In any case, the rate of decline in the share of consumption appears quite remarkable. The large statistical discrepancy in the late 1950's raises some doubts about the timing of the decline, but the long-run trend is unmistakably indicated. In fact, these official figures for consumption, which have been newly estimated according to a revised procedure, indicate a decline in per capita personal consumption from ₱344 to ₱327 during 1962-1966, despite a rise in per capita disposable income from ₱345 to ₱369. Corporate saving increased slightly in the same period, government saving declined slightly, and net borrowing from abroad declined sharply in the same four years. Capital consumption allowances rose substantially, but not enough to match the decline in net borrowing from abroad, so that the rise in personal saving more than accounted for the total rise in saving.

Two explanations for this apparent phenomenon have been offered. The first is simply technical, namely that the deflator used for the consumption series has tended to overdeflate that component in relation to the total. The other accepts the rise in prices of consumption goods that is indicated as real and views this as sharply reducing the real income of the poorer classes relative to the wealthier with a consequent downward shift in the consumption function. The fact that the rise in prices tended to be concentrated in food and other basic cost-of-living items lends some plausibility to this interpretation. The Central Bank index of real wage rates of skilled workers declined 14 per cent between 1960 and 1965, while the index for unskilled

workers declined five per cent. It is possible that other elements in the redistribution of income that resulted from decontrol and devaluation could also help to explain this seemingly anomalous behavior of consumption, if it is real.

3. The System of Protection

Before 1950 what protection existed came largely from the preferred position of the Philippines in the protected U.S. market. A really independent system of protection began only with import controls initiated at the end of 1949. From 1953 on, imports were controlled by foreign exchange allocations of the Monetary Board. While the initial impetus to import controls was a balance of payments crisis it soon became a weapon for stimulating industrialization. Protection was accorded to new industries both by restricting imports or foreign exchange allocations for the final product and by liberally permitting the import of necessary inputs -- capital goods, intermediate goods, and raw materials. The result was the rapid burst of manufacturing growth, described in the previous section, a growth characterized by emphasis on finishing stages processing and assembly plus heavy dependence on imports. By the end of the 1950's, there was little discretion left to exercise in exchange control, the import bill comprising almost entirely essential consumption goods and principally the essential "producer" goods required to sustain the new industries. According to the Central Bank's classification by end-use, in 1960 producer goods (equipment,

intermediate goods and raw materials) comprised 86 per cent of imports, the remaining 14 per cent being consumer goods. This contrasts with percentages of 63 and 37, respectively, for the two groups in 1949. Moreover, consumer goods in 1960 were largely essential foodstuffs, like dairy products, cereals, and meat and fish, which were not produced in sufficient quantity in the Philippines.

Decontrol accompanied by devaluation began early in 1960. By the end of 1960, about half of foreign exchange transactions had been freed; by March 1961, another 25 per cent had been freed; and on January 21, 1962, decontrol was virtually completed.

Devaluation proceeded by stages from April of 1960, and was also virtually completed by January of 1962. Exports continued to be penalized until the end of 1965, however, by the requirement that 20 per cent of foreign exchange proceeds be converted at the old rate. The various stages in the process of devaluation and the complexity of the rate structure during the process are shown in Table XI. For almost two years, a system of multiple exchange rates prevailed, with the export rate (price of foreign exchange) gradually increasing and an increasing proportion of imports paying the penalty of the higher rate. In the end, the price of foreign exchange was 95 per cent higher than in 1956-1958, implying a devaluation of the peso of about 49 per cent.

In the meantime, a new tariff law had been enacted in 1957, and this now became the main instrument of protection.[2] This law amended substantially the tariff code of 1909, which had some importance as a revenue measure, but whose protective effect was largely voided by the free entry of U.S. goods. (Though the proportion declined sharply in the 1950's, the share of U.S. goods in Philippine imports was still 56 per cent in 1957). The prospect of gradual elimination of U.S. preference under the Revised U.S.-Philippines Trade Agreement (Laurel-Langley), which became effective January 1, 1956, had already produced by executive order at the end of 1955 an anticipation of the higher rates that subsequently became part of the new tariff law.

The new law, itself, had four avowed aims: (1) protection, (2) aiding economic development, (3) increasing revenues, and (4) preparing for decontrol. The schedule of rates indicated clearly, however, a protectionist bias,[3] its potential restrictiveness substituting in part for that already existing under

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2/ The discussion which follows, concerning the Tariff Law of 1957, depends heavily on F. H. Golay, The Philippines: Public Policy and National Economic Development (Ithaca: Cornell University Press, 1961), Ch. VIII.

3/ Golay has estimated that: "For any given structure of import values the 1909 tariff code would probably produce more tax revenues than the revised code." op. cit., p. 175.

TABLE XI

PHILIPPINE EXCHANGE RATE STRUCTURE
1945-1966 1/
(Pesos per U.S. Dollar)

ITEM	1945-1950	1951-1955	1956-1958	1959	Apr. 25, to Sept. 11 1960	Sept. 12, to Nov. 27, 1960	Nov. 28, 1960 to Mar. 1, 1961	March 2 - 14, 1961	Mar. 15, 1961 to Jan. 19, 1962	Jan. 20, 1962 to Nov. 5, 1965	Nov. 1965 to date
...ic Rate											
Official Rate	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.0
Free Market Rate	-	-	-	-	3.20	3.00	3.00	3.00	3.00	3.00	-
...ective Buying Rate	2.00	2.00	2.00	2.00	-	-	-	-	-	-	3.9
Import Receipts	-	-	-	-	2.30	2.30	2.50	2.75	2.75	3.51	-
U.S. Government Expenditures	-	-	-	-	2.30	2.30	2.50	2.75	2.75	3.90	-
...visibles, others	-	-	-	-	2.30	2.30	2.50	2.75	2.75	3.90	-
...reign Investments	-	-	-	-	2.30	2.30	3.00	3.00	3.00	3.00	-
...ld Proceeds	-	-	-	-	3.20	3.00	3.00	3.00	3.00	3.90	-
...orist Receipts	-	-	-	-	3.20	3.00	3.00	3.00	3.00	3.90	-
Veterans and Filipino Citizens	-	-	-	-	2.30	2.30	3.00	3.00	3.00	3.90	-
...rsonal Expenses of Diplomatic Personnel	-	-	-	-	2.30	2.30	3.00	3.00	3.00	3.90	-
...ective Selling Rate	2.00	-	2.00	-	-	-	-	-	-	-	3.9
Imports and Invisibles at Official Rate Exempted from Margin	-	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	-	-
Imports and Invisibles at Official Rate Not Exempted from Margin	-	2.358 a/	2.00	2.519 b/	2.50	2.50	2.40	2.40	2.30	-	-
Other Imports and Invisibles at the Free Market Rate 2/	-	-	-	-	4.00	3.75	3.60	3.60	3.45	3.91	-
Foreign Travel	-	-	-	-	3.49	3.27	3.27	3.27	3.27	3.91	-

Footnotes for Table XI

1/ No allowance has been made for the normal spread between buying and selling rates.

2/ From April 25, 1960 to January 19, 1962, in the case of the special privilege given to 90 per cent of dollar earnings of Philippine suppliers to the U.S. Armed Forces, the effective rate would be the free market rate.

a/ From March 29, 1951 to December 31, 1955 a 17 per cent tax was imposed.

b/ On July 16, 1959, a margin fee of 25 per cent was imposed on sales of foreign exchange, was reduced to 20 per cent in November 28, 1960 and to 15 per cent in March 15, 1961 until its suspension in January 20, 1962.

c/ Based on the official parity of P3.00 to U.S. $1.00 established on November 6, 1965.

Source: Central Bank News Digest, July 26, 1966, p. 11.

exchange control, so that when it began to be truly effective in 1960, the transition to free exchange convertibility was less of a problem than it might otherwise have been. Still, after 1960 there were many pressures for upward adjustments in rates to offset the effects of decontrol, and a number of changes -- mostly upward -- did occur between 1961 and 1965. The effects of these changes on average (nominal) rates are seen for several categories of manufactured goods in Table XII.[4] The resulting tariff structure of 1965 yielded a system of protection that was similar in structure to that in effect in the 1950's under exchange control. Final consumption goods were generally protected by very high rates, while intermediate goods and especially capital goods had very substantially less protection.

An additional important element of protection arises from the discrimination against imported goods in the percentage sales tax system in effect since the early 1950's. The same nominal percentage tax is applied to a base equal to CIF cost plus tariff plus a percentage mark-up[5] in the case of imported goods, and to only that portion of manufacturer's price that represents inputs not already taxed (usually value added plus electricity, fuel and depreciation) in the case of domestically produced goods. The nominal tax is seven per cent and the mark-up, 25 per cent, in the case of

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[4] The comparison of average rates in Table XII understates the change that occurred between 1961 and 1965, however, since the proportion of duties to which U.S. goods were liable increased from 50 per cent to 90 per cent over the period. At the same time the U.S. share of total imports declined from 50 per cent to 35 per cent.

[5] There is no mark-up in the case of good imported for own use, however.

TABLE XII

AVERAGE* TARIFF RATES FOR MANUFACTURING
1961 AND 1965
(per cent)

	1961	1965
Consumption Goods	64.1	70.1
Intermediate Goods	24.6	27.4
Inputs into Construction	49.0	55.1
Capital Goods	16.2	16.2
Total Manufacturing	46.2	50.8

* Weights are total supply (production plus imports) in 1965 of more than 90 manufacturing industries at the ISIC four-digit level, these representing more than 90 per cent of manufacturing production.

most goods. But for "semi-luxuries" like electric appliances, watches, synthetic textiles and furniture, the tax is 30 per cent and the mark-up, 50 per cent. And for "luxuries" like automobiles, jewelry and perfumes the tax ranges from 50 to 100 per cent and the mark-up is 100 per cent.

* Thus, it is possible for imported goods of a given value (CIF) to be taxed several times more heavily than similar domestic goods of an equal value (manufacturer's price). If, for example, the taxable proportion of the value of a domestic "semi-luxury" product is 40 per cent and the duty on the comparable import is 50 per cent, the sales tax rate on the CIF value of the import is 67.5 per cent, while that for the domestic product is 12 per cent. It is possible, as in the case of automobiles, for this discrimination to be a more important element of protection than the tariff.

* 4. Potential and Effective Rates of Protection of Value Added

A more meaningful concept of protection is the proportion by which value added in domestic prices (under protection) exceeds the value added that world prices of inputs and outputs would permit under free trade. Thus

$$Z = \frac{W - V}{V}$$

where Z is the rate of protection of value added, W is actual value added in domestic prices and V is hypothetical free trade value added. This measure shows the proportion by which the cost of maintaining a particular activity exceeds the cost of obtaining its equivalent via trade, under the assumption that the terms of trade are unaffected.

Ideally, these estimates would be made by means of direct comparisons between world and domestic prices for homogeneous categories of goods. Only in rare cases, is it possible to find such homogeneity, however, particularly in manufacturing where protection is most important. Accordingly, it is more practical to deduce the degree of protection of value added from the system of protection itself. In all cases, this method yields a measure of "potential" protection, and in those cases where imports are competing in significant volume with similar domestic products, it yields also a measure of "effective" protection.

This measure may, in fact, be superior in many cases to the direct comparison of world and domestic prices, since the latter does not easily distinguish price differentials due to quality differences from those due to protection. When foreign and domestic goods are competing, on the other hand, it is a reasonable inference that the system of protection is fully effective in creating a price differential between domestic and foreign goods of comparable quality. And, if the actual price differential is less, the implication is that domestic producers are receiving protection for inferior quality, as well as for higher price.

A qualification must be made in the case of a bias against domestic goods based on consumer ignorance, a bias widely believed to exist in the Philippines. If this is true, a part of the protection accorded to domestic suppliers may be simply offsetting this bias. The consequences for welfare in this case are the opposite of those usually attributed to protection, since

the effect is to bring domestic prices more nearly in line with world prices for goods of comparable quality. It is impossible to estimate the importance of this quantitatively, however.

The potential rate may have significance in itself, even when the effective rate is judged to be less, in that it measures the margin of protection from foreign competition that is accorded an activity. While domestic competition may keep value added below the potential that this margin would permit, the incentives to cost and price reduction and quality improvement may nonetheless be substantially less than would prevail with more foreign competition.

The procedure that was followed in making the estimates given below was to attempt to obtain price comparisons in those cases where imports represented less than ten per cent of domestic production. This resulted in a number of effective rates that were below potential rates, in some cases by a very substantial margin. In the case of inputs, the rate used was the effective rate, wherever there was a choice.

An industry was considered an export industry if exports were more than ten per cent of production, though beer, with less than three per cent of output exported, was also put in the export category because of its obviously world-competitive price and quality. One important export, sugar, was considered as a special case since its exports go entirely to the highly protected U.S. market under a preferential quota arrangement. Here the method used was a comparison of FOB export unit value (for the portion exported) and

manufacturers' domestic price (for the portion consumed domestically) with a world price, indicated by an average of CIF import values of Japan, Hong Kong and Malaysia.

Sectors producing non-traded outputs, including construction, utilities, transportation, communication, trade, and various services, are indicated as having zero effective rates of protection, rather than negative rates, the basic assumption being that in the general adjustment to a new equilibrium, following the imposition of protection, it is those activities whose prices are constrained by the world market that will bear the brunt of the protection. General equilibrium analysis can give us very little guidance beyond this, and partial equilibrium elasticities of supply and demand would be of no use.

The calculation of potential rates for traded goods followed the general procedures laid down for this project. There were, however, a few special aspects of the Philippine system of protection that complicated the calculations. These are shown in the Appendix. One special element should be mentioned here, however. During most of 1965 exporters were required to surrender 20 per cent of their foreign exchange earnings at the old rate of ₱2-$1. Hence, there was an implicit tax on exports equal to the difference between the net export rate and the new official rate that applied to imports. The tax on exports, weighted by the proportion of the year for which it prevailed, comes to eight per cent. Hence, the nominal tariff for exports industries is equal to -.08.

Potential rates of protection (Z) were estimated for 90 manufacturing industries (at the ISIC four-digit level) and for fourteen other traded goods sectors, including eleven sectors in agriculture, two in mining, plus forestry-and-logging and fisheries. The input-output data for manufacturing is derived from the 1965 Survey of Manufacturing (made available by the Bureau of the Census and Statistics). For non-manufacturing the data is from the input-output table of the Office of Statistical Coordination and Standards (National Economic Council), based on the 1961 Census of Manufacturing. Since the various elements affecting protection for the non-manufacturing sectors showed virtually no change from 1961 to 1965, the 1961 coefficients were allowed to represent the 1965 structure without correction.

It was possible to estimate also, by direct price comparisons, effective rates differing from potential rates for 34 manufacturing industries whose products were not internationally traded to a significant degree. In some cases, it was possible to judge that quality was clearly comparable. In others, it was assumed that the Philippine product sufferred a modest quality disadvantage (real or imagined). Accordingly, in these cases effective protection was raised above that indicated by the price comparison to the extent of ten per cent of the differential between the latter and potential protection. This margin served, then, as protection of the presumed quality differential. For this entire group of essentially non-traded goods with redundant protection, it was assumed that protection of their inputs was passed on in higher prices.

These effective and potential rates are shown in Tables XIII through XVI, where they are grouped according to three categories in manufacturing--exports, import-competing and import non-competing--plus non-manufacturing. The so-called Balassa and Corden estimates derive from alternative methods of treating non-traded inputs. The first, indicated as the Balassa method, assumes that only direct value added in the industry concerned is protected. The second, indicated as the Corden method, assumes that the protection is shared with direct and indirect value added to non-traded inputs. Hence, in the latter case, V is larger in the expression

$$Z = \frac{W - V}{V}$$

and the value of Z is accordingly smaller.

As can be seen from the tables, the differences in the two estimates are typically slight, however. One reason is that we are dealing with ex-factory prices, so that a large part of the non-traded value added in market prices is missing. Moreover, the data from the Philippines Survey of Manufacturing do not identify non-traded inputs other than electricity and water. The construction element in the depreciation coefficient was estimated in each case, however, and direct and indirect value added in construction, along with that in electricity and water, was added to direct value added in the using industry in making the Corden estimates. Any other non-traded inputs -- e.g., advertising -- are included in direct value added. Accordingly, there may be a slight downward bias in the estimates of Z for this reason.

In the cases of eleven industries V (value added at free trade prices) was estimated to be negative, yielding anomalous negative values for Z despite the high level of protection accorded them.[5a] These industries are the last ones listed in Tables XIV and XV and protection (W-V) as a percentage of value of output is indicated for each in parentheses, beside the negative value for Z, to give some idea of the level of protection for these industries.

Very evident is the wide range of rates represented -- from -70 for canned meat[5b] to more than 100 per cent for 32 industries (including those with negative V's). Moreover, the distribution of values is fairly even over the whole range. This indicates, of course, a great amount of distortion of price incentives and implied welfare losses from resource misallocation. Put more concretely, the data suggest that Philippine primary inputs applied

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5a/ These anomalous negative Z's are distinguished from true negative Z's (e.g., those for exports) by combining an asterisk with the minus sign.

5b/ This apparently extreme penalty on the canned meat industry, as well as the minus 26 per cent Corden Z for Milk Processing, stems from the activities of the National Marketing Corporation (NAMARCO), which in 1965 imported, duty-free, very substantial amounts of canned corned beef, sardines and milk; and sold them at below CIF import prices. This practice ceased after 1965. The t rates for the two industries, in the absence of NAMARCO imports are 53 and 12 per cent, respectively.

TABLE XIII

RATES OF PROTECTION
MANUFACTURING, EXPORTS
(per cent)

ISIC Code	Description	Potential & Effective Z	
		Balassa	Corden
2521	Veneer and Plywood	-33	-32
2031	Pineapple Canning	-27	-27
2093	Dessicated Coconut	-27	-27
2611	Rattan Furniture	-25	-25
2315	Ramie Processing Mill Products	-25	-24
2511 & 2513	Lumber	-20	-19
2331	Cordage, Rope, Twine and Net	-18	-17
2131	Beer	-14	-13
3121	Coconut Oil, Copra Cake and Meal	-11	-11
2072	Sugar	186	183

TABLE XIV

RATES OF PROTECTION
MANUFACTURING IMPORT-COMPETING
(per cent)

ISIC Code	Description	Potential & Effective (Balassa)	Potential & Effective (Corden)	Potential & Effective (t)
2014	Canned Meat	-72	-70	05
2024	Milk Processing Products	-29	-26	01
3832	Vehicle Engines, Parts, Bodies	05	04	18
3621	Agricultural Tractors	06	05	14
3622	Farm Machinery, except Tractors	06	05	16
3392	Lime	07	07	12
3632	Metal Forming Machinery	09	08	12
3412	Iron and Steel Foundry Products	10	07	10
3196	Agricultural Chemicals	13	13	15
3111	Inorganic Acids, Alkali, Chlorine	14	10	18
2056	Flour Mill Products	15	12	15
3651	Industrial Pumps and Compressors	16	14	16
3192	Pharmaceutical Preparations	22	22	25
3319	Structural Clay Products	23	21	19
3113	Compressed and Liquefied Gases	28	25	24
3092	Processed Natural Rubber	29	23	27
3646	Woodworking Machinery	29	27	15
3199	Inks and Dyes	38	34	30
3211	Petroleum Refinery Products	45	42	13
3511	Packers' Cans	50	49	25
3021	Tires and Inner Tubes	54	52	51
3591	Metal Barrels, Drums, etc.	64	59	40
3641	Rice Milling Machinery	65	65	41
2712	Paper and Paperboard Products	66	59	31
3831	Trucks and Buses	77	75	29
3321	Glass Containers	82	81	45
3322	Flat Glass and Mirrors	83	77	44
3198	Polishing Preparations	94	91	51
3411	Steel Mill Products	96	88	29
3731	Batteries	101	92	50
3734	Electric Wires and Wiring Devices	103	103	20
3114	Fertilizers	104	72	16
3551	Wire Nails, Brads and Spikes	109	107	29
3992	Fabricated Plastic Products	161	156	74
3532	Architectural Metal Work	164	151	80
3923	Eyeglasses and Spectacles	183	165	98

TABLE XIV (continued, page 2)

ISIC Code	Description	Potential & Effective Z Balassa	Corden	Potential & Effective t
3312	Clay Tiles	261	243	102
3749	Sewing Machines, Household	363	318	78
3531	Structural Iron and Steel	431	335	81
3115	Plastic and Resin Materials	504	485	69
3732	Electric Lamps	4155	2320	125
2641	Metal Furniture	*9750	784	104
2721	Paper Stationery, Envelopes, etc.	*1250	*2600 (45)	71
3742	Industrial Refrigerators and Airconditioners	*380	*447 (78)	101
2911	Leather, Tanned or Finished	*390	*461 (81)	105
2316	Jute Mill Products	*2050	*3154 (84)	110
3722	Household Radios, Phonos and TV	*563	*604 (112)	147
3951	Jewelry	*307	*323 (154)	252

TABLE XV

RATES OF PROTECTION
MANUFACTURING, NON-COMPETING
(per cent)

ISIC Code	Description	Potential Z	Effective Z Balassa	Effective Z Corden	Potential t	Effective t
3391	Structural Concrete Products	129	14	13	67	7
3394	Asbestos Products	179	18	18	92	9
2411	Shoes, except Rubber	71	20	20	71	7
2412	Slippers, except Rubber	125	23	22	70	7
2141	Soft Drinks	400	24	23	110	11
2621	Wood Furniture	1279	24	23	102	10
3011	Rubber Shoes	1992	32	31	104	10
2096	Feeds for Animals	248	33	32	49	5
232	Knitting Mill Products	115	43	42	111	11
3191	Matches	81	48	46	49	25
2431 & 2433	Ready Made Garments	821	53	52	110	11
2111	Distilled Liquors	375	58	55	162	16
3194	Soap	69	59	52	27	14
3341	Cement	93	59	58	56	25
3131	Paints, etc.	*318	71	70	113	11
2211	Cigarettes	*268	76	74	191	19
2094	Vegetable Lard & Margarine	*158	87	85	79	8
2097	Starch	43	87	83	27	5
2722	Paper Bags, Boxes	*525	89	87	87	9
2034	Vegetable Sauces	*3800	106	100	119	54
2081	Candy	*315	300	297	149	66
2314	Cotton Textiles	*400	330	317	91	30
2082	Cocoa & Chocolate	381	350	336	85	39
2012	Sausages (uncanned)	*180	400	400	102	10
2541	Wooden Boxes	*160	400	400	220	22
3193	Perfumes, Cosmetics, etc.	1171	450	433	228	95
3851	Bicycles	1630	474	466	91	31
3831	Autos	*164	533	495	167	54
2441	Bags and Canvas Products	*143	*300	*300(08)	109	11
2013	Ham, Bacon, etc.	*257	*833	*1052(42)	114	71
2091	Vermicelli & Noodles	*345	*640	*800(63)	113	91
*3742	Household Refrigerators and Airconditioners	*233	*500	*580(66)	163	90
3961	Pianos	*1600	*1500	*1520(64)	318	180