

Ranis, Gustav

**Working Paper**

## Challenges and Opportunities Posed by Asia's Super Exporters: Implications for Manufactured Exports from Latin America

Center Discussion Paper, No. 358

**Provided in Cooperation with:**

Yale University, Economic Growth Center (EGC)

*Suggested Citation:* Ranis, Gustav (1980) : Challenges and Opportunities Posed by Asia's Super Exporters: Implications for Manufactured Exports from Latin America, Center Discussion Paper, No. 358, Yale University, Economic Growth Center, New Haven, CT

This Version is available at:

<https://hdl.handle.net/10419/160283>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

ECONOMIC GROWTH CENTER

YALE UNIVERSITY

Box 1987, Yale Station  
New Haven, Connecticut

CENTER DISCUSSION PAPER NO. 358

CHALLENGES AND OPPORTUNITIES POSED BY ASIA'S SUPER-EXPORTERS:  
IMPLICATIONS FOR MANUFACTURED EXPORTS FROM LATIN AMERICA

Gustav Ranis

August 1980

**Notes:** Paper presented at NBER/FIPE/BEER Conference on "Trade Prospects Among the Americas: Latin American Export Diversification and the New Protectionism", March 1980, Sao Paulo, Brazil.

Center Discussion Papers are preliminary materials circulated to stimulate discussion and critical comment. References in publications to Discussion Papers should be cleared with the author to protect the tentative character of these papers.

Challenges and Opportunities Posed by Asia's Super-Exporters:  
Implications for Manufactured Exports from Latin America

Gustav Ranis \*  
Yale University

The process of enhanced differentiation within the developing world in the course of the past two decades has been especially marked by the emergence of the so-called SIC's or semi-industrialized countries. The new prominence of this fast growing middle tier of countries, along with the dramatic rise of OPEC, has been instrumental in transforming the landscape within the South, as well as relations between North and South. To the naked eye, moreover, it would appear that the members of this middle class of developing countries have experienced a rather similar pattern of development over the past two decades--characterized by high overall growth rates and an especially rapid growth of manufacturing, including a rise in manufacturing exports. On closer examination, however, we may become convinced that there really are two very distinct types of SIC's to consider, one which may in shorthand--and imperfectly--be called the Latin American type, the second the East Asian type.

This distinction focuses on two important and related dimensions of performance--one having to do with marked differences in the underlying success of their industrial export performance, the other with the internal balance between growth and distributional outcomes. Moreover, we shall want to examine the causes of the divergence which lie partly in differences in the endowment conditions and partly in the nature of the policy choices made over time in the two sub-sets of countries.

\* Comments by Carlos Diaz Alejandro and Hollis Chenery are gratefully acknowledged.

The East Asian SIC's both pose a challenge and present an opportunity to their Latin American counterparts. The challenge is best summarized by their substantially superior industrial export performance over the past two decades which has worried not only the developed countries. The opportunity is represented by the extent their example happens to be relevant to current Latin American trade and development objectives. Section II will be devoted to an analysis of the divergent two SIC cases in historical perspective, with Section III focussing on the options currently facing the Latin American economies with particular reference to their industrial exports.

## II

Any effort to "explain" the contrasting export performance of the East Asian and Latin American SIC's drives us towards the acceptance of the notion that some sort of underlying typological approach to development makes sense. This means that we believe in the existence of a family affinity among some of the Latin American SIC's, e.g. Argentina, Brazil, Colombia, and Mexico, just as there exists a family affinity among some of the East Asian SIC's, e.g. Korea, Taiwan, Hong Kong and Singapore. It clearly does not mean that we believe important, and conceptually instructive, differences don't exist within any one sub-family of LDC's; Latin Americans, in particular, will rightly bridle at the notion of "the" Latin American case. Rather, it means that intra-typology variances in either endowment or behavior may be less marked

than across typologies, and that this methodological approach, while admittedly somewhat casual, may nevertheless be analytically useful.

Developing countries' attempted transitions to modern growth are necessarily circumscribed by their initial conditions, including their colonial heritage, and other economic-geographic factors such as resource endowment, location etc. The historical experience we have been able to analyze to date, moreover, permits us to formulate an "evolutionary" view of development, i.e. one based on the identification of subphases of transition characterized by somewhat differing structures and changing modes of operation among the three main sectors, agriculture, non-agriculture and foreign. Such phases, of course, represent a combination of economic progressions and changing policy packages, with a good deal of filling and backing and lots of "gray areas." In discussing movements between one phase and the next we are, moreover, talking about gradual changes in the way the system is driven rather than anything either abrupt or complete. Nor, we want to emphasize, is there anything inevitable about any particular sequence of phases. We will, however, find it useful to contrast the actual Latin American and East Asian SIC experience from this longitudinal vantage point. The interplay between the forces of a dynamically changing endowment picture and the intervention of policies to either accommodate or mute these forces is, of course, an essential element in analyzing these contrasts in phasing and performance.

The family affinity among the Latin American SIC's can be summarized in terms of their joint Iberian colonial heritage, a relatively early

start for their post-colonial transition growth effort, their fairly large size (on the average) and their endowment which is relatively natural resources rich but characterized generally by remaining pockets of a not very literate unskilled labor surplus on the land. At the beginning of serious post-colonial transition growth efforts--whether, these are dated more appropriately in the 1880's or the 1930's--we are left with the heritage of a colonial period which focused heavily on traditional primary export activities within a pre-assigned scheme of the international division of labor.

In contrast, the East Asian SIC's are relatively smaller-sized and located in a population dense and natural resources poor region, with favorable levels of literacy for a large labor surplus population and a colonial experience which varied between British entrepot interests in the perhaps less generally interesting city states of Hong Kong and Singapore and heavy Japanese attention to the rural sector and the extraction of food crops in the more relevant cases of Korea and Taiwan.

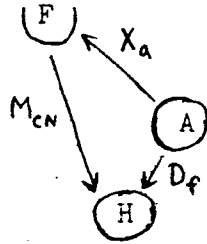
The two contrasting colonial or pre-transition phases may be pictured in panel I of diagram A. Under colonialism both the Latin American and the East Asian NIC's' agricultural sector A produces the domestic food supply ( $D_f$ ) for the households H plus exportable goods ( $X_a$ ) which help "finance" the import of non-durable consumer goods ( $M_{cn}$ ) flowing from the foreign sector F. Given the relative larger size of the typical Latin American case more domestic industries supplying a portion of the domestic market for, say, textiles, undoubtedly existed, but large portions of the domestic market for these goods were satisfied via imports

DIAGRAM A

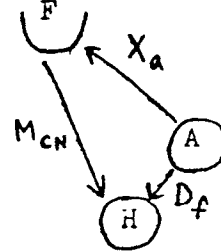
East Asian SICs

Latin American SICs

I. Pretransition

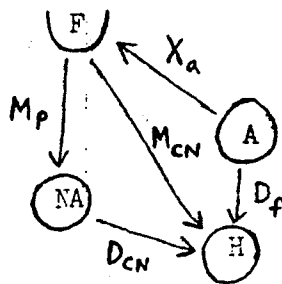


Ia) Colonial Structure

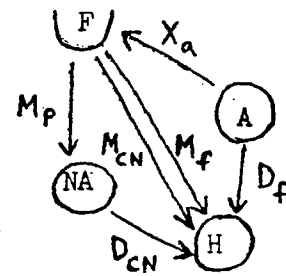


Ib) Colonial Structure

II. Initial transition  
Sub-phase

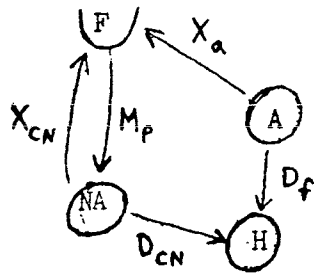


IIa) PIS Growth (1953-63)

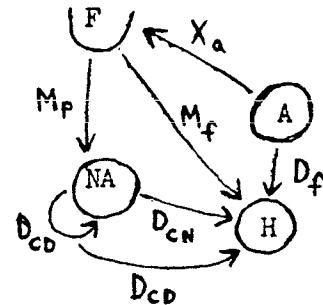


IIb) PIS Growth (1880-1950)

III. Second transition  
Sub-phase

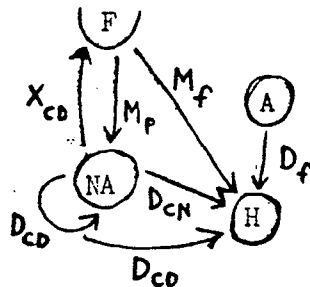


IIIa) PES Growth (1963-72)

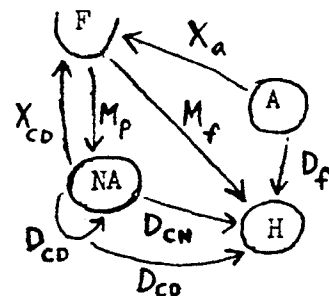


IIIb) SIS Growth (1950-70)

IV. Third transition  
Sub-phase



IVa) SIS/SES Growth (1973-present)



IVb) SIS/EP Growth (1970-present)

in both cases. Another important difference, not captured by the diagram, resides in the commodity content of the primary export, consisting generally of minerals and raw materials requiring very specific kinds of large-scale infrastructural investments (ports, railways) in the case of Latin America, and of rice and sugar, requiring generally small-scale infrastructural investments (irrigation, roads), as well as organizational innovations, (e.g. land reform and the creation of farmers' associations) in the case of East Asia.

Both the East Asian and Latin American SIC's--as virtually all other LDC's--initiated their transition effort by moving into primary import substitution (PIS) during their respective post-independence periods. According to this pattern, captured in diagram A, panel II, an increasing portion of the primary product earnings ( $X_a$ ) is diverted from the importation of non-durable consumer goods ( $M_{cn}$ ) and toward the importation of producer goods ( $M_p$ ) which permit the emergence and growth of so-called primary import substitution industries in the non-agricultural sector NA which is now able to produce these textiles ( $D_{cn}$ ) to gradually substitute for the previously imported variety ( $M_{cn}$ ) in the domestic market. It is this sub-phase of growth, fuelled by primary product exports (and, of course, supplemented by foreign capital imports) that entails several statistically observable substitution phenomena, including the gradual reduction of consumer goods imports, relative to producer goods imports. Panels IIa and IIb are again virtually equivalent, with one significant exception, i.e. there may be need for some net imports of food ( $M_f$ ), even at this stage, in some of the Latin American SIC's.<sup>1</sup>



The overall performance of the two systems during the PIS sub-phase is not so very different on the surface (see the Country Statistical Indicator Tables). Per capita income growth rates (row 1) were modest, if respectable, with the relative reallocation of the labor force to non-agriculture  $\theta$  (row 2) proceeding rapidly in both cases. The economies, even the smaller ones of East Asia, remain basically inward-oriented, as the often-recited interventionist package of protectionist industrial and foreign exchange policies trend the system toward autarky. Saving rates (row 3) are modest, investment rates (row 4) substantial, and distributional indicators, where available, (rows 5 and 6), heavily influenced by relatively low rates of employment generation, everywhere generally unsatisfactory.

On fuller examination, however, we may note the existence of underlying differences even during this sub-phase which yield their repercussions on performance later on. One has to do with the relatively better performance of agricultural productivity in the East Asian case, as a consequence of the combination of their better colonial "preparation" and a lesser relative neglect during the primary import substitution phase itself. A second, related, point is that the level of effective protection was generally lower in the East Asian than in the Latin American case, making its contribution to a somewhat lower temperature in the industrial hot-house. This is important in assessing the more recent experience of these two types of SIC's. As traditional land-based entrepreneurs are converted into industrial entrepreneurs, the level of protection and of profit transfer needs to be high enough for infant

industry reasons but not so high or persistent as to discourage entrepreneurial maturation.

As is well known, this process of primary import substitution (PIS) growth must inevitably terminate once all non-durable consumer goods imports ( $M_{cn}$ ) have been substituted for by domestic output ( $D_{cn}$ ); further industrialization of this type, directed to the domestic market, then has to slow to the pace of population plus per capita income growth. Another indicator of the exhaustion of PIS is the decline of the  $M_{cn}/M$  ratio which, as Table 1 indicates, reaches a low level plateau in most cases by the early 60's. Larger countries as represented by the Latin American SIC's may take a longer time to reach domestic market saturation in this sense-- witness the fact that Latin America took at least twenty years (1930-1950) to arrive at this point (possibly much longer, 1880-1950) while the East Asian SIC's took approximately a decade, 1953-1963.

The societal decisions reached to avoid a cul de sac at this point in the transition growth effort may be the most important in explaining the more recent divergence in the performance of our two types of SIC's. Once PIS came to its inevitable end, the East Asian SIC's moved into primary export substitution as their second transition phase, while their Latin American counterparts continued with import substitution but now of the secondary (or capital and consumer durable goods) type (see panel III of diagram A).

In the East Asian case (panel IIIa) we now encounter the new phenomenon of primary export substitution (PES) i.e. the export of the same non-durable consumer goods into world markets. Such penetration is facilitated by the increased ability of the now more experienced industrial

Table 1  
Primary Import Substitution

	$\frac{M_{cn}}{M}$			
	1950	1962	1970	1977
Brazil	4.1 (53)	2.52	3.43	2.17
Colombia	12.8 (51)	5.37	5.08	6.08 (75)
Argentina	14.4	5.21	6.28	3.71 (76)
Mexico	5.8	4.30	5.67	4.56 (74)
Chile	4.4 (52)	4.37	4.53 (71)	2.32 (74)
Korea		8.0	7.4	5.0
Taiwan	17.2 (53)*	8.1 (60)*	5.8	2.9

Note: Consumer Non durable (C<sub>n</sub>) Industries = 61 leather, etc.  
 65 textiles  
 84 clothing  
 851 footwear  
 892 printed matter  
 64 paper, paperboard, etc.

Sources: U.N. Commodity Trade Statistics Statistical Papers, Series D.  
 Taiwan 1977 -- Monthly Trade Figures, Taiwan Stat. Office.  
 U.N. Yrbk. of Internat. Trade Statis. 1950.

\* Computation not completely comparable to others due to lack of SITC data.

entrepreneurs to combine with the abundance of unskilled labor while taking advantage of accommodating changes in the overall economic policy package in the direction of lower protection and increased liberalization in various markets. The emergence of a new type of unskilled labor based export ( $X_{cn}$ ), gradually replacing the traditional primary product export ( $X_a$ ), is due to both negative and positive factors. Negatively, the basic limitation of natural resources--quite aside from the running out of domestic markets for non-durable consumer goods--will force a change in the structure and operation of the system. Positively, the gradual building up of the system's human resources provides the ingredients for the establishment of efficiency-oriented industries which send labor-embodying manufactured goods to world, especially developed country, markets.

The sustained march of primary export substitution in the East Asian SIC's of Korea and Taiwan during the 1960 and early 1970's can be captured by the rapidly rising proportion of total exports which are manufactured (see Indicators, row 9). Moreover, the rapidly rising overall growth of exports and participation of these systems in the world economy is documented by the growth of total exports (row 10) and of the external orientation ratio  $X/GNP$  (row 11), which has reached perhaps the highest levels in the world (50%) in Korea and Taiwan.

It is this rapid increase in industrial exports which has earned the East Asian SIC's the title of super-exporter and which has drawn the attention of both the DC's and the Latin American SIC's. It is

based, of course, on what constitutes a remarkable domestic development performance which has drawn less attention--namely the ability of the export-oriented industrial sector to quickly absorb its unemployed and underemployed labor at fairly stable real wages. The pursuit of such an employment sensitive growth path, aided by a strategy of small-scale, rural-oriented industrialization and even faster (than earlier) agricultural productivity change yielded not only extremely rapid rates of per capita income increase but also the achievement of good and improving income distribution performance--even before all the labor surplus was mopped up by the early 70's.<sup>2</sup> Once the Asian SIC's' labor surpluses had run out, first in Taiwan, then in Korea, real wages began to rise and the comparative advantage in labor intensive manufactured goods gradually to disappear.

As a consequence, the East Asian countries' industrial output mix shifted towards more skilled labor, technology and capital intensive goods, both for the domestic and then the export markets. This so-called secondary import cum secondary export substitution phase (see panel IVa of diagram A) reinforces elements already present in the earlier sub-phases, i.e. moving along the product cycle in continuing response to gradual changes in the endowment. Capital goods and consumer durables etc. are now produced for the home market ( $D_{cd}$ ) and exported ( $X_{cd}$ ). A related phenomenon is the more or less complete atrophy over time of the domestic agricultural sector, an activity in which the East Asian SIC's do not have a long run comparative advantage. As a consequence we may

note that food imports ( $M_f$ ) became necessary from the beginning in Hong Kong and Singapore, quite early in Korea (which did less well with its own rural sector) and are about to prospectively in Taiwan. The international market responsiveness of the East Asian SIC's during this period is best demonstrated by their ability to overcome formal and informal quota arrangements in the advanced countries, international recession, inflation and even the post-1973 OPEC crisis. This is not to say that the current crisis in the world economy is leaving the East Asian SIC's entirely unscathed--witness the large foreign debt of Korea, for example--but that an amazing record of growth and export performance has been compiled over the past two decades in spite of all this.

In the case of the Latin American SIC's, in contrast, once primary import substitution industrialization ended, around 1950, the system moved directly into a secondary import substitution (SIS) phase (see panel IIIb). This meant the establishment, at home, of more skilled labor, capital and technology intensive industries capable of producing previously imported capital goods and consumer durables and processing raw materials previously processed abroad ( $D_{cd}$ ). It also meant a continuation of development "hacia adentro", including the maintenance, if not intensification and broadening--now to include capital goods etc.--of the protectionist and controls-oriented policy structure of the previous phase. Table 2 indicates the comparative level of effective protection in the mid-60's for a representative of each of our SIC families as well as for the Philippines (about which more later). The extent of protection on non-durable consumer goods is negative in Korea at this point but substantial elsewhere. With respect to consumer

TABLE 2  
EFFECTIVE PROTECTION  
C. 1967

INDUSTRY	SOUTH KOREA		BRAZIL		PHILIPPINES	
	1968		1967		1965	
	Balassa Measure	Corden Measure	Balassa Measure	Corden Measure	Balassa Measure	Corden Measure
Agriculture, Forestry and Fishing	18.5	17.9	10	10	0	0
Processed Food	-18.2	-14.2	5.5	40	47	46
Beverages and Tobacco	-19.3	-15.5	334	155	15	15
Mining and Energy	4.0	3.5	14	13	-25	-25
Construction Materials	-11.5	-8.8	47	29	50	50
Intermediate Products I	-25.5	-18.8	-	-	16	16
Intermediate Products II	26.1	17.4	-	-	88	85
Nondurable Consumer Goods	-10.5	-8.0	49	67	55	53
Consumer Durables	64.4	39.8	70	101	1355	1062
Machinery	44.2	29.5	57	75	112	10.3
Transport Equipment	163.5	83.5	47	60	77	75

Source: S. Korea--Charles R. Frank, Kwang Suk Kim, Larry E. Westphal, Foreign Trade Regimes and Economic Development: South Korea (New York: Columbia University Press, 1975).

Brazil and Philippines--Bela Balassa et al., The Structure of Protection in Developing Countries, (Baltimore: The Johns Hopkins Press, 1971).

and capital goods, on the other hand, we note much higher effective protection rates in the case of both Brazil and the Philippines. Moving directly into SIS regimes thus meant none of the major shifts in the direction of exchange rate and other market liberalizations which the East Asian SIC's had undertaken in the early 60's.

Another, and closely related, distinguishing feature of the Latin American case is, of course, their continued relative abundance of natural resources, which permits the continued exportation of traditional raw materials and/or the supplementation of traditional by new ones ( $X_a$ ). Unlike the East Asian case where import substitution, of whatever kind, is necessarily somewhat short lived, in Latin America it can continue to be fuelled even as it becomes more and more "expensive" in terms of possibly increasing deviations from socially optimal industrial output mixes and technologies.

By the late 1960's and early 1970's secondary import substitution in Latin America had generally been modified to include export promotion (see panel IVb of diagram A). This, in contrast to export substitution, we define as the selective encouragement of particular industries or even firms by administrative action in order to "push out" exports in the absence of a general change in the structure of protection, or market liberalization. Export promotion requires subsidization either via public sector fiscal transfers, interest rate differentials, tariff rebates, etc. or alternatively, via private sector subsidization or price discrimination induced or cajoled by assuring the same companies a continuation of high windfall profits in protected domestic markets. The increase



in industrial export orientation here is caused not by a product cycle type of evolution resulting from increased entrepreneurial maturation responding to changing resource endowment and accompanied by accommodating changes in general economic policy. Instead, it is the consequence of additional controls and incentives planted "on top of" the existing import substitution superstructure. Domestic content and export targets are imposed, as the overall protective veils on intermediate inputs and on relative prices governing primary inputs are left intact. As industrial exports have become increasingly recognized as a "good thing"--even by Prebisch and his ECLA followers--commodities up the technology and capital intensity ladder have moved into domestic production ( $D_{cd}$ ) and exports, ( $X_{cd}$ ), most often sequentially, sometimes simultaneously. Automobile assembly is a case in point as increasing domestic component requirements are linked with increased export quotas.

The Latin American SIC development path is clearly much less overall export-oriented (see  $X/GNP$  in Country Statistical Indicators, row 11), and with a lower proportion of manufactured exports than the East Asian cases. Note that the proportion of the population in non-agriculture  $\theta$  (see row 2) is not all that different across our two types of SIC's by the mid-70's, the end of the period; but notice also that the rate of increase in  $\theta$  over the past 20 years has been much more pronounced in the East Asian cases--in spite of the relatively higher population growth rates during that period in Latin America.

The relative neglect of food producing agriculture seems to have continued, perhaps even been exacerbated, during the SIS/EP phase. As

Table 3 indicates, the representative East Asian SIC's start with somewhat higher cereal yields than the Latin American SIC's in 1950 (with other, natural resource rich, Asian LDC's somewhat intermediate); but what is most impressive is the divergence in yield growth rates thereafter. Net food imports ( $M_f$ ) have become an increasingly important factor in these relatively natural resource rich Latin American SIC's (e.g. Mexico), over time. Export cash crops which are generally likely to be less labor intensive than domestic food crops are favored by a research and relative price intervention system geared to the need to continue channeling these export proceeds into import substituting industries. Unskilled industrial real wages are, moreover, likely to increase more in these cases (see Table 4), partly as a consequence of the relative rise in the prices of agricultural wage goods and partly as a result of enhanced unionization and minimum wage legislation accompanying prolonged import substitution. As we mentioned earlier, Latin American growth and savings rates are generally respectable, if lower than in the East Asian cases (see rows 1 and 3). There is, however, a striking discrepancy in the equity indicators, (rows 5 and 6), resulting from the combination of less attention to food producing agriculture and labor intensive industries serving international markets.

In summary, what looks superficially like a paler, Latin American version of the same East Asian success story (see Table 5a) is actually quite different. As we can see from Table 5b, the composition of industrial exports was consistently biased against non-durable consumer goods in the Latin American cases, with the exception of Colombia. Only in the

TABLE 3

INDICES OF MAJOR CEREAL CROP YIELDS\*  
(Annual Growth in Parentheses)

	1948-1952	1952-1956	1961	1965	1970	1975	1977
(Mexico 1950 = 100)							
TAIWAN	309 (5.0)	375 (2.2)	427 (5.6)	531 (0.0)	532 (-0.1)	529 (3.9)	571
SOUTH KOREA	483 (-2.0)	445 (3.7)	553 (-1.8)	513 (4.7)	617 (2.8)	710 (12.8)	904
BRAZIL	168 (-5.3)	159 (1.6)	175 (1.3)	184 (-0.3)	182 (2.7)	208 (2.4)	218
MEXICO	100 (1.9)	108 (3.4)	132 (3.1)	149 (2.1)	162 (0.8)	169 (-2.1)	162
MALAYSIA	220 (1.7)	235 (3.8)	294 (0.0)	294 (2.3)	323 (1.9)	355 (0.8)	361
PHILIPPINES	157 (0.4)	160 (0.4)	164 (1.6)	175 (6.0)	221 (0.7)	229 (6.8)	261
(1950 yield = 100)							
TAIWAN	100	121	138	172	172	171	185
SOUTH KOREA	100	92	115	106	128	147	187
BRAZIL	100	94	104	110	108	124	130
MEXICO	100	108	132	149	162	169	162
MALAYSIA	100	107	134	134	147	161	164
PHILIPPINES	100	102	104	111	140	146	166

Sources: All figures are from FAO Production Yearbooks, 1966, 1970 and 1977, except Taiwan 1975-77 which are estimates based on multiplying 1970 yield by an index of rice yields from Republic of China, Statistical Yearbook, 1978.

\*Figures are the cereal crop to which the most acreage is devoted. For Brazil and Mexico corn yields are used. All other countries' yield statistics are for paddy rice.

Table 4

Real Monthly Wages in Construction

(In constant 1970 U.S. \$)

	1955	1960	1965	1970	1973	1974	1975	1976	1977
South Korea	81.0	77.2	46.6	73.2	89.7	85.5	95.5	155.0	189.1
Index (1955=100)	100.0	95.3	57.5	90.9	110.7	105.6	118.4	191.4	233.5
Mexico	51.5	62.6	64.7	84.9	98.4	109.3	104.4	-	-
Index (1955=100)	100.0	121.6	125.6	164.9	191.1	212.2	202.7	-	-

Source: "Wage Tables for Latin America and the Carribbean Countries," Swadesh Bose, unpublished World Bank Development Economics Department mimeo, 1979.

TABLE 5

## THE GROWTH AND COMPOSITION OF INDUSTRIAL EXPORTS

	<u>5a</u>				<u>5b</u>			%
	Annual Growth Rates (%)				$\left( \frac{\text{Exports of Consumer Non-durables}}{\text{Total Industrial Exports}} \right)$			
	Total Manufacturing Exports		Consumer Non-durable Exports		1962	1970	1977	
	1962-70	1970-77	1962-70	1970-77				
Brazil	28.6%	40.5	41.4	44.7	11.3	24.2	29.8	
Chile	13.0 (62-71)	33.4 (71-74)	18.0 (62-71)	29.7 (71-74)	23.3	34.3	31.5	
Colombia	20.5	38.0 (75)	17.8	39.6 (75)	48.3	39.2	42.6	
Argentina	24.9	25.6 (76)	45.5	22.8 (76)	8.8	29.8	26.0	
Mexico	11.8	31.2 (74)	5.8	33.9 (74)	30.7	20.3	21.4	
Korea	67.0	44.7	75.7	39.5	33.1	49.5	38.3	
Taiwan	34.7	32.8	32.6	30.7	46.7	41.2	36.9	

-18-

Source: Computed from U.N. Commodity Trade Statistics, Statistical Papers, Series D.

For Taiwan 1977 = Monthly Trade Figures, Taiwan Statistical Office.

70's did Korea and Taiwan begin to shift markedly towards more capital intensive industrial exports. Even when similar SITC categories of goods are being produced in and exported from both sets of SIC's the competitiveness at international prices undoubtedly varies markedly, with Latin American intermediate inputs, for example, having to be procured domestically, and with primary factor markets considerably more distorted. It is striking, for example, (see Table 6) that both with respect to the export of all manufactured goods and the export of non-durable consumer goods, there is a tendency for the Latin American SIC's to sell a larger and--even more meaningfully--increasing proportion of the total to other LDC's. Sales within the Andean Pact countries, for example, are more like sales in a protected domestic market. Quite the opposite trend is in evidence for the East Asian SIC's who are generally increasing their already high sales to the developed countries, especially in the case of the non-durables where their comparative advantage has been presumably highest, at least until 1970. As international trade theory would lead us to expect, a larger proportion of the more labor intensive exports in the East Asian cases have been destined for the more advanced country markets.

In Latin America, food production and rural industry continue to languish, relative to potential; substantial pockets of unemployment and underemployment persist, as do poverty and worsening levels of income distribution inequality. The question which inevitably arises, from the point of view of Latin American policy-makers, is the proximate cause, in nature and in man, of the particular path these economies have taken, and to what extent it is or should be reversible. We intend to, finally, turn our attention to these issues.

Table 6

## EXPORTS OF MANUFACTURING, TOTAL AND CN's, BY DESTINATION (PERCENTAGE)\*

	1962		1970		1977		1962		1970		1977	
	Total		Total		Total		CN's		CN's		CN's	
	DCs	LDCs	DCs	LDCs	DCs	LDCs	DCs	LDCs	DCs	LDCs	DCs	LDCs
Brazil	63.2	36.6	54.7	43.4	55.7	43.1	75.7	20.6	78.3	16.4	74.7	19.2
Colombia	50.5	49.4	42.4	57.0	42.9	56.6	47.9	51.8	60.2	38.1	70.7	28.4
Argentina	65.7	31.4	44.6	51.9	33.4	62.5	75.0	21.0	67.9	23.1	68.0	19.2
Mexico	78.3	21.6	76.0	23.5	73.8	25.6	68.8	31.0	72.0	28.0	87.4	10.1
Chile	41.7	57.4	33.4	66.8	24.5	71.3	-	99.9	1.1	97.9	-	99.6
Hong Kong	83.3	15.6	84.0	15.9	82.2	17.0	75.8	24.0	84.3	15.4	84.4	14.1
Singapore	3.4	96.5	27.4	72.1	50.3	48.6	2.2	97.6	27.4	71.3	49.6	47.7
Korea	83.3	15.6	87.3	12.7	73.3	26.6	98.4	-	85.5	14.4	78.9	20.8
Taiwan	42.0	58.0	68.7	31.3	n.a.	n.a.	42.8	56.7	68.1	31.9	n.a.	n.a.

Source: Same as in Table 5.

\* Non-market economies not included.

III

Our prior analysis and the necessarily circumstantial evidence presented indicate that the Latin American SIC's "skipped" the labor intensive primary export substitution phase and were, as a consequence, unable to effectively mobilize their cheap unskilled labor en route to economic maturity. It was their relatively abundant land-based exports which permitted them to move directly into the production and export of more sophisticated industrial products. It also permitted them the relative luxury of not fully mobilizing domestic food producing agriculture and, if necessary, importing food instead.

The underlying relative abundance of natural resources--supplemented, it should be noted, by foreign capital inflows (both of the equity and portfolio variety) makes its impact felt in two related ways. One, by rendering the system's underlying exchange rate "strong", it effectively discourages labor intensive exports, ceteris paribus, from being competitive; in its extreme form this is the so-called Kuwait Effect, in the case of the oil exporting countries. Secondly, there is the related opiate or cushion effect of ample export proceeds which makes it possible for the system to politically "afford" continued heavy protectionism and moving into more and more "expensive" or capital-intensive areas in which it doesn't necessarily have a comparative advantage--at least not yet.

The availability of ample natural resources and/or foreign capital can thus be viewed as permitting the system to continue on its old tracks,



thus avoiding the political and, at least short term, economic pain of having to move to a different policy package. Growth rates can in this way be maintained--just by adding more fuel to the engine--and difficult decisions postponed. The contrast with the East Asian cases which, at the end of their PIS phase, could not afford to pay for a prolongation of import substitution, but were forced by necessity to turn to the utilization of their human resources, is clear. While additional resources, in theory, should be able to ease the actual and psychological adjustment pains, they can, and in the real world are, often used to put off--or entirely avoid--difficult decisions.

In the Latin American SIC cases, in other words, many decades of import substitution growth have led to encrusted habits and strong vested interest groups able to resist reforms or even marginal policy change. The relatively strong natural resources base permitted the society to channel its "windfall" returns both to the workers and the entrepreneurs in the protected industrial enclave. Under such conditions of bilateral oligopoly real industrial wages could be raised, even in the presence of substantial unemployment and the absence of sustained agricultural productivity increases, by means of government supported union pressure and/or minimum wage legislation (see Table 4 for the contrast in wage behavior). Long before substantial pockets of unemployment and underemployment have been eliminated by labor absorption and growth, higher wages thus encourage the substantial "skipping" of the labor intensive export phase. Higher than normal entrepreneurial returns and higher than normal wages for elite workers result. To the extent sectoral clashes on distribution occur, these

may result in inflation, but the availability of ample land-based exports and/or foreign capital are bound to cushion such clashes and permit the system to continue on its path.

With some zigs and zags, this has been the general Latin American SIC experience. The only events likely to bring it to an end are either the ultimate running out of a sufficiently large natural resources base, e.g. Brazil in the face of rising oil import requirements, or Mexico (a couple of years ago) having difficulty in attracting the customary volume of commercial capital flows; or, on the other hand, the population's unwillingness to permit the continued non-participation of substantial portions of economic actors and the resulting inequities in the distribution of income. The most recent economic policy changes in Brazil may represent a mixture of both these pressures coming to the fore and forcing a reassessment of policies.

Whether a strong desire really exists, beyond the rhetorical level, to respond to employment and distributional problems in the typical Latin American SIC is a subject of some controversy which I am ill equipped to deal with. However, the extent to which the Latin American SIC's have, in fact, lost opportunities, and the extent to which such losses are reversible inevitably represent relevant issues of importance to policy-makers and need to be addressed.

One way of establishing an upper bound estimate of "what might have been " had the Latin American SIC's not decided to skip the PES phase, is to estimate the value of manufactured exports for each had it maintained its base year, say 1960, market share. In that base year, the beginning

of the rapid PES subphase in Asia, the two Asian SIC's had 0.19% of the world market in industrial exports, compared to 1.2% of our Latin American counterparts. By 1975, however (see Table 7) the global market share of the East Asians had increased eight times while that of the Latin Americans had remained about constant. Looking at individual countries, we may note that both Taiwan and Korea vastly expanded their market share, while those of Chile, Mexico and Colombia declined, with only Brazil as an outstanding exception. It is, moreover, important to note that even in the LDC market in which they are relatively favored, the Latin American SIC's have been losing market shares.

Even in the most difficult, post-1973, years we should point out, the East Asian SIC's have been able to maintain--or better, restore--healthy industrial export growth rates from an already high base, in spite of the combination of energy price rises, global inflation, recession and increased DC protectionism, which has been devastating for non-oil LDC's generally. The growth rate of DC manufactured imports from LDC's, for example, fell from 23.3% in 73-74 to .3% in 74-75 but recovered to 39.8% by 75-76. Similarly, Korean manufactured exports rate of growth dropped to 9.5% in 74-75 from 39% in 73-74 but recovered to 63% by 75-76.

In spite of the increased DC protectionist response which has accompanied the super exporters' success in recent years, it should be noted, of course, that LDC manufactured exports still constitute only a tiny, if growing, fraction of global industrial exports; in 1955, for example, the developed market economies bought only 4% of their imported

TABLE 7

MANUFACTURED EXPORTS--MARKET SHARES

	Share of World Exports			Share of LDC Total Exports		
	1960	1970	1975	1960	1970	1975
2 East Asian SIC's	0.19	0.57	1.59	3.44	10.37	22.87
5 Latin American SIC's	1.23	1.07	1.26	22.24	16.31	18.11
South Korea	.01	.32	.80	.18	4.88	11.51
Taiwan	.18	.36	.79	3.26	5.49	11.36
Brazil	.05	.18	.43	.90	2.74	6.18
Argentina	.08	.12	.19	1.45	1.83	2.73
Mexico	.33	.24	.21	5.97	3.66	3.02
Chile	.65	.50	.37	11.75	7.62	5.32
Colombia	.12	.03	.06	2.17	0.49	0.86

Source: UN, Yearbook of International Trade for country statistics UNCTAD, Handbook of International Trade and Development Statistics for world and total developing country statistics, except Taiwan, 1975, Monthly Trade Figures, Taiwan Statistical Office.

manufactures from LDC's; by 1976 this proportion, however, had almost doubled, to 7.8%. The annual growth rates, even in the comparatively "difficult" 70-76 period, were 29% for DC purchases from LDC's vs. 18% from the DC's. Similarly, there has been substantial growth, if from a low base, in intra-LDC manufactured trade, with LDC imports from other LDC's growing by a 27% annual average during 70-76 vs. 26% for such imports from DC's. The continued contrast in the growth rate of manufactured exports between our specific two sets of countries, in spite of the large difference in the initial base already established by the time of the first OPEC crisis, is vividly demonstrated in the empirical record.

The really important question is, of course, to what extent Latin Americans should consider the divergent East Asian experience as a "natural" consequence of different endowment conditions, and to what extent of different policy choices which might be reversible. As with most important questions, this one is rather difficult to answer definitively. What we can and will do, instead, is once again appeal to comparative historical analysis to shed some light on the question.

Societies in some sense act like individuals and are likely to take the road of lesser resistance if they can "get away with it." Thus, the relative natural resources abundance of Colombia, Mexico and Brazil clearly biased their transition growth phasing towards the Latin American type as we have outlined it. More natural resources and/or more foreign capital inflows can clearly be used to help ease the transition from one policy regime to another, but, just as easily,

they can be used to avoid what for some interest groups represent unpleasant changes, e.g. the need to seek earned profits in manufactured exports as a replacement of windfall profits in manufacturing for domestic markets. In an odd Toynbeeian sense the problem of the East Asian SIC's was indeed easier. There were no real alternatives; the agricultural sector could be viewed as a temporary, if important, source of fuel, but the system's long run comparative advantage had to be sought for elsewhere, i.e. in the system's human resources, first unskilled, then skilled.

To some extent, clearly, the "skipping" of the primary export substitution phase in Latin America was thus a politically convenient decision rather than the simple consequence of resources and exchange rates. Protectionist devices were generally maintained and reinforced; agricultural productivity neglected; real wage rates raised; and selective industrial export subsidies administered. But many of these policies can also be reversed and currently existing substantial pockets of unskilled surplus labor productively absorbed. The dubious benefit arising from temporary natural resource bonanzas can be controlled by running a surplus and trying to sterilize the inflows, as Chile (and the U.K.) is now attempting to do. Minimum wages--and the power of unions--can be permitted to lag in real terms. And rural sectors can be given some real attention for the first time, both in terms of a shift to smaller scale infrastructural investments and better internal terms of trade. Given the relatively larger size of the Latin American SIC's, larger attention to domestic balanced growth as part of the strategy is probably indicated. Most of all, a reversal of development strategies requires a redress of

the neglect of food producing agriculture as is currently under way in both South Korea and some of the Latin American SIC's, particularly Brazil (see Table 3).

Real world economies, of course, move in ambiguous non-monotonic paths, lurching forward in one direction one year, partially retracing their steps the next. Moreover, as we have pointed out earlier, they are too complicated to be packaged into neat typologies or transition phases. In fact, it is that very grayness and ambiguity which also supports the positive argument for substantial residual flexibility within any given system at any given point in time.

This point is perhaps best demonstrated by pointing out that Korea and Brazil have been deviating sufficiently from their own "families" in recent years to have several elements in common. There can be little doubt that there have been substantial elements of export promotion along with export substitution in the Korean situation, especially since 1968--witness the setting of firm export targets combined with substantial arm twisting or implied threats concerning the withdrawal of other favors. Korea's relative early neglect of agriculture (with respect to its own reference group, see Table 3) combined with a rapid primary export substitution drive in the 60's meant foreign capital had to be relied on much more heavily than, say, in Taiwan, both to help finance food imports and rapid industrial expansion.<sup>3</sup> Similarly, Brazil's performance, particularly between 1963 and 1973--and perhaps again currently--contains substantial elements of export substitution, yielding a burst in shoe

and textile production and exports. While it is too early to tell, indications are, moreover, that Brazil may be seriously concerned with mobilizing the domestic balanced growth blade of such a strategy with the required help of a spurt in the hitherto neglected food producing agricultural sector.

Other support for the potential reversibility of the Latin American transition pattern may be offered by looking very briefly at a third group of countries, the potential future SIC's of Asia, i.e. Malaysia, Indonesia, and the Philippines. These countries have natural resource endowments and other characteristics which place them somewhere between the East Asian and Latin American SIC's. Their performance with respect to growth and equity (see Country Indicator Tables) has quite similarly been somewhat "intermediate", best for Malaysia, followed by Indonesia and perhaps worst for the Philippines. With respect to phasing, they have essentially been following a Latin American SIC transition growth sequence, moving from a colonial pattern after World War II, to primary import substitution in the 50's and to secondary import substitution in at least the Philippines since then. As the East Asian SIC's successfully mopped up their surplus labor and as their wages rose, they moved, one by one, into secondary import substitution/export substitution during the late 60's and early 70's; there are clear signs, moreover, that the other Asian countries, Malaysia in particular, are currently making an effort to step into the labor intensive export niche being vacated. Indonesia still seems to be doing somewhat less well in avoiding a Kuwait Effect coupled with adverse policy changes; and the Philippines, while it has the potential, is not as yet seriously in the running.



Just to sharpen the visual contrast between our three sets of countries, we have plotted in diagrams 1 to 6 the per capita income growth, equity, industrial export and agricultural performance indices of two representatives for each of our groups. Indonesia, Malaysia and the Philippines seem to constitute intermediate observations between the Latin American and East Asian SIC's in each of the dimensions of performance which we have found to be relevant. This certainly adds to the circumstantial evidence we have been accumulating. It also tends to support the suggestion that other Asian LDC's, would-be SIC's, are "standing in the wings" ready to exercise their flexibility in terms of policy reversal and redirection along the lines indicated here. Here is part of the challenge and the opportunity. Within contemporary Latin America, Brazil and perhaps Chile as well, plus Colombia between 1967 and 1973<sup>4</sup>, represent past examples of efforts to enter the particular international production and trade niche currently being vacated by the East Asian SIC's. Mainland China and India, of course, constitute other potential competitors for that role, but still somewhat down the road.

As Latin American policy makers ponder both the challenge and the opportunity arising from the East Asian historical example they may well-- and in fact frequently have--cite the "specialness" of these cases, either in terms of favored access to capital and markets or a more favorable international environment generally in the 60's as compared to the 80's. Yet one must also add to the record of, say, Taiwan that she had to overcome substantial disadvantages, including not only the poverty of natural resources, but also two major economic/political upheavals followed

by the continuous drain of high defense expenditures, and increasingly severe protectionist restrictions by the U.S. and Europe, accompanying her success in export substitution growth.

The niche in world trade labelled "labor intensive manufactured goods" is, of course, not limited in size but expandable in terms of both variations in quality characteristics and markets, including among the developing countries themselves. In the final analysis, the question of whether Latin American SIC's will be persuaded that a change in the direction of policy is both feasible and desirable depends as much on the capacity for political reform mongering as on the technical issues raised. But it is certainly necessary, if not sufficient, for such policy makers to be convinced that "moving back" towards a more agriculture and labor intensive industry oriented growth path is likely to enhance growth along with equity objectives more dependably than grafting export promotion policies onto a heavily encrusted import substitution base.

## Notes

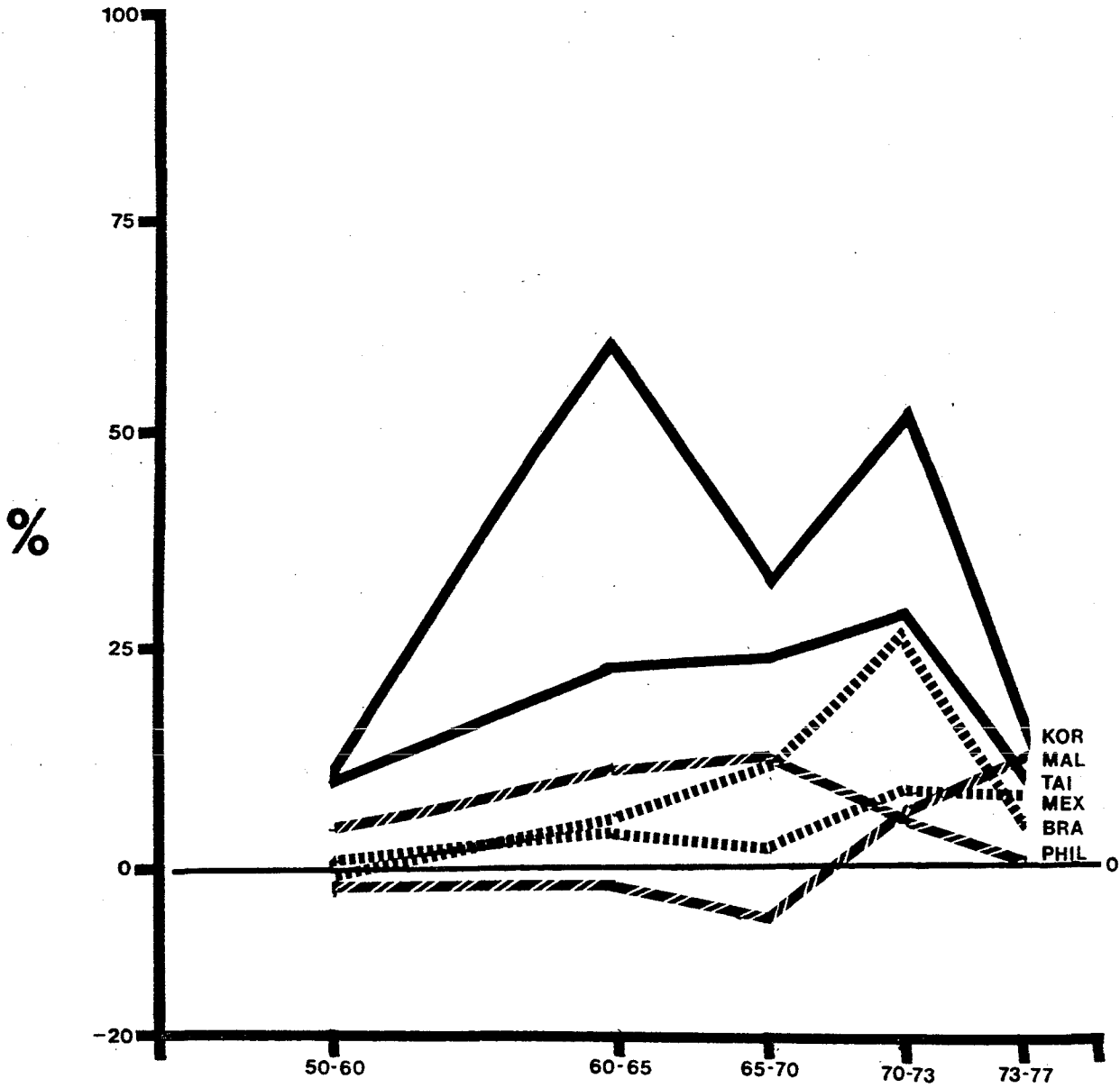
1. To keep matters simple, we are retaining the three sector breakdown. Differentiating diagrammatically between food and non-food agriculture would help but also complicate things unduly.

2. For more on the relationship between the nature of the growth path and the distribution of income see John Fei, Gustav Ranis and Shirley Kuo, Growth With Equity: The Taiwan Case, Oxford University Press, 1979, as well as Gustav Ranis, "Employment and Income Distribution Constraints in Latin America," paper to be presented to the International Economic Association, Sixth World Congress, Mexico, August 1980.

3. For a fuller discussion of the real divergence between the "similar" cases of Korea and Taiwan, see also "A Model of Growth and Employment in the Open Dualistic Economy: The Cases of Korea and Taiwan," Gustav Ranis and John Fei, Journal of Development Studies, January 1975, pp. 32-63. (Reprinted in Employment, Income Distribution and Development, Frances Stewart, editor, Frank Cass & Co., London, 1975.)

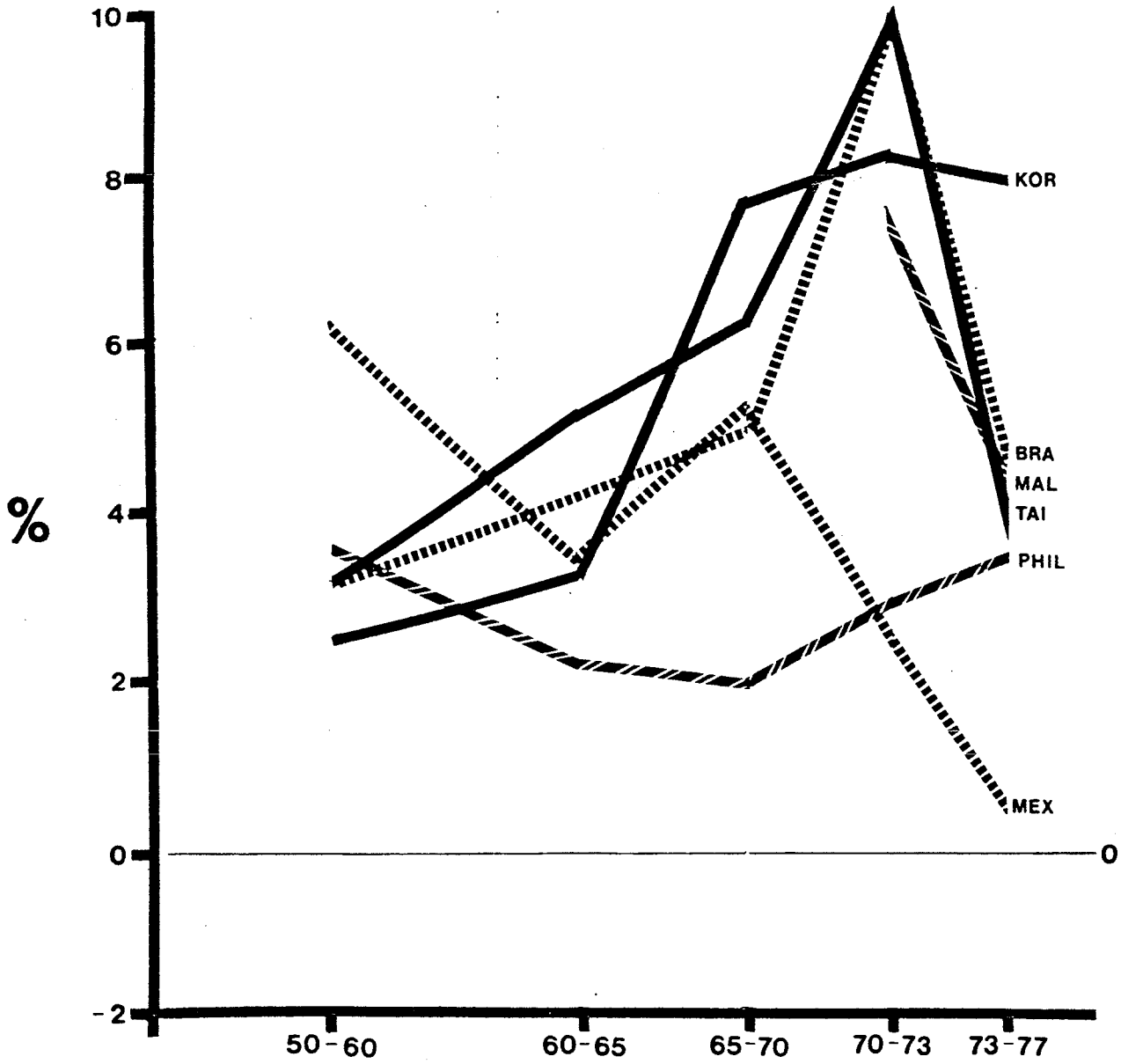
4. For an interesting, amusing and highly relevant discussion of the Colombian case, also see David Morawetz, "Why the Emperor's New Clothes Are Not Made in Colombia," unpublished mimeo, World Bank, November 1979.

# Diagram 1



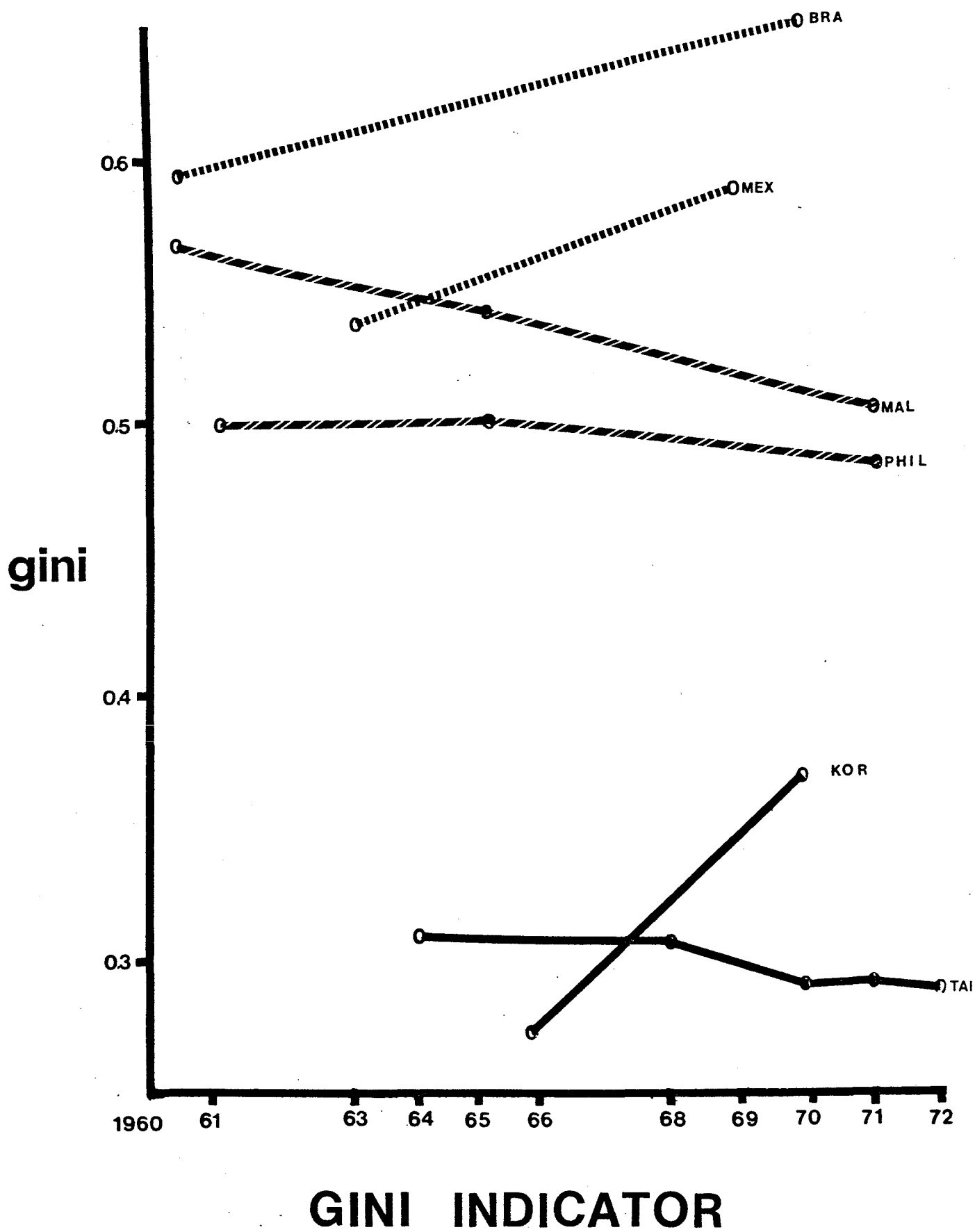
## REAL EXPORT GROWTH

# Diagram 2

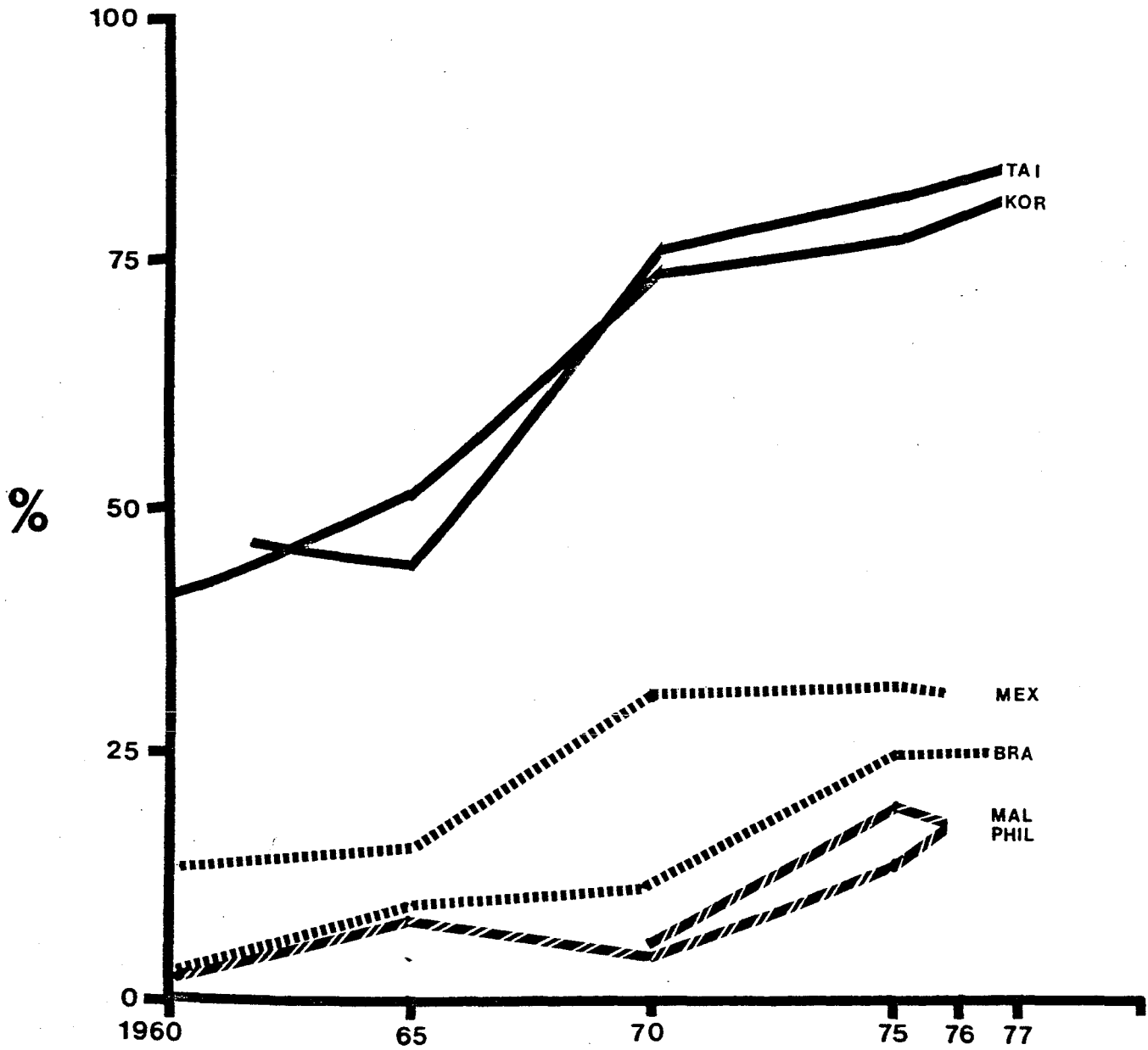


**GROWTH  
OF REAL  
PER CAPITA GNP**

# Diagram 3



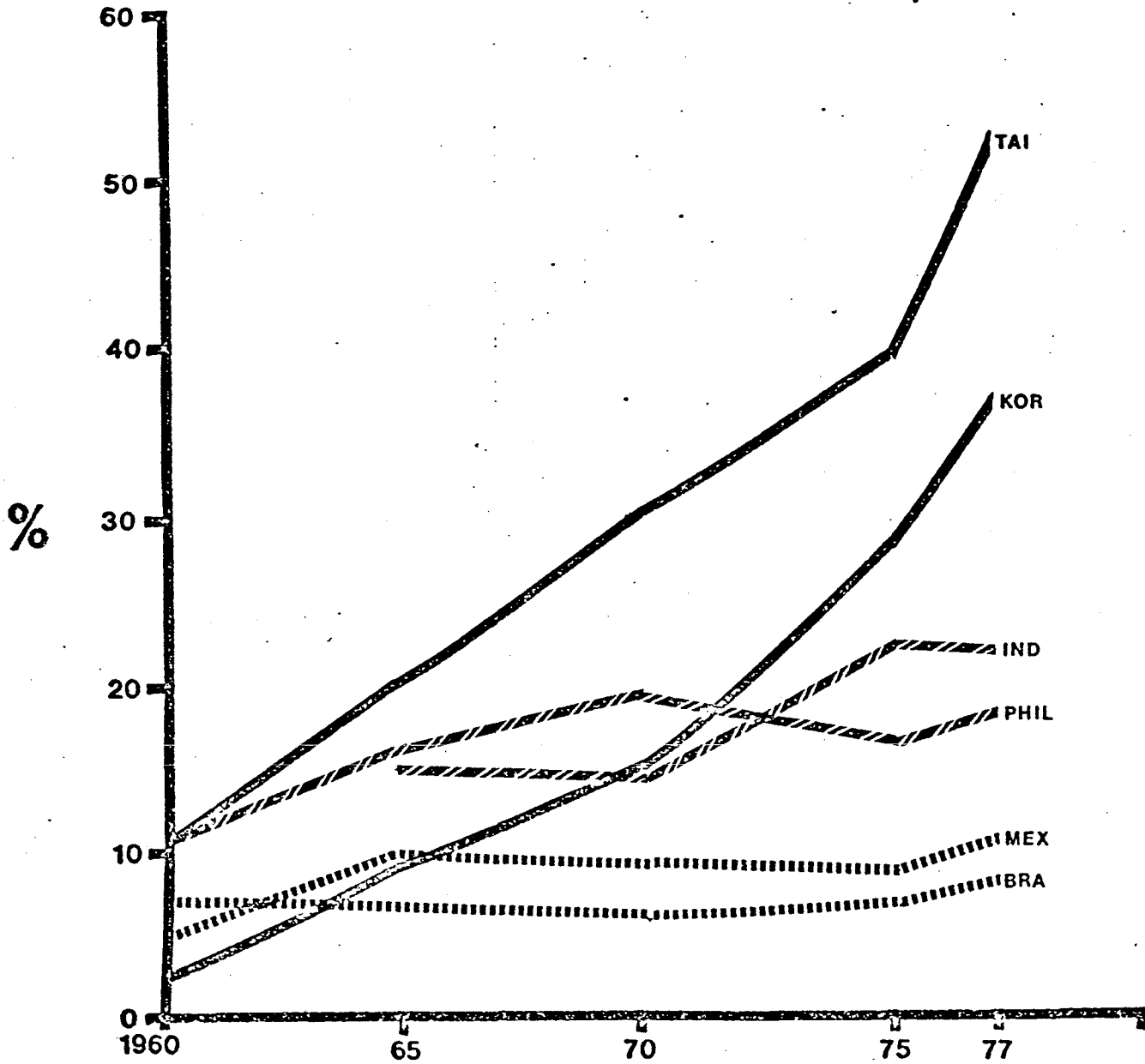
# Diagram 4



$$X_M/X$$

**Industrial Export Proportion**

# Diagram 5

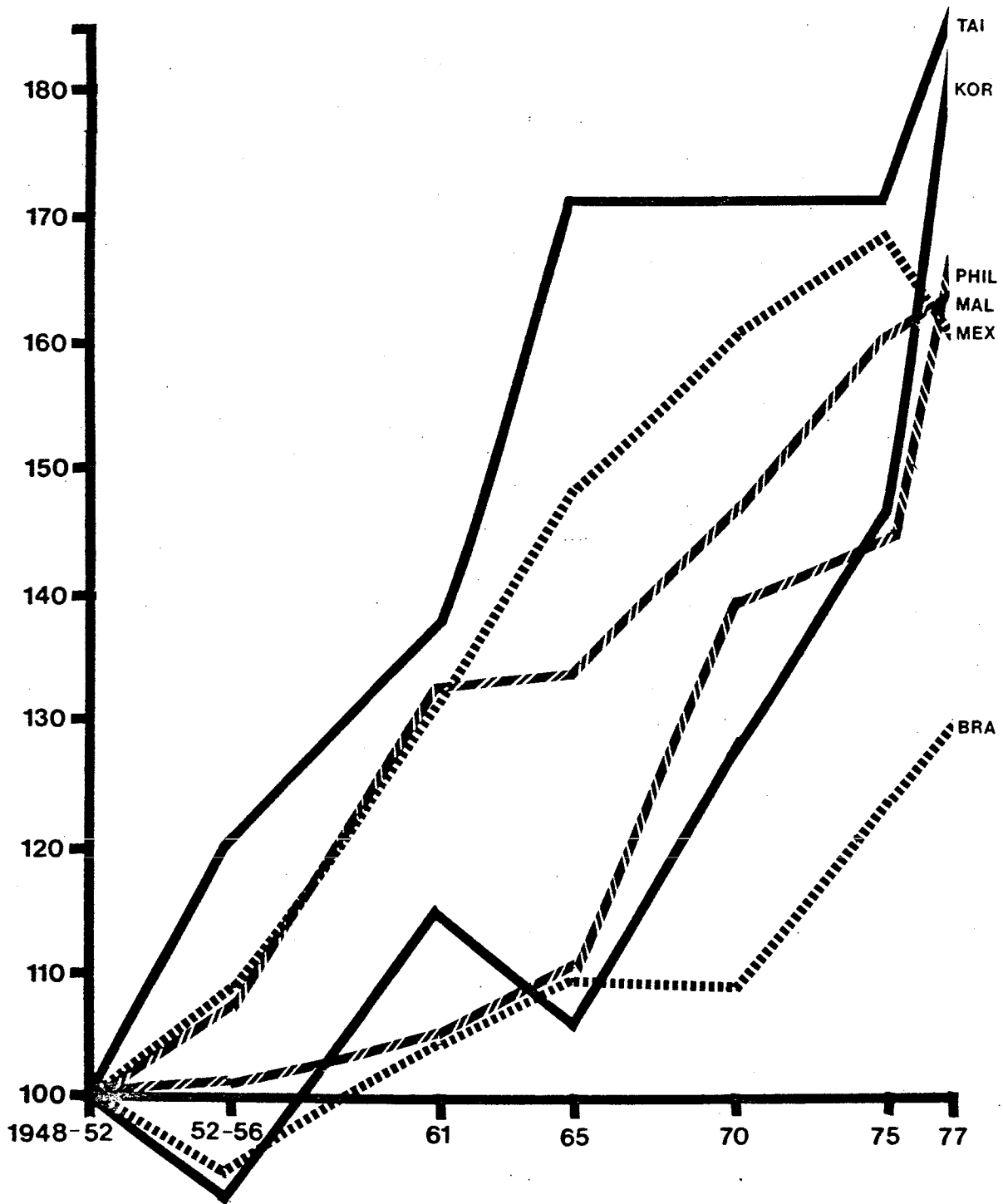


$X/GNP$

Export Orientation



# Diagram 6



## INDICES OF CEREAL YIELD

Country  
Statistical Indicators

East Asian SIC's - SOUTH KOREA

	1950	1960	1965	1970	1973	1974	1975	1976	1977
(1) Annual Real Per Capita GNP Growth Rate (%)	2.4 (52-60)	3.2	7.8	8.3	5.6	6.4	11.0	9.0	
(2) $\theta$ --% Non-agricultural Labor	20.3 (55)	41.9 (63)	41.5	45.3	--	--	49.7	50.9	51.5
(3) Savings/GNP	--	4.0	8.5	12.0	14.4	10.8	10.3	14.4	17.9
(4) Investment/GNP	7.3 (53)	10.8	14.8	24.5	24.2	25.7	26.4	24.2	26.5
(5) Gini Coefficient	--	--	.27 (66)	.37	--	--	--	--	--
(6) Income % of Bottom 20%	--	--	9.4 (66)	7.1	--	--	--	--	--
(7) Agricultural $X_a/X$ Exports (%) as % of Total Exports	82.3 (52)	51.4	25.3	16.7	13.2	10.9	15.1	9.3	12.8
(8) Mineral Exports (%) as % of Total Exports	11.2 (52)	8.3	22.7	8.3	8.5	14.2	7.9	7.8	6.2
(9) Manufactured Exports (%) as % of Total Exports	6.4 (52)	40.3	52.0	74.9	78.1	74.5	76.8	82.6	80.9
(10) Annual Total Export (X) Growth Rate (%)	10.7	58.6	30.6	55.3	-0.8	7.3	13.6	19.3	
(11) Total Exports/GNP	2.1 (52)	3.3	8.5	14.3	30.3	28.5	28.5	33.4	35.8

Country  
Statistical Indicators

East Asian SIC's - TAIWAN

	1950	1960	1965	1970	1973	1974	1975	1976	1977
(1) Annual Real Per Capita GNP Growth Rate (%)	3.2 (53-60)	5.1	6.2	9.6	-1.1	0.6	9.8	6.8	
(2) $\theta$ --% Non-agricultural Labor	37.3	43.9	46.3	55.6	62.8	63.1	63.4	66.9	66.2
(3) Savings/GNP	10.6 (51)	17.7	20.1	26.1	33.0	30.3	28.7	30.0	--
(4) Investment/GNP	12.1 (51)	19.1	16.8	21.9	26.1	28.9	30.3	28.4	25.5
(5) Gini Coefficient	.32 (54)		.32 (64)	.29	.29 (72)				
(6) Income % of Bottom 20%	2.9 (53)		7.8 (64)		8.8 (72)				
(7) Agricultural $X_a/X$ Exports (%) as % of Total Exports	--	51.7	57.9	22.5	15.8	15.5	17.5	13.6	13.4
(8) Mineral Exports (%) as % of Total Exports	--	2.1	0.4	0.7	0.3	0.3	1.1	1.3	1.6
(9) Manufactured Exports (%) as % of Total Exports	--	46.2	41.7	76.8	83.9	84.2	81.4	85.0	84.9
(10) Annual Total Export (X) Growth Rate (%)	9.5	22.2	23.7	31.6	-10.9	1.2	49.6	11.6	
(11) Total Exports/GNP	10.1 (51)	11.1	18.4	29.6	49.0	45.4	41.2	52.3	53.8

Country  
Statistical Indicators

Latin American SIC's - ARGENTINA

	1950	1960	1965	1970	1973	1974	1975	1976	1977
(1) Annual Real Per Capita GNP Growth Rate (%)	-0.4	2.8	2.9	3.3	5.1	-2.9	-4.0	3.6	
(2) $\theta$ --% Non-agricultural Labor (47)	74.8	80.8	81.8	83.6	--	--	85.4	85.8	86.1
(3) Savings/GNP	--	20.3	15.5	15.3	17.9	19.7	20.5	--	--
(4) Investment/GNP	14.3	21.9	17.0	20.2	19.6	20.6	21.9	--	--
(5) Gini Coefficient	--	.49 (61)	--	--	--	--	--	--	--
(6) Income % of Bottom 20%	--	5.1 (61)	--	--	--	--	--	--	--
(7) Agricultural $X_a/X$ Exports (%) as % of Total Exports	91.9	95.3	93.6	85.2	77.0	74.8	74.8	74.3	75.5
(8) Mineral Exports (%) as % of Total Exports	0.3	0.7	1.3	2.5	3.9	4.2	1.5	3.1	1.9
(9) Manufactured Exports (%) as % of Total Exports	7.6	4.0	5.1	12.3	19.0	21.0	23.6	22.6	22.5
(10) Annual Total Export (X) Growth Rate (%)	0.6	3.5	5.9	7.0	1.0	-26.6	61.0	22.6	
(11) Total Exports/GNP	14.3	10.6	7.7	8.5	9.7	8.8	7.6	9.4	11.0

Country  
Statistical Indicators

Latin American SIC's - BRAZIL

	1950	1960	1965	1970	1973	1974	1975	1976	1977
(1) Annual Real Per Capita GNP Growth Rate (%)	3.2	--	5.0	9.7	6.7	3.1	6.0	1.9	
(2) $\theta$ --% Non-agricultural Labor	39.4	--	51.2	54.4	--	--	58.0	58.8	59.5
(3) Savings/GNP	--	17.0	18.4	17.4	20.5	20.1	15.2	15.0	14.9
(4) Investment/GNP	13.7	18.6	18.6	22.5	23.2	24.4	25.7	24.1	22.3
(5) Gini Coefficient	--	.59	--	.65	--	--	--	--	--
(6) Income % of Bottom 20%	--	3.5	--	2.8	--	--	--	--	--
(7) Agricultural $X_a/X$ Exports (%) as % of Total Exports	96.8 (54)	88.8	80.8	75.2	70.3	63.9	57.9	61.9	63.9
(8) Mineral Exports (%) as % of Total Exports	2.1 (54)	7.9	11.7	14.3	10.0	12.0	16.7	15.7	12.3
(9) Manufactured Exports (%) as % of Total Exports	0.8 (54)	3.3	7.5	9.7	17.9	22.3	23.3	20.8	23.0
(10) Annual Total Export (X) Growth Rate (%)	-0.4	6.7	9.9	28.0	10.1	0.5	8.9	9.3	
(11) Total Exports/GNP	8.3	7.4	7.3	6.6	8.1	8.0	7.5	7.4	7.8

Country  
Statistical Indicators

Latin American SIC's - CHILE

	1950	1960	1965	1970	1973	1974	1975	1976	1977
(1) Annual Real Per Capita GNP Growth Rate (%)	1.3	2.5	2.9	-0.6	3.6	-13.0	2.0	6.9	
(2) $\theta$ --% Non-agricultural Labor	70.4 (52)	72.5	73.1	76.2	--	--	79.0	79.5	80.1
(3) Savings/GNP	3.0	-2.5	6.6	6.0	0.8	30.2	-5.9	-1.8	--
(4) Investment/GNP	9.1	15.0	16.1	14.0	13.4	12.6	10.5	9.0	9.2
(5) Gini Coefficient	--	--	--	.51 (68)	--	--	--	--	--
(6) Income % of Bottom 20%	--	--	--	4.8 (68)	--	--	--	--	--
(7) Agricultural $X_a/X$ Exports (%) as % of Total Exports	--	--	7.6 (66)	7.5	6.8	8.7	17.3	--	--
(8) Mineral Exports (%) as % of Total Exports	--	--	88.1 (66)	88.3	89.7	87.0	77.1	--	--
(9) Manufactured Exports (%) as % of Total Exports	--	--	4.2 (66)	4.0	3.5	4.3	5.3	--	--
(10) Annual Total Export (X) Growth Rate (%)	4.1	5.1	11.4	-6.9	69.6	-38.7	19.9	-0.9	
(11) Total Exports/GNP	--	--	11.1	15.8	12.9	17.1	20.4	21.5	19.6

**Country  
Statistical Indicators**

Latin American SIC's - COLOMBIA

	1950	1960	1965	1970	1973	1974	1975	1976	1977
(1) Annual Real Per Capita GNP Growth Rate (%)	4.6	1.4	3.1	3.8	3.2	2.0	--	--	
(2) $\theta$ --% Non-agricultural Labor	46.1	--	55.5	62.1	--	--	67.8	68.8	69.8
(3) Savings/GNP	6.6	9.5	9.1	10.5	9.6	11.8	7.4	--	--
(4) Investment/GNP	14.2	18.3	15.9	20.9	17.9	19.7	19.2	18.6	18.0
(5) Gini Coefficient	--	.53 (62)	.60 (64)	.56	--	--	--	--	--
(6) Income % of Bottom 20%	--	4.1 (62)	4.3 (64)	3.5	--	--	--	--	--
(7) Agricultural $X_a/X$ Exports (%) as % of Total Exports	83.1 (51)	78.9	75.3	81.2	68.0	63.1	71.7	73.7	76.9
(8) Mineral Exports (%) as % of Total Exports	16.3 (51)	18.9	18.0	10.8	6.4	9.1	7.7	4.6	4.1
(9) Manufactured Exports (%) as % of Total Exports	0.5 (51)	1.4	6.7	8.0	25.4	27.6	20.6	21.7	18.6
(10) Annual Total Export (X) Growth Rate (%)	-0.5	4.1	3.6	7.4	0.0	-5.3	13.9	31.4	
(11) Total Exports/GNP	10.9	15.7	11.5	14.6	15.3	14.4	15.4	16.8	16.6

Country  
Statistical Indicators

Latin American SIC's - MEXICO

	1950	1960	1965	1970	1973	1974	1975	1976	1977
(1) Annual Real Per Capita GNP Growth Rate (%)	6.2	3.5	5.4	2.5	2.1	1.0	-1.0	--	
(2) $\theta$ --% Non-agricultural Labor	42.2	45.6	49.7	54.8	--	--	59.5	60.4	61.3
(3) Savings/GNP	--	10.0	6.4	7.0	7.2	12.5	11.6	13.1	19.4
(4) Investment/GNP	11.7	14.8	17.5	19.7	20.5	21.3	22.3	21.9	20.0
(5) Gini Coefficient	--	.54 (63)	--	.58 (69)	--	--	--	--	--
(6) Income % of Bottom 20%	--	3.7 (63)	--	4.2 (69)	--	--	--	--	--
(7) Agricultural $X_a/X$ Exports (%) as % of Total Exports	53.5	64.1	64.7	48.8	42.6	40.8	38.1	42.1	--
(8) Mineral Exports (%) as % of Total Exports	38.6	24.0	22.3	21.2	16.5	23.1	32.4	30.3	--
(9) Manufactured Exports (%) as % of Total Exports	7.9	11.9	13.0	30.0	40.8	36.0	29.5	27.5	--
(10) Annual Total Export (X) Growth Rate (%)	0.9	5.9	1.7	9.3	7.9	-12.0	20.5	24.6	
(11) Total Exports/GNP	17.0	10.6	9.7	8.2	9.4	9.3	7.6	8.5	10.2



Country  
Statistical Indicators

Other Asian LDC's - INDONESIA

	1950	1960	1965	1970	1973	1974	1975	1976	1977
(1) Annual Real Per Capita GNP Growth Rate (%)	3.3 (53-59)	-0.5	1.3	6.0	5.4	2.0	4.0	4.8	
(2) $\theta$ --% Non-agricultural Labor	--	28.1 (61)	29.5	33.7	--	--	37.4	38.1	38.8
(3) Savings/GNP	--	7.9	5.5	9.2	13.8	--	--	--	--
(4) Investment/GNP	4.7 (51)	7.9	6.7	13.8	18.6	17.6	21.3	21.3	19.5
(5) Gini Coefficient	--	--	--	.46 (71)	--	--	--	--	--
(6) Income % of Bottom 20%	--	--	--	6.8 (71)	--	--	--	--	--
(7) Agricultural $X_a/X$ Exports (%) as % of Total Exports	65.2	66.4	54.0	54.3	43.4	24.6	20.4	24.9	26.8
(8) Mineral Exports (%) as % of Total Exports	33.7	33.1	44.1	44.3	54.4	74.5	78.4	73.7	71.5
(9) Manufactured Exports (%) as % of Total Exports	0.7	0.2	1.9	1.2	1.9	0.8	1.2	1.4	1.6
(10) Annual Total Export (X) Growth Rate (%)	-1.0	-3.7	6.5	33.4	94.5	-12.5	15.1	19.7	
(11) Total Exports/GNP	--	--	14.3	13.0	20.8	30.4	23.6	22.8	22.4

Country  
Statistical Indicators

Other Asian LDC's - MALAYSIA

	1950	1960	1965	1970	1973	1974	1975	1976	1977
(1) Annual Real Per Capita GNP Growth Rate (%)	4.1 (55-60)	--	--	7.5 (71-73)	6.3	-2.0	4.9	6.5	
(2) $\theta$ --% Non-agricultural Labor	35.5	34.9	40.6	44.5	--	--	48.3	49.1	49.9
(3) Savings/GNP	--	15.4	14.0	16.8	22.8	--	--	--	--
(4) Investment/GNP	6.9	12.8	16.8	20.9	23.4	29.8	24.2	22.5	20.5
(5) Gini Coefficient	--	.57	.55 (67)	.51	--	--	--	--	--
(6) Income % of Bottom 20%	--	3.2	3.2 (67)	3.8	--	--	--	--	--
(7) Agricultural $X_a/X$ Exports (%) as % of Total Exports	--	74.0	76.4	61.7	69.6	62.4	57.3	57.6	58.0
(8) Mineral Exports (%) as % of Total Exports	--	24.4	19.3	29.3	18.5	24.2	24.9	26.9	26.6
(9) Manufactured Exports (%) as % of Total Exports	--	1.6	4.3	8.2	11.3	12.7	17.1	15.0	15.2
(10) Annual Total Export (X) Growth Rate (%)	-0.3	-3.7	-4.5	7.2	17.4	-23.7	12.8	7.8	
(11) Total Exports/GNP	52.3 (54)	56.8	49.0	47.5	43.2	50.5	47.1	53.8	52.2

**Country  
Statistical Indicators**

Other Asian LDC's - PHILIPPINES

	1950	1960	1965	1970	1973	1974	1975	1976	1977
(1) Annual Real Per Capita GNP Growth Rate (%)	3.4 (50-59)	2.2	2.0	3.0	3.2	3.1	5.0	2.9	
(2) θ --% Non-agricultural Labor	30.5	40.9	42.9	46.8	45.7	44.4	50.4	51.1	51.8
(3) Savings/GNP	4.2	10.8	14.2	12.0	17.6	17.0	16.3	15.3	16.8
(4) Investment/GNP	12.9	13.7	17.7	16.0	15.4	18.6	24.3	24.8	24.0
(5) Gini Coefficient	--	.50 (61)	.50	.49 (71)	--	--	--	--	--
(6) Income % of Bottom 20%	--	4.8 (61)	3.7	3.9 (71)	--	--	--	--	--
(7) Agricultural $X_a/X$ Exports (%) as % of Total Exports	88.9 (54)	85.6	80.9	69.8	63.4	67.9	65.1	57.7	58.4
(8) Mineral Exports (%) as % of Total Exports	9.1 (54)	11.0	10.5	23.7	20.9	19.5	17.9	18.7	17.0
(9) Manufactured Exports (%) as % of Total Exports	1.9 (54)	3.4	8.3	6.4	12.0	8.7	11.2	15.3	15.7
(10) Annual Total Export (X) Growth Rate (%)	5.6	10.9	10.5	6.7	2.7	-15.5	4.2	11.7	
(11) Total Exports/GNP	13.5	10.1	17.3	19.4	22.2	22.2	18.6	17.6	19.2

## Country Statistical Indicators

### General Sources

- 1) Calculated from indices in UN, Statistical Yearbook, 1978, (United Nations Publication Sales No. E/F.79.XVII.1) pp.698-702. Refers to compound annual growth of real GNP.
- 2) Calculated from population estimates in FAO, Production Yearbooks, 1966, 1970, and 1977 (Rome, Italy: Statistics Division, FAO) Table 3.
- 3) Calculated from World Bank, World Tables, (Baltimore: The Johns Hopkins University Press, 1976), and UN National Accounts Yearbook, 1978, (United Nations Publication Sales No. E.79.XVII.8, Vol. I).
- 4) IMF, Yearbook of International Financial Statistics, (Washington: IMF, 1979). Refers to gross investment.
- 5) Jain, Shail, Size Distribution of Income, (Washington, D.C.: The World Bank, 1975). All data are for total population.
- 6) Ibid.
- 7)-9) 1970-77 statistics are from UNCTAD, Yearbook of Trade and Development Statistics, 1979 (United Nations Publication Sales No. E/F.79.II.D.2). Agricultural exports are defined as SITC 0+1+2-27-28+4; mineral exports are defined as SITC 27+28+3+67+68; and manufactured exports are defined as SITC 5+6-67-68+7+8.
- 10) Calculated from IMF, Yearbook, converted to real values using wholesale price indices.
- 11) Calculated from IMF, Yearbook. Export values are from the national accounts and include goods as well as non-factor services.

### Additional Country Sources

#### TAIWAN

- 1) Calculated from IMF Yearbook.
- 2) Calculated from, Statistical Yearbook of the Republic of China, (Taipei: Directorate General of Budget, Accounting and Statistics, 1978).
- 3) National Income of the Republic of China (Taipei: Directorate General of Budget, Accounting and Statistics, 1968 and 1977).
- 4) Ibid.

- 5) John C.H. Fei, Gustav Ranis and Shirley W.Y. Kuo, "Growth and the Family Distribution of Income by Factor Components," Quarterly Journal of Economics, 92:1 (February 1978), p. 29.
- 7) Statistical Yearbook of the Republic of China, 1978, SITC 0+1+2+4, pp. 252-3.
- 8) Ibid., SITC 3.
- 9) Ibid., SITC 5+6+7+8+9.

#### PHILIPPINES

- 2) Figures for 1973 and 1974 are calculated from ILO, Yearbook of Labour Statistics, (Geneva: International Labour Organization, 1978), p. 223.