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**THE OPEN, DUALISTIC ECONOMY:  
PATTERNS OF DEVELOPMENT**

by

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The open, dualistic economy ("small, open economy") has two major features, its relatively high degree of involvement with external markets and a domestic production structure marked by sharp contrasts between agriculture and industry. Domestic dualism is reflected primarily in differences between a more or less dynamic, capital-intensive industrial sector existing side by side with a traditionally stagnant, labor-surplus agricultural sector. The development of such an economy may be thought of as moving through several stages which encompass changes resulting both from the economy's openness and its dualism. In other words, the important dynamic relationships are triangular in nature; the dynamic processes associated with its development involve relationships among agriculture, industry, and foreign trade. Changing patterns of exports and imports play a strategic role, affecting both agriculture and industry as well as the linkages between these two domestic production sectors.

Given the complexity of the development process involving these basically triangular relationships, it is essential to study the economy as a whole. The quantitative framework employed for this purpose is a national income accounting framework, specifically designed for the open, dualistic economy. This system is described in a separate paper.

While the system of quantitative relationships is essential for arranging data appropriately for studying the economy as a whole, institutional and historical aspects of the development process must also be incorporated into the analysis. It is these latter insights that allow us to study the dynamics of growth and development in a meaningful way. Changes in the patterns of resource flows among the key sectors identified in the national income accounting framework are central to understanding the dynamics of growth. The underlying causes of these changing patterns, however, are likely to be found in institutional and historical developments.

## I. GROWTH SEQUENCES

In an earlier working paper we defined growth sequences as a historical view of the development process, characterized by the occurrence of different types of growth systems or stages, each with its specific set of rules of growth, following in sequential order.<sup>1</sup> We viewed each particular growth sequence, S, as comprising a series of

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<sup>1</sup>D. S. Paauw, "A Framework for Development Planning Research: A Typology Approach," Development Planning Project, Field Research Framework, No. 2, July, 1965.

specific growth types ( $M$ ,  $M_2$ , etc.) in a definite sequential order; for example:

$$S = (M_1, M_2, M_3 \dots)$$

Such a growth sequence emphasizes the occurrence of historical events in a definite sequential order. The events are those which occur within specific growth types ( $M$ ) and in the process of change from one type ( $M_1$ ) to another ( $M_2$ ).

In this perspective the open, dualistic economy may turn out to be one growth type, historically existing during a given period of time as a part of a growth sequence. In fact, its development may move through a series of phases or sub-stages before the economy enters a new growth type in the growth sequence. Differences among open, dualistic economies at a point in historical time may be a matter of different sequences of these types or even of phases within a given growth type.

The contemporary economies we describe as open, dualistic economies, therefore, exhibit the central characteristics of openness and dualism, in combination, at this point in time. They have, in general, common historical antecedents in terms of previous growth types through which they have passed, though not, of course, at the same rate or even necessarily in the same order.

For purposes of our current study of the economies of the Philippines and Thailand, we envisage the long-run historical perspective as embracing a growth sequence to include a number of stages which may or may not lead to the ultimate goal of a mature economy.<sup>2</sup> Possible stages which may be included in such a sequence include the following:

- (1) Traditional Agrarian Stagnation
- (2) Colonial, Enclave Economy
- (3) "Hothouse" Industrialization
- (4) Agricultural Gestation
- (5) Symbiosis of Agriculture and Industry
- (6) Mature Economy

To telescope these stages viewing only the initial and terminal stages, we view a successful development strategy as one which would lead the small, open economy from an initial situation of traditional agrarian stagnation through several stages to the mature economy.

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<sup>2</sup>At this point in our research, we leave open the question of whether these "stages" are "growth types," as defined in our earlier paper referred to previously, or sub-stages or phases within a growth type.

Openness, in terms of relatively heavy involvement in the world market begins with the colonial period and persists throughout the remaining stages. A central hypothesis here is that the "small" economy with a limited market and a relatively narrow resource base cannot attain self-sustained, mature growth with a wide pattern of outputs and with a diversified structure of consumption unless there is a rapid and continuous expansion of exports and imports.<sup>3</sup> On the other hand, dualism is a feature which, initiated during the colonial enclave economy stage, must eventually be eliminated to attain the "self-sustained, mature growth stage."<sup>4</sup> We do not elaborate on the first two stages (traditional agrarian stagnation and colonial enclave economy),<sup>5</sup> since these stages have been analyzed elsewhere.

Our focus in this paper is on patterns of development of the small, open economy during the post-colonial period of its history. We emphasize, in particular, alternative patterns including some of the

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<sup>3</sup> Lockwood views Japanese development in these terms. See William W. Lockwood, The Economic Development of Japan, Princeton, 1954, especially Chapters 6 and 7.

<sup>4</sup> The concept of dualism employed here is taken from John C. H. Fei and Gustav Ranis, The Development of the Labor-Surplus Economy.

<sup>5</sup> See D. S. Paauw, op. cit. and D. S. Paauw and J. C. H. Fei, "Development Strategies and Planning Issues in Southeast Asian Type Economies," Philippine Economic Journal, Vol. IV, No. 2, Second Semester, 1965, pp. 200-225.

stages identified above. Much of the discussion in this section involves preliminary hypotheses developed from the Development Planning Project's empirical research in the Philippines and Thailand.

We picture the small open economy as emerging from the colonial period with two dominant characteristics: (1) domestic dualism; i. e. , a dominant, stagnant low-income agricultural sector characterized by widespread disguised unemployment side by side with a small, dynamic, more productive industrial sector--with little inter-sectoral relationship between the two and (2) a high ratio of exports to total output, with exports almost exclusively representing primary products, either from the traditional agricultural sector ("monomorphic agricultural economy") or from a foreign-implanted export sector ("differentiated agricultural economy").

## II. ALTERNATIVE PATTERNS OF DEVELOPMENT

The discussion will cover three quite different patterns, although we do not wish to imply that this listing is exhaustive. At this point, we merely hint at the relationship of these patterns to sequencing

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<sup>6</sup> See D. S. Paauw, *op. cit.*, and D. S. Paauw and J. C. H. Fei, "Development Strategies and Planning Issues in Southeast Asian Type Economies," *Philippine Economic Journal*, Vol. IV, No. 2, Second Semester, 1965, pp. 205-216.

and stages of development, proposing to investigate this problem further as our work progresses. The three patterns discussed are referred to as (1) trade-oriented industrialization; (2) industry-biased development; and (3) symbiosis of agriculture and industry.

#### A. Trade-Oriented Industrialization

The trade-oriented pattern of industrialization is likely to be found in small, open economies of a very special type. It is considered not so much for its importance but rather for didactic purposes to assist in understanding the other patterns of development.

The trade-oriented pattern of industrialization is inevitable and therefore appropriate in the rare situation where a small, urban center forms a separate political and economic unit. We find this situation in such city-states as Hongkong and Singapore where a former entrepot city, utilized during colonial times to service exports from a hinterland, begins a process of independent development. It is important for our purposes to observe that such a city-state possesses virtually no agricultural sector. Hence, it does not confront the fundamental developmental problem of domestic dualism, characteristic of all other types of less developed countries.

Avenues for development of such a single-sector economy are limited. Development cannot proceed on the basis of transforming a massive traditional agricultural sector to feed the process of domestic industrial expansion by providing markets, raw materials, capital, and food. Industrial expansion must be primarily geared to demand in foreign markets, and the inputs for industrial production must be largely drawn from abroad. A triangular development pattern--based on an interplay of agriculture, industry, and foreign trade--is ruled out by the absence of a domestic agricultural sector.

If industrialization is to occur, therefore, it must take place through foreign trade channels already established by the entrepot history of these small enclave economies. Given the absence of a rural backyard in the sense of a large, stagnant traditional agricultural sector, development strategy can be frankly industry-biased. The emphasis is on shifting from the traditional entrepot focus to an industrial center of gravity.

In the absence of a rural backyard with large-scale under-employment, there is the problem of access to cheap labor supply for industrial expansion. In Hongkong and Singapore, this problem has been solved by importing labor from the Asian mainland, thus providing all the benefits of an almost perfectly elastic supply curve of labor without

necessitating agricultural improvement to release agricultural labor. Moreover, the influx of labor can be controlled by immigration policy to prevent excessive urbanization and unemployment.

Similarly, non-labor inputs as well as food for the growing labor force must be drawn mainly from abroad. This is accommodated by import substitution, as labor-intensive industrial products are removed from the import account and are replaced by industrial raw materials, capital goods for industrial expansion, and food for the growing industrial labor force.

The scope of industrialization of this special type is limited by the absence of a domestic agricultural basis. There is little or no opportunity for backward linkages to a domestic raw material producing sector, and economies of scale are limited by the small size of the domestic market.

Yet such economies have exhibited impressive rates of growth during the early stages of trade-oriented industrializations. Significant in this regard is the absence of the drag which would otherwise be exerted by a dominant traditional agricultural sector with low productivity and large-scale underemployment. In short, the opportunities for short-run progress are enhanced by the absence of the problem of domestic dualism between a growing industrial sector and a massive, low-income agricultural sector.

Trade-oriented industrial expansion requires adaptable entrepreneurship to keep industrial exports attuned to changes in foreign demand. A part of the success of Singapore and Hongkong is undoubtedly attributable to their commercial background. Their entrepot histories produced a supply of indigenous entrepreneurs trained to follow the vagaries of the world market and to profit from marginal shifts. This is, however, a very specialized type of entrepreneurial activity, necessarily operating within limited horizons. Oriented toward export opportunities, such entrepreneurs need not emphasize domestic market opportunities nor need they be concerned with backward linkages between their industries and a domestic raw material producing agricultural sector.

#### B. Industry-Biased Development

We now turn to the more typical situation where the open economy does have a large traditional agricultural sector and, hence, the triangular pattern of resource flows--among agriculture, industry, and foreign trade--assumes importance. The special case under consideration here, industry-biased development, emphasizes industrial development as in the previous case. However, in the present case, the economy is predominantly agricultural and does not have the benefit of a specialized entrepot history.

Industry-biased development is a meaningful concept here since a strong bias is built into the system to promote industrial growth at the expense of agriculture. This bias, of course, results from national economic policies which favor industry. The industry bias may appeal to the leadership on the basis of nationalistic aversion to the colonial status of a primary product exporter and manufactured goods importer. It is also likely that there is considerable reluctance to attack the formidable problem of transforming the massive, traditional agricultural sector because of the difficulties of accomplishing improvements in widely scattered, numerous small units. Moreover, the link between production and households in traditional agriculture presents difficulties of a cultural nature which the planner is likely to find particularly perplexing. Finally, one is likely to find that political power is wielded by groups who are rooted in the small modern sector of the economy and, hence, political fortunes are tied to conditions in this sector.

This bias produces a set of policies and investment programs designed to promote lop-sided expansion of the economy--a growing industrial sector accompanied by stagnating agriculture. Capital, foreign exchange, and other key resources are made available to industrial entrepreneurs on favorable terms, and industrial growth

surges ahead. Analysis is likely to reveal, however, that these advantages are conferred on industry by net transfers from the agricultural sector, which continues to be the center of gravity in terms of employment and output shares. The constellation of industry-biased policies in effect shifts the domestic terms of trade increasingly in favor of industry and against agriculture. The traditional agricultural sector is forced to finance industrial expansion under conditions which do not promote improvements in agricultural productivity.

Since economies of this type are heavily involved in world markets with exports traditionally emanating from the agricultural sector, the foreign trade flows exhibit rather dramatic changes associated with such lop-sided industrial growth. Traditional agricultural exports may be maintained, although disincentive effects of industrial-biased policies on agriculture may cause their growth to become increasingly sluggish. There will be little diversification of exports since industrial products are unlikely to compete in the early stages, and there are no inducements to diversify or improve qualities of agricultural exports. Since this is basically an import-substitution strategy at the finished goods level, outlets for industrial exports are not aggressively sought as in the Singapore-Hongkong case. The open,

dualistic economy will not have a comparable supply of export-oriented entrepreneurs attuned to shifts in world markets by their entrepot background.

The important foreign trade changes, therefore, occur on the import side. Industrial expansion will be aimed at substitution of imported manufactured finished goods, perhaps in some sequence related to complexity of technology. Rapid industrial expansion, however, will require growing volumes of imported capital goods. Moreover, in the absence of programs to increase the supply of domestic raw materials for the emerging industries, intermediate goods for industrial production will come to be of growing importance in the import accounts. Perhaps even food will have to be imported as agriculture continues to lag and urban demand for food grows with rising industrial income. In short, we note a pattern of import substitution very similar to trade-oriented industrialization--reflecting the neglect of assigning the agricultural sector a positive role in development.

In the Philippines, for example, where the industrial-biased pattern has been ascendant since the early 1950's, the structure of imports showed the following changes of the type discussed:

	<u>Per cent of total</u>	
	<u>1949-51</u>	<u>1960-62</u>
Capital goods	12	20
Intermediate goods	37	66
Finished goods	51	14

A central feature of the industry-biased pattern, therefore, is growing dependence on foreign sources of supply for the inputs necessary for industrial expansion, particularly intermediate goods. This amounts to employing the lagging agricultural sector to finance from abroad the import requirements for industrial expansion while neglecting the opportunities for obtaining them domestically through strengthening backward linkages between industry and agriculture. We note here a significant difference from the trade-oriented case where expanding industry must export to finance its import requirements.

The fundamental weakness is that this pattern perpetuates-- in fact, aggravates--domestic dualism. It maintains the colonial phenomenon of an industrial enclave surrounded by a wasteland of low productivity, stagnant agriculture. Yet there is an ironic feature in the necessity to squeeze a surplus from the agricultural sector to provide capital and food for the industrial sector. This levy is made on a sector

in which per capita real income will inevitably be held stagnant or fall by a combination of neglect and growing population. Only a minute part of agriculture's population increase will be absorbed into the growing but capital-intensive industrial sector.

Eventually this pattern of development will grind to a halt as a result of retardation in the agricultural sector. Agricultural exports will stagnate for disincentive reasons as well as from the encroachment of growing population on land, causing a shift from export to food crops. With no changes in the traditional saving-investment process in agriculture, productivity increases will not occur and food supply will have to be increased by using land devoted to export crops or by resorting to cultivation of less and less productive fringe areas.

Export stagnation will reduce foreign exchange resources while the import-biased industrialization requires growing supplies of foreign capital and intermediate goods. Moreover, supplies of food for the expanding industrial enclave will be increasingly threatened by the combination of low productivity in agriculture and relentless population pressure. The terms of trade squeeze will induce farmers to attempt to market smaller shares of their total output. In short, when the initial slack has been exhausted by these forces, the capacity to force transfers

from agriculture through either the export-import nexus or domestic terms of trade squeeze will evaporate. We note that these problems were not found in the Hongkong-Singapore case.

Marketing the growing industrial output will also become increasingly difficult. Import-substitution is likely to result in the production of a variety of finished goods which are not competitive abroad since, after all, they have a high import content. Domestic market opportunities will grow only in the limited industrial sector where per capita incomes will rise while those in the much larger agricultural sector continue to stagnate.

Our empirical studies in the Philippines are beginning to produce evidence of these results from the relatively long period of hothouse industrialization. The basic resource flows described, particularly those involving the foreign trade sector, are being confirmed. Analytical studies are underway to investigate the nature of many of the more complex phenomena in this pattern.

### C. The Symbiosis Pattern

Where an economy shows both openness and dualism as dominant initial structural conditions, a successful development strategy must be built around the interplay of changes in agriculture, industry, and foreign trade. The fundamental aspect of this pattern is the encouragement of a symbiotic relationship between industry and agriculture in which each sector's growth reinforces and encourages the growth dynamics of the other. The links between industrial and agricultural growth are strengthened or, put in another way, dualism between the growth dynamics of the two sectors is progressively eliminated.

The basis for a symbiotic relationship will be laid in an initial period of agricultural gestation, a central difference from the industry-biased pattern. Investment and technological change are aggressively introduced throughout the agricultural sector in this early stage to raise productivity in traditional food crops, to diversify production, to provide intermediate goods for domestic industry, and to expand and diversify agricultural exports. This will require a net transfer of resources to agriculture rather than an outward flow to industry. If this seems to be an unrealistically large order, we must

remember that all successfully developing countries have passed through such a stage--Japan in the late 19th century and Taiwan and Israel during the past decade.

Productivity increases and diversified output won during the stage of agricultural gestation provide the basis for a subsequent process of symbiotic growth between industry and agriculture. There are several key aspects to this relationship. First, there is the financial--or real transfer--aspect on which the industry-biased strategy must eventually run aground. As agricultural gestation produces rising productivity, we have provided the basis for a marginal savings approach to real transfers from agriculture to finance the much higher and longer costs of industrial development. This implies that a share of real income increases from agriculture can be utilized to finance industrial development while also providing for the incentive considerations of rising per capita consumption, quite unlike the dead-end industry-biased pattern of squeezing dry a stagnant, unresponsive traditional agricultural sector.

Second, the symbiosis strategy has an important foreign trade aspect, again contrasting sharply with the industry-biased strategy. Export diversification is pushed by promoting gradually widening opportunities for domestic processing of primary products. We note that

this in itself will serve to strengthen a dynamic relationship between industry and agriculture. Similarly, agricultural development progress will be aimed explicitly at developing local sources of intermediate goods which play so large a role in the growing import requirements of the industry-biased strategy. We see here an opportunity to employ the agricultural sector in a way not available to the small enclave economy, a device which can serve to carry development much further than within the confines of a small city-state. On the export side, therefore, this pattern fosters growth of export earnings by employing the industrial sector to process a growing variety of domestic agricultural goods and by maintaining incentives to increase and diversify agricultural exports as well as to improve their qualities. On the import side, foreign-exchange saving occurs both through finished industrial goods substitution and promotion of local raw material supplies. This contrasts sharply with the industry-biased case where imported raw material requirements eventually dominate the import account. Export expansion and import-substitution of this type provide growing foreign exchange resources available to finance capital goods requirements for both modernization of agriculture and continuous expansion of industry. Given the importance of foreign trade in an open economy, trade relationships can play an important role in overcoming domestic dualism.

Third, the symbiosis pattern involves ever-widening markets for finished goods. As both industrial and agricultural incomes rise, we provide the basis for increasingly widening trade opportunities between the two domestic sectors. Industrial expansion will receive the stimulus of rising consumer demand from the massive agricultural sector. Similarly, rising industrial incomes will present consumer demands for new agricultural commodities--fruits, dairy and meat products, for example--long after the income elasticities of demand for staple food products have been exhausted. Though it may seem trite to stress these mutual market opportunities, it is important to note that this basic agriculture-industry relationship is neglected by the previous pattern which progressively tends to confine market opportunities to rising incomes within a small industrial enclave.

As an open, dualistic economy moves into a period of symbiotic growth of agriculture and industry, fundamental issues in foreign trade orientation will be raised. The importance of these issues lies in the nature of the pattern of real resource flows in such an economy. The basic pattern will be triangular, involving inter-relationships among agriculture, industry, and foreign trade. It is these inter-relationships which combine the features of dualism and openness

in a dynamic interplay as symbiotic development proceeds. We limit the discussion here to two contrasting directions, with choice between them representing a strategic decision for the long-run development of the small, open economy.

We distinguish the two foreign trade directions by the terms export-diversification and export-substitution. We define export diversification as a type of export specialization which concentrates on diversifying agricultural-based exports by shifting from traditional primary products to a variety of processed agricultural exports. The emphasis here is on industrial processing of indigenous raw materials for export. In this sense, this type of specialization is a narrower concept than that of "agro-industries," a term defined by ECAFE to mean industries which process farm products or have large quantities of agricultural inputs.<sup>7</sup> In the Philippines, there are many agro-industries--textiles, for example--which do not utilize significant amounts of domestically-produced raw materials. The emphasis in the export-diversification concept is on industrial exports which have strong backward linkages involving indigenous agricultural inputs.

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<sup>7</sup> ECAFE, Economic Survey of Asia and the Far East, 1964, p. 87.

In this type of export orientation found, for example, in the development of New Zealand and Denmark, import substitution primarily takes the form of replacing imports of processed agricultural goods. Import substitution of other industrial manufactures is not marked, and imported manufactures--including capital goods--will continue to dominate the import account indefinitely.

The contrasting foreign trade orientation, export substitution, is defined as a type of export specialization which concentrates on substituting manufactures industrial goods, with relatively low domestic raw material input, for traditional agricultural exports. We take this type of export orientation to be reflected in the Japanese example--even though Japan went through an initial stage of processing domestic agricultural products before becoming committed to the export-substitution orientation.

Quite different patterns of import-substitution are associated with this orientation. Substitution for a wide range of finished consumer manufactures proceeds rapidly, shifting the import structure to one in which imported raw materials, imported capital goods, and eventually foodstuffs become the dominant categories. Eventually, substitution for imported capital goods will commence, and raw materials for domestic

industry will become the major item. In Japan, raw materials for domestic industry rose from 4 per cent of the total imports in 1868-72 to 56 per cent in the late 1930's.

Either type of export-orientation is consistent with a period of symbiotic growth between agriculture and industry. In the Japanese case, a period of agricultural gestation resulted in substantial gains in food output, allowing a relatively long period during which food imports did not rise as a share of total imports. Agricultural gestation also provided the basis for a combination of net transfers to finance industrialization and growing domestic markets for Japanese industries.

### III. CONCLUSION

At the present stage of our work, to recapitulate, we hypothesize that there are two major patterns of development available to the open, dualistic economy. The first--the industry-biased pattern--resembles trade-oriented industrialization found in the one sector city-state. It ignores agricultural development while attempting to wring from agriculture savings and foreign exchange resources to feed industrial expansion. Given the existence of many pressures to pursue industry-biased development, most newly independent countries have drifted into this course. In recent years, however, there has been a pronounced

reaction against this pattern as the process has gradually retarded the economy's growth rate. Retardation has been caused by the emergence of the many built-in brakes arising from stagnation in the massive traditional agricultural sector.

The alternative pattern of symbiotic growth between agriculture and industry is based on an initial period of agricultural gestation to provide a basis for the participation of agriculture in a continued process of expansion. In this process, foreign trade will thrive and the issue of new directions in export orientation will emerge. This choice contrasts export diversification, which is rooted in agriculture, with export substitution, which is more industrially oriented. Both have been viable foreign trade patterns for symbiotic growth in open, dualistic economies. Yet it would appear that the choice may be critical for determining the rate and level of development to be achieved.

We see significant differences between the Philippines and Thailand in these basic patterns of development. In the Philippines, an industry-biased pattern has been pursued, and stagnation in the agricultural sector has increasingly throttled both industrial expansion and overall growth of the economy. In Thailand's case, we observe what

may be the beginning of a period of agricultural gestation providing the basis for symbiotic growth with an export-diversification orientation in foreign trade. New agricultural exports are appearing, and linkages between agriculture and industry are being strengthened. In the Philippines, by contrast, no clear direction is appearing in exports since the economy continues to rely on traditional exports to feed hothouse industrialization.