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INDUSTRIALIZATION IN THE PHILIPPINES:

A PRELIMINARY OVER-VIEW

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Foreword

This study has just begun in a formal sense and no conclusions can be presented at this time. Both authors have been working in the recent past on certain aspects of Philippine industrialization, however, and some tentative hypotheses and even, in some cases, strong impressions have emerged from these separate efforts combined with joint discussions. The major work of attempting to verify these hypotheses and impressions, as well as extending our studies to other aspects of industrialization as suggested by the OECD project framework, remains for the future.

1. Historical Perspective.

On the basis of sketchy data, it appears that Philippine GNP might have grown at an average annual rate of about 3.3 per cent from 1902 to 1966. This suggests an annual per capita income growth rate of about one per cent.

There were two periods of rapid growth -- at the beginning (1902-1918) and at the end (1948-1966) -- with relative stagnation (declining per capita income) in between. In the earlier period of rapid growth agriculture led the way, though there was a very rapid growth also of manufacturing in a few industries, mainly food processing (sugar and coconut oil). The later period saw a much more rapid growth of manufacturing across a broad front of import substitution industries, concentrated principally at the finishing stages of production and heavily dependent on imports. Agriculture grew at about four per cent per annum in this latter period, in contrast with the preceding 30 years of stagnation. As a consequence, annual growth of GNP averaged about six per cent -- roughly three per cent per capita -- since 1948.

Prior to the post-World-War-II growth experience, the determinants of growth in the Philippines were the U.S. business cycle, changes in U.S. trade and tariff policies, and the two world wars. In contrast, the rapid growth -- especially of manufacturing -- in the past two decades was stimulated by the system of protection and a variety of other policies designed specifically to encourage new industries.

In the first period of rapid growth, manufacturing was linked directly to an agricultural supply base and the products were to a substantial degree exported. It was an outward-looking industrialization integrated with a Philippine natural resource base. Trade grew faster than GNP. Agricultural productivity rose (in terms of all inputs combined), while manufacturing productivity declined. And the concentration of industry in the Manila metropolitan area tended to diminish.

In contrast, in the recent period of rapid growth manufacturing was linked to a world supply base and the products substituted for imports. Trade declined as a proportion of GNP. Agricultural productivity declined, while that in manufacturing rose slightly. The new industries tended to concentrate in and near Manila, the principal port, in part because of their heavy dependence on imports. The link between the new manufacturing industries and the primary producing sector is an indirect one, the dependence of the former on the foreign exchange earnings of the latter.

Over the entire period of more than sixty years there appears to have been virtually no reduction in the proportion of the labor force engaged in agriculture. This and the failure of

agricultural labor productivity to increase seem to be the
principal reasons for the slow growth of per capita income. In
the recent period of more rapid growth the gains seem to stem
principally from rapid productivity increase in manufacturing
plus a slight decline in agriculture's share of the labor force.
It was sectors other than manufacturing, however, that accounted
for most of the relative transfer of labor from agriculture. The
rapid productivity increase together with the relatively slight
employment effect from investment in manufacturing suggests an
excessively high capital intensity.

2. Industrial Growth since 1948.

If we divide the period from 1948 to 1966 in half, we
find that growth was more rapid in the first half than in the
second, especially in manufacturing where the earlier average was
more than double the later. (See the following table.)

TABLE 1

AVERAGE ANNUAL GROWTH RATES
(per cent)

Years	GDP	Agriculture	Manufacturing	Services
[1948-1957]	6.6	[4.4]	13.3	4.6
1957-1966	5.1	4.0	6.5	6.9
1961-1966	5.1	[4.1]	6.6	5.5
1948-1966	5.8	4.2	9.8	5.2

The principal stimulus to manufacturing growth in the 1950's was the system of import controls instituted at the end of 1949 during a balance of payments crisis. By 1953 this had evolved into a system of exchange control which favored import substitution by restricting foreign exchange allocations for consumption goods while favoring imports of the capital and intermediate goods needed in the new industries. In addition, tax exemption was granted to "new and necessary" industries and government financial institutions provided long-term capital on favorable terms, the industries so benefitted being principally the same ones that were favored by protection. One exception, however, was the "barter scheme" for exporters, allowing them to use 15 per cent of their proceeds for direct importation.

The retardation of manufacturing growth in the second half of the period appears to have been a natural result of the artificial encouragement given to the first easy stage of manufacturing growth -- substitution for imports at the finishing stages -- combined with lack of incentives to encourage investment for the next stage -- backward linkage plus export. In particular, the slower growth does not seem to have been caused by the decontrol and devaluation which took place during 1961-1965, growth since 1961 having proceeded at the same rate as during

the previous four years in both manufacturing and agriculture, as well as overall. Preliminary estimates for manufacturing growth in 1966-1967 suggest an even lower rate -- about 5.5 per cent.

During the 1950's foreign trade grew at about the same pace as GNP. The composition of imports changed drastically, however, capital goods increasing its share from 20 to 45 per cent (1950-1960), while the share of consumption goods declined from 50 to 25 per cent. Following the initiation of decontrol and devaluation in 1961, however, both imports and exports rose more rapidly, without significant change in their composition. Despite a very great increase in manufacturing production during the 1950's, exports of new manufactures did not develop to any significant degree. Beginning in 1961, however, there is some evidence of a very modest response of new exports to the more favorable exchange rate.

Manufacturing growth complemented the changing pattern of imports. Output tended to concentrate in consumption goods with little development of a capital goods sector. Intermediate inputs, however, rose rapidly as a share in total manufacturing output, especially after decontrol and devaluation put a more realistic price on the imported items in this category. Surprisingly, however, imports of intermediate inputs jumped up at the

same time, possibly as inputs into the expanded intermediate outputs, as well as to build up inventories.

Overall, the period since 1948 exhibited the following characteristics, some of which are perhaps common to growth behind high protection: (1) a tendency toward horizontally balanced import substitution in manufacturing in accordance with the pattern of demand for finished products, production concentrating at the finishing stages; (2) relatively slow growth of foreign exchange earnings overall (even after devaluation); (3) failure to induce exports of manufactures and backward-linkage investment in manufacturing at a sufficient pace to maintain industrial growth; (4) a consequent slowdown in industrial growth following the initial burst of import substitution, leading to a decline in overall growth of the economy; (5) a very uneven regional concentration of growth owing to the heavy dependence on imports and the corresponding lack of integration of the new manufacturing sector with agriculture, mining and forestry; (6) a sharply rising import bill and a high response of imports to industrial growth; (7) a failure of domestic food supply (principally rice) to keep pace with growing demand; (8) because of (6) and (7) an

unwillingness on the part of the monetary authority to meet the credit demands of the industrial sector for fear of rising food prices and balance of payments difficulties; (9) partly as a result of (8), continuing high unemployment and excess capacity in manufacturing.

3. The Effects of Decontrol and Devaluation (1961-66).

The retardation of growth at the end of the 1950's plus the fact that there was little discretion left in foreign exchange allocation, imports having been largely pared to a few essential consumption goods and the essential inputs for the new industries, suggested that the time was ripe for decontrol. This was largely accomplished between 1960 and 1962. At the same time the peso was devalued -- from a rate of ₱2 = $1.00 to ₱3.90 = $1.00. Exports continued to be penalized by the equivalent of about a seven per cent tax, however, until the end of 1965.

In anticipation of this and of the phased reduction of U.S. preference under the Laurel-Langley Agreement, tariffs had been raised by executive order in 1955 and by the enactment of a new tariff law in 1957, which was strongly protectionist in character. Moreover, a considerable number of tariffs were

raised further by 1965. The result is a system of protection under tariffs, similar in its restrictive effects to that under exchange control, protection being highest for finished consumption goods, lower for intermediate inputs and substantially lower for capital goods and for some basic raw materials.

However, devaluation did raise the peso earnings of exports and the peso costs of imported inputs, balance of payments equilibrium being attained after decontrol with less bias against allocation of resources to exports and the earlier stages of production. The present structure still retains strong biases of this sort, however, suggesting that these biases under the control system were indeed extreme. Finally, not very much of the devaluation was nullified either by declines in the world prices of Philippine exports or increases in the domestic prices of non-traded goods. The devaluation was largely effective in that sense.

Still the effect of decontrol and devaluation on exports has been disappointing. While the official figures show a moderate rise in growth of export volume among the traditional exports, a recent study based on the data of the Philippines' trading partners suggests that a large part of this may be more

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honest reporting. /New exports have developed only to a slight
degree despite the magnitude of the devaluation and the existence
of excess capacity in many manufacturing industries./ It may be,
however, that in both categories of potential exports -- tradi-
tional and new -- an elastic supply response requires more time.
(Recall that the special penalty on exports was removed only at
the end of 1965.) /The basic problem may still remain, however,
in the form of a residual strong bias against exports from the
new tariff-based system of protection./ (See below.) Decontrol
and devaluation merely reduced the bias without eliminating it.

The same is true of the bias against backward linkage
from the protected finished consumption goods industries.
Perhaps, however, because this bias is not so pronounced as that
against exports, backward linkage has fared a little better after
decontrol. The higher prices of imported inputs has favored
those industries using domestic natural resources and their
products, while at the same time encouraging the manufacture of
intermediate inputs. It is again, perhaps, too early to judge
whether backward linkage investment can proceed rapidly enough
to sustain a high pace of industrial growth without further
reducing the bias against it that the structure of protection
provides. Unfortunately, there has been some tendency to

increase the bias by raising duties on the products of industries
that have been especially hard hit by the higher prices of inputs
resulting from decontrol. Still, the overall pattern of changing
profitability in the 1960's has favored export industries and
those with an indigenous raw material supply base, while hurting
those most dependent on tax exemptions and protection.

Agriculture has benefited from the intersectoral terms
of trade changes following decontrol, because of both higher
peso prices of exports and greater encouragement to use domestic
instead of imported materials. The domestic price of food has
increased significantly with no matching rise in money wage rates.
The various shifts in income distribution resulting from decontrol
have sharply raised the proportion of national income saved, if
we are to believe the newly revised national income accounts.
(A better understanding of this may come from a flow of funds
study currently in process.)

Altogether the decontrol process has had a favorable
effect on industrial efficiency. The closer exposure to foreign
competition and the increase in prices of imported supplies has
forced more attention on production costs. A more favorable
climate now exists for agricultural growth, particularly with

the termination in 1966 of sales at below acquisition costs of imported grain and some manufactured foods by government marketing agencies. And the bias against exports and backward linkage has been somewhat reduced. |There remains, however, considerable distortion in market prices resulting from the tariff system and the related indirect tax system which would be difficult to justify on growth criteria.|/A look at the present structure of protection will perhaps indicate why we believe that the next stage in economic policy must encompass rationalization of the tariff structure and additional incentives to new exports.|

4. The Present Structure of Protection

Estimates of potential and effective rates of protection of value added in 1965 are available from a World Bank project study for 92 manufacturing industries (ISIC four-digit level), 11 agricultural industries and 16 other sectors. ("Effective rates differ from "potential" only in manufacturing industries where imports are not substantially competing with domestic products, these rates being estimated where possible from direct comparisons of world and domestic prices, instead of being deduced from tariff and indirect tax levels as in all other cases.)

The manufacturing industries are grouped by end-use in Table 2 where average rates for each group are presented. (Z measures protection as a proportion of free trade value added, while U measures protection as a proportion of actual value added. $U = \dfrac{Z}{Z + 1}$.)

TABLE 2

AVERAGE* RATES IN MANUFACTURING
BY END-USE CATEGORY
(per cent)

Category	Potential Z	Effective Z	Potential U	Effective U
Exports	14	14	12	12
(excluding sugar)	-18	-18	-22	-22
Capital Goods	47	47	32	32
(excluding trucks and buses and refrigeration equipment)	12	12	11	11
Intermediate Goods	79	61	44	38
Inputs into Construction	223	72	69	42
Consumption Goods	–	194	101	66

* Weights are total supply.

Table 3

AVERAGE RATES OF PROTECTION BY MAJOR SECTORS*

	Average Z	Average U
Fisheries	1900	95
Manufacturing	64	39
Agriculture	13	12
Mining	-22	-27
Forestry and Logging	-26	-35

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* Effective rates for manufacturing, potential rates for other
  sectors.

The bias against exports is very evident, especially

when we eliminate sugar which goes entirely to the protected U.S.

market. At the opposite extreme, consumption goods represent the

most favored group, protection averaging 194 per cent of free

trade value added. Next to exports, capital goods industries are

least favored, effective protection averaging only 12 per cent

when two exceptional cases are eliminated. Intermediate goods

and inputs into construction fall in the middle range at about

the average for all manufacturing, which has an effective Z of 64 per cent. The entire range extends from a Z of -33 for plywood to a U of 252 for automobiles (the latter value implying negative value added at free trade prices).

In Table 3 the average rate for manufacturing can be compared with averages for the other major sectors in which internationally traded goods are present. Because of the level of aggregation, comparisons of domestic and world prices were not possible for the sectors other than manufacturing, so that the rates estimated measure the potential protection accorded by the system of tariffs and indirect taxes. Thus the very high rate for the Fisheries sector is misleading. A great amount of casual evidence indicates that sea food is inexpensive by inter-national standards in the Philippines, so that a true "effective" rate of protection would be low. The same can be said for some commodities in the Agriculture sector, suggesting that the average effective rate there is even lower than is indicated in the table. Mining and Forestry are dominated by export industries, which explains their negative average rates.

Manufacturing stands out, therefore, as the sector that gains most from the system of protection. Within manufacturing,

moreover, there is a strong bias toward the finishing stages of production and especially against capital goods industries (including construction because of the penalties from relatively high protection of its inputs). Finally, exports from whatever sector are least favored.

The usual qualifications to such estimates apply, of course, especially where lack of homogeneity in quality prevents direct price comparisons from serving as a test of the degree to which protection offered is effectively used. Moreover, evasion of the system may be more widespread in the Philippines than in some other countries. Distortion of prices, particularly at the high end of the scale of rates of protection, may not be as great as the estimates suggest. Still, the distortion is probably very significant and the order of bias is, we think, correctly indicated.

The foreign exchange rate that prevails under a system of protection is likely to be a partial offset to protection for import substitutes, as well as a further penalty on exports. That is, all of the rates estimated tend to be higher than they would be if the exchange rate were at an equilibrium level under free trade, or under some more modest average level of protection.

Taking into account the likelihood of substantial evasion of the system and making some heroic estimates of the trade elasticities, one can guess that the peso is over-valued by about 25 per cent in relation to a free trade situation. Thus a downward adjustment of all rates by 25 percentage points might give a more accurate picture of the various levels of protection, though the order of relative biases would be unaffected.

5. Implications for Future Policy.

While the structure of protection described above is that of 1965, we believe that the system of import controls in the 1950's was characterized by the same kinds of biases, perhaps in even stronger degree. This judgment is at least consistent with the evidence pertaining to the pattern of industrialization briefly described above (in Section 2). Moreover, it appears that other policy measures designed to influence industrial growth, such as tax exemptions and government lending tended to reinforce rather than to offset the biases in the system of protection. It is a reasonable inference, we think, that the direction and pace of industrial growth have been strongly influenced by these protective policies.

Since, however, a vigorous pace of industrial growth in the future depends on the ability to move backward to the earlier stages of production and outward into the export market, the policies described above, which sufficed for import substitution in finished consumption goods, now act as impediments to the required allocation of resources. What is needed, perhaps, is a rationalization of the tariff structure by reducing the higher rates to the point where a more uniform pattern of tariffs prevails, and the introduction of an equivalent subsidy or other inducement to the same products when exported. "Infant industry" or other special reasons for particular encouragement should be considered selectively so as not to dilute incentives by distributing them broadly, and might better be met by tax and credit inducements. The intention here, however, is only to indicate the general lines of policy reform. Actual proposals that might have some chance of political success require considerable subtlety and ingenuity of design.

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