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INDUSTRIALIZATION IN THE PHILIPPINES  
The Need for New Directions

by

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INDUSTRIALIZATION IN THE PHILIPPINES  
The Need for New Directions

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This brief paper presents some thoughts and tentative judgments about the present state of industrialization in the Philippines and its implications for future economic growth. The theme is a need for new directions in industrial growth, and an attempt is made both to indicate why and to suggest some general lines of policy that might give encouragement to investment in the indicated directions. The ideas are based on research undertaken at the School of Economics, University of the Philippines by the present writer and his Research Associate, Mrs. Eloisa F. Litonjua, whose collaboration was made possible by financial support from the Asian Development Bank, which is hereby gratefully acknowledged. The writer has drawn on the research findings of others, as well, particularly those of Dr. Gerardo P. Sicat. The views expressed here are entirely the responsibility of the writer, however.

I

The current concern over the balance of payments, which has caused Government policy to veer in the direction of a return to controls over foreign exchange transactions, may reflect only a temporary difficulty due to external causes. There is, however, some reason to believe that, in the words of Mr. Sixto Roxas, "the propensity of the economy to translate credit expansion into inflation and balance of payments deficits is a symptom of a deep structural malady."<sup>1/</sup> It is this possibility that is explored in this section.

In a fully employed economy, of course, further credit expansion would normally be expected to bring inflation and a deterioration of the balance of payments. There is nothing structural about that. But in the context of continuing high rates of unemployment of both labor and manufacturing plant capacity, and in the face of lagging industrial growth, it is difficult to quarrel with Roxas' judgement. In any case it appears possible to give a "structuralist" explanation of both the inflation barrier and the foreign exchange bottleneck, each of which has served in the recent past to prevent the economy from using more fully existing productive capacity. If this analysis is on the mark, it serves also to help explain the retardation in industrial growth since about 1956, as well as the tendency today for some Philippine and foreign capital to look abroad for profitable outlets for reinvestment of earnings.

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<sup>1/</sup> Sixto K. Roxas, "Policies for the Private Sector," Philippine Economic Society Conference on Long Term Policies for Promoting Philippine Growth, The Philippine Economic Journal, First Semester 1969.

I'll deal only very briefly with the inflation question, first because it is simpler, second because it is temporarily at least in abeyance, and third because it can be transformed, in any case, into simply another aspect of the more fundamental balance of payments problem.

Inflation in the Philippines has been relatively mild compared to what is found in many less developed countries. Even the devaluation of the early 1960's did not produce the kind of general price response one might have expected. Rather the principal price effects were those associated directly with the re-valuing of internationally traded goods, a consequence of devaluation that could scarcely be avoided. And the fact that there was relatively little sympathetic response of the prices of non-traded goods meant that the effects of the devaluation were not eroded to any great extent.

Surprisingly, also, there was very little in the way of a money wage response to the moderate rise in the cost of living, with the consequence that real wages of workers have declined over the past decade. This is particularly surprising in view of the fact that the cost of living increases have been predominantly in the category, foodstuffs, reflecting particularly increases in the price of rice. In fact, one economist has attributed what inflation has occurred in the 1960's in substantial measure to a mis-handling of rice policy.<sup>2/</sup>

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<sup>2/</sup> A.C. Ross, "Understanding the Philippine Inflation," Philippine Economic Journal, Vol. V. No. 2 (1966), pp. 288ff.

Supplies tended to be overestimated and demands underestimated, resulting in inadequate provision for imports (which are, of course, government-controlled).

Consequently monetary policy was constrained from time to time by the cost of living response to relative rice shortages, with the result that employment and output had to be held back generally because of a particular scarcity--rice. On the other hand, proper anticipation and planning would simply have meant more imports of rice, and would have translated the rice bottleneck into a foreign exchange bottleneck.

Either way of viewing it, however, suggests a structural problem rather than a general inflationary gap. For there has been little evidence of a general excess of demand. In fact, rather high rates of unemployment of labor and low rates of utilization of manufacturing capacity have persisted during the period of rising prices. Moreover, a breakdown of the wholesale price index shows that almost 80 per cent of the rise between 1960 and 1965 can be explained by the direct effect of the devaluation on the prices of traded goods plus the rise in the price of rice. Finally, the relative price stability of the past two years can again be attributed largely to the improvement in rice supplies.

This means that the kind of inflation that has occurred in the 1960's, and could occur again in the future if rice production falters, does not call for general measures to restrict aggregate demand by traditional monetary and fiscal restraints. . . To depress demand generally in the face of widespread unemployment of resources is too heavy a price to pay to meet a particular supply bottleneck.

The same can be said with respect to a foreign exchange bottleneck though this would seem to be a more general problem than a specific scarcity like rice. However, the problem is better viewed as structural again because it is not a general shortage of productive capacity in relation to demand.

\* Rather, the economy is structured to produce the wrong pattern of output -- in particular too little of goods that earn or save foreign exchange and too much of goods that require foreign exchange to import necessary supplies and equipment. Restrictions on aggregate demand do little to restructure output, but instead "cure" the balance of payments problem by depressing output and employment generally.

Of course, since the economy cannot be restructured overnight, some kinds of temporary measures are called for -- controls, perhaps, and restraints on credit expansion. But these should not substitute for more fundamental measures. For the foreign exchange bottleneck has its roots deep in the industrial structure, and in the kinds of incentives to

investment that have directed industrial growth since 1950. To put it very briefly, the incentives have been too strongly biased in favor of investing in the finishing stages of production for the home market. The result is an excessive dependence of the industrial sector on imports, as well as an inadequate growth of new exports of manufactures. Let me turn very briefly back to the 1950's to see how this came about.

## II

The story is not a unique one. Many newly developing countries have had similar experiences. Typically, it began in the Philippines with a balance of payments crisis in December, 1949. The response was a system of import controls, later (1953) becoming exchange controls administered by the Central Bank. Scarce foreign exchange was, in effect, rationed on criteria of "essentiality." At first, this meant differentiating among consumption goods, but as the protective effect of import restrictions spawned new consumption goods industries, "essential" imports became the capital goods and intermediate goods required for maintaining and expanding production and employment. The results can be seen in Table I. Consumer goods, which accounted for 37 per cent of imports in 1950, had dropped to less than 14 per cent of imports by the end of the decade. The share of capital goods doubled over the same period, while that of intermediate goods plus raw materials also rose substantially. Correspondingly, the new manufacturing industries were concentrated heavily in assembling and final processing of consumption goods with a heavy dependence on imports.

✓ TABLE I  
IMPORTS CLASSIFIED ACCORDING TO END USE  
(in percent)

	1949	1954 - 56	1959 - 61	1966 - 67
Raw Materials	1.0	3.2	10.4	14.0
Intermediate Goods	51.7	67.6	56.0	52.8
Capital Goods	9.9	10.1	19.7	19.6
Consumer Goods	37.3	19.1	13.9	13.6

Source: Central Bank Annual Reports

By the end of the decade, there was little discretion left in the control system, most imports being essential to the maintenance and expansion of employment and output in already existing industries. Moreover, the burst of rapid growth of the manufacturing sector which import restriction induced had subsided by the end of the decade. This can be seen in Table II. Value added in manufacturing rose at an annual average rate of 12.3 per cent between 1950 and 1956, but dropped to about half that rate of increase in the next four years. In the 1960's manufacturing growth has lagged behind that of the rest of the economy.

TABLE II

ANNUAL RATES OF GROWTH OF MANUFACTURING AND AGRICULTURE\*  
(Average annual percentage changes in 1955 prices)

	Gross National Product	Net National Product (at factor cost)	Value added in Manufac- turing	Value added in Agri., Fishing and Forestry
1948-52	9.2	9.1	10.5	6.6
1950-56	7.9	7.8	12.3	6.2
1952-56	7.7	7.6	12.9	6.3
1956-60	4.4	4.6	6.3	3.3
1960-64	5.6	5.1	4.8	3.5
1964-68	6.1	5.3	4.7	6.9

Source: OSCAS, National Economic Council

\* For more detail and comments on this table, see Appendix C

This again is a common element in the experience of newly developing nations. What Albert Hirschman has called the "exuberant" stage lasts only as long as the main emphasis is on taking over an existing market, behind protection, from the foreign supplier. In this stage, there are no market



constraints and if protection is high, relative efficiency need not be, so that profits are easily available even in comparatively disadvantageous industries. Moreover, the more difficult technical problems are avoided by concentrating on assembling or finishing basic manufactured goods that are imported.

But when this has been largely accomplished quick, easy gains are no longer available. The limits of the domestic market are approached in many lines and this constrains the rate of growth of finished goods output. ✓ Overcrowding gives rise to excess capacity in many lines. ✓ Finally, the heavy drain these industries impose on foreign exchange availability render it impossible to employ the idle capacity (and matching idle manpower). ✓ Aggregate demand must be restrained not because capacity to produce is lacking, but because the existing pattern of production uses too much and earns too little foreign exchange.

This is the situation the Philippines has been in since the latter half of the 1950's. To sustain the earlier pace of industrial growth would require breaking out of the confines of the domestic market for finished consumption goods. ✓ This could be done in either or both of two directions. First, investment could move back to the earlier stages of the production process -- i.e., backward linkage import substitution. Second, manufactures could break into the export market. ✓ In the absence of either or both of these the manufacturing sector must inevitably become a "lagging" sector -- i.e., one that merely follows the growth of domestic demand which, in turn, must get its impetus from some other sector.

Moreover, it is these same two new directions that

✓could resolve the balance of payments problem. ✓Expansion of industrial production that saves or earns (instead of merely using) foreign exchange would permit a relaxation of monetary and fiscal restraints, thus inducing an all-around expansion of output and employment. So looked at either from the standpoint of market constraints or the foreign exchange constraint the required redirection of industrial growth is evident. ~~Backward~~ integration and new exports are the growth avenues for the next stage of industrialization. ||

### III

Decontrol and devaluation, accomplished in the early 1960's, might have provided the incentives to break into these new avenues of growth. That they did ~~not~~ sufficiently accomplish this is due, I believe, to the character of the tariff system which replaced exchange controls. The highly protective Tariff Law of 1957 was passed in anticipation both of decontrol and the gradual elimination of U.S. preference under the Laurel-Langley Agreement.// Moreover, a number of tariff rates were raised by executive order between 1961 and 1965 to restore a portion of the former protection to "distressed" industries. ✓The resulting tariff structure is strongly biased, in the same way as was the control system, in favor of production of finished goods and against backward integration, as is evident from Table III.

Finally, as under the control system, exports were relatively disadvantaged, being given no margin

TABLE III

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

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	<u>1961</u>	<u>1965</u>
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

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\* 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.

of advantage in competition with foreign supply in the world market, while sales in the domestic market had generally very substantial margins of protection.

Thus, even with the sharp devaluation of the Peso, exports were still at a very great relative disadvantage in attracting capital and other resources. It is undoubtedly true, however, that the margin of disadvantage was diminished when tariff protection plus devaluation were substituted for exchange controls. The protective effect of the latter must have roughly matched the combined protective effect of the former. So a portion of the former bias against exports was eliminated. The remaining bias, however, while not strong enough to deter traditional exports in which the Philippines has a strong competitive advantage, seems

to be sufficient to hold back the development of new manufactured exports.

A clearer picture of the extent of this bias can be gleaned from Table IV. The rates of protection shown there are averages of rates of protection of value added in 1965 of 90 manufacturing industries grouped by end use. The method of calculation is the standard one employed in the various World Bank studies, and is explained in an appendix to this paper. The "Potential" rates are those offered by the system of tariffs and indirect taxes. The "Effective" rates are modifications of these based on direct world-domestic price comparisons to take account of the fact that some of the tariffs were apparently not fully effective.

TABLE IV  
AVERAGE RATES OF PROTECTION OF VALUE ADDED, 1965  
✓ (90 Manufacturing Industries  
Grouped by End Use)  
(per cent)

	<u>Potential</u>	<u>Effective</u>
Exports (excluding sugar)	-23	-23
Capital Goods	37	37
(excluding trucks & buses)	9	9
Intermediate Goods	43	39
Inputs into Construction	57	42
Consumption Goods	99	55

What the rates show is the extent to which the potential value added in free trade prices in the various industries is raised or lowered by the system of protection. Exports register negative protection because, while receiving no protection for

their products, they pay the penalty of having to buy protected inputs.<sup>4/</sup> Moreover, in 1965 there was a modest tax on exports in the form of a less favorable exchange rate.

✕ It is evident that consumption goods are still relatively favored as under the control system, while capital goods, intermediate goods, and especially exports are less favored. The system of incentives is still in the old pattern appropriate perhaps to the earlier industrialization of the 1950's but inappropriate to the redirection of industrial growth that is now required. Moreover, these averages hide a much greater disparity among individual industries. Rates range from a low of minus 32 per cent for Veneer and Plywood to rates approaching, or even exceeding 100 per cent for automobiles, household electrical goods, processed meat products, ✓jewelry, and many others. ✓The result is that some industries which save very little foreign exchange, or even none at all, are rendered artificially profitable by very high protection, while others that are potent foreign exchange earners are artificially penalized. This strongly suggests that the foreign exchange bottleneck is as much a result of perverse policies as of natural circumstances. ✓The structure of protection under the tariff system, which superseded the system of controls, has failed to provide the incentives for the new exports and the backward integration that are needed.

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<sup>4/</sup> If the drawback of duties on exported products is effective and there is no tax on exports, these negative values would become zeros. The drawback was not effective in 1965.

Instead, the system is designed primarily to protect and maintain the already existing pattern of industrial output, with its heavy foreign exchange requirement.

This not only illuminates the deep structural character of the balance of payments problem, it helps also to explain the failure of the economy to exhibit any evidence since the late 1950's of the kind of structural change that normally accompanies successful economic development. It is evident from Table I (above) that the change in the composition of imports was accomplished by 1960 and that the pattern has been frozen since then. Table V indicates a similar picture with respect to the industrial distribution of the national product. The sharp rise in the share of manufacturing at the expense of agriculture that occurred in the 1950's has not continued in the 1960's. Rather the structural pattern again has become frozen.

TABLE V

✓ INDUSTRIAL DISTRIBUTION OF NET DOMESTIC PRODUCT  
At 1955 Prices  
(in percent)

	<u>1950</u>	<u>1960</u>	<u>1968</u>
Agriculture	36.4	31.4	31.3
Manufacturing	13.2	17.9	17.3
Services	23.8	25.8	26.5

Source: OSCAS, National Economic Council.

IV

Some other consequences of this biased pattern of industrialization might be noted. First is the geographical concentration of manufacturing. To some extent this would no doubt have occurred anyway. ✓ But the dependence of the new industries on imports rather than on supplies from the agricultural, mining and forestry sectors, further biased location in favor of proximity to the principal port--Manila. This phenomenon has been noted elsewhere, and Hirschman has called these concentrations of import-dependent manufacturing industries "import enclaves," since they link on the supply side to the rest of the world rather than to the other sectors and regions of the economy. Even on the demand side, the market for many of the consumption goods depends significantly on the free-spending new urban classes spawned by the industrialization itself. ✓ The result is a very unequal regional sharing in the economic growth that has occurred since 1950. ✓ This may have accentuated the inequality of personal income distribution, as well.

Another consequence of the set of biases in the protection system is an excessive capital intensity in the new industries with a corresponding disappointing performance with respect to employment. While it is difficult to judge how much substitution of capital for labor has been ✓ induced by the system, the relatively low prices (from low duties) of capital goods in relation to the artificially high prices of consumption goods represents a strong incentive to excessive use of capital in production. This is compounded by the relatively high wage

rates that manufacturing must pay for various institutional and legal reasons. With widespread unemployment and substantial numbers in very low productivity employments, the social cost of using labor in manufacturing is very low.

Yet the combination of excessively cheap capital and a market wage for manufacturing labor far above its social opportunity cost conspire to hold back the growth of employment there.

It was noted above that the real wage rate has tended to fall over the past decade, principally because of the rise in food prices. This has not helped employment in manufacturing, however. For wage rates are lower in relation to the price of food, not in relation to the prices of manufactured goods generally. So while the worker's real income has declined, this has not meant a reduction in real labor costs in the sectors where growth in employment might occur.

Finally, the pattern of biases has contributed to a poor investment climate, adding further to balance of payments difficulties by discouraging private capital inflow and encouraging its outflow. This stems from the bias in profit incentives against the future growth areas--backward integration and exports--plus the relative exhaustion of opportunities for further import substitution in the favored area--finished consumption goods.

How much this may be responsible for the lack of any substantial net private capital flow into the Philippines is



difficult to guess, but a recent study of U.S. investments<sup>5/</sup> is revealing. American capital was strongly attracted by the control system of the 1950's to invest in the Philippines in the production of the goods that they could no longer export to this market. So import-substitute consumption goods tended to predominate. But after an initial burst of investment to by-pass the import controls, the pace of investment slowed. And correspondingly, the portion of profits remitted as dividends rose. The reason, I suggest, is that after substituting production in the Philippines for what was formerly exported to this market, there were no further avenues for rapid expansion. Investment was now required only for the pedestrian growth of market demand itself. The natural routes of backward integration and breaking into the export market were unprofitable because the pattern of incentives was set against them. This, incidentally, helps to explain also why profits from Philippine capital, as well as foreign, tend sometimes to look abroad for investment.

V

The analysis of the preceding sections has obvious implications for both economic policies and investment criteria. Some of these will be summarized in this concluding section.

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<sup>5/</sup> B.G. Bantegui, "Aspects of U.S. Investments in the Philippines" (unpublished).

✓ It is evident that investment and output decisions in the Philippines today are made in the face of strong biases arising from the protection system. One would not object to this distortion of prices and profits if it led to more rapid industrial expansion and a higher overall growth rate. In fact, because it caters to the finishing stages import substitution industries which came into existence in the 1950's rather than to the prime opportunities for industrial growth in the 1960's and 1970's - - backward linkage import substitution and new exports - - the protection system stands today as a leading obstacle to the resurgence of industrial growth.

This is why the Board of Investments is obliged to set itself against this system by offering special incentives to industries that link backward to the natural resource sectors, to intermediate and capital goods industries and to those with export potential. In some cases the weapons of the BOI may be sufficient to neutralize the existing price and profit bias. But in many cases, especially for new exports, this is not likely. The net result is an overall system of incentives in which some socially valuable activities that could save and earn foreign exchange are rendered privately unprofitable, while many socially sub-marginal activities that are heavy users of foreign exchange seem attractive to private business.

What can be done? An obvious place to start is the correction of the biases against backward integration and new

exports in the protection system. This calls for uniform tariffs on all goods (including capital goods and raw materials) combined with equivalent subsidies for exports. This could be modified by withholding (or reducing) the subsidy to those exports in which the Philippines share of the world market is sufficiently large to give rise to a concern about the effect on world prices from increased supply. And temporary tax, subsidy, and credit incentives could be added in selected "infant industry" cases. The latter should be restricted to a few whose efficiency response to growth and learning are expected to be exceptional, since spreading such inducements too broadly simply dilutes the effect for those that really warrant such classification.

The advantages of such a reform in the protection system should be evident. A tariff on a product gives the domestic producer a margin of protection against the foreign supplier -- a margin paid to the producer by the Philippine consumer. To avoid a bias against the saving of foreign exchange via backward integration, however, the same margin of protection must be given to the supporting industries -- capital goods, intermediate goods and raw materials. And to avoid a bias against the earning of foreign exchange via export of new industrial products, the same margin of protection against foreign suppliers must be given in the export market. To fail to redress the present biases, on the other hand, would be to continue a policy of favoring the heavy users of foreign exchange, the consumption goods industries, against the potential new savers and earners

of foreign exchange. In addition it would mean continuing the bias against those industries with the greatest growth potential, thus maintaining the present poor investment climate.

The uniformity in rates of protection must apply, of course, not only between categories of goods, but to all industries within the categories, as well. The only exceptions would be the export industries whose prices might suffer from undue expansion and a limited number of genuinely infant industries, as noted above. General uniformity in protection is especially important to encourage efficiency in investment and other resource allocation. The present system, in contrast, tends to offer whatever protection is "needed" by a particular industry. Thus the least efficient industries are likely to receive the highest protection (i.e., subsidy from the consumer). The more efficient an industry is (or becomes) on the other hand, the more difficult it is to establish a case for protection. Such a system, then, systematically subsidizes inefficiency. The difficulties in the way of successful economic development are great enough without creating artificial barriers of this sort.

The reader no doubt has noticed with some impatience that the above discussion of the desirability of uniform protection has proceeded with no indication as to how high the general level of protection should be. The answer is, simply,

high enough to achieve balance of payments equilibrium. This need not be predicted in advance. Rather the reform of the protection system should proceed gradually in successive stages, with the highest rates declining and the lowest rates and subsidies to exports rising. In this way the authorities can feel their way toward the equilibrium level. Moreover, this gradual approach will ease the difficulties of adjustment to the new system.

A question naturally arises as to the source of finance of the subsidies to exports. Ordinarily this would present the problem of new taxation which, in turn, might itself create new distortions and a partial offset to the impetus to growth that the new protection policy would offer. This is especially true when, in the political process, a new tax program emerges as a hodge-podge of compromise between the conflicting claims of various power groups. Fortunately, however, in the present situation in the Philippines, the inadequate fiscal machinery of the government need not present such an obstacle. For the subsidy would be paid only in connection with additional foreign exchange earnings and these, in turn, would permit expansion of output through greater use of existing capacity by financing the necessary imports. Thus the subsidy could come from a rise in the Government deficit since a rise in the supply of goods could occur together with the expansion of monetary demand. The point is that the foreign exchange bottleneck would have been broken, permitting

fuller employment of existing resources. The principal inflationary danger would then come from food prices, so that continuing success in the rice program is essential.

There is an alternative means of achieving the same result, however, without requiring a direct subsidy to exports. A rise in the price of foreign exchange will give to domestic industry an additional element of protection against foreign competition in both domestic and foreign markets. In fact, the exchange rate adjustment can give more complete and effective protection than can tariffs simply because it protects domestic production both as import substitutes and as exports. Ideally, then, tariffs would be eliminated altogether except, as already noted, for selected infant industries. Even for these straight subsidies would be better than tariffs because the latter impose an unwarranted penalty on users of the products, whether producers or consumers. In this case, however, the question of the ability of the government to implement a rational tax program is a real one, since the subsidy to infant industries could not be safely financed through government deficits unless the "infants" were foreign exchange earners or savers. ✓ Tariffs might, then, turn out to be the best available means of protecting infant industries, despite their unfortunate side effects. It should be emphasized, however, that this would be true only because of an inability on the part of the government to implement a tax system that involves less inefficiency in resource allocation than customs duties. (I am abstracting from the equity aspects of alternative taxes.) And it should also be emphasized again that the general

level of protection for all domestic industry can be much more effectively provided by a higher price of foreign exchange than by tariffs, since the latter is effective only in the domestic market. <sup>6\*/</sup>

The equivalence (for commodity trade) of a system of uniform tariffs and matching subsidies to exports with a higher price of foreign exchange has been, I think, insufficiently appreciated. Consider a country (e.g., Japan) that combines tariff protection with what is, in effect, a subsidy to exports by means of taxes that apply to sales in the domestic market, but not to sales in the world market. The fact that the price to the Japanese buyer is greater than that at which Japan sells to the world has led to charges that Japan is "dumping" its products on the world market. But suppose that Japan were to eliminate all of its tariffs and taxes on sales. It would then have to devalue the Yen to restore balance of payments equilibrium.<sup>6/</sup> The devaluation would both protect the home market for Japanese industry and encourage its exports to a degree equal to that afforded by the combination of tariffs and subsidies. Yet in this case Japan would not be accused of "dumping".

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<sup>6/</sup> This assumes that there was initial balance of payments equilibrium. If Japan is, in effect, under-valuing the Yen by over-playing this game of tariff and subsidy, the argument must be stated in relation to a restoration of the initial disequilibrium in the balance of payments. Other than that the argument is unaffected.

<sup>6\*/</sup> The choice between tariff policy and exchange rate policy is discussed in more detail in Appendix B.

It seems that adding export subsidies to a system of protection via tariffs or exchange control is a way of overcoming the bias against exports from an over-valued currency. And those countries in Asia that have implemented such a policy (Japan, Pakistan, Taiwan and South Korea) have found that industrial exports have boomed as a result. In contrast, the Philippine has remained inward-looking in its industrialization policies with the consequences described in the preceding sections of this paper. It is difficult to imagine that a real resurgence of industrial growth could take place here without a re-direction of policy that would give an outward-looking character to manufacturing.

Which means to employ -- reduction of protection plus devaluation or subsidies to manufactured exports -- is largely a political question. Both, however, have one political difficulty in common. This arises from the need to discriminate against certain traditional exports. A properly implemented devaluation would exclude (or include in lesser measure) these exports. Likewise they would be excluded (or included in lesser measure) from the subsidies if that alternative is adopted. There is a sound, perfectly respectable economic argument for this. It stems from the terms of trade effect of expanding exports whose world demand elasticity is less than infinity. The social value is measured by the marginal revenue from such exports, not by the world price. To bring private decisions into line with social values these exports should be taxed (relative to all others and to import substitutes) by a percentage equal to the reciprocal of the particular world demand elasticity. That is, if world demand elasticity for a certain export is estimated to be equal to ten, the appropriate



relative tax is one-tenth, or ten per cent. This will adjust the world price to the level of marginal revenue, thus giving the exporter the correct indicator of the social value of his exports.<sup>7/</sup>

The political power of the traditional export sector in some countries may render this aspect of a rational industrialization policy difficult to implement. Albert Hirschman has commented on this with respect to Latin America.<sup>8/</sup>

...For example, why not tax the tradi-  
tional export sector, subsidize the new industries and do away with the overvalued exchange rate so that industrial exports are encouraged? To ask this question is to answer it: in most Latin American countries such a course would have been politically impossible. The power of the groups tied to the primary export sector would hardly have permitted so direct an assault ....

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<sup>7/</sup> This assumes that the exporters are competing, taking world price as given. If the export industry is a monopoly, it should already be exploiting the world market to an optimal degree from the national standpoint. There remains in this case, however, the question of how the gain is distributed. The government might still choose to tax away the monopoly gain.

<sup>8/</sup> Albert O. Hirschman, "The Political Economy of Import-Substituting Industrialization in Latin America, "Quarterly Journal of Economics, February, 1968.

For the Philippines, perhaps, subsidies that discriminate in favor of new exports might appear a less direct assault than devaluation plus a tax on traditional exports.

There is yet another element of bias against the modern industrial sector that needs to be corrected if the Philippines is to experience the resurgence of industrial growth required for successful development. This is the wide gap between the market wage in the modern sector and the marginal social opportunity cost of labor from the traditional sector -- so-called factor price disequilibrium. While we do not have, for the Philippines, a precise measure of the marginal social opportunity cost of labor to manufacturing, the great disparity between average earnings there and those in agriculture suggest that the <sup>gap</sup> must be substantial.<sup>9/</sup> This may help to explain why a system that discriminates strongly against exports via an unfavorable exchange rate defended by high tariffs nevertheless permits a strong performance in some primary export industries. Of course a real underlying comparative advantage may also help to account for the success of these industries, but the fact that manufacturing must pay such a relatively high wage when unemployment and very low productivity employment are widespread suggests that this factor price disequilibrium is masking cases of real comparative advantage in manufacturing, especially where labor-intensive techniques are possible.

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<sup>9/</sup> See also the corollary evidence on the labor surplus character of the Philippine economy in T.K. Ruprecht, "Labor Absorption Problems and Economic Development in the Philippines," Philippine Economic Journal, Second Semester 1966.

What are the remedies for this bias? The classical one, first advocated in 1931 by Manoilescu,<sup>10/</sup> was tariff protection for manufacturing. This the Philippines has, and the inadequacies of this remedy have been set out above. At best it can correct the bias only for import substitution, leaving manufactured exports at an even greater disadvantage, and in effect maintaining, rather than diminishing, the dependence of the economy on its traditional primary exports.

To avoid the bias against manufactured exports, Lary<sup>11/</sup> advocated a dual exchange rate instead of tariff protection. A higher price of foreign exchange for manufactured imports and exports alike would favor both import substitution and exports in that sector. Note that this is equivalent to uniform tariffs and subsidies for manufactured import substitutes and exports and also equivalent, of course, to a devaluation plus tax on traditional exports. The latter tax is separate from, or additional to, the optimum tax for terms of trade reasons, described above. Ideally, it would apply in just the measure needed for each industry to redress the effect of factor price dis-equilibrium.

The Lary proposal, while a vast improvement over crude tariff protection is still a second-best remedy, however, since another consequence of a wage rate in manufacturing above the social marginal cost of labor is a bias toward capital-

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<sup>10/</sup> M. Manoilescu, The Theory of Protection (London, 1931).

<sup>11/</sup> H. Lary, "Economic Development and the Capacity to Import -- National Policies," in Lectures on Economic Development (Istanbul, 1958).

intensive rather than labor-intensive techniques and industries. This bias together with those in the protection system (described above) and a variety of direct and indirect influences from labor and social welfare legislation<sup>12/</sup> help to explain the disappointing growth of employment in manufacturing in the 1950's and 1960's, averaging only 2.7 per cent a year from 1952 to 1968.<sup>13/</sup> This is below the estimated rate of growth of the labor force for the same period.<sup>14/</sup>

There are, then, three unfortunate consequences of this kind of factor price disequilibrium. There is a bias against import substitution in manufacturing; there is a bias against manufactured exports; and there is a bias against labor intensity in manufacturing.<sup>15/</sup> Tariffs correct the first, but tend to worsen the second and third. The dual exchange rate (or equivalent) corrects the first two. A policy which would

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<sup>12/</sup> See Gerardo P. Sicat, "Labor Policies and Philippine Economic Development," Discussion Paper No. 69-4, Institute of Economic Development and Research, School of Economics, University of the Philippines.

<sup>13/</sup> Central Bank News Digest, May 6, 1969. The rate of growth of employment might be understated because of a failure adequately to include new and rapidly growing firms in the reporting sample. On the other hand, there is an upward bias in the estimate from beginning the period at 1952. Starting from any other year in the 1950's yields a lower average rate of growth.

<sup>14/</sup> Ruprecht, op. cit., p. 303.

<sup>15/</sup> The bias may, of course, extend beyond manufacturing to other "modern" sectors. The argument should be interpreted to include these sectors in "manufacturing."

correct all three is a straight subsidy to employment in manufacturing. Whether or not the latter is, in fact, the ideal remedy turns on the method of financing the subsidy. In contrast to the subsidy of exports (see above, page 20), this one is not self-financing. So the choice between the subsidy to employment in manufacturing and the dual exchange rate (or equivalent) turns on whether the welfare loss from the taxes that would actually be imposed is greater or less than that associated with a failure to correct the factor mix. In any case, tariffs appear only third-best, as an inept and costly answer to factor price disequilibrium.

Many readers will no doubt feel that this critique calls for a degree of rationality in economic policy that is not likely to prevail. Can we really expect wholesale reform of the tariff system along the suggested lines and radical innovations in policy like straight subsidies to employment in manufacturing or to new exports? Or is the best current hope that the Board of Investments can effectively offset the existing biases with its array of tax advantages, favorable access to credit, and other special incentives? Can the BOI effectively translate the social interest into private profitability?

In general the criteria of the BOI seem good. And these criteria underline the theme of this paper - - that new directions in industrial growth are needed. There are, however, two major handicaps limiting the effectiveness of the BOI. The first is the inappropriateness of some of the inducements which

it can offer under the law. Tax credits are of little help, for example, in cases where biases in the price system render socially desirable investments privately unprofitable. Again, it is inconsistent to encourage labor-intensive industries by offering cheap credit and cheap capital equipment. It is also inefficient and perhaps wasteful to encourage exports by subsidizing promotional expenses. The various elliptical paths by which social targets are supposed to be reached with incentives of these kinds render them greatly inferior to straight subsidies to employment and to new exports.<sup>16/</sup>

Finally, however, the greatest handicap is the existing protection system, characterized particularly by the grossly distorted tariff structure. So long as the BOI has to fight this system its effectiveness will be blunted.

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<sup>16/</sup> For a general critique of the Investment Incentives Act see Gerardo P. Sicat, "An Analysis of the Investment Incentives Act of 1967," Discussion Paper, no. 67-10, Institute of Economic Development and Research, School of Economics, University of the Philippines.

## APPENDIX A

### CALCULATION OF RATES OF PROTECTION

Consider two industries, each of which imports materials and adds value to them to produce a finished product. Industry A has imported inputs worth 80 to which value of 20 is added in processing to yield a product of 100. Industry B has imported inputs of 20 and value added of 80 to yield also 100 of product. Now, suppose that duties of 50 per cent are placed on A and B and 25 per cent on all imported supplies. If the duties are effective, the values will be as shown in the second columns under A and B. Price can rise in each case to 150, but value added has increased by 150 per cent in the case of A (from 20 to 50) and by only 56 per cent in the case of B (from 80 to 125).

There are two things to note. First, in each case the rate of protection of the economic activity (adding value) is greater than the tariff. This is because the duty on the final product is greater than that on the intermediate inputs. If duties were uniform, rates of protection of value added would also be uniform, as the reader can verify. Second, the rate of protection in industry A is much greater than in B. This is because the same percentage of value of product is applied to a much smaller value added in A. Thus, this kind of tariff system gives the greatest advantage to industries with the least free trade value added-- i.e. those which save the least foreign exchange.

Finally, note the situation in the third columns, under "Export". If these goods were to be exported they would suffer a reduction in value added under the protection system. For export, the rate of protection for A is minus 100 per cent (from 20 to zero) and for B is minus six per cent (from 80 to 75).

	<u>A</u>			<u>B</u>		
	<u>Free</u> <u>trade</u>	<u>Tariff</u>	<u>Export</u>	<u>Free</u> <u>trade</u>	<u>Tariff</u>	<u>Export</u>
Material imports	80	100	100	20	25	25
Value Added	20	50	0	80	125	75
Value of Product	100	150	100	100	150	100

## APPENDIX B

### A NOTE ON PROTECTION OF DOMESTIC INDUSTRY: TARIFF VERSUS EXCHANGE RATE POLICY.

Suppose that under realistic assumptions about domestic saving and foreign capital inflow, an adequate domestic investment program for development implies a balance of payments deficit. There are, in general, three ways to meet this problem. First, the level of investment could be reduced and the rate of growth sacrificed. Let's consider this unacceptable. Second, the price of foreign exchange could be raised to encourage both further import substitution and export expansion. Third, additional controls or tariffs could be placed on imports.

Suppose it is estimated that a ten per cent rise in the price of foreign exchange would suffice. This means, of course, making foreign goods ten per cent more expensive in the Philippine market, giving domestic producers that extra margin for successful import substitution. It also grants domestic producers a ten per cent margin to enhance successful competition with foreign supply in the world market. There is thus a ten per cent bonus to domestic producers both to save and to earn foreign exchange.

If import restriction or tariffs are employed there is, in contrast, a bonus only for saving, not for earning, foreign exchange. All of the burden for meeting the balance of payments deficit must now fall on reducing imports, in contrast to the exchange rate adjustment in which there was an equivalent incentive also for expanding exports. So the bonus for import substitution must be greater than ten per cent -- say additional tariff rates of 20 per cent (or restriction of imports to raise domestic prices by that amount).

Contrasting the results of the second case with that of the first, we can see that some industries which were not efficient enough to compete in the domestic market at a ten per cent bonus now can do so with a 20 per cent bonus. Let's call these the 80-90 per cent efficiency group. At the other extreme, some which could have competed in the international market at a ten per cent bonus are now ruled out because no bonus is given for export. These we can put in the 90-100 per cent efficiency class. So we have substituted less efficient industries for more efficient industries. Consequently, it will cost more resources to achieve balance of payments equilibrium by import restriction than by exchange rate adjustment.



Note that equivalent to an upward exchange rate adjustment of ten per cent is a system of additional ten per cent duties on imports and ten per cent subsidies to exports. Hence, if one wanted to correct the bias against exports in the import restriction case described above, he could do so by reducing tariffs from 20 to ten per cent, while granting a ten per cent subsidy to exports. This is general rule. Starting from free trade and imposing a ten per cent duty on all imports while granting a ten per cent subsidy to all exports is equivalent to a ten per cent rise in the price of foreign exchange.

There is one powerful argument, however, against such an exchange rate adjustment or its equivalent to achieve balance of payments equilibrium. That is the terms of trade effect of encouraging expansion of exports. Thus, what is gained in efficiency may be lost in terms of trade. It is only with respect to a few commodities, however, that the volume of Philippine exports can affect world prices. Hence, this argument can be met by not granting the subsidy to these (a policy successfully carried out by Pakistan); or, in the case of exchange rate adjustment by imposing a tax on these few exports. This means, of course, discriminating against the powerful traditional export industries, which may be politically difficult. But it would be a serious mistake to fail to correct the bias against all other exports (including all future potential exports) because of a few. For a widening of the market for industrial growth and a diversification of exports are very important for successful Philippine economic development.

## APPENDIX C

### GROWTH RATES OF MANUFACTURING AND AGRICULTURE

Table II (page 7 above) shows average annual growth rates of manufacturing and agriculture (including forestry and fishing) for selected periods, 1948-1968. There is always a danger of distortion from selecting individual years as beginning and ending points. This is particularly true in the early 1950's in the Philippines when continuing recovery from World War II may have overlapped the new phase of manufacturing growth via import substitution behind import controls. Accordingly average rates of growth for both 1950-56 and 1952-56 were included in the table. Since the rates are very nearly the same for the two periods, however, it evidently makes little difference whether we date the "exuberant" period of manufacturing growth from 1950, the beginning of import controls, or two years later when recovery from World War II was more nearly complete.

In order to check more generally on the possibility of such distortion for all periods selected, average rates were calculated also on the basis of three-year average values for each beginning and ending point (except for 1968). For example, a value for 1948 was set at the average of 1947-49. These rates are shown below in parentheses beside the original rates from Table II.

	GNP	NNP	Manufacturing	Agriculture
1948-52	9.2 (9.6)	9.1 (9.7)	10.5 (11.0)	6.6 (7.1)
1950-56	7.9 (7.9)	7.8 (7.7)	12.3 (11.9)	6.2 (6.0)
1952-56	7.7 (7.6)	7.6 (7.4)	12.9 (11.6)	6.3 (5.7)
1956-60	4.4 (5.0)	4.6 (5.1)	6.3 ( 7.0)	3.3 (3.7)
1960-64	5.6 (5.4)	5.1 (4.9)	4.8 ( 4.5)	3.5 (3.7)
1964-68	6.1 (5.8)	5.3 (5.1)	4.7 ( 4.8)	6.9 (6.1)

In general the two sets of rates conform closely. However, in two cases the values based on three-year averages suggest less abrupt changes than are indicated by the actual rates. The decline in the rate of growth of manufacturing after 1956 appears less sharp, though still substantial. And the contrast between agriculture growth in 1964-68 and 1960-64 is moderated a little. (1964 was a particularly poor year for agriculture.)

Finally, there is always a danger that manufacturing growth becomes increasingly understated as the weights given to new and rapidly growing industries become more out of date. To check on this, the Central Bank Industrial Production Index, based on 1955 weights, was revised on the basis of 1966 weights for the years 1956 to 1967. This resulted in a slight rise in the rate of manufacturing growth, as can be seen below.\*

GROWTH OF INDUSTRIAL PRODUCTION  
Annual average percentage rates

	1955 weights	1966 weights <sup>a</sup>
1956-60	6.8	7.1
1960-64	6.8	7.1
1964-67	5.0	5.1

<sup>a</sup> 1966 weights based on the 1966 Survey of Manufacturing, Bureau of Census and Statistics.

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\* I am indebted to Cristina Crisostomo for the revision of the Industrial Production Index.