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Policy Reversals, Lobby Groups and Economic Distortions

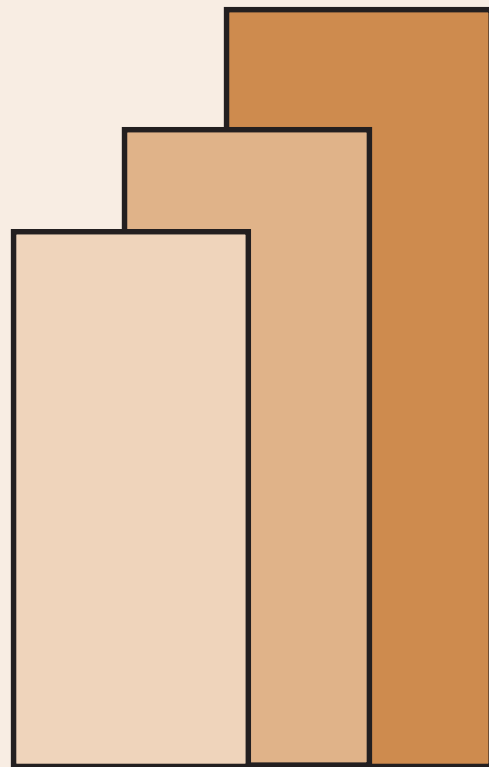
Rafaelita M. Aldaba

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Abstract

This paper aims to review the impact of the various tariff legislations passed from 1998 to 2003 on the structure of protection in the Philippines. The paper finds that while the overall level of effective protection has declined, it has remained uneven as some selected sectors have continued to receive relatively high effective rates of protection. As such, the economic distortions that characterize our tariff structure have continued to prevail and have led to the inefficient use of resources. The tariff structure continues to favor the manufacture of highly protected import substitutes at the expense of exportables. Oftentimes, the favored sectors are intermediate goods like sugar, petrochemicals, float glass, and steel which are inputs to a lot of products. Since the tariffs on the inputs are higher than the outputs, the cost of production has remained high affecting the competitiveness of the user sectors. The large disparities in tariff protection has provided incentives for lobbying. Thus, sustaining the trade reforms and encouraging competition to promote efficiency and consumer welfare has been very difficult.

Keywords: effective protection, tariff structure, trade policy

Policy Reversals, Lobby Groups, and Economic Distortions¹

Rafaelita M. Aldaba²

The Petition of the Candlemakers

“We are suffering from the ruinous competition of a foreign rival who apparently works under conditions so far superior to our own for the production of light, that he is flooding the domestic market with it at an incredibly low price.... This rival... is none other than the sun....

... We ask you to be so good as to pass a law requiring the closing of all windows, dormers, skylights, inside and outside shutters, curtains, casements, bull's-eyes, deadlights and blinds; in short, all openings, holes, chinks, and fissures....”

“A Petition”
Frederic Bastiat

I. Introduction

Since the early 1980s, the Philippines has liberalized its trade policy by reducing statutory tariff rates and removing import quantitative restrictions. The first tariff reform program (TRP I) initiated in 1981 substantially reduced the average nominal tariff and the high rate of effective protection that characterized the Philippine industrial structure (see Box 1). 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.

¹ Ms. Amelia Menardo of NEDA provided a very good tariff data base covering the products affected by EOs 241 and 264 from 1998 to 2005. Ms. Louie Mendoza of the Tariff Commission shared the HS-IO concordance table, 1996 HS-2002 HS conversion table, and the tariff lines contained in the tariff schedules from 1998 to 2005. Ms. Melalyn Cruzado of PIDS did an excellent job in matching the HS 1996 tariff schedules with the HS 2002 schedules as well as with their corresponding IO codes. Ms. Milette Belizario of PIDS also provided assistance in putting together the different tariff schedules. Ms. Ann Pimentel shared the EPR program which was modified for this paper. Finally, Dr. Erlinda Medalla gave a lot of very useful comments and suggestions and provided the weights and other assumptions used in the EPR computations.

² Research Associate, Philippine Institute for Development Studies, afita@mail.pids.gov.ph. This paper forms part of the author's dissertation on “The Impact of Trade Reforms on Price Cost Margins: Evidence from the Philippine Manufacturing Industry”.

Box 1: Major Episodes of Trade Policy Reform in the Philippines

Time Line	Event	Description
1980	<i>Marcos Administration</i> 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
1983	Assassination of Benigno Aquino Balance of payments crisis Suspension of the TRP I	
1986	EDSA I <i>Aquino Administration</i> Revival of import liberalization	
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	EO 470 (July 1991) Tariff Reform Program II	TRP II reduced the tariff range to within a three percent to 30 percent tariff range by 1995
1992	<i>Ramos Administration</i> EO 8 Tariff Reform Program II	EO 8 tariffed quantitative restrictions for 153 agricultural products and tariff realignment for 48 commodities
1994	Ratification of the GATT-WTO	
1995	EO 264 (August 1995) Tariff Reform Program III 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 288 modified the nomenclature and import duties on non-sensitive agricultural products
1996	EO 313 (March 1996) RA 8178	EO 313 modified the nomenclature and increased the tariff rates on sensitive agricultural products RA 8178 lifted the quantitative restrictions on three products and defined minimum access volume for these products
1997	Asian financial crisis	
1998	EO 465 (January 1998) <i>Estrada Administration</i> EO 486 (June 1998) EO 63 (January 1999) EO 334 (January 2001) Tariff Reform Program IV	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 63 adjusted the tariff rates on six industries Freezing of tariff rates at 2000 level until 2001 EO 334 adjusted the tariff structure towards a uniform tariff rate of 5 percent by the year 2004
2001	EDSA II <i>Macapagal-Arroyo Administration</i> EO 11 (April 2001) EO 84 (March 2002) EO 91 (April 2002)	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 2003)	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.

In 1995, the government initiated another round of tariff reform (TRP III) 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. In 1996, the government legislated the tariffication of quantitative restrictions imposed on agricultural products and the creation of tariff quotas imposing 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).

In 2001, another legislation (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. In October and December 2003, the Arroyo government issued Executive Orders 241 and 264, respectively, to modify the tariff structure such that the tariff rates on products that are not locally produced are as low as possible while the tariff rates on products that are locally produced are adjusted upward.

Except during the Ramos administration, the various liberalization episodes that the economy has gone through under different presidents have been characterized by reversals. The inability of the government to sustain trade reforms can be attributed not only to the crises that have incessantly plagued the country but also to intense lobbying by special interest groups to increase their tariffs and delay or exempt them from tariff restructuring. For instance, the Marcos administration suspended TRP I because of the 1983 economic and political crises that triggered the imposition of severe import restrictions and the re-regulation of previously liberalized commodities.

The Aquino administration signed EO 413 in July 1990 to simplify the tariff structure over a period of one year but was not implemented because of the vehement protests from domestic manufacturers of import substitutes. Various industry associations convened to oppose the issuance of EO 413 resulting in the formation of the Federation of Philippine Industries, a private sector group advocating protection of domestic industries. The business firms successfully persuaded then President Aquino to delay the tariff reform package for one year. In July 1991, EO 470 was legislated; it contained the same tariff cuts under EO 413, except that the reductions were spread over a period of six years instead of one year.

Amid a weak Estrada administration, the National Economic Development Authority (NEDA) struggled to continue the trade reforms initiated by the Ramos government. In 1998, EO 486, a comprehensive tariff reform package, was signed. However, this was strongly opposed by the local manufacturers of import-substitutes. After six months, EO 63 was issued to increase the tariff rates on textiles, garments, petrochemicals, pulp and paper, and pocket lighters. The same pattern emerged under the Arroyo administration, which also remained captured by various interest groups. Hence, TRP IV, which was legislated prior to the impeachment of Estrada never really took off the ground as intense pressure by lobby groups either resulted in tariff increases or postponement of scheduled tariff reductions.

The main objective of this paper is to assess the impact of the various tariff legislations from 1998 to 2003 on the overall structure of protection, highlighting those sectors where protection remains particularly high. After the introduction, the current structure and level of nominal protection will be assessed by comparing the changes in nominal tariff rates from

1998 to 2005. In the next section, EPR estimates will be used to analyze the impact of the tariff increases embodied by the tariff laws passed during the period 1998 to 2003 on the structure of effective protection. Then, a closer look and assessment of the favored sectors in terms of their economic performance and contribution will be made. Finally, lessons and policy implications will be drawn from the preceding analysis.

II. Changes in Structure and Level of Statutory Tariff Rates: 1998 to 2005

EO 465 (January 1998) signed by then President Ramos and EO 486 (June 1998) were part of a series of legislations that were meant to modify the tariff schedule defined by EO 264 of August 1995 that represented TRP III. In 2000, tariffs were frozen until 2001. EO 334 or TRP IV was signed in January 2001 with the aim of adopting a five percent tariff rate by 2004. In March 2002, EO 84 was passed to extend existing tariff rates from January 2002 to 2004 on various agricultural products. In January 2003, EO 164 was signed to maintain the 2002 tariff rates for 2003 covering a substantial number of products. Before 2003 ended, two legislations, EOs 241 and 264, were passed to adjust the tariff schedule resulting in tariff increases on a group of selected agricultural and manufactured products.

In this section, mean tariffs are used in the analysis of the structure of nominal protection. Simple arithmetic averages (unweighted) are calculated from 1998 to 2005 to trace the effects of the various legislations on the overall level of tariff protection. Table 1 and Figure 1 present the statutory tariff rates from 1998 to 2005 for the country's major economic sectors. Each year reflects the changes in tariffs mandated by the different legislations passed from the Estrada administration (June 1998 to January 2001) until the Arroyo administration (February 2001 to the present).

It is evident from Table 1 that our overall level of tariff rates is already low. On the average, tariff rates were reduced from 33% to the current average rate of 6.82 percent. Agriculture has the highest average tariff rate of 11.3 percent. Manufacturing mimics the total industry average with its average tariff rate of 6.76 percent. Fishing and forestry has an average rate of six percent while mining and quarrying is the lowest at 2.5 percent. Unlike the rest of the sectors where ad valorem tariffs are used, tariff quotas are used in agriculture primarily because of the increased protection that they can provide against large reductions in import prices.

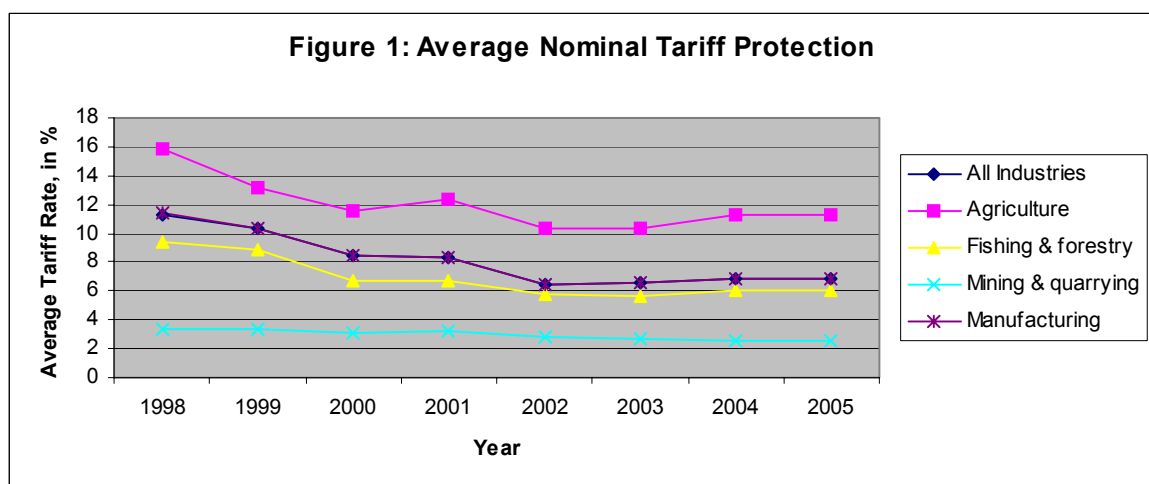
Note, however, that lower level of tariff protection does not always imply that the tariff schedule is less distorting. The economic and trade distortions associated with our tariff structure depend not only on the size of tariffs but also on the dispersion of these tariffs across all products. Two measures are estimated: the percentage of tariff peaks and the 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. In general, the more dispersion in a country's tariff schedule, the greater the distortions caused by tariffs on production and consumption patterns. Firms will tend to increase the production of those commodities protected by high tariffs while consumers will

tend to shift their consumption from products with high tariffs to competing products with lower costs.

Table 1: Structure of Nominal Tariff Protection, 1998-2005

Major Sectors	1990	Major Tariff Legislations Passed							
		EOs 465 & 486	EO 63	Tariff freeze, EOs 334, 11, 84 & 91			EO 164	EOs 241 & 264	
		1998	1999	2000	2001	2002	2003	2004	2005
All Industries	33.33	11.32	10.25	8.47	8.28	6.45	6.60	6.82	6.82
Coefficient of variation	0.44	0.96	0.91	0.99	1.04	1.17	1.06	1.07	1.07
% of tariff peaks	-	2.24	2.24	2.48	2.50	2.69	2.53	2.71	2.71
Agriculture	36.73	15.9	13.2	11.5	12.3	10.4	10.4	11.3	11.3
Coefficient of variation	-	1.07	1.14	1.3	1.23	1.31	1.22	1.17	1.17
Fishing & forestry	29.24*	9.4	8.9	6.7	6.7	5.8	5.7	6.0	6.0
Coefficient of variation	18.21**	0.63	0.70	0.66	0.62	0.45	0.48	0.57	0.57
Mining & quarrying	11.71	3.3	3.3	3.1	3.2	2.8	2.7	2.5	2.5
Coefficient of variation	-	0.42	0.41	0.24	0.23	0.38	0.40	0.48	0.48
Manufacturing	34.66	11.38	10.35	8.50	8.28	6.39	6.57	6.76	6.76
Coefficient of variation	-	0.93	0.88	0.95	1.00	1.13	1.03	1.03	1.03
Number of product Lines	6193	7363	7363	7363	7363	7363	7363	7382	7382

*Fishing, **forestry . 1990 figures are from Manasan & Pineda (1999).



As Table 1 shows, while the average tariff rate for all industries dropped from 33 percent in 1990 to 6.82 percent in 2004, tariff dispersion widened as the coefficient of variation went up from 0.44 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. The number of tariff lines went up from 6,193 to 7382 between 1990 and 2004.

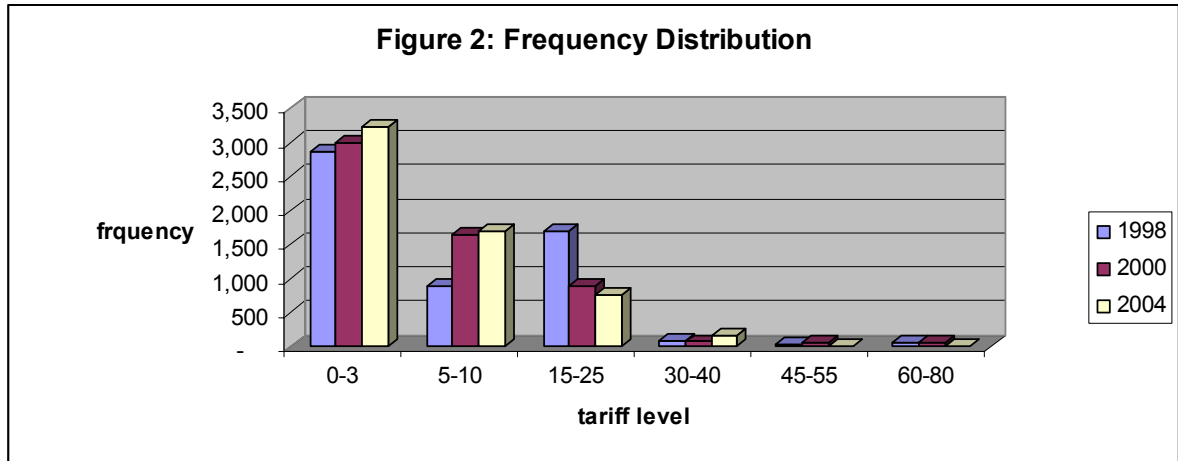
Table 1 also indicates that the percentage of tariff peaks (tariffs that are greater than three times the mean tariff) went up from 2.24 percent in 1998 to 2.71 percent in 2004. An increase in tariff peaks occurs when high tariffs are reduced by less than the average reduction over all tariffs. The greater the percentage of tariff peaks in a country's tariff schedule, the greater the potential economic distortions particularly when highly substitutable products are present in both domestic and world markets. 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.

Table 2 presents a more detailed tariff structure in the manufacturing sector. The table shows that within manufacturing, the average nominal tariff rates vary with food manufacturing receiving the highest level of average tariff rate of 13.8 percent in 2004 while machinery gets the lowest average tariff rate of three percent. The other manufacturing sectors enjoying relatively high average tariff rate include textile and garments with 11.7 percent and furniture and fixtures with 11.2 percent. The rubber and plastic products sector has an average tariff rate of nine percent while the beverages sector has an average rate of 8.6 percent. Based on the coefficient of variation, machinery, transportation, food processing, and chemicals and chemical products exhibit the largest dispersion of tariffs while tobacco, textiles and garments, and furniture and fixtures have relatively low dispersion. Note that manufacturing sectors with relatively high coefficient of variation such as machinery and chemical and chemical products are the same sectors with the lowest average tariff rates of three and 3.6 percent, respectively.

In terms of frequency distribution, figure 2 shows that 55 percent of the Philippine tariff lines are clustered around the 0-3 tariff levels. About 29 percent of the tariff or product lines are found in the 5-10 percent tariff levels. Between 1998 and 2004, the number of product lines in both tariff levels increased. The number of product lines in the 15-25 tariff level declined from 30 percent in 1998 to 13 percent in 2004. However, the number of lines in the 30-40 tariff level rose from 1.5 percent to 2.6 percent. Those in the 45-55 and 60-80 tariff levels seem to be negligible.

Table 2: Structure of Average Nominal Tariff Protection in the Manufacturing Sector

	1998	1999	2000	2001	2002	2003	2004	2005
Manufacturing	11.4	10.3	8.5	8.3	6.4	6.6	6.8	6.8
Coefficient of variation	0.93	0.88	0.95	1.00	1.13	1.03	1.03	1.03
Food manufacturing	20.8	18.2	16.1	16.5	14.4	12.9	13.8	13.8
Coefficient of variation	0.98	0.92	1.06	1.08	1.2	1.08	1.01	1.01
Beverages	15.3	13.6	9.7	9.7	7	7	8.6	8.6
Coefficient of variation	0.41	0.5	0.52	0.52	0.44	0.44	0.53	0.53
Tobacco	18.6	13.9	9.1	9.1	6.5	6.5	7.6	7.6
Coefficient of variation	0.21	0.22	0.27	0.27	0.22	0.22	0.31	0.31
Textile & garments	18.8	17.6	14.3	14.1	10.6	10.9	11.7	11.7
Coefficient of variation	0.38	0.31	0.43	0.46	0.45	0.48	0.42	0.42
Leather & leather prods	13	10.6	8.5	8.1	6.1	7.9	7.7	7.7
Coefficient of variation	0.76	0.74	0.72	0.70	0.53	0.70	0.77	0.77
Wood & wood products	13.8	12.3	9.9	9.9	7.1	7.5	7.5	7.5
Coefficient of variation	0.59	0.56	0.64	0.64	0.66	0.66	0.66	0.66
Furniture & fixtures	19.6	16.3	15	14.4	10.8	11.1	11.2	11.2
Coefficient of variation	0.39	0.36	0.45	0.48	0.49	0.45	0.44	0.44
Paper & paper products	14.2	12.1	9.4	8.9	6.0	6.6	5.7	5.7
Coefficient of variation	0.64	0.6	0.56	0.59	0.64	0.67	0.72	0.72
Chemicals & chemical	4.7	4.5	3.9	3.9	3.2	3.3	3.6	3.6
Coefficient of variation	0.86	0.84	0.64	0.65	0.73	0.79	1.09	1.09
Rubber & plastic prods	13.4	12.1	9.1	9.3	7.9	8.7	9.0	9.0
Coefficient of variation	0.58	0.52	0.56	0.54	0.57	0.56	0.57	0.57
Non-metallic mineral	9.8	9	6.7	6.4	4.8	5.7	5.7	5.7
Coefficient of variation	0.8	0.77	0.69	0.7	0.6	0.76	0.77	0.77
Basic metals	10.2	9	7.8	6.9	4.9	5.4	5.3	5.3
Coefficient of variation	0.74	0.73	0.73	0.78	0.74	0.82	0.83	0.83
Machinery	6.2	5.9	4.8	4.5	3.0	3.1	3.0	3.0
Coefficient of variation	0.99	0.96	1.03	1.01	1.16	1.23	1.27	1.27
Transportation	11.5	11.2	8.9	8.6	8.1	8.1	7.9	7.9
Coefficient of variation	1.09	1.12	1.03	1.06	1.15	1.16	1.20	1.20
Miscellaneous products	8.5	7.5	6.0	5.8	4.4	4.9	5.0	5.0
Coefficient of variation	0.89	0.81	0.80	0.82	0.76	0.83	0.90	0.90



III. Analysis of the Impact of Tariff Changes on Effective Protection

Effective protection rates (EPR) or rates of protection of value added are more meaningful than actual tariff rates since it is value added rather than the value of the product that is contributed by the domestic activity being protected. EPRs measure the net protection received by domestic producers from the protection of their outputs and the penalty from the protection of their inputs. The EPR formula is given by

$$EPR = (V - V^*) / V^*$$

where V is the domestic value added per unit of the final good (including the tariffs on that good and on its inputs) and V^* is the value added under free trade. Value added per unit, in turn, is defined as the gross value of output minus the cost of inputs used in production. Domestic value added is

$$V = (1 + t_j) - \sum a_{ij} * (1 + t_i)$$

free trade value added is the same, except that in this case tariffs do not exist (the value of t is zero)

$$V^* = 1 - \sum a_{ij}$$

where

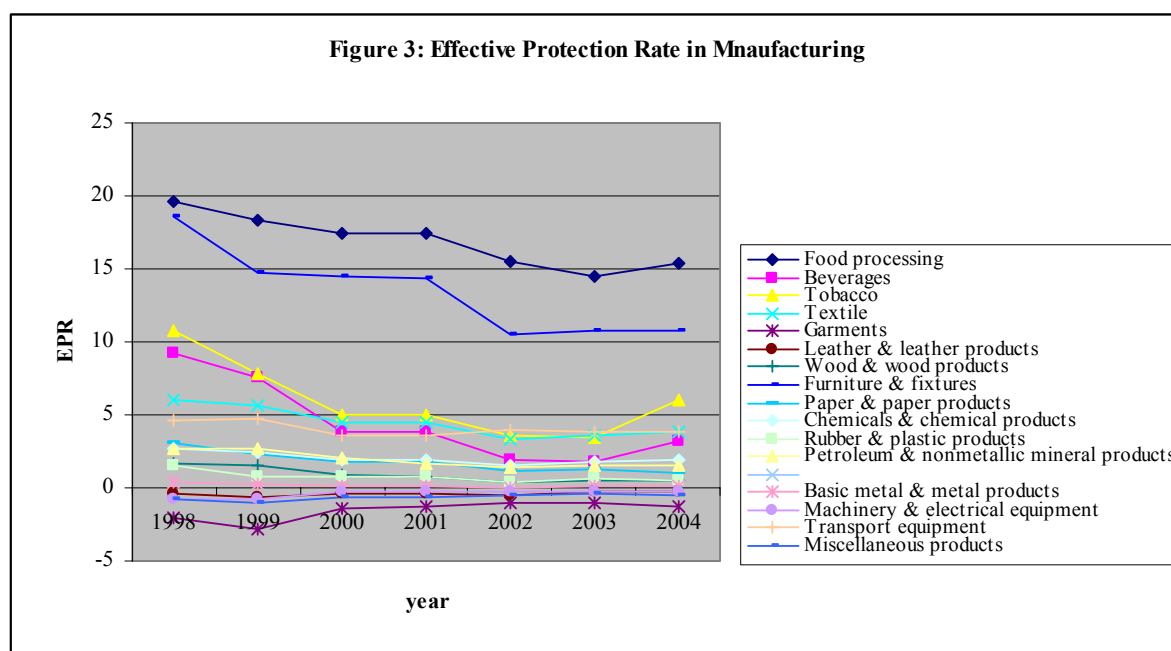
- a_{ij} : technical coefficient derived from the 1994 input-output table indicating the amount of input from sector i needed to produce a unit of output j
- t_j : tariff on output from sector j
- t_i : tariff on input from sector i .

Table 3: Weighted Average Effective Protection Rates (in %), 1998-2005

Sector	1998	1999	2000	2001	2002	2003	2004
All Industries	8.59	7.80	7.06	7.09	6.14	5.89	6.33
Exportable	2.35	1.75	1.59	1.71	1.16	1.1	1.38
Importable	14.76	13.42	12.28	12.16	10.89	10.48	10.98
Agriculture	19.38	17.50	15.87	16.62	14.38	13.74	15.09
Exportable	6.96	6.45	5.22	5.67	4.26	4.04	4.93
Importable	12.42	11.05	10.65	10.95	10.12	9.70	10.16
Fishing & forestry	8.52	8.05	5.97	5.78	4.67	4.63	5.15
Exportable	5.28	4.94	3.70	3.51	2.61	2.62	3.04
Importable	3.24	3.10	2.27	2.27	2.05	2.00	2.11
Mining & quarrying	1.99	2.05	2.09	2.11	1.91	1.86	1.80
Exportable	1.15	1.22	1.34	1.38	1.30	1.27	1.24
Importable	0.84	0.83	0.75	0.73	0.60	0.59	0.56
Manufacturing	7.01	6.36	5.86	5.79	5.04	4.82	5.13
Exportable	-0.38	-0.92	-0.48	-0.45	-0.52	-0.52	-0.53
Importable	14.17	12.93	11.75	11.51	10.2	9.83	10.3
Food processing	19.61	18.32	17.47	17.42	15.57	14.49	15.36
Exportable	0.89	0.91	0.67	0.63	0.29	0.29	0.35
Importable	18.72	17.40	16.80	16.79	15.28	14.20	15.01
Beverages	9.27	7.54	3.88	3.89	1.88	1.75	3.20
Exportable	-0.38	-0.34	-0.29	-0.29	-0.25	-0.26	-0.26
Importable	9.65	7.88	4.18	4.18	2.13	2.01	3.46
Tobacco	10.83	7.88	5.01	5.04	3.56	3.50	6.06
Exportable	-0.31	-0.24	-0.18	-0.17	-0.12	-0.12	-0.12
Importable	11.14	8.12	5.18	5.21	3.68	3.62	6.18
Textile	5.97	5.58	4.51	4.51	3.28	3.6	3.82
Exportable	-0.48	-0.86	-0.3	-0.25	-0.24	-0.09	-0.26
Importable	6.37	6.24	4.76	4.69	3.49	3.7	4.02
Garments	-2.11	-2.76	-1.42	-1.31	-0.99	-1.01	-1.34
Exportable	-2.95	-3.39	-2.11	-2.01	-1.51	-1.52	-1.84
Importable	0.84	0.63	0.69	0.69	0.52	0.52	0.5
Leather & leather products	-0.42	-0.70	-0.36	-0.37	-0.49	-0.28	-0.27
Exportable	-2.65	-2.46	-1.78	-1.72	-1.38	-1.58	-1.59
Importable	2.24	1.76	1.42	1.35	0.89	1.30	1.33
Wood & wood products	1.62	1.48	0.85	0.77	0.37	0.49	0.50
Exportable	-0.68	-0.59	-0.60	-0.64	-0.59	-0.58	-0.59
Importable	2.30	2.07	1.45	1.41	0.96	1.07	1.09
Furniture & fixtures	18.53	14.71	14.55	14.37	10.55	10.76	10.80
Exportable	18.41	14.61	14.45	14.28	10.48	10.70	10.73
Importable	0.13	0.09	0.09	0.08	0.06	0.07	0.06
Paper & paper products	3.10	2.36	1.78	1.77	1.18	1.31	1.01
Exportable	-1.94	-1.73	-1.37	-1.33	-0.90	-0.96	-0.85
Importable	5.04	4.09	3.15	3.10	2.09	2.26	1.86
Chemicals & chemical products	2.69	2.49	1.96	1.88	1.55	1.82	1.86

Exportable	-0.52	-0.50	-0.44	-0.43	-0.33	-0.34	-0.34
Importable	3.21	3.00	2.40	2.31	1.89	2.16	2.20
Rubber & plastic products	1.48	0.79	0.73	0.74	0.40	0.60	0.45
Exportable	-1.95	-1.94	-1.51	-1.46	-1.29	-1.31	-1.43
Importable	3.43	2.73	2.23	2.20	1.68	1.91	1.88
Petroleum & nonmetallic mineral products	2.64	2.65	1.99	1.65	1.37	1.58	1.60
Exportable	0.13	0.14	0.03	-0.02	-0.06	0.00	0.01
Importable	2.51	2.51	1.95	1.67	1.44	1.58	1.59
Basic metal & metal products	0.35	0.21	0.15	0.11	0.00	0.10	0.09
Exportable	-1.95	-1.78	-1.55	-1.42	-1.08	-1.13	-1.13
Importable	2.30	1.99	1.70	1.52	1.08	1.24	1.23
Machinery & electrical equipment	-0.79	-0.76	-0.20	-0.23	-0.21	-0.25	-0.26
Exportable	-1.85	-1.74	-0.96	-0.88	-0.69	-0.74	-0.70
Importable	1.06	0.98	0.77	0.66	0.48	0.49	0.44
Transport equipment	4.59	4.69	3.61	3.54	3.92	3.83	3.89
Exportable	-1.94	-1.82	-1.45	-1.39	-1.21	-1.23	-1.20
Importable	6.53	6.51	5.06	4.94	5.13	5.07	5.08
Miscellaneous products	-0.82	-1.02	-0.62	-0.59	-0.45	-0.39	-0.48
Exportable	-2.15	-2.13	-1.53	-1.48	-1.11	-1.18	-1.26
Importable	1.32	1.11	0.91	0.89	0.67	0.79	0.78

Table 3 and figure 3 present the EPR weighted averages implied by the statutory tariff rates discussed in the previous section. In general, the overall level of effective protection declined between 1998 and 2004. The average EPR for all industries is relatively low and does not differ much from the rates of nominal tariffs. However, protection continues to be uneven with the coefficients of variation remaining at very high levels. Table 4 shows that while the coefficient of variation was on a decline between 1998 and 2001, it has increased from 2.05 to 2.91 between 2002 and 2004. This indicates that the twin executive orders of 2003 did not alter the substantial dispersion of protection reflecting a wide variation in incentives within the economy. Manufacturing exhibits the highest coefficient of variation rising from 2.61 in 2001 to 3.85 in 2004 (see Table 4).



The structure of protection also indicates that the bias for agriculture has remained as it enjoys the highest level of protection from 1998 to 2005. Given the obvious bias of the system of protection against manufacturing, the gap between manufacturing and agriculture widened between 2003 and 2004.

Table 4: Coefficient of Variation based on weighted averages of EPRs

Sectors	1998	1999	2000	2001	2002	2003	2004
All Industries	2.19	2.09	2.08	2.04	2.05	3.09	2.91
Agriculture	0.78	0.74	0.78	0.84	0.88	0.82	0.77
Fishing & forestry	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Mining & quarrying	1.0	0.9	0.8	0.8	0.8	0.9	0.9
Manufacturing	2.83	2.72	2.64	2.61	2.59	4.04	3.85

The system of protection also reveals that it has remained bias for importables. The EPR of import-substituting activities, though it has declined from 15 percent to 11 percent between 1998 and 2004, has remained higher than the EPR of export-oriented activities which declined from 2.4 percent in 1998 to 1.4 percent in 2004. Manufacturing importables exhibit the highest EPRs at 10 percent in 2004. While a reduction in the protection of importables is evident between 1998 to 2005, the average EPRs of manufacturing exportables have remained negative since 1998. Note that in the other major economic sectors consisting of agriculture, fishing and forestry, and mining and quarrying; exportables have positive EPRs from 1998 to 2004, though still smaller than their respective EPRs for importables. This indicates that manufacturing exportables are penalized by the system of protection. To address this penalty, manufacturing exportables are allowed duty free raw material importation through export processing zones, bonded manufacturing warehouses, and tax credit programs. As a result, in

economic zones for instance, there is little valued added created and weak backward linkages established with the rest of the economy.

Within manufacturing, average EPRs range from -1.34 to 15.36 percent in 2004 and 2005. The most highly protected sectors include food manufacturing (15.36%), furniture and fixtures (10.8%), tobacco (6.1%), transport equipment (3.9%) and textile (3.8%). Garments, leather and leather products, and machinery and electrical products have small negative EPRs indicating that they are penalized by the system of protection.

IV. A Second Look at the Country's Most Favored Sectors

The previous section noted the high nominal tariffs and high effective protection of the agriculture sector relative to manufacturing. Table 5A shows that the average share of agriculture value added declined in the last two decades. While its average share slightly increased from 21.7 percent to 22.5 percent in the 1980s, the nineties witnessed a continuous decline in its share. The average share of manufacturing value added also fell from 26.7 percent to 25.9 percent during the eighties and remained almost constant thereafter. In terms of growth, Table 5B indicates that agriculture grew slower than manufacturing up to 1997, but in the recent years 1998-2000, agriculture registered a higher growth rate of 4.8 percent while manufacturing posted only 3.5 percent. In terms of employment generation, the average share of agriculture to total employment continued to decline from 51 percent during the period 1981-85 to 37.7 percent in 1998-02. The average share of manufacturing remained almost constant at 9.9 percent for all years under review.

Table 5A: Distribution of Gross Value Added by Sector

	81-85	86-90	91-95	96-97	98-00
AGRI.FISHERY, & FORESTRY	23.77	24.09	22.02	20.09	18.80
a. Agriculture industry	21.69	22.49	21.57	19.91	18.64
b. Forestry	2.08	1.59	0.46	0.18	0.15
INDUSTRY SECTOR	40.07	35.90	34.06	34.31	32.91
a. Mining & Quarrying	1.60	1.81	1.44	1.13	1.07
b. Manufacturing	26.73	25.89	24.63	24.15	23.42
c. Construction	9.12	5.42	5.14	5.87	5.20
d. Elect, Gas and Water	2.62	2.77	2.84	3.16	3.23
SERVICE SECTOR	38.64	42.24	42.09	41.60	42.97

Table 5B: Growth Rates of Gross Value Added by Sector

	81-85	86-90	91-95	96-97	98-00
AGRI.FISHERY, & FORESTRY	(0.39)	2.5	1.9	-1.8	4.8
a. Agriculture industry	1.02	3.1	2.3	-1.6	4.8

b. Forestry	(14.16)	-10.7	-18.3	-16.2	0.0
INDUSTRY SECTOR	(4.17)	3.6	3.9	1.9	2.4
a. Mining & Quarrying	5.29	-1.7	-1.2	2.2	0.4
b. Manufacturing	(3.14)	4.0	3.2	1.5	3.5
c. Construction	(13.58)	3.2	6.7	2.4	-3.3
d. Electricity, Gas & Water	4.82	3.6	7.2	4.0	3.6
SERVICE SECTOR	1.01	4.6	3.7	4.3	4.1

Table 5C: Structure of Employment

	1981-1985	1986-1990	1991-1995	1996-97	1998-02
Agriculture, Fishery and Forestry	51.1	47.0	44.9	41.8	37.7
Manufacturing	9.7	9.9	10.3	9.9	9.9

Table 6 gives a more detailed glimpse on the most highly protected sectors in the economy. In the agriculture sector, the sub-sectors with the highest EPRs consist of coffee (an exportable product) and hogs with EPRs of 38 percent and 35 percent in 2004, respectively. Corn comes next with an EPR of 26 percent.

In manufacturing, there are two outlier sectors: coffee roasting and processing and manufacture of pesticides and insecticides. Both sectors have very high EPRs with coffee roasting having a very large negative EPR while pesticides and insecticides have an EPR of over 200 percent in 2004. Under transport, the manufacture and assembly of motor vehicles also has a relatively high protection with its EPR of 76 percent. Meat and meat processing and rice and corn milling have EPRs slightly above 40 percent. Bicycles and motorcycles, carpets and rugs, rebuilding of motor vehicles, wire nails, and sugar milling and refining, have EPRs ranging from 30 to 35 percent. Hardboard and particle board, ready-made clothing, structural concrete products, bakery products excluding noodles, manufacture and repair of metal furniture and fixture, hosiery, underwear and outer knitting, wearing apparel except footwear, leather and leather substitutes, articles made up of native materials, metal stamping, coating, and engraving mills, and flat glass have EPRs greater than or equal to 20 percent but less than 30 percent. Annex 1 contains a complete list of EPRs.

Table 6: Highly Protected Sectors

Sector	1998	1999	2000	2001	2002	2003	2004	Ave	Classification
Coffee roasting & processing	*	*	*	*	*	*	*	*	Food processing
Manufacture of pesticides, insecticides	109	-71	-96	96	110	237	238	89	Chemicals & chemical products
Mfr and assembly of motor vehicles	97	98	77	75	78	77	76	82	Transport equipment
	60	51	49	53	52	41	41	50	Food processing

Meat and meat products									
Rice & corn milling	51	47	47	47	43	40	42	45	Food processing
Manufacture of wire nails	74	48	44	45	28	32	32	43	Basic metals
Coffee	48	38	38	48	43	38	38	41	Agriculture
Manufacture of carpets & rugs	52	36	43	44	32	35	33	39	Textile
Hog	40	37	37	38	36	34	35	37	Agriculture
Rebuilding & major alteration of motor vehicles	43	44	33	32	34	33	33	36	Transport equipment
Mfr, assembly of motorcycles & bicycles	45	43	31	31	32	32	35	36	Transport equipment
Manufacture of hardboard & particle board	38	38	40	39	29	29	29	34	Wood & wood products
Manufacture of ready made clothing	45	34	37	37	28	27	27	33	Garments
Manufacture of structural products	59	43	28	28	16	26	26	32	Non metallic mineral products
Manufacture of made up textile goods ex apparel	40	31	32	34	26	30	29	32	Textile
Sugar milling and refining	36	32	31	31	31	31	30	31	Food processing
Corn	36	31	31	32	31	26	26	30	Agriculture
Mfr of radio and TV receiving sets, sound recording & reproducing eq. incl records and tapes	37	37	37	29	22	21	19	29	Machinery & electrical equipment
Mfr of bakery prods exc noodles	35	35	29	31	23	21	28	29	Food processing
Mfr & repair of furniture & fixtures, made primarily of metal	37	31	31	31	23	24	24	28	Miscellaneous products
Hosiery, underwear, & outer knitting	36	26	30	29	22	22	21	27	Textile
Manufacture of other wearing apparel ex footwear	35	25	29	29	22	23	22	26	Garments

Manufacture of veneer & plywood	35	29	27	27	19	20	19	25	Wood & wood products
Manufacture of leather & leather substitutes ex footwear & apparel	37	30	23	23	14	21	23	24	Leather & leather products
Manufacture of articles made up of native materials	31	23	25	25	20	23	22	24	Textile
Metal stamping, coating, engraving mills	36	30	24	24	16	21	20	24	Non metallic mineral products
Manufacture of rubber footwear	37	29	26	22	14	19	19	24	Rubber & plastic products
Mfr of other fabricated wire & cable prods exc insulated wire & cable	33	29	25	24	16	16	16	23	Non metallic mineral products
Manufacture & repair of furniture	33	24	25	21	17	17	17	22	Furniture & fixtures
Manufacture of flat glass	30	29	22	22	14	20	20	22	non metallic mineral products
Manufacture of leather footwear & footwear parts	33	25	22	20	13	19	19	21	Leather & leather products
Commercial & job printing & allied industries	36	28	21	21	14	16	10	21	Paper & paper products

* negative free trade value added

Table 7A: Distribution of Manufacturing Gross Value Added

Industry Group	1981-85	1986-90	1991-95	1996-97	1998-02
<i>Moderate to High</i>					
Food manufactures	45	33	36	35	36
Furniture & fixtures	1	1	1	1	1
Tobacco manufactures	4	3	3	3	3
Beverage industries	3	4	4	4	4
Textile manufactures	4	4	3	3	2
Transport equipment	2	1	1	1	1
Average	59	46	49	46	47
<i>Low</i>					
Chemical & chemical products	7	7	6	6	6
Products of petroleum & coal	10	12	17	18	16
Paper & paper products	1	1	1	1	1

Publishing & printing	1	1	2	1	1
Wood & cork products	3	2	2	1	1
Rubber products	2	3	1	1	1
Basic metal industries	2	3	2	2	2
Metal industries	2	2	2	2	2
Non-metallic mineral products	2	3	3	3	3
Footwear & wearing apparel	5	5	6	6	5
Leather & leather products	0	0	0	0	0
Miscellaneous manufactures	1	2	2	2	3
Machinery except electrical	1	2	1	2	2
Electrical machinery	3	3	5	7	11
Average	41	45	52	54	53

Source of value added data: National Income Accounts

Table 7B: Growth Rates of Manufacturing Gross Value Added

Industry Group	1981-85	1986-90	1991-95	1996-97	1998-02
<i>Moderate to High</i>					
Food manufactures	-3	2	0	4	4
Furniture & fixtures	-8	9	-1	7	1
Tobacco manufactures	0	0	0	7	3
Beverage industries	10	3	1	8	-1
Transport equipment	-35	14	10	-5	-3
Textile manufactures	-8	5	-4	-3	-5
<i>Average</i>	<i>-7</i>	<i>5</i>	<i>1</i>	<i>3</i>	<i>0</i>
<i>Low</i>					
Wood & cork products	-17	8	-7	1	-8
Rubber products	-8	8	-3	-9	-5
Metal industries	-6	8	1	3	5
Basic metal industries	10	2	2	-3	-6
Electrical machinery	5	8	11	20	13
Machinery except electrical	-11	9	6	13	3
Leather & leather products	-7	0	3	12	4
Miscellaneous manufactures	0	13	2	9	7
Footwear & wearing apparel	-5	11	5	-3	2
<i>Average</i>	<i>-4</i>	<i>8</i>	<i>2</i>	<i>5</i>	<i>2</i>

Source value added data: National Income Accounts

Tables 7A and 7B summarize the performance of the different manufacturing sectors in terms of their contribution to manufacturing value added and their corresponding growth rates. Based on their average EPRs for the period 1998 to 2004, the manufacturing sectors were ranked according to their degree of protection: high, moderate, and low (2% and below).

In terms of contribution to manufacturing value added, food manufacturing has remained the most important manufacturing sector although its share considerably dropped

from 45 percent till the mid-1980s (see Table 7A). On the average, its share constituted 36 percent of total manufacturing value added during the period 1998-2002. Petroleum and coal and electrical machinery followed with average shares of 16 percent and 11 percent, respectively during the same period.

Note that in a span of about two decades, the electrical machinery showed quite a strong and consistent performance as its value added continuously grew from a mere 4.89 percent in 1981-1985 to 8.3 percent in the succeeding period (see Table 7B). In the recent periods, 1996-1997 and 1998-2002, the sector registered the highest manufacturing growth rates of 20 percent and 12.8 percent, respectively. In contrast, the average shares of chemical and chemical products and footwear and wearing apparel hardly moved during the last two decades. The average share of chemical and chemical products even dropped from 7 percent in 1981-1985 to about 6 percent from 1991-1995 to 1998-2002. The average share of footwear and wearing apparel showed moderate increases till the 1991-1995 period, but declined from 6.2 percent in 1991-1995 to 5.6 percent in 1996-97 and to 5.3 percent in 1998-2002. The weak performance of these sectors is manifested in their relatively lackluster growth over the last two decades. Textiles and transport equipment are the other low growth sectors. Falling in the same group are rubber products, paper and paper products, and wood and wood products (see Table 7B).

It is evident from Tables 7A and 7B that the total contribution of sectors receiving relatively less protection increased almost steadily from 41 percent during the period 1981-85 to 53 percent during the period 1998-02. The share of moderately and highly protected sectors declined from 59 percent in the period 1981-85 to 47 percent in 1998-02 period.

In terms of growth, the sectors receiving very little protection have grown more rapidly than the moderately to highly protected sectors. Overall average manufacturing growth rate has trailed behind the average growth rate of the low protection group for all periods under study. Prior to the Asian financial crisis, the sectors registered a growth rate of about 5 percent and managed to attain a 2 percent growth rate percent after the crisis.

To measure the correlation between protection and growth, the correlation coefficient between the EPR and value added growth rate was estimated. The correlation analysis yielded a correlation coefficient of -0.006 indicating that protection and growth are negatively correlated.

Table 8 compares the performance of the manufacturing vis-à-vis other economic sectors from the 70s to the 20s. The share of the industrial sector in total output saw a reduction from its peak of about 38 percent from the 1970s till the 1980s. This dropped to 34.1 percent during the 1990s with very little improvement in the period 2001-2003. The manufacturing sub-sector represents the most important industrial sector. It registered its highest contribution of about 28 percent in the 1970s. Its share fell to 26 percent in the 1980s and to 24 percent in the 1990s. This has remained unchanged in the most recent period under review.

Table 8: Average Growth Rates and Value Added Structure by Major Economic Sectors
(in %, at constant 1985 prices)

Period	1971-80	1981-90	1991-00	2001-03
Value added growth rate				
Gross Domestic Product	5.7	1.7	3.0	3.89
1. Agriculture, Fishery, Forestry	3.9	1.1	1.8	3.59
2. Industry Sector	7.6	0.3	3.0	2.51
Mining & Quarrying	6.1	1.9	-0.2	16.86
Manufacturing	5.9	0.9	2.5	3.46
Construction	14.1	-3.1	4.3	-4.84
Electricity, Gas and Water	11.6	4.1	5.6	2.56
3. Service Sector	5.2	3.3	3.6	5.07
Share in Value added				
1. Agriculture, Fishery, Forestry	25.6	23.9	20.8	19.7
2. Industry Sector	38.3	38.0	34.1	34.4
Mining & Quarrying	1.4	1.7	1.3	1.4
Manufacturing	28.2	26.3	24.3	24.2
Construction	7.1	7.3	5.5	5.6
Electricity, Gas and Water	1.7	2.7	3.0	3.3
3. Service Sector	36.6	40.4	42.4	45.8

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 and 2.5 percent in the period 2001-2003. Manufacturing registered an average annual growth rate of 0.9 percent in the 1980s, this went up to 2.5 percent in the 1990s and in the recent period, this improved to 3.5 percent.

Table 9 compares the performance of the Philippine manufacturing with other Asian developing countries. It is evident from the data that our neighboring countries registered reductions in the share of agriculture and substantial increases in the size of industry during the period 1990 to 1999. During this period, the share of Philippine agriculture dropped from 22 percent to 18 percent, industry declined from 34 percent to 30 percent while services, which constituted a large portion of Philippine output, rose sharply from 44% in 1990 to 52% in 1999.

Table 9: Structure of Output

Sector	Philippines		Thailand		Indonesia		Malaysia		China	
	1990	1999	1990	1999	1990	1999	1990	1999	1990	1999
Agriculture	22	18	12	10	19	19	15	11	27	18
Industry	34	30	37	40	39	43	42	46	42	49
Manufacturing	25	21	27	32	21	25	24	32	33	38
Services	44	52	50	50	41	37	43	43	31	33

Source: World Bank, 2001 World Development Indicators.

In contrast, the share of agriculture in Thailand dropped from 12 percent in 1990 to 10 percent in 1999. The same trend was witnessed in Malaysia and China. In Malaysia, agriculture declined from 15% to 11%. In China, the share of agriculture fell from 27% to 18%. In Indonesia, it remained constant at 19%. In terms of industry share, in Thailand this went up from 37% to 40%, in Indonesia, it increased from 39% to 43%, in Malaysia, it rose from 42% to 46% and in Thailand, from 42% to 49%. The bulk of industry, manufacturing, witnessed significant increases in its share for all the countries under review except for the Philippines. In services, Thailand's share remained unchanged at 50% in both years. In Indonesia, Malaysia, and China reduction in the share of services were observed.

V. Conclusions and Policy Recommendations

In the last ten years or so, the high rates of nominal protection have been reduced considerably. But despite our generally low average import duties, the total number of tariff headings (8-digit level of the 2002 Harmonised Commodity Description and Coding System or HS) increased from 7,366 tariff lines in 1998 to 7,382 in 2004. Most countries average about 6,000 tariff headings. The nominal tariff variance increased from 96 percent in 1998 to 107 percent in 2004 implying a wide dispersion of tariff lines. The number of tariff peak products went up from 165 product lines (or 2.24 percent of total number of HS lines) to 200 lines (2.7 percent of total HS lines) during the same period. The tariffs for peak products range from 25 percent to 65 percent in 2004. These tariff peaks are concentrated in agricultural staple food products such as palay, corn, sugarcane, onions, garlic, cabbage, roots and tubers, hog, cattle and other livestock, chicken, other poultry and poultry products. Tariff peaks are also present in manufactured food products such as milled and refined sugar, milled rice and corn, processed and roast coffee, processed meat, canned and preserved fruits and vegetables, starch and starch products, bakery products excluding noodles, and miscellaneous food products. They can also be found in non-food manufactures like animal feeds, drugs and medicines, chemical products, and motor vehicles.

In terms of effective protection, the current average EPR for all industries is relatively low and does not differ much from the rates of nominal tariffs. However, protection continues to be uneven with the coefficients of variation remaining at very high levels. Manufacturing exhibits the most dispersion with a coefficient of variation of 385 percent in 2004. The EPR estimates also show that the bias for agriculture has remained as the sector enjoys the highest level of protection from 1998 to 2005. The high tariff schedule resulting from the tariffication under the WTO is a main problem in agriculture. The structure of protection has also remained biased for importables as they continue to receive higher levels of protection than exportables.

On the overall, the recent tariff review conducted by the Tariff and Related Matters Committee resulting in the legislation of EOs 241 and 264 did not lead to any substantial increases in both average nominal and effective protection. However, since many of the tariff increases were made selectively to favor particular interest groups, the twin EOs hardly made a significant contribution in reducing our highly dispersed tariffs. Though our average nominal tariffs are already low, it should be noted that economic and trade distortions associated with a

tariff schedule depend not only on the size of the tariffs but also on the dispersion of these tariffs across all products. The more dispersion in a country's tariff schedule, the greater the distortions caused by tariffs on production and consumption patterns. There are also many dangers in providing differentiated tariff protection to various sectors of industry and agriculture. A large dispersion of tariff structure encourages lobbying for high protection by industry groups³. Experience has shown that it is very difficult for a government to select sectors that are most likely to satisfy the conditions justifying protection, to be immune to pressures from special interest groups, and to prevent any protection from becoming permanent.

Our long history of protection has illustrated how import lobbies with political clout are able to ensure that their sectors remain protected. But despite the protection that these sectors have enjoyed, their growth has been sluggish and their contribution to total value added has even declined. In contrast, sectors that have received very little protection have registered increases in their share in total value added and their growth rates have been consistently higher than the relatively more protected sectors. The various policy reversals indicate how the government is driven by vested interest groups that lobby for protection to the goods that they produce and duty-free access to their inputs. Tariffs on these products have remained relatively high. On the other hand, tariffs on products where there is no or small domestic industry have relatively low tariffs because there is no opposing lobbying influence advocating tariffs on these sectors.

As a consequence of the selective protection policy that the government has adopted, tariffs have been changed on an ad hoc basis. As such, efficiency considerations are not taken into account. Effective protection in the economy becomes uneven and the protection becomes incompatible with the country's stated development objectives. Unorganized groups or sectors who do not have the capacity to engage in lobbying, fall prey to these lapses as the duties on their inputs are higher than the tariff rates that apply to their finished products. Petrochemicals, float glass, and steel are prominent examples of intermediate inputs receiving higher duties than the final user products. This increases the cost of production and greatly affects the competitiveness of user products.

Given the tariff distortions, problems of inefficient resource allocation arise that tends to favor highly protected importables at the expense of exportables which encourages the production of import-substituting goods but discourages the production of export-oriented goods. This partly explains the lack of backward linkages in our economy.

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. Our experience, though, has shown that that the duty drawback and bonded manufacturing warehouse systems are both costly to administer leading to cumbersome procedures, delays, and corruption. Note that the success of these systems depends on a technically efficient government bureaucracy that is immune to corrupt practices; these

³ D.G. Tarr, "Arguments for and against uniform tariffs", 2002, in *Development, Trade, and the WTO* edited by B. Hoekman, A. Mattoo, and P. English, The World Bank, Washington, D.C.

institutions, however, are missing in our country. Export processing zones are relatively successful in terms of generating exports, however, the lack of backward integration with the rest of the economy has meant greater dependency of our exports on imported inputs. Addressing this problem would require economy-wide reforms.

The present analysis strongly suggests that there is little economic justification in providing diverse tariff protection. Engaging in tariff reforms that do not reduce the level of dispersion of the tariff structure will convey relatively small benefits. The government should therefore give priority to⁴:

- Reducing the highest tariffs as the costs in terms of inefficiencies in resource allocation rise more than proportionately with the height of the tariff. This requires strong political will as this would involve a lot of agricultural products.
- Raising the low rates, although this might be more controversial particularly for intermediate and capital goods. For revenue generation, tariffs on certain products such as alcohol and tobacco products may be raised but these must be accompanied by equivalent taxes on domestic production.
- Simplifying the tariff structure by limiting the number of tariffs and reducing both tariff levels and dispersion of the tariff structure. A tariff structure that is low and has a small variance will be beneficial especially in discouraging lobbying activities and incentives for corruption.

If the administration finds it inevitable for political or other reasons to reverse its tariff policy, then it should avoid a sector-by-sector approach as this lends itself most easily to lobbying and selective requests for protection. Instead, a broader approach say, an across the board increase should be adopted rather than selective increases to individual sectors.

The promotion of competition and the transition from a highly distorted trade regime to a more liberal one is a long term process. The fruits of trade liberalization may be wiped out by a variety of circumstances such as currency depreciation, economic crisis, imposition of antidumping and countervailing duties to limit competition, and anti competitive business practices like cartels and price fixing. And more often, domestic producers may put up a strong resistance as they may be unable to adapt quickly to new market conditions and may find themselves vulnerable to competition from more efficient foreign producers. At the same time, foreign investors in emerging markets may also demand protection against competing imports. Powerful business groups engage not only in restrictive business practices but also in lobbying activities for the government to re-impose protectionist measures.

In light of these conditions, it becomes very difficult to sustain trade reforms and competition as mechanisms to promote efficiency and consumer welfare. In most cases, given our weak institutional and regulatory framework, the government simply tends to be inconsistent and soon after, a policy reversal is evident. Indeed, there may be some valid

⁴ This draws from D.G. Tarr, "Arguments for and against uniform tariffs", 2002, in *Development, Trade, and the WTO* edited by B. Hoekman, A. Mattoo, and P. English, The World Bank, Washington, D.C.

reasons, particularly social concerns for temporary protection such as to preserve employment. It should be emphasized, however, that substantial care must be taken in proving that competition from imports has been too fierce to allow the transition process to be socially sustainable. Protection should be awarded as long as import growth is the cause of serious injury to domestic import-competing industries. It must be temporary and strictly related to a restructuring program. It must also be noted that the preservation of jobs as a social policy often results in tremendous costs to consumers. A tariff artificially increases prices, reduces imports and increases domestic production, but leads to a decline in consumption. The impact on the competitiveness of the export industries must also be considered. If the costs are disproportionate relative to the expected benefits, then the social policy embodied in protectionism should be addressed in a more efficient manner. For example, through direct government assistance to individuals who lose their jobs as imports increase or tax relief to firms that are less efficient than foreign competitors.

Allowing backsliding and the continuous use of protection may dampen firms' incentives to become efficient and may foster rent-seeking behavior. Backsliding substantially reduces the credibility of trade reforms. As Rodrik (1989)⁵ points out, the primary need for a government engaged in trade liberalization is to establish and bolster its credibility. Allowing the possibility of providing protection amidst the transition process sends a signal to firms that the government will not commit itself to a given policy reform. This can negatively affect the performance of firms and can lead to so-called time-inconsistency problems. The firms do not adjust because they expect to obtain further protection in the future. When the future comes, it may not be politically optimal for the government not to grant such protection.

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⁵ Dani Rodrik, 1989. "The Credibility of Trade Reform – A Policy Makers Guide," *The World Economy*, 12:1-17.

Annex 1: Effective Protection Rates (1998-2004)

Based on Input-Output Sectors

Description	1998	1999	2000	2001	2002	2003	2004
Corn	35.83	30.76	30.78	31.61	30.77	26.00	26.02
Vegetables	15.68	12.89	9.78	10.35	8.04	11.91	13.64
Banana	22.72	22.84	17.03	16.99	11.19	11.19	17.10
Pineapple	22.23	22.28	16.59	16.66	10.98	11.01	10.97
Mango	21.10	21.13	15.80	15.80	10.47	10.49	15.83
Citrus fruits	23.56	19.04	12.95	11.43	7.84	7.85	11.62
Fruits and nuts exc. coconut	14.22	12.03	8.90	9.20	6.59	6.62	7.48
Coconut	15.20	14.57	11.00	11.00	7.85	7.87	9.98
Abaca	5.40	5.52	3.03	2.94	2.98	3.00	5.57
Coffee	48.37	37.57	37.60	48.42	43.03	37.64	37.63
Cacao	2.87	2.94	2.98	2.94	2.98	3.00	3.01
Rubber	2.86	2.92	2.96	2.93	2.99	3.00	3.01
Other agricultural production, n.e.c.	5.89	4.18	3.35	4.36	3.84	3.15	3.20
Hog	40.38	37.02	37.21	37.94	35.67	33.78	35.11
Ocean,coastal and inland fishing	11.25	10.86	7.82	7.69	6.94	6.83	7.21
Aquaculture and other fishery activities	15.44	14.44	10.86	10.33	7.71	7.75	8.95
Forestry	3.15	2.69	2.60	3.11	2.91	2.60	2.65
Gold and silver mining	2.24	2.38	2.57	2.64	2.91	2.86	2.82
Copper mining	2.14	2.30	2.54	2.62	1.44	1.38	1.29
Nickel mining	1.53	1.69	2.10	2.28	1.31	1.24	1.28
Chromite mining	2.35	2.43	2.65	2.72	3.02	2.99	2.97
Other metal mining	2.26	2.40	2.59	2.67	2.50	2.47	2.22
Coal mining	5.32	5.40	4.31	4.36	4.14	4.13	4.10
Crude petroleum and natural gas	2.71	1.03	1.12	2.87	2.98	2.96	2.97
Stone quarrying, clay and sandpits	3.40	3.39	3.10	3.14	2.97	2.88	2.62
Salt mining	3.89	3.92	3.97	2.91	0.84	0.82	0.82
Other non-metallic mining and quarrying	2.92	2.96	2.98	3.00	2.56	2.44	1.88
Meat & meat products processing	60.14	50.70	49.48	53.47	51.72	40.88	41.17
Milk processing	1.97	2.42	1.43	0.90	0.74	0.77	-0.50
Butter and cheese manufacturing	11.59	9.65	6.22	6.32	5.76	5.70	5.93
Other dairy products	8.28	9.13	8.26	8.31	5.88	5.70	4.48
Canning & preserving of fruits and vegetables	11.76	9.97	7.70	7.69	6.66	7.01	7.41
Fish canning	34.58	31.33	25.11	25.82	16.04	15.95	24.30
Fish drying, smoking & mfg of other seafood products	31.02	30.27	23.18	22.58	14.76	14.78	18.67
Prod'n of crude coconut oil,copra cake and meal	31.05	32.16	23.87	23.87	14.90	14.86	11.38
Other crude vegetable oil exc coconut oil, fish and other marine oils and fats	4.76	6.34	5.45	5.29	4.96	3.16	3.45
Manufacture of refined coconut and vegetable oil	0.36	-1.20	0.29	-1.46	0.43	0.22	0.28
Rice and corn milling	50.96	47.41	46.64	46.57	43.01	40.21	42.27
Flour, cassava & other grains milling	23.28	23.13	17.85	16.00	11.03	12.16	14.71
Mfr of bakery prods exc noodles	34.85	35.36	28.55	31.17	22.74	21.18	27.51
Noodles mfg	24.05	27.38	17.43	15.29	6.43	7.81	18.13
Sugar milling and refining	35.62	31.91	31.00	31.02	30.61	30.60	29.53
Mfr of cocoa, chocolate and sugar confectionery	10.82	10.38	5.59	5.64	2.23	2.18	5.76
Mfr of desiccated coconut	17.81	18.60	14.17	14.21	9.37	9.34	12.66

Coffee roasting and processing	605.59	580.74	589.82	366.59	301.37	222.68	270.42
Mfr of animal feeds	-1.42	-1.04	-0.58	0.09	-2.74	-3.35	-3.73
Mfr of starch & starch prods	9.35	9.10	7.59	7.38	5.81	5.83	10.05
Mfr of flavoring extracts, mayonnaise and food coloring products	10.02	9.52	6.12	5.87	3.56	4.26	5.79
Miscellaneous food products	7.98	3.67	2.77	5.60	5.02	3.69	2.13
Alcoholic liquors and wine	23.37	21.73	14.14	13.93	8.76	8.72	12.76
Malt and malt liquors	11.99	11.25	8.46	8.46	5.18	4.96	7.94
Softdrinks & carbonated water	22.06	16.57	6.51	6.55	2.46	2.23	4.53
Cigarette mfg	27.87	20.30	12.95	13.03	9.18	9.04	15.66
Cigar, chewing & smoking tobacco	19.15	14.23	8.87	8.87	6.55	6.52	7.67
Tobacco leaf flue-curing and redrying	20.34	15.24	10.14	10.14	7.09	7.09	7.09
Textile, spinning, weaving, texturizing and finishing	18.80	22.25	12.94	11.98	8.86	9.10	11.47
Fabric knitting mills	23.70	32.65	15.68	16.11	10.84	10.14	12.90
Hosiery, underwear & outerwear knitting	36.21	26.27	29.52	29.48	22.07	21.84	20.98
Mfr of made-up textile goods exc. wearing apparel	39.88	31.20	31.94	33.78	25.82	30.44	29.44
Mfr of carpets and rugs	52.22	36.40	43.36	43.93	32.33	34.97	32.99
Cordage, rope, twine and net mfg	30.90	23.45	24.74	25.23	19.70	22.74	22.25
Mfr of articles made of native materials	27.40	23.37	20.71	20.76	14.72	19.07	18.94
Mfr of artificial leather and impregnated & coated fabrics	21.05	27.14	14.46	14.69	9.33	10.04	14.91
Mfr of fiber batting, padding, upholstery fillings incl. coir, linoleum and other hard surfaced floor coverings	17.34	15.66	13.47	13.59	10.04	10.93	11.38
Mfr of ready-made clothing	45.14	33.65	36.78	37.05	27.78	27.42	26.56
Embroidery establishments	35.03	25.32	28.67	28.84	21.67	23.09	22.31
Mfr of other wearing apparel exc footwear	28.46	20.68	22.19	21.86	16.58	17.44	17.11
Tanneries and leather finishing	6.40	4.69	4.05	3.87	4.02	4.52	3.73
Mfr of prods of leather and leather substitutes, exc footwear and wearing apparel	37.29	29.56	22.76	22.53	14.32	21.45	22.51
Mfr of leather footwear & footwear parts	32.54	25.31	22.01	19.53	12.94	18.84	18.76
Sawmills and planing mills	17.20	15.80	10.00	9.60	6.42	7.14	7.41
Mfr of veneer and plywood	34.70	29.20	26.88	26.57	19.43	19.62	19.47
Mfr of hardboard and particle board	37.77	37.75	39.52	38.88	29.21	29.05	28.91
Wood drying and preserving plants	14.39	14.83	9.81	9.83	6.96	6.88	6.81
Millwork plants	17.35	16.06	10.68	10.86	7.36	7.20	7.48
Mfr of wooden and cane containers and small cane wares	28.45	24.45	17.34	17.29	11.43	15.84	15.75
Mfr of wood carvings	31.50	24.01	17.05	17.03	9.80	13.68	13.63
Mfr of misc wood, cork & cane prods.	17.32	13.54	10.63	10.18	6.49	8.00	7.97
Mfr and repair of wooden furniture incl upholstery	26.99	21.52	20.88	20.49	14.89	15.39	15.50
Mfr and repair of rattan furniture incl upholstery	36.88	29.19	29.65	29.64	22.08	22.09	22.06
Mfr and repair of other furnitures and fixtures, n.e.c.	32.84	24.50	24.50	21.29	16.71	17.43	16.81
Pulp, paper and paperboard	16.18	14.42	11.30	10.94	7.05	7.54	6.30
Paper and paperboard containers	19.06	10.65	10.57	11.02	7.60	7.61	8.62
Mfr of articles of paper and paperboard	23.71	19.10	13.87	11.95	8.19	9.61	8.93
Newspapers and periodicals	9.58	10.86	6.71	6.93	5.23	4.89	5.54
Printing and publishing of books and pamphlets	10.38	9.84	7.10	7.22	5.49	5.69	6.17
Commercial & job printing & other allied industries	36.31	28.24	20.97	21.38	14.43	16.17	10.18

Mfr of basic ind'l chemicals	2.77	2.80	2.87	2.89	2.17	2.07	1.98
Mfr of fertilizer	2.76	2.81	2.95	2.96	3.81	2.50	2.43
Mfr of synthetic resins , plastic materials & other man-made fibers exc glass	9.41	9.66	7.29	6.88	7.20	7.17	8.32
Mfr of pesticides, insecticides,etc	108.62	-71.09	-96.46	95.97	110.42	236.74	237.95
Mfr. of paints, varnish & lacquers	15.31	14.27	12.40	12.60	9.44	9.33	8.55
Mfr of drugs and medicines	2.96	2.86	2.82	2.87	2.62	2.63	2.62
Mfr of soap and detergents	15.10	14.67	11.09	9.95	8.10	10.14	9.90
Mfr of perfumes, cosmetics & other toilet preparations	20.74	17.44	12.10	11.54	7.14	9.68	10.09
Mfr of misc chemical products	5.32	4.91	4.16	3.96	3.36	3.70	6.42
Rubber tire & tube mfg	19.31	13.72	11.90	11.94	8.41	8.82	8.41
Mfr of rubber footwear	37.45	29.01	25.61	21.89	14.29	19.00	18.64
Mfr of other rubber products, n.e.c	18.68	15.97	10.94	10.68	7.23	9.24	10.63
Mfr of plastic furniture,plastic footwear & other fabricated plastic products	23.13	21.50	15.59	17.48	16.65	17.77	17.69
Petroleum refineries	3.38	4.64	4.40	3.31	3.06	3.03	3.04
Mfr of asphalt, lubricants and misc prods of petroleum and coal	4.78	5.14	3.97	3.72	2.77	2.90	2.96
Manufacture of pottery,china & earthenware	21.22	18.61	11.74	11.79	8.05	11.89	11.95
Mfr of flat glass	29.93	29.10	21.58	21.61	14.24	20.15	20.08
Mfr of glass container	17.96	17.65	12.44	12.47	8.12	11.51	11.54
Mfr of other glass and glass products	11.86	11.93	8.66	8.02	6.27	6.99	6.91
Cement mfr	8.06	6.37	3.51	3.54	4.37	4.31	4.35
Mfr of structural clay products	22.22	20.06	12.50	10.88	6.84	8.37	8.45
Mfr of structural concrete prods	59.02	42.68	27.65	27.70	16.34	25.67	25.71
Mfr of other non-metallic mineral prods,n.e.c.	12.10	9.99	7.19	6.84	4.89	6.06	6.12
Blast furnace and steel making furnace, steel works and rolling mills	16.07	14.20	11.79	10.26	7.58	8.06	8.17
Iron and steel foundries	14.02	12.01	9.95	8.62	5.00	6.16	5.81
Non-ferrous smelting & refining plants, rolling,drawing and extrusion mills	7.49	6.69	6.07	5.74	3.97	4.10	3.79
Non-ferrous foundries	7.65	7.41	5.58	5.57	4.52	4.33	3.97
Cutlery, handtools, general hardware	18.01	16.69	15.48	10.20	7.35	7.90	8.02
Structural metal prods	19.41	19.49	15.70	15.56	11.44	12.94	12.73
Mfr of metal containers	24.26	19.65	17.13	17.19	13.18	15.90	16.17
Metal stamping, coating, engraving mills	36.03	29.73	24.48	23.98	15.98	20.65	19.93
Mfr of wire nails	73.83	48.34	43.57	44.81	27.57	31.56	31.57
Mfr of other fabricated wire & cable prods exc insulated wire & cable	32.79	28.69	25.49	24.10	16.14	16.26	16.05
Mfr of non-electric lighting and heating fixtures	19.77	16.73	16.97	15.56	10.83	10.39	10.49
Mfr of fabricated metal prods exc machinery & equipment	18.76	15.39	13.63	11.21	7.79	9.05	8.98
Mfr of agricultural machinery and equipment	1.53	-0.18	0.77	3.16	3.97	2.08	1.64
Mfr of metal and wood-working machinery	0.90	1.32	1.40	1.67	0.30	0.11	0.12
Mfr of engines nd turbines exc. for transport eq. & special ind. mach'y and equipment	1.31	1.70	1.90	1.91	0.38	0.01	-0.01
Mfr, assembly & repair of office, computing and acctg machines	3.53	3.49	1.24	0.97	0.67	0.72	0.75
Mfr of pumps, compressors, blowers and airconditioners	6.16	6.38	5.52	5.67	2.82	3.09	3.12
Machine shops & mfr of non-electrical mach'y and eq. n.e.c.	7.68	7.78	6.09	5.44	3.07	3.59	3.77
Mfr of electrical ind'l mach'y and apparatus	5.04	5.20	4.04	4.29	2.75	2.60	2.52
Mfr of radio and TV receiving sets, sound recording & reproducing eq. incl records and tapes	37.42	37.44	37.16	29.03	21.80	21.39	19.41

Mfr of communication and detection equipment	5.28	5.17	6.08	6.67	5.70	4.40	2.73
Mfr of parts and supplies for radio, TV & communication (semi-conductors)	5.91	6.09	3.25	3.04	2.33	2.51	2.34
Mfr of appliances and housewares	16.96	14.35	8.79	7.59	5.48	4.91	4.33
Mfr of primary cells and batteries and electric accumulators	29.30	18.11	12.51	9.05	6.81	8.84	8.65
Insulated wires and cables	14.73	15.20	16.72	16.91	11.31	12.12	12.16
Mfr of current-carrying wiring devices, conduits & fittings	6.43	6.24	4.86	5.30	2.82	2.96	2.61
Mfr of electrical lamps, fluorescent tubes and other electrical apparatus & supplies, n.e.c.	10.43	8.57	8.18	7.44	5.97	6.04	6.21
Shipyards and boatyards	4.84	4.29	3.71	3.82	3.31	3.19	2.89
Mfr and assembly of motor vehicles	97.45	97.60	76.87	74.58	77.88	76.70	76.13
Rebuilding & major alteration of motor vehicles	42.54	43.65	32.98	32.14	33.57	33.35	33.14
Mfr of motor vehicles parts and accessories	9.69	10.46	8.15	8.35	8.90	8.45	7.43
Mfr, assembly of motorcycles & bicycles	44.80	43.36	30.76	30.88	31.96	31.91	34.92
Mfr, assembly, rebuilding & major alteration of railroad equipment, aircraft, and animal and hand-drawn vehicle	3.56	3.26	3.17	2.86	2.18	2.13	2.13
Mfr of professional, scientific measuring a & controlling eq	3.42	2.81	2.74	2.93	2.34	1.91	2.07
Mfr of photographic and optical instruments	4.22	4.03	3.07	3.00	2.72	2.68	2.37
Mfr of watches and clocks	7.54	6.76	5.10	5.19	3.83	4.16	4.11
Mfr & repair of furniture & fixtures, made primarily of metal	36.53	30.85	30.74	30.70	22.93	23.69	24.04
Mfr of jewelry & related articles	8.40	8.61	6.79	6.83	5.27	6.05	6.03
Mfr of musical instruments	6.19	5.75	4.66	4.61	3.99	4.78	4.89
Mfr of sporting and athletic goods	7.68	5.42	4.68	3.37	2.85	3.78	2.94
Mfr of surgical,dental,medical and orthopedic supplies	5.48	4.84	4.94	5.02	5.00	4.80	6.21
Mfr of ophthalmic goods	12.32	9.68	6.99	6.48	4.70	4.59	4.15
Mfr of toys and dolls exc. rubber and plastic toys	18.35	13.19	9.31	7.86	5.62	9.58	9.16
Mfr of stationers', artists' and office supplies	11.01	9.29	6.67	6.19	4.44	4.83	4.71
Miscellaneous mfg	14.27	11.21	9.06	8.67	6.35	8.11	8.07