68 -1.72 Manufacture of Fabricated Metal Products, Except 28 Machinery and Equipment 71.10 31.87 28.09 8.99 4.20 5.11 Manufacture of Electrical 31 Machinery and Apparatus, n.e.c. 41.88 1.65 2.31 -0.24 -0.14 -0.08 Manufacture of Medical, Precision and Optical Instruments, Watches and 33 Clocks 19.96 21.05 15.60 -1.02 -0.55 -0.59 Manufacture and Repair of 41.80 13.59 13.69 27.99 15.96 16.33 36 Furniture 41.30 31.59 31.69 27.99 15.96 16.33 36 50.00 30								
Manufacture of Wood, Wood Products and Cork, Except Furniture; Manufacture of Paper and Paper Products 177.50 24.06 19.63 6.89 2.60 2.57 Publishing, Printing and Reproduction of Recorded Reproducts Reprod	4.0		0.77	22.00	12.10	0.70	0.07	0.45
Products and Cork, Except Furniture; Manufacture of 26.94 17.90 20.02 2.96 0.68 0.91	19		0.77	22.09	13.19	-0.72	-0.85	-0.47
Furniture; Manufacture of Manufacture of Paper and Paper								
Manufacture of Paper and Paper Products 177.50 24.06 19.63 6.89 2.60 2.57 Publishing, Printing and Reproduction of Recorded	20		26.04	17.00	20.02	2.06	0.60	0.01
Products	20		26.94	17.90	20.02	2.96	0.68	0.91
Publishing, Printing and Reproduction of Recorded A36.80 19.92 18.52 6.79 2.65 1.71	21		177.50	24.06	10.62	6.80	2.60	2.57
Reproduction of Recorded Media	21		177.30	24.00	19.03	0.89	2.00	2.37
22 Media Manufacture of Coke, Refined Petroleum and other Fuel 436.80 19.92 18.52 6.79 2.65 1.71 23 Products Manufacture of Chemicals and 24 40.40 15.33 4.54 2.04 1.84 1.83 24 Chemical Products Manufacture of Rubber and 25 226.58 14.64 9.45 5.00 2.88 3.45 25 Plastic Products Manufacture of Other Non- 26 48.03 25.79 19.80 2.87 0.77 0.88 27 Manufacture of Basic Metals Metall Products, Except Metal Products, Except 48.03 25.72 13.62 14.00 5.34 7.00 28 Machinery and Equipment Manufacture of Machinery and 71.10 31.87 28.09 8.99 4.20 5.11 29 Equipment, n.e.c. Manufacture of Electrical 41.88 1.65 2.31 -0.24 -0.14 -0.08 31 Machinery and Apparatus, n.e.c. Manufacture of Medical, Precision and Optical Instruments, Watches and 19.96 21.05 15.60 -1.02 -0.55 -0.59 34 T								
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Petroleum and other Fuel Products	22		130.00	17.72	10.32	0.77	2.03	1.71
Manufacture of Chemicals and 24 Chemical Products 226.58 14.64 9.45 5.00 2.88 3.45 Manufacture of Rubber and 25 Plastic Products 40.08 25.79 19.80 2.87 0.77 0.88 Manufacture of Other Non- 48.03 25.72 13.62 14.00 5.34 7.00 27 Manufacture of Basic Metals Metals Products, Except 70.76 11.77 6.18 -2.41 -1.68 -1.72 28 Machinery and Equipment Manufacture of Machinery and Equipment Manufacture of Machinery and Equipment Manufacture of Electrical 71.10 31.87 28.09 8.99 4.20 5.11 31 Machinery and Apparatus, n.e.c. Manufacture of Electrical Instruments, Watches and 9.60 12.76 7.42 -2.08 -0.54 -0.68 33 Clocks Manufacture of Motor Vehicles, Manufacture of Motor Vehicles, Manufacture and Semi-Trailers Manufacture and Repair of 25.50 26.31 19.60 18.55 15.84 15.70 36 Furniture 1.30 13.59 13.69 27.99								
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27 Manufacture of Basic Metals Manufacture of Fabricated Metal Products, Except 70.76 11.77 6.18 -2.41 -1.68 -1.72 28 Machinery and Equipment Machinery and Equipment, n.e.c. 71.10 31.87 28.09 8.99 4.20 5.11 29 Equipment, n.e.c. Manufacture of Electrical 41.88 1.65 2.31 -0.24 -0.14 -0.08 31 Machinery and Apparatus, n.e.c. Manufacture of Medical, Precision and Optical Instruments, Watches and 7.42 -2.08 -0.54 -0.68 33 Clocks Manufacture of Motor Vehicles, Manufacture of Motor Vehicles, Manufacture and Semi-Trailers Manufacture and Repair of 25.50 26.31 19.60 18.55 15.84 15.70 36 Furniture 1.30 13.59 13.69 27.99 15.96 16.33								
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Precision and Optical Instruments, Watches and	31		9.00	12.70	7.42	-2.08	-0.54	-0.08
Instruments, Watches and 33 Clocks 19.96 21.05 15.60 -1.02 -0.55 -0.59 Manufacture of Motor Vehicles, 34 Trailers and Semi-Trailers 25.50 26.31 19.60 18.55 15.84 15.70 Manufacture and Repair of 36 Furniture 1.30 13.59 13.69 27.99 15.96 16.33		· · · · · · · · · · · · · · · · · · ·						
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Manufacture of Motor Vehicles, 34 Trailers and Semi-Trailers 25.50 26.31 19.60 18.55 15.84 15.70 Manufacture and Repair of 1.30 13.59 13.69 27.99 15.96 16.33	33		19.96	21.05	15.60	-1.02	-0.55	-0.59
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Manufacture and Repair of 36 Furniture 1.30 13.59 13.69 27.99 15.96 16.33	34	· · · · · · · · · · · · · · · · · · ·	25.50	26.31	19.60	18.55	15.84	15.70
27 M C	36	Furniture	1.30	13.59	13.69	27.99	15.96	16.33
3/ Manufacturing ,n.e.c58./3 13.45 9.61 -1.23 -0.71 -0.75	37	Manufacturing ,n.e.c.	-58.73	13.45	9.61	-1.23	-0.71	-0.75

D. Investment Policy Reforms

Trade and investment policies have been the major policy tools for industrialization in the Philippines. In the area of investment, the government provided generous fiscal incentives to selected industries initially through the 1967 Investment Incentives Act (Republic Act 5186). This also created the Board of Investments which was empowered to determine preferred areas of investment through its Investment Priorities Plan (IPP) and to administer the granting of incentives. The following incentives were provided to eligible domestic enterprises: deduction of organizational and preoperating expenses from taxable

income, accelerated depreciation, net operating loss carryover, tax exemption on imported capital equipment, tax credit on domestic capital equipment, tax credit for withholding tax on interest and deduction for expansion of investment. "Pioneer enterprises" were exempted from all internal revenue taxes except income tax and could receive post-operative tariff protection.

Between 1970 and 1987, several amendments were introduced which culminated with the legislation of the present Executive Order 226 of 1987 or the Omnibus Investment Code (OIC). This simplified and consolidated previous investment laws and added two new measures: income tax holiday for enterprises engaged in preferred areas of investment and labor expense allowance for tax deduction purposes. The 1987 OIC provides uniform incentives with minor exemptions for exporters and importers. The incentives include the following: income tax holiday from three to eight years, exemption from taxes and duties on imported equipment and accompanying parts, deduction from taxable income of 50% of annual incremental labor expense for a period of five years, and credit for tax and duties paid on supplies, raw materials, and semi-manufactured products used in producing exports.

With respect to foreign direct investment, the 1967 Investment Incentives Act restricted foreign ownership in non-pioneer industries up to forty (40) percent equity. The ownership requirement rule was relaxed if the enterprise is engaged in a pioneer activity³ or if it exported at least seventy (70) percent of its production. Under the Foreign Business Regulations Act of 1968, foreign investments that were not registered under the Investment Incentives Act and whose equity participation exceeded thirty (30) percent equity required these enterprises to obtain prior authority from the BOI. The 1987 Code allowed foreign and domestic investors to avail of fiscal and non-fiscal incentives provided they invest in preferred areas of investment identified annually in the Investment Priorities Plan (IPP). If the areas of investment are not listed in the IPP, they may still be entitled to incentives, provided:

- at least 50% of production is for exports, for Filipino-owned enterprises; and
- at least 70% of production is for export, for majority foreign-owned enterprises (more than 40% of foreign equity).

Towards the 1990s, the attitude and policy direction of the Philippines toward foreign direct investment changed considerably. Given the decline in commercial bank loans and foreign aid in the 1980s, the government realized the need to rely more on foreign direct

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³ Pioneer projects are those which (i) engage in the manufacture, processing or production; and not merely in the assembly or packaging of goods, products, commodities or raw materials that have not been or are not being produced in the Philippines on a commercial scale; (ii) use a design, formula, scheme, method, process or system of production or transformation of any element, substance or raw materials into another raw material or finished goods which is new and untried in the Philippines; (iii) engage in the pursuit of agricultural, forestry, and mining activities considered as essential to the attainment of the national goal; and (iv) produce unconventional fuels or manufacture equipment which utilizes non conventional sources of energy. Non-pioneer projects include those that are engaged in common activities in the Philippines and do not make use of new technology.

investments to achieve sustainable economic growth. At the same time, the government recognized the need to expand exports and the potential economic contribution of FDI through the transfer of knowledge and experience. The nineties witnessed a policy shift as the Philippines adopted more open and flexible policies toward FDI. This was almost carried out simultaneously with the country's market-oriented reforms consisting of trade liberalization, privatization, and economic deregulation in the 1980s up to 1990s. The country accelerated the FDI liberalization process through the legislation of Republic Act 7042 or the Foreign Investment Act (FIA) in June 1991.

The FIA considerably liberalized the existing regulations by allowing foreign equity participation up to 100% in all areas not specified in the Foreign Investment Negative List (FINL) which originally consisted of three component lists: A, B, and C.

List A: consists of areas reserved for Filipino nationals by virtue of the Constitution or specific legislations like mass media, cooperatives or small-scale mining.

List B: consists of areas reserved for Filipino nationals by virtue of defense, risk to health moral, and protection of small and medium scale industries.

List C: consists of areas in which there already exists an adequate number of establishments to serve the needs of the economy and further foreign investments are no longer necessary.

Prior to this, 100% eligibility for foreign investment was subject to the approval of the Board of Investments. The FIA was expected to provide transparency by disclosing in advance, through the FINL, the areas where foreign investment is allowed or restricted. It also reduced the bureaucratic discretion arising from the need to obtain prior government approval whenever foreign participation exceeded 40%.

Over time, the negative list has been reduced significantly. In March 1996, RA 7042 was amended through the passing of RA 8179 which further liberalized foreign investments allowing greater foreign participation in areas that were previously restricted. This abolished List C which limited foreign ownership in "adequately served" sectors. Currently, the FIA has two components Lists A and B covering sectors where foreign investment is restricted below 100%, those falling under the Constitution or those with restrictions mandated under various laws.

The mid-1990s witnessed the liberalization of the banking and retail trade sectors. The 1994 Foreign Bank Liberalization allowed the establishment of ten new foreign banks in the Philippines. With the legislation of the General Banking Law (RA 8791) in 2000, a seven-year window has been provided during which foreign banks may own up to 100 percent of one locally-incorporated commercial or thrift bank (with no obligation to divest later).

To develop international financial center operations in the Philippines and facilitate the flow of international capital into the country, foreign banks have been allowed to establish offshore banking units (OBUs). Incentives have also been offered to multinationals that establish regional headquarters (RHQ) or a regional operating headquarters (ROHQ) in the Philippines. Both RHQs and ROHQs are entitled to the following incentives: exemption from all taxes, fees, or charges imposed by a local government unit except real property tax on land improvements and equipment; tax and duty free importation of training materials and equipment; and direct importation of new motor vehicles, subject to the payment of the corresponding taxes and duties.

In March 2000, the legislation of the Retail Trade Liberalization Act (Republic Act 8762) allowed foreign investors to enter the retail business and own them 100% as long as they put up a minimum of US\$7.5 million equity. Singapore and Hong Kong have no minimum capital requirement while Thailand sets it at US\$250,000. A lower minimum capitalization threshold (\$250,000) is allowed to foreigners seeking full ownership of firms engaged in high-end or luxury products. R.A. 8762 also allowed foreign companies to engage in rice and corn trade.

While substantial progress has been made in liberalizing the country's FDI policy, certain significant barriers to FDI entry still remain The sectors with foreign ownership restriction include mass media, land ownership where foreign ownership is limited to 40%, natural resources, firms that supply to government-owned corporations or agencies (40%), public utilities (40%), and Build-Operate-Transfer (BOT) projects (40%).

In the 1990s, several other laws containing investment incentive packages were legislated; the most important of which are RA 7227 known as the Bases Conversion and Development Act of 1992 and RA 7916 or the Special Economic Zone Act of 1995. RA 7227, or the Bases Conversion and Development Act of 1992, was enacted into law in March 1992 with the objective of accelerating the development of the former United States military bases into special economic zones. The Act created two administrative bodies, the Bases Conversion and Development Authority (BCDA) and the Subic Bay Metropolitan Authority (SBMA), tasked with adopting, preparing and implementing a comprehensive development program for the conversion of the Clark and Subic military reservations into special economic zones. The BCDA is mandated to oversee and implement the conversion and development of Clark and other military stations; while the SBMA is mandated to oversee the implementation of the development programs of the Subic Bay Naval Station and surrounding communities. In 1993, Executive Order No. 80 was issued establishing the Clark Development Corporation (CDC) as the implementing arm of the BCDA for the Clark Special Economic Zone. In July 2005, the Supreme Court revoked the incentives for Clark locators under RA 7227; although these were restored through an amendment of RA 7227 in 2007.

In 1995, RA 7916 was legislated to shift the focus away from government EPZs towards private industrial zones. Focus has also shifted from the traditional EPZ in which firms must be 100 % export-oriented and engaged in recognized manufacturing activities

towards industrial parks which allow all industries regardless of market orientation and a separate, fenced-in EPZ for wholly export-oriented firms. Republic Act 7916 also replaced the EPZA and created the Philippine Economic Zone Authority (PEZA) to manage and operate government-owned zones and administer incentives to special economic zones (ecozones). RA 7916 allowed greater private sector participation in zone development and management through the provision of incentives for private zone developers and operators. Zone developers are allowed to supply utilities to tenants by treating them as indirect exporters. Activities permitted within the economic zones have also been expanded.

The current system is characterized by different investment regimes administered by different government bodies consisting of Board of Investments, Philippine Economic Zone Authority, Subic Bay Metropolitan Authority, Clark Development Corporation, and other bodies mandated by various laws to establish, maintain, and manage special economic or free port zones. Table 8 presents a comparison of the major incentives provided by the different investment incentive-giving bodies. BOI-registered enterprises are allowed income tax holiday up to eight years, tax and duty free importation of spare parts, and tax credit on raw materials. Under EO 226, the incentives of importing capital equipment duty and tax free and tax credit on purchase of domestic capital equipment expired in 1997. After the lapse of the income tax holiday, the regular corporate tax rate of 32% will apply to BOI enterprises. PEZA grants the most generous incentives including income tax holiday, basic income tax rate of 5% of gross income, and tax and duty free importation of capital equipment, spare parts, and raw material inputs. Except for the income tax holiday, Clark⁴ and Subic enterprises enjoy the same incentives available to PEZA enterprises.

Table 8: FDI Incentives by Type of Investment Regime

	Investment Regime	BOI OIC	PEZA	SBMA & CSEZ
	Income	4-8 years ITH	4-8 years ITH	No ITH
Incentives	Others	After ITH, payment of the regular corporate tax rate	After ITH, exemption from national & local taxes, in lieu of this special rate of 5% tax on gross income	5% tax on gross income in lieu of all local & national taxes
	Importation of raw materials & supplies	Tax credit	Tax & duty exemption	Tax & duty exemption
	Purchase of breeding stocks & genetic materials	Tax exemption within 10 years from registration	Tax & duty exemption	Tax & duty exemption

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⁴ The October 2004 and July 2005 rulings of the Supreme Court nullified the fiscal incentives given by four special economic zones including the Clark Special Economic Zone (CSEZ). In March 2006, Presidential Proclamation 1035 was signed declaring the CSEZ as a PEZA Special Economic Zone. Still, with the Supreme Court decision all locators would be subject to back taxes and duties. The House of Representatives passed two bills seeking to regain the fiscal incentives and provide tax amnesty. Currently, the bills are in the Senate for deliberation.

ſ	Imported capital	Tax & duty exemption on	Tax & duty exemption	Tax & duty
	equipment, spare parts,	spare parts (duty & tax		exemption
	materials & supplies	free importation of		
		capital equipment expired		
		in 1997) ⁵		
		·		

E. Liberalization in the Services Sector

Unlike goods, services, which are generally intangible, do not have tariffs. Instead, service industries are characterized by government-imposed restrictions such as the regulation of both market access and the nature and scope of operations of service providers. Considerations relating to consumer protection, high fixed (sunk) costs (increasing returns to scale), prudential supervision, and regulatory oversight, often induce governments to put in place measures that regulate the cross-border trade in services, require domestic establishment by foreign providers in certain service sectors, or reserve activities for government-owned or controlled entities (Hoekman 2006).

In general, barriers to trade in services are classified in terms of whether they restrict market access in general (e.g., a policy that limits the number of service providers) or specifically affect foreign services suppliers by refusing them national treatment (e.g., a policy that limits foreign equity ownership). Regulatory restrictions can reduce competition and efficiency in the services sector. Entry barriers reduce competition and allow incumbent firms to engage in rent-seeking behavior.

In the Philippines, the first wave of reforms took place in 1987 with the opening up of generation under the power sector. This abolished the monopoly of the government-owned National Power Corporation by allowing private sector to invest and participate in augmenting generation capacity. In 1990, the first build-operate-transfer (BOT) in Asia was passed. In 2001, the Electric Power Industry Reform Act (EPIRA) was legislated. It restructured the industry by allowing competition in generation and supply and regulating transmission and distribution.

Another wave of reforms occurred in the early 1990s with the liberalization of the telecommunications industry which was dominated by a private monopoly for more than half a century. The shipping industry was also liberalized with the deregulation of first and second class passage rates. Subsequently, surcharges for insurance premiums were abolished while freight rates for cargoes were deregulated.

In the mid-1990s, the air transport industry was also deregulated thus challenging the supremacy of the country's only designated flag carrier, Philippine Airlines. Restrictions on domestic routes and frequencies and government controls on rates and charges were eliminated. In the late 1990s, the water sector was privatized through competitive bidding

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⁵ Executive Order 313 (2004) restored these incentives.

won by two firms which were granted concessions to bill and collect water and sewerage services in two separate areas for 25 years. As early as the 1980s, the financial sector was undergoing reforms through the liberalization of interest rates and the easing of restrictions on the operations of financial institutions. In 2000, the General Banking Law was enacted to allow a seven-year window for foreign banks to own up to 100% of one locally-incorporated commercial or thrift bank.

In general, these reforms were crucial in introducing competition in these sectors as well as in disciplining incumbent monopolies. However, by themselves, these policies are not sufficient to ensure that markets perform efficiently. In the absence of clear rules and appropriate regulatory framework as well as efficient regulators, effective competition cannot be guaranteed. In telecommunications, interconnection remains a regulatory challenge. In air transport, reforms need to be deepened through an open skies policy. In shipping, the regulatory framework and competition laws need to be drawn.

Moreover, entry barriers are prevalent with constitutional restrictions limiting foreign equity participation to 40%. Table 10 presents a list of government restrictions and regulations on the services sectors. Foreigners are not allowed to own land but can lease for a maximum of 75 years.

Table 9: Government Restrictions and Regulations in the Services Sector

Sector	Government Restrictions/Regulations					
Wholesale and retail	-Foreigners are not allowed to own land but can lease for a maximum of 75					
trade	years.					
	-Foreign investment is not allowed in certain categories such as retail trade enterprises with paid-up capital of less than US\$2.5 million or less than \$250,000 or retailers of luxury goods. Full foreign participation is allowed for retail trade enterprises with paid-up capital above these levels. -Foreign investors are also required to comply with performance requirements: the Retail Trade Liberalization Act 2000 requires foreign retailers, for ten years after the bill's enactment, to source at least 30% (for retail enterprises capitalized at no less than US\$2.5 million) or 10% (for those specializing in luxury goods) of their inventory, by value, in the Philippines.					
Telecommunications	-The Philippine Constitution limits foreign ownership to 40% -Foreigners are restricted from serving as executives or managers of telecommunications companies -The proportion of foreign directors in telecommunications companies may not exceed that of the foreign component of a company's capital stock -Foreign equity in private radio communications networks is constitutionally limited to 20% -Operation of cable television and other forms of broadcasting and media are also reserved for Philippine nationals.					
Maritime	-Foreign equity limits to 40% -Monopolistic structure of public ports controlled by the Philippine Ports Authority					
Air Transport	-Foreign equity limits to 40%					
Road	-Foreign equity limits to 40%					
Electricity	-Foreign equity limits to 40%					

Water	-Foreign equity limits to 40%
Health services	-Foreign equity ownership limited to 40% for hospitals -Full foreign ownership allowed for health maintenance organizations
Postal services	-Government Monopoly

III. Analysis of Changes in Economic Growth, Performance, and Structure

A. Overall Economy

Figure 3 presents a historical picture of GDP annual growth rate that is characterized by a boom-bust cycle. The 1950s represented the best decade with GDP growth average of 6.2% (see also Table 10). From the seventies to the nineties, the Philippines experienced three major crises: the first occurred in 1984 when the GDP shrank by 7.3 % followed by another crisis in 1991 when GDP contracted by 0.6% and again in 1998 when GDP shrank by 0.6%. The 1980s, marked as the lost decade, witnessed the country's average growth rate plummet to 1.7%. This placed the Philippines significantly below its neighbors who were able to attain respectable growth rates during the same period. The 1990s to 2000s witnessed the economy's attempt to recover and catch up with its neighbors.

Figure 3: Gross Domestic Product, 1951-2011

Source: National Accounts of the Philippines, National Statistical Coordination Board

Table 10 presents the average growth rates of the economy from the 1950s to the 2000s. While the industry sector was the best performer in terms of average annual growth rate from the 1950s to the 1970s, the services sector has become the most important sector in the succeeding decades. Both agriculture and industry, manufacturing in particular, experienced sluggish growth in the 1980s and 1990s; modest gains were registered in the

current period. In contrast, the average growth rate of the services sector increased particularly in the last two decades as its average growth rate went up from 3.6% in the 1990s to 5.6% in the 2000s. Broad growth took place in the services sector as most of its sub-sectors registered consistently rising growth rates in the same periods under review.

Table 10: Average Growth Rates by Sector (in %, at constant 1985 prices)

Year	1951-60	1961-70	1971-80	1981-90	1991-00	2001-11
Gross Domestic Product	6.2	4.8	5.7	1.7	3.0	4.7
1. Agriculture, Fishery, Forestry	4.8	4.2	3.9	1.1	1.8	2.9
Agriculture industry	4.8	1.0	5.7	2.0	2.2	2.9
Forestry		2.6	-3.6	-9.1	-16.7	-2.3
2. Industry Sector	7.1	5.5	7.6	0.3	3.0	4.1
Mining & Quarrying	8.7	7.1	6.1	1.9	-0.2	12.2
Manufacturing	9.4	5.7	5.9	0.9	2.5	3.9
Construction	-0.6	4.2	14.1	-3.1	4.3	3.9
Electricity, Gas and Water	4.3	5.4	11.6	4.1	5.6	4.2
3. Service Sector	6.7	4.7	5.2	3.3	3.6	5.6
Transport, Comm'n & Storage	7.6	5.6	7.2	3.4	5.1	6.8
Trade		4.9	5.7	3.0	3.5	5.2
Finance*	6.4*	-16.5	8.7	2.2	4.4	7.1
Dwellings & Real Estate		1.4	1.6	2.4	1.9	6.2
Private Services	7.2	-1.8	5.0	5.0	3.6	5.2
Government Services		7.6	4.3	3.6	2.9	3.0

Source of basic data: National Accounts of the Philippines, National Statistical Coordination Board *: figure refers to combined finance and trade sectors

Since the 1980s, industrial growth has been very slow with virtually no growth in the 1980s. In the 1990s, the sector posted an average annual growth rate of 3 percent. It grew by 4.1 percent in the period 2001-2011. Manufacturing registered an average annual growth rate of 0.9 percent in the 1980s, 2.5 percent in the 1990s, and 3.9 percent in the recent period.

Within the services sector, the transportation, communication, and storage as well as finance and private services sub-sectors have registered continuously rising growth rates since the 1980s. In the current period, finance posted the highest average growth rate of 7.1 percent. Transportation, communication, and storage was next with an average growth of 6.8 percent. This was followed by dwellings and real estate with an average growth rate of approximately 6.2 percent.

Table 11 shows a declining trend in the value added share of the agriculture sector as its share dropped from 33 percent in the 1950s to 26 percent in the 1970s. In the last two decades, its average share fell slightly from 20.8 percent in the 1990s to 13 percent in the 2000s. While the average share of manufacturing value added was rising from 22% in the 1950s to 28% in the 1970s, this declined to 26% in the 1980s, to around 24 percent in the 1990s and 2000s.

Table 11: Value Added Structure by Major Economic Sector

Year	1951-60	1961-70	1971-80	1981-90	1991-00	2001-11
Agriculture, Fishery, Forestry	32.5	29.7	25.6	23.9	20.8	13.0
Agriculture industry	32.5	26.5	20.7	22.1	20.5	11.9
Forestry		8.2	4.9	1.8	0.3	0.1
Industry Sector	30.6	32.6	38.3	38.0	34.1	32.7
Mining & Quarrying	1.2	1.1	1.4	1.7	1.3	1.0
Manufacturing	22.3	25.6	28.2	26.3	24.3	23.2
Construction	6.1	5.0	7.1	7.3	5.5	5.0
Electricity, Gas and Water	1.1	1.0	1.7	2.7	3.0	3.6
Service Sector	38.3	38.4	36.6	40.4	42.4	54.3
Transportation, Communication &						
Storage	3.7	4.0	4.7	5.5	6.0	7.7
Trade		13.0	12.8	14.4	15.0	16.5
Finance*	24.6*	15.8	3.4	3.6	4.4	6.0
Private Services	9.9	8.3	5.1	6.6	6.8	9.9
Government Services		4.6	4.5	4.8	5.0	4.7

Source of basic data: National Accounts of the Philippines, National Statistical Coordination Board *: figure refers to combined finance and trade sectors

It is also evident from Table 11 that the Philippine economy's output structure is characterized by a large services sector. The services sector's share continued to increase from an average of 37 percent during the 1970s to 40.4 percent in the 1980s, 42.4 percent in the 1990s and to 54 percent in the most recent period. Trade constituted the bulk of the services sector followed by transportation, communication, and storage and private services sub-sectors. Since the 1980s, all services sub-sectors except for government services experienced rising shares.

B. Value Added Growth and Structure: Manufacturing Industry

Table 12 shows a more detailed structure of manufacturing value added. Consumer products such as food manufactures and beverage industries continue to dominate the sector, although its share dropped from 58 percent during the period 1981-1985 to about 49 percent during the 1996-2000 period. In the most recent period, it registered an average share of 51%. Intermediate goods like petroleum and coal products and chemical and chemical products follow, accounting for an average share of 30 percent in 1981-1985 to around 33 percent in the 1996-2000 period. Its share posted a reduced share of 26.4% in the current period 2001-2010. The share of capital goods increased markedly from approximately 10 percent during 1981-1985 to 15.8 percent in 1996-2000. Currently, its average share is about 20 percent. This can be attributed to the growing importance of the electrical machinery sub-sector which posted the highest share of 12.3 percent in the period 2001-2010.

Table 12: Distribution of Manufacturing Value Added (in percent)

Industry Group	1981-85	1986-90	1991-95	1996-00	2001-10
Consumer Goods					_
Food manufactures	45.1	33	36.4	35.5	40.8
Beverage industries	3.4	3.9	3.9	4.0	3.5

Footwear & wearing apparel	4.8	4.5	6.2	5.4	4.3
Sub-total	58.1	45.7	50.4	48.7	51.1
Intermediate Goods					
Chemical & chemical products	7	7.3	6.3	6.2	5.8
Products of petroleum & coal	10.2	12.3	17.3	17.3	13.5
Sub-total	30.1	33.1	35.5	33.2	26.4
Capital Goods					
Basic metal industries	2.2	2.8	2.4	2.1	2.6
Electrical machinery	2.9	3.1	4.9	9.0	12.3
Sub-total	10.3	10.5	12.2	15.8	19.5
Miscellaneous manufactures	1.4	1.5	2.0	2.4	3.1

In terms of growth, electrical machinery has been the best performer from the 1980s up to the 1990s as it grew from about 5 percent during the mid-1980s to 18 percent during the 1996-2000 period (see Table 13). Its growth, however, slowed down substantially to 5.9% in the recent period. Non-electrical machinery and miscellaneous manufactures also registered respectable growth from the 1980s up to the 1990s. In the recent period, non-electrical machinery registered a contraction in its growth while miscellaneous manufactures posted a slowdown. The growth of textile manufactures, wood and cork products, and rubber products, on the other hand, has been disappointing with the subsectors experiencing negative or minimal growth in three successive periods from 1991 to 2010. Wearing apparel and footwear also posted negative growth during the 1996-2000 period to 2001-2010. It was only food manufactures that consistently posted increases in its growth rate from 1991 to 2010. Other sectors with positive growth include beverage, chemicals, and metal industries.

Table 13: Average Value Added Growth Rates in Manufacturing (in percent)

Tuble 13: Tiverage value fluded Growth Rates in Mandiacturing (in percent)									
Industry Group	1981-85	1986-90	1991-95	1996-00	2001-10				
Food manufactures	-3.1	1.6	0.4	3.6	5.9				
Beverage industries	9.8	2.8	0.7	3.8	3.8				
Tobacco manufactures	0.1	0.5	-0.2	3.2	-9.8				
Textile manufactures	-8.0	4.8	-3.6	-5.9	0.8				
Footwear & wearing apparel	-4.5	11.3	5.5	-0.8	-1.9				
Wood & cork products	-16.5	7.8	-7.2	-4.9	-2.7				
Furniture & fixtures	-8.3	8.6	-0.8	5.2	6.3				
Paper & paper products	-2.9	7.6	0.3	4.2	0.6				
Publishing & printing	-9.0	14.5	0.7	-0.7	0.6				
Leather & leather products	-6.6	0.0	2.7	6.4	-4.6				
Rubber products	-7.6	7.9	-2.6	-2.7	1.1				
Chemical & chemical products	-3.1	1.6	1.8	1.5	4.4				
Products of petroleum & coal	1.9	10.2	3.7	2.2	2.5				
Non-metallic mineral products	-10.8	10.4	7.3	-2.4	5.0				
Basic metal industries	9.8	2.2	2.4	-8.1	13.1				
Metal industries	-5.9	8.3	0.5	0.7	5.4				
Machinery except electrical	-10.5	9.1	6.3	8.4	-0.5				
Electrical machinery	4.9	8.3	10.7	18.3	5.9				
Transport equipment	-34.7	14.2	9.7	-5.4	7.5				
Miscellaneous manufactures	-0.3	12.8	1.5	10.0	7.9				
Gross Value Added in Mfg.	-3.1	4.9	2.0	3.2	4.1				

Source of basic data: National Accounts of the Phil., National Statistical Coordination Board

Table 14 compares the value added structure of the Philippines with other East Asian countries. It is evident from the data that our neighboring countries registered reductions in the share of agriculture and substantial increases in the share of industry during the period 1990 to 2010. In comparison, the share of Philippine agriculture dropped from 22 percent to 18 percent, industry declined from 34 percent to 33 percent while services, which constituted a large portion of Philippine output, rose sharply from 44 percent in 1990 to 55 percent in 2010.

Table 14: Structure of Output (as percentage of GDP)

Sector	Philippines		Thailand		Indonesia		Malaysia			China					
	90	99	10	90	99	10	90	99	10	90	99	10	90	99	10
Agriculture	22	18	12	12	10	12	19	19	15	15	11	11	27	18	10
Industry	34	30	33	37	40	45	39	43	47	42	46	44	42	49	47
Manufacturing	25	21	21	27	32	35	21	25	25	24	32	26	33	32	30
Services	44	52	55	50	50	43	41	37	38	43	43	45	31	33	43

Source: World Bank, 2010 World Development Indicators.

In contrast, the share of agriculture in Thailand dropped from 12 percent in 1990 to 10 percent in 1999, but this increased to 12 percent in 2010. In Malaysia, agriculture declined from 15 percent to 11 percent. In China, the share of agriculture fell from 27 percent to 10 percent. The same trend is observed in Indonesia as agriculture declined from 19 percent to 15 percent. In terms of industry share, in Thailand this went up from 37 percent to 45 percent, in Indonesia, it increased from 39 percent to 47 percent, in Malaysia, it rose from 42 percent to 44 percent and in China, from 42 percent to 47 percent. The bulk of industry, manufacturing, witnessed significant increases in its share for all the countries under review except for the Philippines with Thailand and China registering the highest shares of 35% and 30%, respectively. The share of services dropped in Thailand, Indonesia, and Malaysia while China posted a rising trend.

C. Employment

In terms of employment contribution, the services sector has become the largest provider of employment in the most recent period (Table 15). The share of the labor force employed in the sector consistently increased, from around 32 percent in the mid-1970s to about 49 percent in 2000-2011. The share of industry to total employment has been almost stagnant at 15% from the mid 1970s to the most recent period under review.

Table 15: Structure of Employment (in percent)

Tuble 13: Structure of Employment (in percent)								
Major Sector	1975-78	1980-89	1990-99	2000-11				
Agriculture, Fishery and Forestry	52.83	49.60	43.16	36.07				
Industry	15.23	14.49	15.98	15.10				
Mining and Quarrying	0.46	0.66	0.59	0.42				
Manufacturing	11.29	9.93	10.01	9.08				
Electricity, Gas and Water	0.35	0.36	0.44	0.40				
Construction	3.13	3.54	4.94	5.22				

Services	31.87	35.90	40.94	48.82
Wholesale and Retail Trade	10.32	12.55	14.54	18.65
Transportation, Storage & Communication	4.08	4.45	5.80	7.46
Financing, Insurance, Real Estate & Business Services	4.55	1.79	2.18	3.55
Community, Social & Personal Services	14.05	17.11	18.42	19.17
Industry not Elsewhere Classified	0.49	0.02	0.05	0.00

Sources: Yearbook of Labor Statistics (1980-2000) and Current Labor Statistics (2001-2002), Bureau of Labor and Employment Statistics, Department of Labor and Employment and Employed Persons by Major Industry Group, National Statistics Office Labor Force Survey (1970, 1975-1976, 1977-1978, 2003-2009).

The manufacturing sector has failed in creating enough employment to absorb new entrants to the labor force as well as those who move out of the agricultural sector. Its share dropped from 11 percent in the mid-1970s to 9 percent in the 2000-2011 period. While the share of agriculture has been declining, the sector has remained an important source of employment. From 52.8 percent in the mid-1970s, the agriculture sector's share in total employment continuously declined in the succeeding decades and is currently around 36 percent.

D. Productivity

The traditional way of measuring productivity at the plant level is to compute value-added per worker⁶. On the average, labor productivity in manufacturing declined substantially from around P84,000 during the 1980s to P78,000 in the 1990s (see Figure 4 and Table 16), although in the current period, this improved to around P98,000.

97.54 96 97.54 84.09 83.98 84.09 78.02 78.02 1970s 1980s 1990s 2000s

Figure 4: Average Labor Productivity in Manufacturing, in '000 pesos

Table 16: Labor Productivity (in thousand pesos, 1985 constant prices)

Avg. Labor Productivity

Economic Sector	1976-1978	1980s	1990s	2000-2010
Agriculture, Fishery and Forestry	15.87	15.18	15.56	19.56
Industry	87.76	84.00	68.28	82.26
Mining and Quarrying	96.56	82.20	85.80	153.07
Manufacturing	84.09	83.98	78.02	97.54
Construction	90.44	70.61	35.21	33.66
Electricity, Gas and Water	178.96	230.34	216.24	304.82

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⁶ While this is easy to calculate and reflects labor productivity, it focuses productivity measurement only on labor which can be misleading.

Services	38.39	34.75	33.00	36.90
Transportation, Storage & Communication	40.79	38.10	32.56	41.74
Wholesale and Retail Trade	41.19	35.79	32.80	33.82
Financing, Insurance, Real Estate & Business				
Services	184.89	272.14	242.67	201.45
Community, Social & Personal Services	12.21	8.54	8.73	8.80

Table 16 compares the levels and trends in the productivity of labor across the different economic sectors from the mid-1970s to the current period. The results indicate that labor productivity is low and disparities across the three major sectors are wide. Industry has the highest labor productivity, which declined from the mid-seventies to the nineties but showed some improvement in the current period, although it still has not reached its highest average level registered in the mid-1970s. The average labor productivity in the services sector has declined from the mid-1970s to the 1990s but improved in 2000-2010. The agriculture, fishery, and forestry sector has the lowest level of labor productivity which remained stagnant from the mid-1970s up to the nineties but increased slightly in the current period. Herrin and Pernia (2003) attributed the deterioration in the country's labor productivity from the mid-1970s to the 1990s to three factors: the failure of firms to invest in state-of-the-art technology and implement best practice, the lack of investments in human capital due to rapid population growth, and the relatively quick expansion of employment in low productivity services sector.

Table 17 shows total factor productivity (TFP)⁷ growth figures for manufacturing which are normalized and interpreted as growth relative to 1996. From 1996 to 2006, aggregate productivity gains are evident in leather, textile, furniture, other manufacturing, and basic metals and fabricated metal sectors. Leather grew by 9.5%, textile by 2.4%, other manufacturing by 2.9%, furniture by 1.9% and basic metals by 1.3%.

Table 17: TFP Growth in the Manufacturing Industry

Industry description	Year	TFP	Industry description	Year	TFP
	1997	0.45		1997	0.11
	1998	3.01		1998	1.47
	2000	-0.82		2000	-1.12
	2002	-1.83		2002	-7.38
	2003	-2.25		2003	-2.20
food, beverages, &	2005	-1.36		2005	0.39
tobacco	2006	-1.44	non-metallic products	2006	-0.65
	1997	1.80		1997	-0.20
	1998	1.01		1998	-4.39
	2000	0.95		2000	-1.77
	2002	-0.46		2002	-3.18
textile	2003	1.20	basic metal & fabricated metal	2003	-2.70
	2005	6.00		2005	-4.47

⁷ Total factor productivity was estimated using the methodology of Levinsohn and Petrin (2001).

1			1		
	2006	2.35		2006	1.32
	1997	1.12		1997	0.37
	1998	2.46		1998	-4.92
	2000	0.51		2000	0.90
	2002	0.49		2002	-2.00
	2003	0.62	1: 0 :	2003	-2.75
garments	2005	-0.75	machinery & equipment, motor vehicles & other transport	2005	-1.70
garments	2006	-0.99	vemeres & other transport	2006	-0.86
	1997	-1.35		1997	1.16
	1998	0.81		1998	1.64
	2000	0.63		2000	3.12
	2002	7.20		2002	3.46
	2003	12.10		2003	2.03
	2005	8.09		2005	2.59
leather	2006	9.54	furniture	2006	1.86
	1997	0.61		1997	-0.18
	1998	0.29		1998	3.01
	2000	-2.46		2000	0.27
	2002	-1.06		2002	1.49
	2003	-3.85		2003	0.63
wood, paper, &	2005	-3.64		2005	1.18
publishing	2006	-5.39	Other manufacturing	2006	2.87
	1997	-0.61		1997	-0.23
	1998	-2.68		1998	-1.59
	2000	2.94		2000	-0.44
	2002	-6.65		2002	-4.86
	2003	4.19		2003	-1.00
coke, petroleum,	2005	-1.11		2005	-2.53
chemicals & rubber	2006	-4.76	All manufacturing	2006	-3.37
A 1 1 1 (2010)					

Source: Aldaba (2010)

Out of the 11 manufacturing sectors, six sectors covering food, beverages, and tobacco; garments; wood, paper, and publishing; coke, petroleum, chemicals and rubber; non-metallic products; basic metal and fabricated metal products as well as machinery and equipment, motor vehicle and other transport registered negative productivity growth rates from 1996 to 2006. On the whole, the manufacturing sector's aggregate productivity declined by 3.4% from 1996 to 2006.

E. Imports and Exports

Trade (exports plus imports of goods and services) increased from an average of around 82% of GDP in the 1990s to 89% in the 2000s (Figure 5). On average, exports of goods & services as % of GDP rose from 38% to 43% during the same period, and imports from 44% to 47%. Trade balance, however, has been unfavorable with imports surpassing exports except in 1999-2000 (Aldaba et al, 2010).

Figures 6 and 7 present the structure of exports and imports by 2-digit level PSIC. In 1988, 60% of our exports consisted of electrical machinery & apparatus, nec (22%), food and beverages (17%), and wearing apparel and textile (21%). Over the years, however, the Philippine export base has become less diversified. In 2008, 66% of the country's exports relied on only one sector: machinery equipment & transport. Meanwhile, the shares of traditional exports such as food and beverages as well as wearing apparel and textile declined from 17% to 5% for the former and from 21% to 5% for the latter.

120 Exports of goods and 100 services (% of GDP) 80 Imports of 60 goods and services (% of 40 GDP) 20 Trade (% of GDP) 0

Figure 5: Trade as Percentage of GDP, 1990-2011

Source: World Development Indicators 2012, World Bank

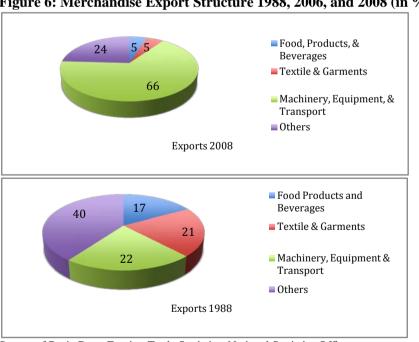


Figure 6: Merchandise Export Structure 1988, 2006, and 2008 (in %)

Source of Basic Data: Foreign Trade Statistics, National Statistics Office.

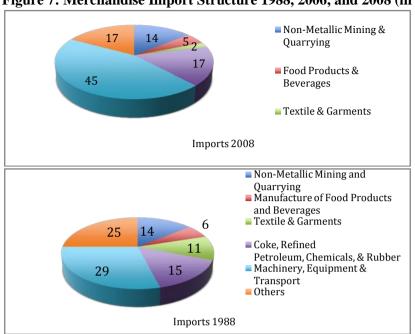


Figure 7: Merchandise Import Structure 1988, 2006, and 2008 (in %)

Source of Basic Data: Foreign Trade Statistics, National Statistics Office.

In 1988, Philippine imports were composed of machinery equipment & transport which represented the bulk of the total with a share of 29%, chemicals had a share of 15%, while non-metallic mining & quarrying had 14%. Textiles and garments registered a share of 11% and food and beverages had 6%. Following the changes in the country's export structure, in 2008, the share of machinery & transport increased significantly to 45%, chemicals also increased to 17% while textiles & garments dropped to 2%. Non-metallic mining & quarrying share remained unchanged at 14%.

As earlier indicated, the Philippine export base has become less diversified as the country's exports are largely concentrated in three product groups: electronics and other electronics, garments and textile, and machinery and transport equipment which accounted for around 76% of total exports in 2008. These goods are considerably dependent on imported inputs and have weak backward and/or upward linkages with the rest of the manufacturing sectors (Duenas-Caparas, 2007).

The country's electronics exports are mainly concentrated in semiconductor assembly, packaging and testing (APT). Given the limited role of Philippine electronics in the labor-intensive assembly and testing segment of the production process, the country's electronics exports have been import dependent with minimal domestic value added. Research on the electronics industry shows that backward linkages in the electronics industry remain weak because local suppliers are few and immature. This is attributed to the unavailability of raw materials, difficulty of finding local suppliers, unreliability of local suppliers, high cost of local raw materials, and failure to meet required quality standards.

The same problem of limited backward linkages confronts the auto parts sector. The linkage between the automotive assembly sector and local parts and components has remained weak. After almost three decades of import substitution which was centered on local content policy, a large portion of the parts and components industry still remains underdeveloped. At best, the local content program only had a limited impact on the growth and development of the parts and components industry. Very little parts and components are locally sourced with the domestic parts sector accounting for only 10 to 15 percent of the total number of parts and components needed by local motor vehicle assemblers. Studies have cited the following reasons why the government's local content program failed to develop the parts manufacturing sector as a world-class export sector: lack of locally manufactured raw materials, low productivity and lack of quality measures among small and medium parts makers, old equipment and technology, many are using technologies that are more than 20 years behind, and lack of mold design technology, tool and die making.

Since the 1990s, the garments sector also face the same problems of limited linkages and weak competitiveness. The lack of locally sourced quality raw materials and dependency on imported raw materials such as fabrics and accessories from China, Taiwan, Hong Kong, and India resulted in longer lead times. Note that the Philippines does not have an integrated textile industry that can support the requirements of the garments industry. Other problems that negatively affected industry competitiveness included the high cost of labor and power, slow productivity growth due to lack (decline) of investments. Given the lack of design capabilities and minimal linkages between local designers and manufacturers, the industry was not able to move up the value chain and engage in original brand manufacturing activity. As of 2008, garments exports accounted for only 5% of total exports in contrast to its 21% share in 1988.

F. Industry Concentration

In terms of market structure, Table 18 shows four-firm concentration ratios (CR4)⁹ in the manufacturing sector for the year 2003. CR4 calculations are high ranging from 65 to 100% for sub-sectors such as petroleum refineries, glass and glass products, industrial chemicals, professional and scientific equipment, transport equipment, machinery except electrical, textiles, tobacco and food manufacturing and processing.

Note, however, that these CR4 calculations do not take import competition into account. The calculated CR4 measures are adjusted to reflect the presence of imports. It is also important to point out that on the overall, the Philippine manufacturing industry is

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⁸ In the absence of an integrated textile industry, textile millers also faced difficulties sourcing their raw materials importing about 80 percent of their input requirements like polyester fiber, cotton, rayon, and acrylic.

⁹ The four firm concentration ratio refers to the proportion of an industry's gross output accounted for by the four leading firms in the industry, i.e. the sum of the leading four firms' market shares.

already contestable. As the adjusted CR4 measures show, in most sectors, these are already below 35 percent. These include paper & paper products, rubber & plastic, medical & precision instruments, basic metals, and machinery & equipment nec, while fabricated metal products and publishing & printing are about 36%.

Table 18: Adjusted Four-Firm Concentration Ratios (in %), 2003

PSIC	Description	CR4 ^A	ACR4 ^A
High			
23	Coke, Refined Petroleum and other Fuel Products	100.0	79.8
16	Tobacco Products	99.7	72.0
15	Beverages	65.4	62.4
26	Other non-metallic: flat glass	99.9	82.4
Modera	te Adjusted CR4		
34	Motor Vehicles, Trailers, and Semi-trailers	84.1	57.2
15	Food	70.0	55.7
26	Other Non-Metallic Mineral products	62.5	54.3
26	Other non-metallic: cement	53.0	52.7
	Tanning and Dressing of Leather; Luggage,		
19	Handbags and Footwear	63.9	45.1
35	Manufacture of Other Transport Equipment	95.9	44.8
24	Chemicals and Chemical Products	77.3	40.6
Low Ad	justed CR4		
22	Publishing, Printing and Reproduction of Recorded Media	44.6	36.3
22	Fabricated Metal Products, Except Machinery and	44.0	30.3
28	Equipment	59.3	35.8
29	Machinery and Equipment, n.e.c.	85.8	34.5
27	Basic Metals	63.6	30.5
	Medical, Precision and Optical Instruments,		
33	Watches and Clocks	86.1	29.4
21	Paper and Paper Products	48.2	29.0
25	Rubber and Plastic Products	47.5	28.3
36	Manufacture and Repair of Furniture	32.2	22.7
	Wood, Wood Products and Cork, Except Furniture;		
20	Articles of Bamboo, Cane, Rattan and the Like; Plaiting Materials	46.8	20.4
17	Textile	66.7	4.4
	Export-oriented industries	00.7	
30	Office, Accounting and Computing Machinery	88.1	ND
31	Electrical Machinery and Apparatus, n.e.c.	84.1	ND
31	Radio, Television and Communication Equipment	0 1.1	112
32	and Apparatus	62.4	ND
34	Parts of Motor Vehicles, Trailers, and Semi-trailers	43.3	ND
18	Wearing Apparel	21.0	ND
39	Manufacturing, n.e.c.	66.7	ND
Others:	no trade data		
37	Recycling	89.8	ND
Notes:			

Notes:

ACR4: Adjusted CR4

CR4 = 4-firm concentration ratio calculated as the value of output by the four largest firms to total for each 5-digit industry level

MPR = import penetration ratio; ACR4 is CR4 adjusted for import penetration

ACR4=(1-MPR)*CR4. Import penetration shares are estimated as the ratio of imports to output plus imports less exports. All ratios are weighted averages at the 2-digit industry level.

For chemicals & chemical products, adjusted CR4 is 41% while other transport equipment is about 45%. For motor vehicles, non-metallic products, and food, CR4 is moderately high ranging from 54% to 57%. For some sectors such as refined petroleum, tobacco, and beverages, the adjusted concentration ratios still remain high ranging from 60 to over 80%.

For office, accounting & computing machinery and electrical machinery & apparatus, which both have high import penetration and export intensity ratios, the high unadjusted CR4 may not be a significant measure of industrial concentration. The same may hold for other manufacturing products nec.

G. Size Structure

In 2006, micro enterprises dominated the economy accounting for 92% of the total while small and medium enterprises (SMEs) accounted for only 7.04 % (Table 19). ¹⁰ Since 2003, the total number of enterprises has fallen from 839,114 to 783,165 in 2006. In terms of employment contribution, micro and large enterprises registered the same employment share of 33% in 2006 while SMEs recorded a share of 34%.

Table 19: Total Number of Enterprises and Employees in the Philippines

Number	of Enterprises								
Year	Micro	%	Small	%	Medium	%	Large	%	Total
1995	449950	91	39848	8	2712	1	2447	0.5	495057
2000	747740	91	67166	8	3070	0.4	2984	0.4	821060
2003	762573	91	69175	8	3521	0.4	3745	0.4	839114
2006	720191	92	57439	7	2839	0.4	2596	0.3	783165

Number of Employees

	Year	Micro	%	Small	%	Medium	%	Large	%	Total
	1995	1345175	31	945401	22	366890	8	1664076	39	4321603
	2000	2165100	37	1522227	26	416686	7	1798173	30	5902256
	2003	2214278	34	1556206	24	485891	8	2218419	34	6474860
	2006	1667824	33	1279018	26	381013	8	1657028	33	4984950
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Source: National Statistics Office

Within manufacturing, micro enterprises accounted for 89.5% of total establishments while SMEs recorded a share of 9.7% (Table 20). Accounting for only 0.8% of total enterprises, large firms contributed the highest share of employment at 53%. SMEs contributed 28% and micro enterprises 19%. Medium size enterprises constitute a small share not only of the SME sector but also of the overall manufacturing and total Philippine industry structure, such that the country's industrial structure has remained "hollow". Lack of new

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¹⁰ Micro enterprises have from 1-9 employees. Small enterprises are defined as having 10-99 employees; medium as having 100-199 employees; and large as having over 200 employees (The National Statistics Office and Small and Medium Enterprise Development Council Resolution No. 1, Series 2003).

medium-sized entrants may indicate that large incumbent firms do not face credible threat of potential competition. The linkages of small and medium enterprises with large domestic and multinational corporations has remained weak; hence growth experienced by large enterprises has failed to spillover to the SME sector. Compared with large enterprises, SMEs continue to face growth and market entry difficulties due to underdeveloped financial markets, overly complex administrative arrangements, and poor infrastructure. Subdued SME performance has not generated sufficient manufacturing value added and employment to increase market contestability and improve the country's industrial structure.

Table 20: Manufacturing Total Number of Enterprises and Employees

Number	Number of Enterprises										
Year	Micro	%	Small	%	Medium	%	Large	%	Total		
1995	86900	88.8	8928	9.1	1027	1.0	982	1.0	97837		
2000	108998	86.9	14121	11.3	1110	0.9	1238	1.0	125467		
2003	107398	88.6	11910	9.8	853	0.7	1024	0.8	121184		
2006	105083	89.5	10274	8.8	1004	0.9	985	0.8	117346		

Number of Employees

Year	Micro	%	Small	%	Medium	%	Large	%	Total
1995	271699	22.0	227949	18.0	137384	11.0	615874	49	1252906
2000	354025	22.0	354328	22.0	150734	9.0	730127	46	1589214
2003	360576	25.0	285027	19.0	118896	8.0	698173	48	1462672
2006	259664	18.9	252931	18.4	132332	9.6	727984	53	1372911

Source: National Statistics Office

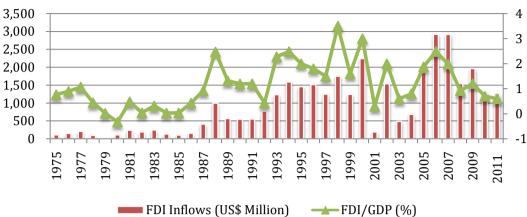
H. Foreign Direct Investment

Figure 8 presents the inward FDI flows in the Philippines from the 1970s to 2011. FDI inflows from the 1970s to the 1980s were small and erratic, due mainly to the political and economic instability that characterized the country in these decades. As a result, it failed to take advantage of the rapid growth of Japanese FDI in the mid-1980s following the 1985 Plaza Accord. In the 1990s, overall FDI inflows improved substantially as well as in the 2000s. However, competition has become much fiercer especially given China's growing share. FDI as percentage of gross domestic product (GDP) reached 3% in 2000, and about 2% in 2007, however, the ratio dropped to 0.9% in 2008 primarily due to the global economic crisis. Note also that gross domestic investment as a percentage of GDP has been low and declining from 25% in 1997 to 14% in 2009. The average for the Philippines for the period 2000-2009 was about 16.5%. Compared with other countries, it has lagged significantly behind Indonesia (with an average of 25% during the same period), Korea (30%), Malaysia (22%), and Thailand (26%). ¹¹

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¹¹ Table 1.9: Gross Domestic Investment as Percentage of GDP in Aldaba et al (2010).

Figure 8: FDI Performance



Source: World Development Indicators and UNCTAD Statistics.

Table 21 presents a sectoral breakdown of FDI¹² or non-residents' total equity for periods 1980-1989, 1990-1999, 2000-2009 as well as 2010 and 2011. It can be seen that manufacturing FDI dominated total inflows with its share of 45 percent during the 1980s and 50 percent in the 1990s. However, its share dropped to 38 percent in the 2000s while in 2010 where total foreign equity is negative, much of it was from the manufacturing sector.

The share of the financial sector rose from 8 percent in the 1980s to 16 percent in the 1990s but declined to about 10 percent in 2000-2009. Transport, storage and communication sector also witnessed an increase in its share from 1 percent to 12 percent between the 1980s and the 1990s, but this declined to an average of around 10 percent in the current period. The share of mining and quarrying was reduced from 32 percent in the 1980s to 6 percent in the 1990s. This further went down to 4 percent during the 2000s. Wholesale and retail witnessed a slight increase in share from 3 percent to 4 percent between the 1980s and the 1990s, but this was reduced to roughly 2 percent in the 2000s.

Table 21: Net FDI by Sector, average percentage share to total, 1980 – 2011

	per correnge	, 21101 C C C	70 0002, 27 00		
Industry	1980-89	1990-99	2000-09	2010	2011
Manufacturing	44.7	50.1	38.2	311.6	20.0
Mining and quarrying	32.4	5.7	4.3	-68.9	-47.0
Financial intermediation	8.1	15.5	9.5	-14.6	41.4
Trade/commerce	2.9	3.9	1.6	-7.9	6.0
Real estate and business services	7.6	8.7	26.6	-71.8	25.8
Transport, storage and communications	1.1	11.9	6.3	-26.0	51.4
Construction	0.5	3.0	1.4	0.4	5.5
Electricity, gas and water			11.8	3.6	-4.4

Source of basic data: Bangko Sentral ng Pilipinas. (Note that this does not include "Others not elsewhere classified" which could not be broken down by sector).

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¹² The total FDI does not include "Others, Not Elsewhere Specified" defined as non-residents' equity capital investments in non-banks sourced from the cross-border transactions survey and in local banks, no sectoral breakdown is available.

Electricity, gas and water registered a share of 10 percent in the most recent period. Construction share also rose from less than 1 percent in the 1980s to 3 percent during the 1990s and 2 percent on the average in the 2000s. Real estate, renting and business services' share went up from 8 percent in the 1980s to 9 percent in the 1990s and to 18 percent in the 2000s.

70 ■ Basic Metals & Chemicals 60 50 Coke, Refined Petroleum and 40 Other Fuel Products 30 Food Products and Beverages 20 Transport & Motor vehicles 10 Mach, App, Suppl.& Radio, TV & 1980-89 1990-99 2000-2009 Communications eqipment

Figure 9: Distribution of Manufacturing FDI (in %)

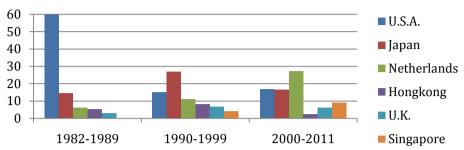
Source of basic data: Bangko Sentral ng Pilipinas (BSP)

Within manufacturing, FDI inflows have been dominated by the food and beverage sector increasing substantially from a share of 27 percent in the 1990s to 57 percent during the 2000-2009 period (see Figure 9). The share of basic metals and chemical products which dominated manufacturing in the 1980s fell from 47 percent to 14 percent in the 1990s to 11 percent in the 2000s. The share of coke, refined petroleum, and other fuel products rose from 7 percent in the 1980s to 20 percent in the 1990s but this dropped to only 7 percent in the 2000s. Similarly; FDI inflows in machinery, apparatus and supplies and radio, tv, and communications equipment increased from zero to 21 percent between the 1980s and the 1990s but this dropped to 12 percent in the 2000s. There is also a decline in the share of transport equipment and motor vehicles from 10 percent in the 1980s to 6 percent in the 1990s to 3 percent in the 2000s.

Up to the 1980s, the US was the country's largest source of FDI inflows with a cumulative share of 60 percent (see Figure 10). However, this dropped significantly to only 15 percent in the 1990s but increased to 17 percent in the 2000s. US dominance has been substantially diluted by the increasing presence of Japan, UK, and Singapore. Japan's share increased from 15 percent in the 1980s to 27 percent in the 1990s, although this fell to 17 percent in the 2000s. Singapore increased its share from less than one percent during the 1980s to four percent in the 1990s and to 9 percent in the recent period. The share of the Netherlands rose from six percent to 11 percent, but declined to just 2.5 percent in 2000-2008. In addition, during 2009 to 2011, Netherlands had negative inflows to the country. The share

of the UK, on the other hand, went up from 3 percent in the 1980s to around 6 percent in the 1990s and 2000s.

Figure 10: FDI by source country (in percent)



Source: Bangko Sentral ng Pilipinas (BSP).

While the investment policy reforms and opening up of more sectors to foreign investors in the past decade resulted in improvements in FDI inflows to the country, on the overall, FDI inflows to the Philippines have been limited; hence the country's performance has lagged behind its neighbors in Southeast Asia. Figure 11 compares FDI inflows to the Philippines with inflows to Singapore, Thailand, Malaysia, Indonesia, and Vietnam from the mid-1970s up to 2011. The figure shows that huge differences are evident in FDI inflows to the ASEAN 6 countries with the Philippines receiving the lowest level of FDI inflows particularly in the 1990s and the 2000s.

Figure 12 presents the FDI stock in the ASEAN countries. In 1990, cumulative FDI inflows to the Philippines amounted to US\$ 4.5 billion while Vietnam registered a total of US\$ 1.65 billion. In 2000, Vietnam surpassed the Philippines total of US\$18.2 billion as its total FDI reached US\$20.6 billion. In 2011, Vietnam soared to US\$73 billion while the Philippine total barely increased at US\$28 billion.

70000 60000 50000 Indonesia 40000 Malaysia 30000 Philippines 20000 Singapore 10000 Thailand 0 Viet Nam -10000 1985 1987 1993 1995 1999 1999 2003 2005 2007 2007

Figure 11: FDI Inflows to ASEAN 6 (in million US\$)

Source: UNCTAD FDI Database.

600 500 400 300 200 100 0 Indonesia Malaysia Philippines Singapore Thailand Viet Nam 1990 1995 2000 2005 2010 2011

Figure 12: FDI Stock in ASEAN 6 (in billion US\$)

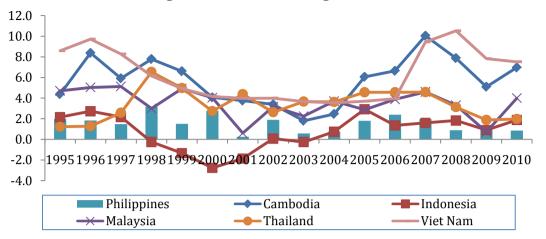
Source: UNCTAD FDI Database.

In terms of FDI as percentage of GDP, the Philippines along with Indonesia have been lagging in the ASEAN region. In the Philippines, the indicator showed a slight increase from 2% in 1995 to 3% in 2000 and 2.5% in 2006 but it then dropped to 2% again in 2007 until it reached just 0.9% in 2010. Indonesia dropped substantially from 2.2% in 1995 to -2.8% in 2000 but increased to 1.6% in 2007. In 2010, Singapore registered 18.5%, Cambodia 7%, Indonesia 1.9%, Malaysia 4%, Thailand 2%, while the Philippines posted 1%.

Table 22 presents three sets of competitiveness indicators: global competitiveness, macro environment, and public institutions indices along with the rankings of the Philippines and other Southeast Asian countries out of a total of 102, 133, and 144 countries for the years 2004, 2009, and 2012 respectively. The macro environment index is based on macroeconomic stability, country credit risk, and wastage in government expenditures while the public institutions index is based on measures of the enforcement of contracts and law and degree of competition. The results show that the Philippines performed substantially poorly than Malaysia, Thailand, and Indonesia in 2009 and although still lagging in 2012 it improved considerably in the rankings. Public institutions index worsened for the Philippines in 2009 but improved substantially in 2012. Overall, the Philippine ranking improved from 71 (out of 133 countries) in 2009 to 65 (out of 144 countries) in 2012.

Based on the World Bank's cost of doing business, Table 23 shows a comparison of the business costs indicators for the Philippines and its East Asian neighbors. The table reveals that in general, the Philippines, along with Indonesia, performed significantly below the other East Asian countries in terms of corruption-related indicators. Across time, improvements are observed for time to start a business and time to enforce a contract for the Philippines. For instance, number of days to start a business which is 60 days in 2004 was reduced to 52 in 2009 and at present is 36 days. Overall, out of 183 countries, Philippine ranking in the ease of doing business worsened from 141 in 2008 to 144 in 2009, while in 2012 it improved slightly to 138 out of 185 countries.

Figure 13: FDI as Percentage of GDP



Source of basic data: World Development Indicators, 2012

Table 22: Competitiveness Indicators Rankings for Selected Southeast Asian Countries

	Globa	l Competiti	veness	Macı	o Environn	nent	Public Institution			
		Index			Index		Index			
	2004	2009	2012	2004	2009	2012	2004	2009	2012	
Malaysia	29	21	25	27	38	35	34	30	29	
Thailand	32	34	38	26	41	27	37	57	77	
Philippines	66	71	65	60	53	36	85	105	94	
Indonesia	72	54	50	64	52	25	76	68	72	

Source: World Economic Forum, Global Competitiveness Report, 2003-2004, 2008-2009 and 2012-2013.

Table 23: Cost of Doing Business Indicators

Country	Number of start-up		Time to start a				Cost to register business			Procedures to			Time to enforce a			Rigidity of employment index: 0 (less	
Country	p	rocedure	es	bus	iness (da	ays)	(%	of GNI	pc)	enfo	enforce a contract		contract (days)			rigid) to 100 (very rigid)	
	2004	2009	2012	2004	2009	2012	2004	2009	2012	2004	2009	2012	2004	2009	2012	2004	2009
Phils	15	15	16	60	52	36	25	28	18	37	37	37	862	842	842	29	29
PRChina	13	14	13	48	37	33	16	5	2	35	34	37	406	406	406	28	31
Malaysia	9	9	3	30	11	6	25	12	15	30	30	29	600	585	425	10	10
Hong Kong	5	3	3	11	6	3	3	2	2	24	24	27	211	280	360	0	0
Indonesia	12	9	9	151	60	47	131	26	23	39	39	40	570	570	498	40	40
S Korea	10	8	5	17	14	7	16	15	15	35	35	33	230	230	230	27	38
S'pore	7	3	3	8	3	3	1	1	1	21	21	21	120	150	150	0	0
Thai	8	7	4	33	32	29	7	6	7	35	35	36	479	479	440	11	11
VNam	11	11	10	56	50	34	31	13	9	34	34	34	356	295	400	33	21

Source: World Bank, Doing Business 2005, 2010 and 2013 (http://www.doingbusiness.org)

Table 24 shows a comparison of the number of the documents needed, time, and cost to import and export in the same countries. Between 2005 and 2012, a reduction in the number of documents needed and time to export and import is evident in Hong Kong, Indonesia, South Korea and Thailand. In the Philippines, except for the number of documents to import, other selected indicators improved. From eight documents needed to export, the

number is now down to seven, and from 17 days of exporting time in 2005, it is better now with 15 days. It is also faster by four days to import now compared in 2005. In terms of cost to export, the Philippines has still one of the highest costs at US\$585 per container at present, only lower than Indonesia, South Korea and Vietnam. Cost to import is still high but the country is lower compared to South Korea and Thailand.

Table 23: Trading Across Borders Indicators

Country	Documents to export (number)		to export (number)		export export (US\$ per container)		Documents to import (number)		Time to import (days)		Cost to import (US\$ per container)	
	2005	2012	2005	2012	2005	2012	2005	2012	2005	2012	2005	2012
Phils	8	7	17	15	800	585	8	8	18	14	800	660
PRChina	6	8	18	21	390	580	11	5	24	24	430	615
Malaysia	7	5	18	11	432	435	7	6	14	8	385	420
HKong	6	4	13	5	525	575	8	4	17	5	525	565
Indonesia	7	4	25	17	546	644	9	7	30	23	675	660
S Korea	5	3	12	7	780	665	8	3	12	7	1040	695
Singapore	4	4	5	5	416	456	4	4	3	4	367	439
Thailand	9	5	24	14	848	585	12	5	22	13	1042	750
Vietnam	6	6	24	21	669	610	8	8	23	21	881	600

Source: World Bank, Doing Business Report 2006 and 2013 (http://www.doingbusiness.org).

IV. Conclusions and Recommendations

Since the 1980s, the Philippines has made considerable progress in opening-up the economy to competition by removing tariff and non-tariff barriers in the manufacturing and agriculture sectors. From the 1980s up to the mid-1990s, the Philippines implemented substantial trade policy changes by reducing tariffs and removing import restrictions. Average nominal tariff rates were reduced from a range of 70 to 100% to within a three to 30% range. Overall, average effective protection rates declined from 53% in 1983 to 36% in 1988. In 1995, this further dropped to around 25% and to 8.59% in 1998. With the removal of import restrictions, the number of regulated items as a percentage of the total number of products fell from 32% in 1985 to around eight percent in 1989. In 1996, this declined to about three percent and by 1998, most quantitative restrictions were removed except those for rice.

Other market-oriented reforms consisting of deregulation, liberalization, and privatization were pursued in infrastructure utilities such as telecommunications, water, power, shipping and airlines. At the same time, foreign investment rules were relaxed in almost all sectors particularly in areas that were reserved only for Filipinos such as banking and retail trade. As a result, the current regime is substantially more open.

In the literature, there are three main channels through which trade liberalization affects a country's economic performance. First, there are static gains arising from trade liberalization as resource allocation improves within and across industries. Second, there are dynamic gains through technical change, learning, and growth that leads to improved productivity growth. Third, there are competitive effects arising from domestic competition. Despite the breadth and depth of market-oriented reforms, the impact on the growth, employment, investment, and productivity has been limited. The performance of the overall manufacturing industry has been weak. From the 1980s up to the early 20s, manufacturing growth was very slow; growing on the average by 0.9 percent in the 1980s, by 2.5 percent in the 1990s, and by 3.5 percent in the early 20s. Its share to total industrial output remained unchanged during the same periods; it accounted for 28 percent of total output in the 1970s, 26 percent in the 1980s, and 24 percent in the 1990s. In terms of employment generation, the industry failed in creating enough employment to absorb new entrants to the labor force as its share to total employment dropped from 11.3 percent in the mid-1970s to 9.7 percent in the 2001-2003 period. The industry's total factor productivity growth was negative from 1996 to 2006.

As percentage of gross domestic product (GDP), FDI inflows increased from an average of 0.51% of GDP in the seventies to 0.9% in the eighties and to 1.8 percent of GDP during the nineties. In the current period, FDI inflows represented an average of 1.6 percent from 2000 to 2008. The Philippines has lagged behind its neighbors in terms of FDI performance. FDI data show huge differences in FDI inflows to the ASEAN countries with the Philippines receiving the lowest level of FDI inflows particularly in the 1990s and the 2000s.

Studies on Philippine economic development have extensively discussed the constraints to growth, investment, and employment generation in the country (World Bank, 2007; ADB, 2007). The most important ones include tight fiscal condition due to huge fiscal deficits, lack of infrastructure, and weak investor confidence arising from governance issues like corruption and political instability.

The shift from a highly protected and highly distorted economic regime towards a more market-oriented has not been a smooth one for the Philippine economy. Trade liberalization in the manufacturing industry has been a long and tedious process with many stops and starts due to the policy reversals that took place. The more than two decades of trade liberalization have not yet led to rapid industrial growth. Medalla (2002) attributed the lackluster performance to the adjustment and restructuring process that the manufacturing industry is still undergoing. She noted that new investments are only starting to be made in the more recent years. This delayed response may be due to the failure of the government to implement necessary complementary measures particularly with respect to the exchange rate.

The prolonged peso appreciation inhibited much of the potential growth from a more open economy.

The industrial structure has remained "hollow" or "missing" in the middle and medium enterprises have never seriously challenged the large entrenched incumbents. The linkages between SMEs and large enterprises have also remained weak. SMEs have continued to face competitiveness problems along with difficulties in finance and market access. Trade indicators show the heavy concentration of Philippine exports on three major products groups: electronics, garments and textiles and auto parts. Within these major product groups, exports are highly concentrated in low value added and labor-intensive products sectors.

Our experience has shown that trade liberalization does not automatically lead to a competitive domestic market economy. Imports are effective in disciplining domestic manufacturing firms and to sustain the competitive gains derived from the presence of imports, the government has an important role to play particularly in creating and maintaining a competitive environment. The government needs to coordinate policies to implement continued liberalization and deregulation policies in tandem with necessary support measures that will address the obstacles to the entry, exit and growth of domestic firms, particularly small and medium enterprises. Note that policy reversals can substantially reduce the credibility of reforms since reversals can foster rent-seeking behavior and dampen firms' incentives to become efficient. To achieve this, well-functioning institutions and regulatory agencies are necessary.

Competition can be lessened significantly by government regulatory policies, behavioral restraints and structural characteristics of the market that can act as barriers to entry (see WB-OECD, 1999)¹³. It is important to point out that the strength of competition is a function not only of the regulatory policies, behavior of firms, and structural barriers but also of the external environment within which firms compete. This includes the state of transport and communication, framework of laws and regulations, effectiveness of the financial system in matching investment resources with entrepreneurial opportunities, as well as information available to consumers. Carlin and Seabright (2000) call this external environment "competitive infrastructure" referring to both physical and institutional infrastructure. When this "competitive infrastructure" is inadequate, competition becomes weak.

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¹³ Regulatory barriers are barriers imposed by government policies including investment licensing, tariff and non-tariff measures, antidumping and countervailing duties along with safeguard measures, special permits, license to operate, regulations influencing the use of some inputs, discriminatory export practices, exclusionary lists, and ownership restrictions.

Behavioral barriers are associated with abuse of dominant position where "relatively large" firms engage in anticompetitive conduct by preventing entry or forcing exit of competitors through various kinds of monopolistic conduct including predatory pricing and market foreclosure.

Structural barriers are due solely to conditions outside the control of market participants. Economies of scale (increasing returns to scale) is an example of a structural barrier.

Good infrastructure and efficient institutions are necessary to support the new economic environment arising from trade reforms. To effectively benefit from these reforms, it should substantially increase investment spending and strengthen its weak institutional and regulatory environment. Many complementary policies and institutions that are necessary to support the reforms and generate supply-side responses leading to employment and growth are missing. If market reforms are to have their intended effects, "behind the border" complementary policies that define the business environment must be addressed including investment in human capital, infrastructure, the quality of governance in the country, improve the investment climate, and boost the country's competitiveness to enable us to catch up with our neighbors. The Aquino government should make full use of its popularity and wide support from broad sectors in society to carry out these badly needed institutional and regulatory reforms together with huge infrastructure spending.

For the manufacturing industry, there is a need to strengthen the domestic parts and suppliers sector, particularly small and medium enterprises, and deepen their linkage with domestic large enterprises and multinational companies. Equally important is for manufacturing industries particularly electronics to move up the value chain and diversify the export base. To achieve these, there is a need for strategic industrial policy and carefully designed subsidies that would target improvement of firm level competitiveness such as innovation and research and development activities and human resource development. Apart from diversifying our export base, we also need to diversify our FDI partners. Strong investment promotion should be carried out particularly in countries such as South Korea and Taiwan.

References:

- Aldaba, R. 2010. "Micro Study: Does Trade Protection Improve Firm Productivity? Evidence from the Philippines. Paper submitted to Economic Research Institute for ASEAN and East Asia, Jakarta. http://www.eria.org/pdf/research/y2009/no2/CH05 Micro-Data.pdf
- Aldaba, Rafaelita M. 2005. "Impact of market reforms on competition, structure, and performance of the Philippine economy", PIDS Discussion Paper 2005-24, Philippine Institute for Development Studies, Makati City. Also in www.worldbank.org.ph/productivity.
- Aldaba, R., Dorothea Lazaro, Erlinda Medalla, and Gilbert Llanto. 2010. "ERIA Study to Further Improve the ASEAN Economic Community Scorecard: the Philippines". Paper submitted to Economic Research Institute for ASEAN and East Asia, Jakarta.
- Asian Development Bank. 2007. "Country Diagnostics Studies Highlights Philippines Critical Development Constraints" Mandaluyong City, Philippines.
- Bautista, R., J. Power and Associates. 1979. *Industrial Promotion Policies in the Philippines*. Makati City: Philippine Institute for Development Studies. Research Paper Series No. 94-03. Makati City: Philippine Institute for Development Studies.
- Carlin, W. & P. Seabright. 2000. "The importance of competition in developing countries for productivity and innovation", background paper for the World Development Report.

- Dueñas-Caparas, M. 2007. Firm-Level Determinants of Export Performance: Evidence from the Philippines. Philippine Journal of Development 62, 1st Semester 2007(XXXIV-1): 1–26.
- Herrin, A.N. and E.M. Pernia. 2003. Population, human resources, and employment. In The Philippine economy: development, policies and challenges, edited by A. Balisacan and H. Hill. New York: Oxford University Press.
- Hoekman, B. 2006. Liberalizing Trade in Services: A Survey. World Bank Policy Research Working Paper 4030. The World Bank. Washington DC, US.
- Manasan, Rosario and Virginia Pineda. 1999. "Assessment of Philippine Tariff Reform: 1998 Update." AGILE Program Study Report.
- Medalla, E. 2002. Trade and Industrial Policy Beyond 2000: An Assessment of the Philippine Economy. Chapter 5 in Yap, J., ed. *The Philippines Beyond 2000: An Economic Assessment*. Makati City: Philippine Institute for Development Studies
- World Bank. 2007. "Philippines invigorating growth, enhancing its impact", Report No. 39226-PH, PREM Unit East Asia and Pacific Region.
- World Bank and the Organisation for Economic Cooperation and Development (OECD). 1998. A Framework for the Design and Implementation of Competition Law and Policy