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Relative Prices in

Planning for Economic Development

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I

THE social significance of relative prices in traditional economic theory is closely related to the efficiency of resource allocation in a general equilibrium context. The heart of that relationship consists of ensuring optimality in the Pareto sense through the interaction of relative commodity and factor prices. Given production conditions and consumer preferences, general equilibrium theory aims to show how efficiency can be achieved in a market-oriented or capitalist system.

When a time dimension is added to the above we obtain the so-called dynamic general equilibrium model in which relative prices once again play an important role. The problem of resource allocation now takes on intertemporal as well as horizontal dimensions. Besides relative factor and commodity prices, we have an additional price to deal with, namely, the rate of interest, which affects the crucial decisions as between consumption and saving. The central interest of traditional theory remains: How does the market or capitalist system simultaneously bring about an efficient horizontal as well as intertemporal allocation of resources.

Another extension of our static general equilibrium theory in which relative prices play a prominent role is in the space dimension, usually called international trade theory. Now flows between countries are included and another relative price, the exchange rate, becomes relevant. But the basic social problem remains the same, i.e., to ensure maximum global efficiency, as both relative prices within countries and exchange rates between them are adjusted to take maximum advantage of the additional production opportunity called trade.

Thus the most important role of relative prices in the traditional classical and neoclassical literature has been in the achievement of efficient resource allocation extended to time and space. The relevance for practical planning or policy making is relatively slight. In fact, only one real policy conclusion can be drawn from the general equilibrium model as extended, namely, to let the price system function as freely as possible.

We know that the real world, even in the mature economies, does not always meet the implicit conditions which permit the general equilibrium system to operate to ensure Pareto optimality. Even if we should accept the efficient utilization of resources as "the" major social problem, certain essential conditions must be fulfilled if such a system is to be at all relevant to a real society and if planning based upon it is to make any sense. For one, we must assume the existence of a minimal set of price- and profit-sensitive entrepreneurs or other economic agents. For another, the society must be politically and ideologically ready to accept the capitalist system as a driving force. In other words, the relevance of the price system as an essential instrument to ensure optimality requires that there exist no economic necessity, e.g., because of scale or other reasons, for government to play a substantial role in the economy's directly productive areas, and moreover, that there exist no overriding noneconomic or ideological "necessity" to have the public sector play a more extensive role. Thirdly, we must assume the relatively full and free flow of information and resources, i.e., the absence of pronounced institutional constraints.

In the developing economy context, to which this paper is primarily addressed, the existence of a sufficiently large number of entrepreneurs sensitive to price and profit signals cannot be taken for granted. Secondly, there is customarily in evidence a shortage of those many social and economic overheads painfully built up over the centuries and taken for granted in what are now the mature economies. Moreover, in many of these societies, especially in the early stages after emergence from colonialism, there exist strong ideological reasons for not wanting to accept a market-oriented system, which is often identified with imperialism, as the driving force. Finally, neither the mobility of

resources, nor the flow of information, nor the absence of other major institutional constraints, can be taken for granted. In fact, perhaps more than anything else, it is the absence of these features and the consequent inability to use the convenient ceteris paribus assumptions of traditional theory which lie at the heart of the development problem.

Under these circumstances, it is legitimate to ask whether or not the efficient utilization of available resources is, in fact, "the" major social problem facing the developing society. As it emerges from a frequently stagnant colonial agrarian situation, a developing country usually demands a reallocation of resources and is almost bound to make some use of prices and profits in helping to achieve that reallocation. The role of relative prices in this context is, however, very different from that envisioned in the dynamic general equilibrium system. While this system may be valid in the long run, i.e., once an economy is approaching economic maturity—with all the caveats we are familiar with even in those contexts—it does not capture the essence of the problem of development; consequently, the simple policy advice flowing from it is not really relevant.

If resource allocation across time and space is not "the" problem of major relevance for the developing economy, what is? Basically, it is the achievement of structural change via a broadening of the resources base, both human and material. The basic question, in other words, is not how to allocate given resources more efficiently, but how to introduce technological change, how to broaden participation, how to create entrepreneurs, how to create institutional change, and how to induce minimum mobility. If these issues lie at the heart of the problem, and if they can be addressed with the help of planning and policy making, relative prices can be viewed as taking on a new and quite different role. It is this role to which this paper is addressed. In section II, I describe the typical import substitution phase the newly independent developing economy is likely to pass through initially. In section III, I seek to outline the dimensions of the required transition from import to export substitution and the role of relative prices in planning for that transition. Finally, in section IV, this role is illustrated for the case of Korea and Pakistan.

II

In traditional theory. relative prices provide the information and the signals required for efficient static allocation as well as for moving the economy in the right direction dynamically. Prices serve as stimulants and propellants, but they cannot be expected, in any simple fashion, to help create the proper environment, or entrepreneurial capacity, *ab initio*. If there exists a shortage of entrepreneurs in a developing country, or if there exists the impediment of institutional barriers, planners or policy makers may well set shadow prices in such a way as to provide larger than normal profits to offset larger than normal risks. Over time, once such decision makers, given the benefit of experience, begin to improve at their task, and once institutions are gradually transformed in directions which accommodate rather than obstruct change, these extra price margins can be reduced and finally eliminated.

This idea is not a new and startling one, but it lies at the base of the infant-industry argument. It is essentially what Smith and List were talking about when they recognized the need for government intervention to affect relative prices in behalf of new industries. The infantindustry entrepreneurial argument is but another way of stating the same case—for the use of administered distortions in relative prices to permit learning-by-doing processes to assert themselves.

Newly independent governments with developing economies have, almost without exception, tried to replace traditional colonial patterns of production and trade-orchestrated mainly by the commercial interests of the mother country-by interposing themselves and taking direct action in the import-substituting direction. Typically, they first move to gain full control of the critical raw material export flows in order to prevent continued reinvestment of these flows for the exclusive benefit of that same sector, or for repatriation abroad-and to channel them into the domestic industrial and service sectors. Typically also, they see the world through early Prebisch eyes, as an unequal partnership between Center and Periphery, with anticipation of unfavorable demand patterns for traditional exports, coupled with a firm belief in the dynamic learning processes associated with import substitution. In virtually all cases, this leads to more or less clear notions of what the government must do directly and what it can induce or order the private sector to undertake.

Most import substitution efforts reflect a consensus that government must provide social and economic overheads, but there is much less consensus concerning the ideal division of labor between the public and private sectors in the directly productive sphere and least of all on how to organize or cajole what remains in the private sector. Here, of course, we have a wide range of choice, almost a continuous spectrum, between direct government ownership, on the one extreme, and something approaching textbook laissez faire, on the other. Most developing societies have, in fact, partly for economic and partly for ideological reasons, opted for a relatively expansive definition of what should be in the public sector—as well as for substantial direct controls over the private sector. The tools most frequently used are exchange controls, the compulsory surrender of foreign exchange, and the allocation of import licenses to socially desirable projects in overheads and industry.

This import substitution syndrome usually includes substantial government deficit financing accompanied by inflation and an increasingly overvalued exchange rate. Quantitative restrictions are preferred over tariffs, credit rationing at low interest rates over an approach to market allocation at higher interest rates, and the rationing of any critical materials, like cement, over excise taxes. In fact, the policy choice can often be characterized as one of trying to displace markets rather than attempting to work through them.

The system described obviously provides windfall profits for importers and tends to discriminate against exports, since a local producer can acquire more local currency by saving a dollar of imports than by earning a dollar of exports.

A second major concomitant of this distortion of relative prices consists, very often, of the neglect of agriculture. Typically this sector, instead of becoming a major propellant of overall development, turns out to be a drag, incapable of even keeping up with population growth, not to speak of freeing workers and providing savings for industrial growth. Food shortages consequently frequently inhibit further industrial growth as industrial wages tend to rise prematurely.

Thirdly, in the market for capital, the administratively controlled interest rate usually is far below the rate of return on investment. Interest rates are often kept at these levels in less developed countries (LDC's) mainly because it is believed that higher rates would discourage investment, as well as for so-called equity reasons, i.e., to help the small investor. Both arguments are defective. Most developing countries chronically suffer from an excess of intended investment relative to available savings; higher interest rates would not only improve the allocation of a given amount of savings, but more importantly, increase the total volume of savings. On the equity issue, the choice is really one between low interest rates which go to the favored large-scale borrower, and high interest rates at which all borrowers, large and small, new and old, have approximately equal access at a price.

The allocation of imports, of investment funds, for that matter of virtually every scarce commodity, is thus likely to be highly inefficient during the import substitution phase, since administered prices drawn up by bureaucrats are asked to bear the burden of determining output as well as factor input mixes. The price of industrial goods is usually pegged high relative to that of agricultural goods, not only via the exchange rate, but also via taxes and subsidies intended to protect the urban consumer; capital goods are often priced low relative to other industrial goods both because imports are undervalued and because the interest rate is kept artificially low. For all these reasons industrial production is likely to be capital- and import-intensive, in spite of the presence of surplus labor. Efficiency becomes irrelevant when receipt of an import license or of a loan per se bestows a sizable windfall profit and becomes a main objective of entrepreneurial activity.

The costs of maintaining this kind of system are patently large. Anne Krueger estimated, for Turkey, that import-substituting industries used 20–75 lira to save a dollar of imports, while export industries required 8–14 lira to earn a dollar of exports.¹ Johnson, for Chile, estimated that about 12 escudos were needed to save a dollar of imports at a time when the official exchange rate was only 2 escudos per dollar.² Stephen Lewis estimated that Pakistani manufactures received about 40 per cent more rupees per dollar than did agricultural goods in the early sixties.⁸

¹ Anne O. Krueger, "Some Economic Costs of Exchange Control: The Turkish Case," Journal of Political Economy, October 1966, Table 3, col. 5.

² Lelland J. Johnson, "Problems of Import Substitution: The Chilean Automobile Industry," *Economic Development and Cultural Change*, January 1967, p. 209.

³ Stephen R. Lewis, Jr., "Effects of Trade Policy on Domestic Relative Prices: Pakistan, 1951–1965," American Economic Review, March 1968, Table I.

Moreover, in spite of its high costs, import substitution as a way of life may be difficult to abandon. Industrial importing interests become ever more entrenched and ever more used to making large windfall profits. The civil service enjoys not only its absolute power but also its ability to supplement its income as *sub rosa* payments grease the wheels of the disequilibrium system. Perhaps most importantly, any change in policy must be prepared to run the gauntlet of accusations of "giveaway" either to foreign or domestic private interests.

It should be remembered that this set of policies is basically a reaction to the real or imagined lack of indigenous industrial entrepreneurship. But it will fulfill its historical mission and thus possibly be worth the price only if the system can also be geared to a gradual reduction of these controls over time. Otherwise, the self-fulfilling prophecy of the "absent" entrepreneur forcing government into more and more direct actions may well constitute the most vicious of the many vicious circles we have heard about. In other words, the imposition of a hothouse industrial sector can have the desired effect of creating sufficient entrepreneurial capacity for use at a later stage only if there are assured gradual reductions in the temperature over time. Only in this way will embryonic entrepreneurs have a chance to divert their energies from chasing slips of paper and subverting the control system to making some of the finer allocative decisions at the margin. Only if entrepreneurs become discouraged from trying to maintain the hothouse indefinitely or using their influence with government to have it maintained-and only if government in turn is willing to recognize the prohibitive costs of continued import substitution-can a transition to a more efficient stage of development occur.

The use of relative prices in planning for such a transition relates much less to the efficient allocation of known and given resources, and much more to uncovering additional resources and exploiting slacks in the system. In other words, the conventional wisdom about the main springs of growth undergoes gradual change. Emphasis must shift to the broadening of the resource base, the attempt to bring the economy closer to its full potential, mainly through the adoption of technological change; and an adjustment of relative prices is likely to be essential in effecting the necessary adjustments. While under the previous regime public and large-scale private enterprise were the beneficiaries

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in response to the actual or assumed shortage of domestic entrepreneurship, a lowering of the hothouse temperature really requires a restructuring of relative prices; that is to say, the role assigned to relative prices must increasingly be one of reflecting actual scarcities rather than facilitating, in a very passive sense, the government's directly allocative actions. The goal must now become a broadening of the development base in the attempt to harness a much larger proportion of the previously disenfranchised economic agents to the development effort. Especially if peasants and medium- and small-scale industrialists are to be mobilized, this broadening cannot be done effectively either by government ownership or by direct horizontal controls over resources allocation in the private sector-if for no other reason than the sheer impossibility of making all the millions of necessary decisions on a broad front, and even physically reaching all the agents concerned. Increasingly, therefore, as the economy moves out of its import substitution subphase and into the next phase of development, the catalytic role of government, through its influence on relative price signals, rather than through its direct control of resources captured and allocated, becomes the critical element.

III

The transition which a successful developing society must be prepared to negotiate is from a land- or raw material-based import substitution phase, as described above, to what may be called a labor and, later, skill-based export substitution phase. The role of relative prices in planning for such a transition is crucial. It can perhaps be best summarized as promoting growth by undoing the artificial distortions while preserving the gains of the earlier period. For example, distortions between the price of capital and of consumer goods may have led to high saving and low capital formation, as in the case of Argentina, or to relatively low saving and low capital formation, as in the case of Pakistan. Substantive inefficiencies within the industrial sector, characterized by high rates of excess capacity and capital intensity, result from the overvaluation of the exchange rate and artificially low interest rates. Stagnation in agriculture usually accompanies the artificial depression of that sector's terms of trade in the effort to assist the industrialization drive and keep vocal urban consumers under control.

All this is subject to change by tackling relative prices in the context of development planning. The terms of trade between agriculture and nonagriculture may be a prime objective. With agricultural activity still a preponderant feature of the landscape, the introduction of technological change in that sector usually remains a prerequisite for sustained growth-no matter how important the role of the foreign sector. But while new knowledge on miracle seeds, fertilizer, and other input combinations is clearly required for any major change in physical relationships to take place, it is likely to be relative price adjustments which are the sine qua non for the adoption of such new technology. As long as, either because of an overvalued exchange rate or because of forced procurement at artificially low prices, the farmer's terms of trade are stacked against him, the potential bounty made available through the courtesy of the International Rice Research Institute or Mexican wheat researchers is not likely to be realized. This certainly has been the comparative experience in India and Pakistan, where a time-phased relationship between changes in agricultural price policy and in the willingness to adopt the burgeoning new technology can be established. Relative price adjustments can, of course, also be used on the agricultural input side, especially when the new technology is sensitive to the use of a new input, such as fertilizer. Sensible planning which seeks to harness relative price changes for the promotion of structural change and growth may well call for temporary subsidization of that input, quite in addition to overall government support of the output price as an underpinning of the market for major food crops. Such relative price readjustments should, however, have time limits, since one would clearly not wish to move away from one set of distortions to perpetuate another. In other words, both on the input and output side, the government, in its growth-promoting role of adjusting relative prices away from previous levels of distortions, should be sensitive to the necessity, over time, of returning the economy as quickly as possible to international prices, both in terms of the support levels on major food crops and the restoration of input prices, such as fertilizer, to competitive levels, after the period of introduction.

Perhaps the most important relative price which needs to be adjusted during this transition period is, of course, the exchange rate, through which an indirect tax is levied on exports while importer-industrialists

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benefit from incentive-dulling windfall profits. Devaluations, either *de facto* or *de jure*, have been a major tool of the restructuring that began to take place in many of the developing countries during the latter half of the 1960's, especially where such devaluations were accompanied by import liberalization, i.e., the partial dismantling of the import quota and licensing system, permitting a somewhat more market-determined allocation of bottleneck inputs. As the economy tries to move away from its almost exclusive reliance on traditional exports and seeks to export more of its abundant labor power—and, somewhat later, its indigenous skills—a more realistic exchange rate permitting increased participation in the international economy becomes essential.

Similar comments apply to the relative price governing intertemporal choices between saving and consumption, i.e., the interest rate. In the typical situation, with official rates way below the scarcity price of capital, and a wide gap between it and unofficial curb rates, a move toward unitary official rates at a considerably higher level is likely not only to lead to a better allocation of investment, but also, and more importantly, to a substantial rise in the volume of saving.

There are, in other words, a large number of relative price adjustments which, in the context of planning, can promote growth through a restructuring effort. In order to determine, in any particular country, what role to assign to the adjustment of which relative prices, and in what sequence, we must first have a clearer picture of the type of economy we are talking about and the phase of development it finds itself in. For example, the growth promotion problem may not simply be one of enhanced participation of all the factors; there may be special problems of income or regional distribution which must be addressed if a political explosion is to be avoided-a consideration also relevant to growth. For another, the relative importance of the exchange rate is much greater in the case of a small economy than of a large one, and internal terms of trade much more crucial in the latter than in the former. If an economy has a strong and diversified natural resources base, with good expectations as to the future, the pressures for restructuring from land- to labor-based development are much smaller. In such cases, e.g., Malaysia, the attempt may well be made to skip the import substitution stage completely. And if the inherited human resources endowment is strong, the required length of that phase may

be much shorter. In other words, any sensible assessment of the role of relative prices in planning cannot be independent of the type of economy we are talking about, e.g., its size, its land-labor ratio, its infrastructure, and its relative strength of human and natural resources, among others. Without an understanding of these elements as well as some historical perspective on where the economy has been (during its colonial period), and where it is now, the potential growth-promoting role of relative prices in planning cannot be fully realized.

The only really general statement that can thus be made, in summary, is that there may exist a unique role for relative prices in promoting growth via a planned restructuring of the developing economy's' system—long before the promotion of efficiency in the more familiar general equilibrium context becomes relevant. Then, as distortions are gradually eliminated, these readjustments in relative prices can be the prime force in gradually moving the economy out of import and into export substitution, with the growth-promoting role of relative prices gradually yielding to the promotion of Pareto efficiency in the fully activated mature economy. This role of relative prices in the transition process is illustrated by a brief look at a couple of actual cases, South Korea and West Pakistan.

IV

At the time of initial attempted transition to modern growth the small dualistic economy of South Korea found itself with a fairly strong agricultural infrastructure and a fairly well developed indigenous entrepreneurial class. Nevertheless, in the aftermath of partition and war, Korea in the early 1950's turned toward a fairly conventional import-substituting set of policies, tending to favor industry and services through foreign exchange controls, with an increasingly overvalued exchange rate as domestic inflation made itself felt. As long as stabilization efforts are not successful and the economy continues to be subject to rapid inflation and inflationary expectations—as was the case in the 1950's and early 1960's—relative prices are unlikely to be effective either as growth-promoting or finely allocative devices. When such signals are obscured by massive overall inflation, and energies are concentrated on making quick profits, rather than on productive investment, there is very little chance to reap the full benefits of import substitution and move beyond it. During the period under discussion, Korea's growth rate was just about high enough to keep up with population growth, while saving rates were negligible—for some years, even negative.

By 1963 the back of the inflation was finally broken and, given the basically strong inherited human resource endowment, the first efforts to attempt a developmental transition via changes in relative prices became possible soon thereafter. In order to shift from what are essentially land-based food and raw material exports to the exportation of labor and, increasingly with time, domestic skills and ingenuity, Korea first had to achieve a more realistic relative price of foreign exchange, i.e., it could not, especially since it is small, continue to live behind artificial walls of protection without serious consequences for growth. As a result, in May 1964, Korea substantially devalued her currency and simultaneously unified a complicated multiple exchange system. Moreover, imports were liberalized, i.e., the licensing system was broadened through the widening of import quotas, the introduction of export retention schemes and, later, a quasi-automatic licensing system to cover an expanding volume of imports. The effects of a change in the signals via a change in this crucial relative price have been startling. Exports, which had grown at annual rates of less than 15 per cent during the 1958-62 period, have been growing at annual rates of 30 to 40 per cent since 1964. Moreover, this export boom has been especially pronounced in light industry, where value added in the form of pure labor could play an increasingly important role.

In 1965, relative prices in the sector complementary to the foreign trade sector, i.e., the credit sector, were changed dramatically. Interest rates, which had been kept at artificially low levels, were drastically raised in 1965, and the huge gap between the low official rates, actually available only to established prime borrowers, and the astronomically high rates facing ordinary people on the curb market was substantially narrowed. Interest rates on saving deposits doubled, and deposits responded by rising by more than 200 per cent between 1964 and the end of 1965, and by more than 700 per cent by September 1968. To indicate that this was not just a shift from one form of saving to another, we should note that the overall saving rate, which had been negative in the 1958–62 period and had stood at only 5.8 per cent as

late as 1962-64, reached 13.6 per cent in 1968 and is currently about 15 per cent.

It can be said that the changes in these two relative prices, the exchange rate and the interest rate, more than anything else, have led to the spectacular turnaround in the performance of the Korean economy, summarized in Table 1. As a direct consequence, Korea was placed in a position to put her abundant high-quality human resources to use in an export-led rather than import-substitution-dominated industrialization effort. Increasingly also, domestic skill and innovative ingenuity could be incorporated with unskilled domestic labor as medium- and small-scale entrepreneurs had an opportunity, really for the first time, to gain access to resources and participate broadly in the development process.

That other relative price, the terms of trade between agriculture and industry, has not as yet in Korea been substantially modified from its distorted earlier levels. It is true that, in 1968, the Korean government adopted a price support policy which has tended somewhat to improve the terms of trade of the agricultural sector. Unfortunately, however, this price is announced at harvest rather than at planting time and thus serves more as an income redistributive rather than incentive device. Largely as a consequence, the adoption of better technology including double cropping, fertilizer, and lime use, etc., has been slow, and techniques for substantial agricultural productivity increases still

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	Years	Per- centage
Average annual rate of	1955-60	1.6
growth of real per	1960-65	3.7
capita income	1965-67	8.3
Domestic saving rate	1958	-2.5
Ū	1966	9.2
Average annual rate of	1955-60	-0.8
growth of exports	1965-67	39.3

Growth Performance of Korea, 1955-67

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wait to be harnessed. While many of the distortions of the import substitution regime have, in other words, been corrected through changes in relative prices, much yet needs to be done to activate the agricultural sector.

Pakistan adopted a classic set of import substitution policies soon after partition and independence. While inflationary pressures built up, rendering the exchange rate increasingly overvalued, the proceeds of the traditional raw jute and cotton export trade, supplemented by foreign aid, were reallocated, via exchange controls and licensing, to the construction of overheads and industry in West Pakistan.

The overall economic performance which resulted throughout the 1950's was little short of dismal. Agricultural production was barely able to keep up with population growth; exports were sluggish throughout the decade, actually declining in value. Only large-scale industry, much of it in the public sector, grew at a fast pace, i.e., in excess of 30 per cent annually. Domestic saving averaged around 5 per cent, and consequently, more than 50 per cent of the investment expenditures of the first Five Year Plan (1955–60) had to be financed from abroad.

In 1959 the first restructuring of relative prices was undertaken via a *de facto* devaluation of the exchange rate through the establishment of an export bonus system. This was followed by additional import liberalization, including an expanding open general license system and a "free list." By 1964 more than 40 per cent of imports was liberalized in one way or another. Industrial excess capacity declined from more than 50 per cent in 1960 to 18 per cent of a much larger industrial plant in 1965. Nontraditional exports rose by 89 per cent between 1959 and 1964 and accounted for 60 per cent of the total by 1964.

In 1961, moreover, the policy of forced procurement of major food crops at low prices was abandoned. Instead, prices were permitted to be market-determined, undergirded by government-guaranteed minimum price supports, with fluctuations reduced through the operation of buffer stocks. This reform, supplemented by fertilizer subsidies, constituted a marked improvement in agriculture's terms of trade. In this fashion farmers' incentives were realigned, culminating in substantial growth of agricultural productivity, especially in West Paki-

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stan, even before the new miracle seeds became generally available. Once this more drastic change in input-output relations became possible, especially in wheat, farmers were ready to respond and, moreover, able to increase vital water inputs through the free importation of pig iron needed for the construction of tubewells. The realignment of the terms of trade thus made the 32,000 private tubewells which had mushroomed up by 1965 profitable, while readjustments in the exchange system made them possible. Food grain production, which had been growing at 1 to 2 per cent annually during 1950–60, spurted ahead at an annual clip of 4 per cent during 1960–65. By 1970–71 a wheat crop at 170 per cent of 1964–65 levels is expected; and agricultural surpluses, rather than the persistent deficits of the 1950's, are being contemplated.

Moreover, the substantial increase in agricultural productivity and the accompanying demand for pumps to power the tubewells led to the surprising development of engineering and other smaller-scale industries in West Pakistan. In this mutually self-reinforcing fashion, agricultural surpluses financed the growth of decentralized mediumand small-scale industries, many of which in turn provided the physical inputs and incentives for further agricultural productivity increase. Changes in crucial relative prices thus effected major growth-promoting changes in the economy. The change in aggregate performance for Pakistan, from negligible per capita income increases in the late 1950's to increases of better than 3 per cent annually on a sustained basis, in spite of war, aid declines, and drought, amply testify that the economy, in spite of its political problems, now seems to be moving on entirely different tracks. This is illustrated in Table 2.

In summary, the role of relative prices in planning for the transition from colonial agrarianism, through import substitution, to a more market-oriented and broadly based growth effort is a central one. In the typical situation, the attempt is made to achieve economic independence by cutting the colonial pattern and capturing the land-based resources for import-substituting industrialization; relative prices are administered and largely irrelevant, with resources allocated directly to what are considered socially desirable areas. Then, as the crazy quilt of administered pricing and controls begins to take its toll in terms of low efficiency and growth rates, structural change in the direction of a

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TABLE 2

	Years	Per- centage	
Average annual rate of	1955-60	1.2	
growth of real per	1960-65	2.9	
capita income	1965 - 67	3.4	
Domestic saving rate	1958	5.5	
0	1966	9.0	
Average annual rate of	1955-60	2.5	
growth of exports	1965-67	8.3	

Growth Performance of Pakistan, 1955-67

fuller participation of the society's peasants and medium- and smallscale entrepreneurs is considered increasingly essential. Such a transition, in keeping with the changing entrepreneurial capacity of the economy, requires major changes in relative prices. The ability to transform the economy so that, first, unskilled labor, and then, domestic ingenuity and skills can carry more and more of the essential burdens of growth is heavily dependent on the timely, well-planned adjustment of relative prices.

COMMENT Richard Ruggles

In the first section of his paper, Ranis discusses the significance of relative prices for the efficiency of resource allocation in the context of general equilibrium theory. He emphasizes that the central interest of traditional theory is in how the market or capitalist system simultaneously brings about an efficient horizontal and intertemporal allocation of resources. In this context relative prices include factor prices, commodity prices, interest rates, and exchange rates.

Ranis recognizes that in order for market-determined prices to produce efficient resource allocation in a Pareto-optimal sense, certain essential conditions would have to be met. For example, enterpreneurs

would have to be exclusively profit maximizers; there would have to be full and freely available information; institutional constraints would not exist; and there would have to be no overriding economic or noneconomic reason for the government to play an extensive role. Ranis argues that although in developed countries these conditions may not be met, in developing economies their absence lies at the heart of the development problem. The basic question is therefore not how to obtain Pareto efficiency, but rather how to introduce technological change, broaden economic participation, create entrepreneurs, bring about institutional change, and induce mobility. This then is the question which Ranis addresses.

Although Ranis is sympathetic with the problem, his description of what developing countries actually do is quite the reverse. The import-substitution syndrome and the expansive definition of the public sector, he feels, result in a myriad of tools to accomplish their purpose. Thus, exchange controls, foreign exchange allocation, import licences, government deficit financing, inflation, overvalued exchange rates, neglect of agriculture, control of the interest rate, and allocation of investment funds are all part of the picture. The costs of maintaining such a system are shown to be large in terms of the inefficiency of import-substitution industries relative to export industries in Turkey, Chile, and Pakistan. It is not at all clear from the discussion that Ranis feels that the relative price distortions created by development policies accomplish anything but an increase in costs and inefficiencies. In fact, the main emphasis of the paper lies not on how relative prices may be used to shape economic development, but rather on how restoration of relative prices which reflect market conditions (both domestic and international) results in healthy economic growth. The final proof of the pudding, according to Ranis, is the examination of the cases of South Korea and Pakistan, where evidence seems to show that when more market-oriented prices were substituted for the crazy quilt of administered prices and controls, broadly based growth could take place.

From both a theoretical and empirical point of view the thesis which is presented at first glance seems quite plausible. Ranis admits that under conditions found in less developed countries relative prices as determined by market conditions may not be optimal. Such logic, he indicates, leads countries to adopt policies which distort the system and are inefficient and costly to maintain. The only bright spot on the horizon is that if such countries return to market-oriented prices, virtue will be rewarded by increases in efficiency and growth.

What makes me uneasy about such a presentation is the implication that although theoretically changes in relative prices can be used for development purposes, at best this is true only in a very temporary hothouse situation, and usually such interference is an impediment to healthy economic development. It is almost as if Ranis is saying that government interference with the market mechanism is inevitably arbitrary, clumsy, and irrational, and that sticking to the market mechanism is vastly superior. It is the unseen hand which best guides our destiny, and what governments should do is to help facilitate the market process rather than oppose or alter it for purposes of economic development.

In many ways this is the council of despair. What the market system produces we must like. By definition it is most efficient. Interference with it will produce chaos. People are not masters of their own destiny --the market system is. It is true that unwise decisions by governments often create undesirable situations. On the other hand, undesirable situations are also created by the market process. Extremes in income distribution, inadequate housing, lack of education and sanitation, and poverty all occur in market-oriented systems; their effects cannot be overcome by strict adjustment of relative prices to market levels. Specific policies which may interfere with relative prices must be developed.

The interest rate is a case in point. Ranis suggests that the rate of interest affects the crucial decisions between consumption and saving, and that higher interest rates not only improve the allocation of a given amount of savings, but also, and more importantly, increase the total volume of savings. In terms of equity, Ranis argues that the choice is really one between low interest rates which channel available savings to favored large-scale borrowers and high interest rates at which all borrowers, large and small, new and old, have approximately equal access at a price. It is true that higher interest rates do increase the total volume of savings, but they accomplish this not so much by

affecting the consumption-saving decision as by affecting the distribution of the income flow in the economy. Interest is not so much a reward for current saving as it is a reward for having money. High interest rates increase interest income, and interest income accrues to the higher-income groups who are more likely to save it; they who have get more. Increased saving thus occurs at the cost of increasing the inequality of the income distribution. With respect to the allocation of investment funds, it is true that large and small, rich or poor borrowers alike have equal access at a price, but the result, given the price, is that investment funds are likely to be channeled into luxury housing, office buildings, or other investments which have been made profitable by the increase in income inequality and the affluence of the financial community receiving higher interest rates.

In similar manner free and open trade may permit much of a country's foreign exchange to be used for luxury consumption or to flow abroad. Merely because many governments make poor use of imports does not mean that market-determined use would be optimal or even superior to what some governments have done or are now doing.

The successes which Ranis cites might better be summed up by the mottoes "devaluation is a good thing" and "agriculture needs stimulation." The impact of devaluation, however, may not be through the shift in relative prices nearly as much as through the income effect of additional external demand and the shift from imports to domestic production. Thus I would maintain that the marked improvement which Ranis cites for Korea and Pakistan was primarily due to the income effect of devaluation which increased the absolute level of economic activity in the system, rather than to an increase in the efficiency of resource allocation which might have resulted from relative price changes. With respect to agriculture the problem is somewhat more complex. Relatively higher prices may encourage agriculture in some situations, but it may do so only at the cost of raising food prices in urban centers. If agricultural response is slow because of institutional or other factors, the price in real terms may be too high for the system to pay, and other methods of raising agricultural output may have to be tried.

I do not mean to say that irrational distortion of relative prices by

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governments is justified in the name of development planning, but by the same token I do feel that development planning will necessitate rational departure from the relative prices which would occur if the economic system were left to go its own way. In some instances market solutions are appropriate; in others they result in distributions of income or uses of resources which are not compatible with long-range economic development goals. The argument that the primary criterion in determining optimal relative prices should be efficiency of resource allocation stated in terms of the marginal conditions is naive, because it either ignores the fact that relative prices also determine the income distribution or it assumes that the income distribution can be altered without affecting the marginal conditions and thus the efficiency of resource allocation. In practice it is often not possible or politically feasible to alter an initial income distribution of an economic system significantly, and it may be easier and more efficient to adopt relative prices which may not be optimal in a resource allocation sense but which will result in an initial distribution of income that will provide greater welfare and be more socially acceptable. The role of the economist in planning is to analyze the impact which alternative policies can be expected to have on the economic system, rather than just to indicate that the only role of the government should be to facilitate the working of the unseen hand.

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The main thesis of the Ranis paper is that the development of a newly independent economy should occur in two phases. (Mercifully, he has abjured the term "stages.") The first is a "growth-promoting" phase in which there is a "planned restructuring" of the economy toward import substitution. Resource use is determined by direct government allocation or by administered prices that have been distorted away from the levels that prevail in world markets or that would provide domestic market equilibrium. The second is an efficiency-promoting phase in which relative prices are adjusted toward their equilibrium levels, undoing the "artificial distortions" of the earlier phase and shifting the economy toward export expansion.

I find myself able to agree with exactly 50 per cent of this argument, fortunately the half that describes the direction in which most underdeveloped economies should be moving today. Development economists have been increasingly recognizing the need to go beyond the phase of import-substituting industrialization,¹ and the Ranis paper is useful in marshaling many of the arguments and in illustrating them with two of the most persuasive case histories.² The most important contribution of the paper may be the suggestion from the Korean case that saving rates can actually be increased by dismantling a system of controls partly established for the purpose of stimulating saving.⁸

I find myself unable to accept even the qualified endorsement Ranis bestows on the distorted-price phase: that it is "worth the price," but "only if it is geared to a gradual reduction of controls over time." My own position is that there is far less conflict than he implies between the objective of basic growth and the objective of efficiency, and that what conflict exists does not justify the kinds and magnitudes of price distortions typically adopted to encourage import substitution.

¹See, for example, Santiago Macario, "Protectionism and Industrialization in Latin America," Economic Bulletin for Latin America, March 1964, pp. 61-101; United Nations Economic Commission for Latin America (Raul Prebisch), Towards a Dynamic Development Policy for Latin America, New York, 1963, esp. pp. 6-8, 67-78; Bela Balassa, "Integration and Resource Allocation in Latin America," 1966, mimeographed; John H. Power, "Industrialization in Pakistan: A Case of Frustrated Take-Off," Pakistan Development Review, Summer 1963; Power, "Import Substitution as an Industrialization Strategy," Philippine Journal of Economics, Second Semester, 1966, pp. 167-204; and Henry J. Bruton, "Productivity Growth in Latin America," American Economic Review, December 1967, pp. 1099-1116.

² In our common zeal for the merits of a market system we should be careful not to exaggerate. When Ranis tries to establish for Pakistan "a time-phased relationship between changes in agricultural price policy and in the willingness to adopt the burgeoning new technology" of the Green Revolution, I fear he risks crossing this line. Mexican wheat and International Rice Research Institute rice were not introduced into Pakistan on a commercial scale until 1965 and 1967, respectively. Growth of acreage was spectacular, and improvements in market conditions undoubtedly made the new varieties more attractive. However, the profitability of adoption would have been high even without these improvements, and we cannot contrast this fast adoption with some earlier period in which the technology was available to Pakistani farmers but was not being applied. (For profitability figures, see Lester R. Brown, *Seeds of Change*, New York, 1970, p. 42.) ³ It is not really clear, however, why "distortions between the price of capital and

³ It is not really clear, however, why "distortions between the price of capital and of consumer goods may have led to high saving and low capital formation" in Argentina but "to relatively low saving and low capital formation" in Pakistan.

THE RELATIONSHIP OF PROBLEM AND POLICY

The Ranis paper offers three economic bases for a conflict between growth and efficiency as an economy emerges from a state of dependency-a lack of price-responsive entrepreneurs, a shortage of overhead facilities, and the immobility of resources and information.4 The policy implications of these deficiencies would seem to be straightforward. The "infant entrepreneurial argument" is one that favors subsidizing and supporting entrepreneurship in general-through schools of business administration, special training programs in entrepreneurial skill and motivations, and the widespread availability of business credit (raised, if necessary, through taxation) at equilibrium interest rates. A lack of market information suggests that government should supply it directly or encourage cooperation among competing firms to seek it out. Resource immobility and deficient infrastructure justify government action to subsidize or supply basic overheads in transportation, communications, and education. What is striking, however, is the contrast between such neutral policies and the pricing and allocation policies which Ranis defends as necessary to overcome the

⁴ Ranis cites a fourth, noneconomic justification for the system of distorted prices: "strong ideological reasons for not wanting to accept a market-oriented system" and for having "the public sector play a more extensive role." I do not think the economist must mutely bow in deference to such "reasons." The ideologies in question rarely seek ends which are unattainable through a fairly close adherence to equilibrium prices; rather, they often introduce dogmatic misperceptions of the relationship between means and ends. The job of the economist is not to take such misperceptions as given, or to rationalize them into "necessities," but to point out how ignoring opportunity costs can cripple the attainment of any set of economic objectives and to devise less costly ways of translating ideology into policy. For example, if the state must play "a more extensive role," the economist can make the case that the entrepreneurial gap is wider and the expected social return to investment is higher in the agricultural infrastructure than in automobile assembly.

The notion that adherence to ideologically prescribed means can itself be a source of national welfare parallels the argument that no forms of habitual consumption can be decried as "wasteful," since the individual's preference for them is itself an indication of their utility. Veblen's reaction seems apt: "The question is . . . not whether, under the existing circumstances of individual habit and social custom, a given expenditure conduces to the particular consumer's gratification or peace of mind; but whether, aside from acquired tastes and from the canons of usage and conventional decency, its result is a net gain in comfort or the fullness of life." This way of posing the question is even more appropriate in examining development policy, which can often gratify the politician or bureaucrat who calls the tune, while detracting from the comfort of the taxpayer, worker, or consumer who must pay the piper.

same obstacles. He lists many of the typical elements of "the import substitution syndrome": the undervaluing and rationing of foreign exchange; tariffs and import controls that are more stringent for consumer goods than for capital equipment; subsidized interest rates to favored borrowers; price controls and rationing for some basic material inputs; and measures to turn the internal terms of trade against agriculture. To this list we might add several more items: governm. ant inducements for higher urban wages; the escalation of tariff structures by degree of fabrication; the conferring of astronomical levels of effective protection; and a systematic tendency to underprice government services and products.

The net effect of these distorted price and allocation policies is to induce economic decisions which ignore the opportunity costs of resources, as represented by world prices and domestic factor availabilities. In an economically arbitrary manner these discriminatory policies favor the production of import substitutes over exports, of manufactured goods over agricultural commodities, and of consumer goods over capital goods; ⁵ they stimulate so wide an array of industries that few can attain an internationally competitive scale of production; they encourage the use of imported inputs in the domestic assembly of final goods; they favor capital-intensive techniques over labor-intensive ones; and they create bottlenecks in the provision of overhead services that provide neither guidance for the direction of further expansion nor the means by which such expansion can be financed.⁶

Ranis accurately describes the costs of maintaining this system as "patently large," so it should be abandoned once it has had time to "do its job." The system he describes, however, is never well suited to the job he has assigned it, is never accurately aimed at "the heart of the development problem."

⁵ Power ("Industrialization," pp. 192–97) argues that the bias toward the production of consumption goods itself entails a bias toward consumption expenditure. ⁶ Ranis at one point characterizes his early phase as one of "land- or raw material-based import substitution" as against later phases of labor-based and then skill-based "export substitution." If (as appears in the discussion of Korea) he means to contrast the characteristic inputs to exports, this distinction seems useful. The import-substitution process, however, is itself rarely "land or raw material" intensive but, as he says elsewhere, typically "capital- and import-intensive," and this defiance of the law of comparative advantage is a major source of its excessive cost.

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Governments do not need distorted prices to induce them to stimulate entrepreneurship, to provide information, or to undertake overhead investments. Rather, increased supplies of entrepreneurship, information, and overhead capital can make their greatest contribution to development only if they support directly productive activities that are planned or established in close response to real opportunity costs in the conomy. Many overhead services to production will realize that contribution only if they are rationed by prices which reflect their actual scarcities.

By contrast, the system of price distortions does "its job" by creating "larger than normal" profit opportunities in some lines but not in others. It stimulates entrepreneurship in automobile assembly but not in fertilizer production; it creates flows of information about the domestic market for tires made from imported rubber but not about the world market for glass made from domestic silicates; it provides railway lines to mammoth steel complexes but few dirt roads to village craftsmen and vegetable growers; it provides transportation so cheap that the mills can locate far from their sources of coal but close to their sources of import licenses.⁷

EFFICIENT AND INEFFICIENT GROWTH

The important contrast is not between growth and efficiency but between efficient growth and inefficient growth. Both theory and history suggest that efficient growth in the early phase of economic independence is (1) faster, because it wastes fewer of the limited resources currently available in the economy; and (2) more sustainable, because it saddles the future with fewer social structures that resist change and fewer economic structures that have to be scrapped, subsidized, or artificially supported.

As to the greater speed of efficient growth, the case histories of South Korea and Pakistan are suggestive but not conclusive, since the period of negligible per capita growth under distorted prices may-as Ranis

⁷ See, for example, Edward S. Mason, Economic Development in India and Pakistan, Cambridge, Mass., September 1966, pp. 8-9; Anne O. Krueger, "Some Economic Costs of Exchange Control: The Turkish Case," Journal of Political Economy, October 1966; John A. King, Jr., "Colombia: Steel," Case 30 in Economic Development Projects and Their Appraisal, Baltimore, 1967, pp. 505-27; and Alan Carlin, "Indian Transportation: A Sectoral Approach to Development Constraints," Journal of Development Studies, July, 1967.

implies-have laid some essential groundwork for rapid growth when price distortions were finally reduced. Fortunately, there are many examples of underdeveloped economies that have grown continuously and rapidly in the postwar years in a single phase of broad participation in the world market-the Central American republics, the Ivory Coast, Lebanon, Malaysia, Singapore, Hong Kong, and, to a great extent, Mexico and Peru.⁸ Both Dudley Seers and Barend de Vries have provided cross-sectional evaluations of the strategy of inwarddirected growth through distorted prices, largely for the Latin American economies, and have shown that only the largest of these have been able to maintain respectable aggregate growth. Thus, the South American pattern of development-what Prebisch has come to lament as "industrialization in watertight compartments"-has not taken Brazil, with a broad spectrum of resources and a sizable domestic market, nearly so far from the exploitation of comparative advantage and economies of scale as it has taken Paraguay and Uruguay.⁹ Estimates of Chile's loss of current GNP through allocative distortions run from 2.5 per cent (Harberger) to 14 per cent (Balassa's upper limit).¹⁰

⁸ The list includes none of the largest of the underdeveloped economies—not because the policy of growth through trade at world prices has failed for them, but because few (if any) have tried it. Reaching farther back into history, there are many explanations of the remarkable development of Japan, but it seems difficult to explain the pattern of that development without including the fact that for most of the Meiji period Japan was forbidden by treaty from levying import duties of more than 5 per cent ad valorem. (See, for example, W. W. Lockwood, *The Economic Development of Japan*, Princeton, 1954, p. 539.) Individual enterprises were established and temporarily subsidized by the government, but the main thrust of "structural change" took place in the context of world prices.

⁹ Barend A. de Vries, "Importance of Size for the Orientation of Economic Policy," in David Krivine, ed., Fiscal and Monetary Problems in Developing States, New York, 1967, pp. 309-23; and Dudley Seers, "The Stages of Economic Development of a Primary Producer in the Middle of the Twentieth Century," Economic Bulletin of Ghana, 1963, pp. 57-69. This kind of reasoning and evidence tends to support Ranis's assertion that "the relative importance of the exchange rate is much greater in the case of a small economy than in that of a large one." Such assertions, however, should not overlook the effect of the distorted price policy in reducing the import share of GNP but making it more strategic for the continued functioning of the economy. The smaller tail is often more able to wag the dog. Witness, for example, stories of Pakistani coal mines being forced to close temporarily for lack of imported safety lamps, or 40 per cent of Indian tractors being out of commission in 1966 for lack of imported spare parts. On the latter, see Brown, Seeds, p. 60.

¹⁰ Balassa, "Integration," pp. 3–8. Arnold C. Harberger, "Using the Resources at Hand More Effectively," *American Economic Review*, May 1958, pp. 134–55. Assume these resources to have been saved rather than wasted. From an historical (but

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Inefficient growth is less sustainable than efficient growth because it achieves not only "a broadening of the resources base, both human and material," but also embeds that base in structures that continue to delay and inhibit the transition to a more efficient pattern of production. On the human side, entrepreneurs trained at "chasing slips of paper and subverting the control system" may bear no special qualification for chasing customers in world markets or subverting the mindless application of Western technology to domestic production.¹¹ "Entrenched" industrial and bureaucratic interests may use all their accumulated power to sabotage any tendency toward market rationing at equilibrium prices.

There is little evidence that the distorted price system serves to transform institutions "in directions which accommodate rather than obstruct change." All too often the corollary of "structural change" through distorted prices is structural resistance to restoring an efficient pattern of production. Significantly, the dramatic decontrol measures in South Korea and Pakistan were both decreed by strong governments that were born in military coups and had secure power bases independent of the bureaucratic and industrial interests.¹²

On the material side, the most pernicious legacy of an inefficient pattern of investment is not the abandoned cannery or the broad highway reverting to jungle, widespread though such examples may be. Such investments can be written off to experience while the economy

inefficient) Chilean capital-output ratio of 3.2, we can crudely calculate that the growth rate could have been higher by 0.8 to 4.4 per cent: Bruton, "Productivity," estimates "residuals" (annual growth rates of productivity) during the postwar period which are respectable for Mexico (above 2 per cent), low for Brazil and Colombia (about 1½ per cent), negligible for Chile, and negative for Argentina.

11 Presumably the spectacular business success of Captain Gohar Ayub in Pakistan over the period 1963-68-in automotive assembly, canning, and the distribution of imported tractors-was not entirely due to the applicability of his military training to entrepreneurship but bore some relationship to the fact that he was the son of the president of the republic.

¹² It might be unfair to apply to a normative "phase" theory one of Simon Kuznets's requirements for a descriptive "stage" theory—that it identify "the major processes in the preceding stage that complete it and, with the usual qualifications for exogenous factors, make the next... stage highly probable" ("Notes on the Take-Off," in W. W. Rostow, ed., *The Economics of Take-Off into Sustained Growth*, New York, 1963, p. 24). If, however, as Ranis implies, movement out of the distorted-price phase is a requirement for its validity, then any useful normative theory must establish that the impetus for the transition is something more endogenous to the economy than the *deus ex machina* of a takeover by strong-willed and well-advised military leaders.

goes forward into more promising lines of production. Nor is it the government enterprise which, after a decade of operations, enjoys a profit rate only half that of comparable private firms. Rather, the heaviest burden on the future is created when inefficient enterprises must have their operating costs subsidized directly by the government (like the ubiquitous national airlines) or indirectly by the economy (like the Pakistani industries which, well into the "efficient" phase of economic development, were consuming raw materials worth more on world markets than the final goods they were producing).¹³ An additional burden on the future results when new inefficient enterprises are created primarily to justify an original inefficient enterprise by providing its inputs (e.g., the parts for domestically assembled automobiles) or by purchasing its outputs (e.g., electricity or steel for which there is inadequate domestic demand).14 While the cases of direct subsidization are more blatant and entail the extra cost of dissipating scarce government revenues, the many forms of indirect subsidization may ultimately do more to hamstring the growth potential of the economy.

CONCLUSION

I do not think we need to be so relative in our advocacy of economic efficiency as Ranis implies. I think it is perfectly possible to devise a

¹³ While the extent of "negative value added" in Pakistan reported by Soligo and Stern, based on highly indirect evidence, was probably exaggerated, more detailed investigations still find examples of the phenomenon. Examples are not confined to import-substituting industries but spread to the export sector—e.g., cotton textiles in Pakistan, cocoa butter in Ghana—when export preferences are granted to manufacturing but not to agriculture. (See, for example, Richard Mallon, "Export Policy in Pakistan," *Pakistan Development Review*, Spring 1966, pp. 58–79; and Elliot J. Berg, "Structural Transformation vs. Gradualism: Recent Economic Development in Ghana and the Ivory Coast," 1969, azographed.) Of more quantitative importance may be the heavy outlays in domestic resources to save insignificant —but positive—amounts of foreign exchange.

¹⁴ Specific examples of "linkages" used to subsidize inefficiency include the progressive "content-protection" regulations applied to automobile assembly in Latin America; action of the colonial government of Uganda to subsidize an abortive industrial estate near the site of the Owen Falls Dam; and tax exemptions granted by the Colombian government to users of steel from the Paz del Rio mill. See, for example, Leland L. Johnson, "Problems of Import Substitution: The Chilean Automobile Industry," *Economic Development and Cultural Change*, January 1967, pp. 202-16; Walter Elkan and Gail G. Willson, "The Impact of the Owen Falls Hydro-Electric Project on the Economy of Uganda," *Journal of Development Studies*, July 1967, pp. 387-404; and Richard C. Porter, "The Effectiveness of Tax Exemption in Colombia," 1969, multilithed.

general defense of the equilibrium exchange rate as the basic device for rationing foreign exchange and an equilibrium interest rate as the basic device for rationing capital and for price rationing in general as opposed to quantitative restrictions. I think it is possible to phrase that defense in ways that are independent "of the type of economy we are talking about" and the "phase of development" in which that economy finds itself, one which would be as relevant for Burma as for the United States. Equilibrium prices do not imply laissez faire, and such a defense need not preclude a substantial developmental role for government-in the areas of saving, investing in infrastructure, stimulating entrepreneurship, exercising monopolistic power in particular world markets, nurturing truly infant industries, regulating aggregate demand, and insuring some appropriate tradeoff between equity and the speed and efficiency of the growth process.¹⁵ Nor need that defense deny that an efficient pattern of growth will entail substantial and continuing import substitution, particularly for a large economy. It should even recognize that administrative obstacles or distributional considerations may force a solution in which some individual prices are taxed or subsidized to draw them away from world or domestic equilibrium levels. But a general statement of development policy would hold that efficiency is always "relevant" and that no rational pattern of divergences from equilibrium prices would in any way resemble the systematic distortions and gross inefficiences typically introduced in the name of "structural change" through import substitution during the "growth-promoting phase" of economic development.

JAGDISH N. BHAGWATI

Ranis is in the happy position of having Ruggles support one half of his paper and Eckstein support the other half. Between the two

¹⁵ The price that will bring about market equilibrium will, of course, depend heavily on the taxation, production, and purchasing decisions of the government. The dependence, for example, of the equilibrium interest rate on the level of government saving does not invalidate the principle of using the equilibrium rate to ration capital; it does, however, suggest the wide range of policies consistent with such a principle.

discussants, therefore, Ranis has full protection from damaging criticism!

The problems raised in this session are so wide-ranging that I shall have time to focus on only a few questions. I find myself in sympathy with what both discussants have said; but I think that they have not drawn the issues sharply enough.

Ruggles rightly questions whether we ought to continue thinking in terms of static allocative efficiency. He introduces the question of income distribution. He also raises the important question of the impact of the investment policies on the rate of savings. He is dead right. We certainly can argue, at an a priori level, that if savings are a function of the market-imputed distribution of national income, and if the allocation of investments is designed to maximize current output, the rate of growth of income might be less than if we reduced output with a view to increasing the rate of savings. This familiar second-best problem from the theory of optimal growth could conceivably be of great importance from the viewpoint of specific countries. However, we as economists have still to ask two more questions before we rush ahead and justify the observed departures from static efficiency in actual practice by resort to such arguments. We have to ask whether, in fact, the sectors to which we have redirected resources in search of higher savings actually have these higher savings rates; and next, we have to ask whether this shift was brought about in an optimal, least-cost manner. I would submit that, in my experience, neither of these two arguments is valid for many countries which are characterized by high short-run inefficiency although I am willing to be persuaded otherwise.

I also wish to join issue with Ruggles when he feels that the waste from inefficiency is small and has been shown by Harberger and others to be so. Let me say, for one thing, that the mythology has grown up, thanks to Harberger's paper, that an inherent property of inefficiency is that it must be small. Needless to say, you only get out of your exercise what you put in, and all such estimates are based on guesses at production functions, etc., which are by no means better than hunches of one kind or another. Secondly, the wastes vary with the nature of the distortions. Waste from monopoly, in a general equilibrium model, does not involve a consumption cost, but a tariff will: for this reason, Harberger's estimate of monopoly-induced waste is already an underestimate of what waste can and does occur in practice. Thirdly, Harberger cannot have estimated the loss that occurs from the kinds of distortions which result from lack of competition in sheltered markets: the waste that takes the form of unduly high costs, failure to improve the product in response to foreign competition that quantitative restrictions (QR's) imply, etc. Finally, there is a psychological point: Anything divided by national income looks small. A 2-3 per cent loss of national income is a small integer but a large absolute loss. Besides, in relation to important and critical magnitudes such as the annual increment in domestic investment, or marginal savings, or foreign aid, the loss is by no means small but indeed very large.

Let me now turn to Peter Eckstein's interesting comment. While I am in overwhelming agreement with his general description of where things tend to go wrong in the underdeveloped countries, I must state forcefully that the notion that import substitution is necessarily harmful is untenable. Economic philosophy swings from one end of the pendulum to another; we are now exhorting countries to go in for export promotion, and I predict that, in another two decades, we will be talking of desirable import substitution and excessive export promotion. In fact, we were doing that only a couple of decades ago, when import substitution began as a conscious strategy in many countries. "Fine tuning" is as much out of our grasp in the less developed countries (LDC's) as it is in the more sophisticated and expertise-endowed developed countries.

While it has become fashionable to denounce import substitution at the moment, let me remind ourselves that most LDC's do not live in a world where exports can be sold at given prices in indefinite amounts: We have surely heard of the textile quotas, the pending U.S. legislation on import restrictions, and such unpleasant things. The fact that we have gone around calculating effective rates, costs, and benefits of projects, etc., at international prices, pretending to ourselves that world prices are fixed, may itself have contributed to the general tendency to think that after all the world is indeed characterized by such fixity of prices and that LDC's who act contrary to such an assumption must be import substituting out of a burst of irrationality.

The really important criticism of the LDC's must be not that they have been import substituting but that (1) they have suffered from

export pessimism and have carried import substitution too far in some cases, in consequence; and (2) they have gone in for indiscriminate, high-cost import substitution, either following the policy of letting domestic industrialization proceed under the impetus provided by exogenously imposed QR's and high tariffs or putting up industries indiscriminately under planned programs and making it profitable by adjusting trade policy so as to give the necessary protection to such industry. It has become increasingly obvious that the costs from both these sources, and especially from the latter cause, have tended to be very high in a number of countries; and the proper focus of debate would seem to me to be whether we can think of optimal policy frameworks in the area of both trade and domestic investment policies which would avoid such costs and increase the efficiency and pace of development in the LDC's.

WOLFGANG F. STOLPER, University of Michigan

There are a number of disagreements with Gustav Ranis's presentation of the problem but, to vary the French phrase, *l'accord vient en lisant*. In fact the paper seems to be written by two people. There is Ranis the statesman and apologist, the understanding father confessor. And then there is Ranis the economist, who really knows better, who knows that in fact *tout comprendre n'est pas tout pardonner*, and who realizes that the cost of nonsense is just too high. In a discussion, it is proper to stress the disagreements even though in fact the agreements dominate. The disagreements diminish with each section.

First, I regret that Ranis has in a sense prejudiced his discussion by equating a market-oriented with a capitalist economy, and by seeming to suggest that only in these do prices have a proper role. Even if we had a centrally planned economy, prices would of course be an essential planning tool-*vide* "Liebermanism"-though they would (ideally) reflect the planners' rather than consumers' preferences. Even there they would (ideally) reflect true scarcities of factors, which of course are affected by the planners' preferences for particular output mixes.

Prices are not an ideological phenomenon-though many countries believe they are, and act as if they could ignore them. No priceless economy of any complexity exists. What happens depends on what prices happen to be, and if they are irrational, irrational things happen. Why should the absence of a "large number of entrepreneurs sensitive to price and profit signals" make any difference? (Ranis). For one class of entrepreneurs, farmers, it is by now reasonably well established that they do react to price signals. But suppose there are no entrepreneurs, and the whole manufacturing and agricultural sector is controlled by the government. How would a planner decide upon a steel or textile mill or anything else without reference to cost and prices? And if he wants to increase the amount of goods available to the economy-whether for private consumption or public investment or education or social overhead—he still would want to avoid waste. How could that be done without prices?

Let us also agree that the conditions of Pareto-optimality in the static sense-are not entirely relevant, and in the dynamic sense not easily achieved. But let us then declare a moratorium on the necessity of such stringent conditions, let us forget the very artificial and indeed pernicious distinction between prices as an allocation and prices as a growth-promoting device, and let us settle for practical purposes on the necessity to use prices and to have prices reasonably (not perfectly) realistic (as defined above).

Ranis states:

the relevance of the price system as an essential instrument to ensure optimality requires that there exist no economic necessity, e.g., because of scale or other reasons, for government to play a substantial role in the economy's directly productive areas, and moreover, that there exist no overriding noneconomic or ideological "necessity" to have the public sector play a more extensive role. Thirdly, we must assume the relatively full and free flow of information and resources, i.e., the absence of pronounced institutional constraints.

I find this almost totally unacceptable even where it is correct.

1. The supposed economic necessity for government to play a role refers, among others, presumably to economics of the public utility type, where "natural monopolies" make marginal cost pricing inapplicable. Now from a planning standpoint which deals with *future* investments, variable and fixed and hence marginal and total cost are the same anyway. But surely, the failure of marginal cost pricing (as

applied to a particular existing project) to give correct answers hardly justifies dismissing the use of prices as a planning tool. There are still more or less rational ways to do business.

2. Ditto for having a larger or smaller public sector. The real point is that "ideology" has been used to "subsidize,"—i.e., to justify—an uneconomic allocation, or to put it differently either (a) to justify the eating up of one's capital; and/or (b) to tax the productive sectors (usually agriculture) more and more in favor of supposed "dynamic" sectors or "socially desirable" ends. The fact, however, is, as J. R. Hicks remarked a long time ago, that the satisfaction of social needs quickly runs into the barrier of insufficient productivity. Or, as I have desperately tried to put it to a minister of finance: I understand that politics has priority over economics. I do *not* understand how you propose to meet political ends without economic means. Prices are nonideological, and the preference of ideology over economics is a confusion of ends and means.

Since these lines were written-and I have stressed this point for many years-Le Monde has carried a report of Le Duan's prescription for North Vietnamese planning. Le Duan stresses the importance of productivity and the weaknesses in project management (gestion). He stresses that there must be planning, of course, but "dans quelle mesure utiliser les rapports de marché, et les leviers du crédit, des prix, des salaires, du profit?"¹ I could go on quoting the first secretary of the North Vietnamese Communist party as a crown witness for my point of view. It suffices to stress that it is completely wrong to say, as Ranis does, that "the society must be practically and ideologically

¹ Jacques Decornoy, "M. Le Duan met l'accent sur 'la révolution technique' et la nécessité de rationaliser l'economie," *Le Monde* (Paris), June 21–22, 1970, p. 5. Decornoy summarizes with numerous quotations a 200-page North Vietnamese document. It is somewhat embarrassing for a capitalist American to quote the Chief Enemy. But I can think of nothing better to show that economic development is "really" a matter of economics and that prices belong to the *faits récalcitrants et têtus* of the economy than to do so. Since I have several times referred to the recalcitrant nature of economic reality and since this is a highly idiosyncratic use of the word, I wonder whether part of my royalties have come from Hanoil

Le Duan's willingness to analyze his situation so objectively and to blame the neglect of economics rather than the Central Intelligence Agency or even the bombing for his troubles explains perhaps why North Vietnam has been able to cause us so much trouble! It would certainly be better for the United States if he preferred ideology to economics! ready to accept the capitalist system as a driving force." I am aware that political scientists sometimes argue this way. But the problem is one of efficiency and not ideology; it is not whether an enterprise should be public or private, but whether it produces a net output or wastes resources.

3. Finally, the lack of information is desperately real. But the conclusion I draw is that planners must still use prices the best way they can. The presence of "institutional constraints" explains why things go wrong, not that one can do without prices.

Ranis has put his finger on an important shortcoming of planning models in general: the absence of government in influencing allocation. But this means not that prices are less important, but only that the models are irrelevant precisely in situations in which the government is given a crucial role in determining *how* resources are to be used against how many are to be used.

I do not therefore see just what Ranis is driving at in his implied assertion that an efficient utilization of available resources is not in fact "the" (his quotes) major social problem, particularly in the face of a "frequently stagnant colonial agrarian situation," and that such role as relative prices has does not capture the "essence" of the development problem; which is "basically . . . the achievement of structural change via a broadening of the resources base, both human and material. The basic question . . . is not how to allocate given resources more efficiently, but how to introduce technological change . . . ," etc. Precisely. Having defined the object of development to make sure that as the result of one's resource allocation I come out with more resources to allocate rather than less, and with more and better choices (in my Planning Without Facts) and being a student of Schumpeter, I have never understood the problem of resource allocation in a dynamic context to be anything else. The dichotomy made by Ranis does not exist (except possibly on the rarified level of purest mathematical static theory), any more than the idea that prices have something to do exclusively with a market economy. Ranis's section I, in other words, is a red herring.

It is a very dangerous red herring indeed. Perhaps Ranis has been seduced by the theory of stages. He discusses in his section II the import substitution phase through which newly independent countries are

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"likely" to pass. But again Ranis seems to me to contradict himself. Prices cannot be expected to create the environment for growth; therefore planners may have to use protection and subsidies to make production profitable. But this simply means that the price system is rigged in favor of certain activities. It is a kind of primitive shadowpricing policy.

Countries try to get rid of colonial production patterns—and more power to them. But the colonial patterns were often (not always) maintained precisely by rigged prices—the French system of paying higher than world market prices is perhaps the best example—and rigged markets—again the French have offered protected markets to their colonies. It should be self-evident that underdeveloped countries having scarce resources must rationally allocate them to achieve their ends. Ranis's account shows that in fact the opposite has happened.

How did it happen? Ranis refers to Prebisch, and far be it from me to defend him. But those of us who had thought to bypass the pricing mechanism in favor of continuous subsidies or of decision making in physical terms bear a considerable guilt. We complain about techniques deemed too capital-intensive, yet rig low interest rates; we complain about misusing scarce foreign exchange, yet rig overvalued exchange rates; we complain about the absence of entrepreneurs, and let a bureaucrat produce steel with no economic sanctions and virtually unlimited access to the budget. We create institutions to break bottlenecks, and then make it impossible for them to achieve their end because we set up an irrational price system. To add insult to injury, this sort of nonsense is sometimes defended by reference to "learning by doing." Yet those of our colleagues who developed this idea never had in mind the abuse, any more than Arthur Lewis's Industrialization of the Gold Coast can possibly be used to defend what passes as an import substitution policy.

In short it is precisely the attempt to bypass prices as a planning device—or to console oneself perhaps that they are the dual of an input-output table—which has led to the absurd situation so well described by Ranis. There has been no "learning by doing" because the curriculum has been irrelevant in the absence of decent prices. Nor has there in all likelihood been any import saving.

Thus Ranis is obviously right that if the "hothouse" atmosphere of

controls and wrong prices (leading to windfall profits instead of output), etc., is not abandoned, entrepreneurs cannot learn their business. But it remains quite unclear just how the creation of the hothouse atmosphere did any good in the first place. There is a Rasputin-like quality about the argument: the more you sin, the greater the salvation. But it really makes no more sense in economics than in theology, and it can ruin economies as well as empires, ministers of finance and planning as well as czars.

Ranis describes well what happens: ". . . under the previous regime, public and [very rarely—w.F.S.] large-scale private enterprises were the beneficiaries in response to the actual or assumed shortage of domestic entrepreneurship. . . ." Precisely. In the abstract, the "import substitution phase" is seen as a necessary period of economic violence, as it were, to break with the past and establish a base for the future which the next step (so well documented by Ranis as a substitution of price signals for direct controls) is to rationalize.

But in actuality what has happened and what Ranis has described is really nothing of the sort. If the colonial policies, as in British West Africa, have induced the development of a cocoa industry by smalland medium-sized farmers, it was to the benefit of the future countryand the absence of unjustifiable subsidies, of rigged prices, monopolies, milking of budgets and the rest, indeed laid a sound foundation for later stages. Where colonial policies were policies of rigged prices and guaranteed markets, of subsidies and exploitation, it did nothing of the kind. The policies of import substitution as practiced-not as envisaged by W. A. Lewis or Hirschmann-in fact continued the colonial pattern of exploitation, of freezing the economy in inefficient patterns, of preventing the emergence of entrepreneurs, whether private or public. What difference that the color and nationality of the exploiter changed? What difference the socialist rhetoric to which models of indifferent academic interest give some respectability? Nkrumah went through over \$1.75 billion. It is impossible not to do some good while spending this kind of money. Yet the present Ghanaian government is after ten years of Nkrumah's "socialism" without foreign reserves, with a foreign debt of \$1 billion, without working capital, with a dubious endowment of fixed real capital, and has to undo the damage of years, only to meet with snide sniper attacks.

Sukharno did the seemingly impossible: He did eat up practically all of his patrimony without noticeable benefits. In Latin America, the industrialization policies have aggravated revolutionary situations. The periods of import substitution had in fact not done what they were, theoretically, supposed to do, and they could not.

So my conclusion is that the very establishment of a base for growth, of an incipient entrepreneurial group—whether private or governmental is irrelevant—requires sound price policies. (Needless to say it requires a lot more than that, but this conference deals with price problems). So I agree with Ranis that the problem is to promote "growth by undoing the artificial distortions while preserving the gains of the earlier period," while insisting that if there were any gains at all in the "import substitution phase" they were accidental and not inherent in past policies.

Perhaps it would be good to add more specific uses of prices in planning. In project evaluation, the "correct" prices are evidently important. No great sophistication is needed. The truth is that investments will produce growth only if they are "really" profitable and if they do not swallow up resources as hidden or open subsidies. Hence it becomes important to estimate output prices and cost, but also timing problems, tax revenues and resources required, cash flows, etc. This links the projects also to budgets and hence to savings which, in most countries, are prominently made a task of the government. If the prices are reasonably correct, we can evaluate the project. If they are rigged by tariffs or subsidies, the project can be made to look good, but by working out the budgetary implications there is a check on whether the evaluation was reasonable. It is possible to make any individual project look good. It is not possible to make all of them look good at the same time.

Practically speaking it means that one should try to overestimate cost and underestimate revenues, and that one should be careful about when to accede to direct or indirect subsidies which hurt the budget and are therefore at the expense of alternate investments and/or other uses. It is precisely this neglect that leads in Ranis's import substitution phase to such waste.

Prices are not only signals. There must be a discipline. If prices are improper, say for "social" reasons, it will show in the budget. Example: In Tunisia the railway proposes an economic tariff. The government may, for perfectly good reasons, prefer a different tariff and agree to compensate the railway. It is a legitimate use of governmental power. But the economist must point out that if the subsidy had been eliminated, savings would have been bigger (though perhaps by less than the subsidy reduction).

Or, if a steel mill gets the right price it will operate efficiently. If its prices are kept high, there will be a cost to other enterprises and/or the government. If it is too low, there will be subsidies, or else there will be borrowing for the wrong purposes. Instead of using resources to augment resources, instead of finding new resources, the wrong prices invariably reduce present and future resources. This is true no matter what the stage of development of the economy.

Prices may change over time. Hence if there is a lag between inputs and outputs, input prices must be current—I leave aside the problem of replacement cost—and output prices must be the best guess of the future. Again the stage of development is irrelevant. Some of the Ghanaian factories can be salvaged. As for the others, if the earth swallowed them, it would be the best thing that could happen. The annual operating subsidies in some cases I know of would pay for whole new factories, with a greater output and more employment!

I do not feel it necessary to discuss Ranis's last section. There is complete agreement as well as the awareness, shared by Ranis I am sure, that much more than prices are involved in the Korean or Pakistani performance, or that, for that matter, the last word on these experiences has not yet been spoken. I conclude that the distinction made by Ranis between growth-promoting and efficiency-promoting functions of prices is a red herring from the standpoint of development policy (whatever may be said for it from a purely theoretical standpoint). No one in his right mind has ever claimed that correct prices will automatically lead to development. Such a unicausal proposition is undoubtedly much better than explaining growth by the method of swaddling babies, but still insufficient. But there is no doubt in my mind that the ignorance of how prices work and the attempt to bypass them have in fact caused the very difficulties which are referred to as neocolonialism and which are much more the fault of domestic

leaders of the Nkrumah-Sukharno type and their intellectual tutors than of such foreign scapegoats as are fashionable at the moment.

JACK BARANSON

The transition from Phase Two import substitution to Phase Three export orientation can prove to be difficult and painful, as the experiences of several developing countries in more advanced stages of industrialization already demonstrate. For example, in the automotive industry among countries of the Latin American Free Trade Association there is already nearly ten times the industrial plant that would be required under cost-competitive conditions.¹ Once national industries have been developed behind substantial protection walls, they are difficult to phase out from both an economic and political standpoint. The Japanese experience is often cited as a model of successful transition, but both the rapid growth in the size of the Japanese home market and the system of "administrative guidelines," which have carefully nurtured Japanese industry toward progressive improvements in industrial efficiency, are unique to Japan. Developing countries would do better to plan Phase Two and Phase Three industrialization jointly, with a view toward avoiding excessive and indiscriminate Phase Two import substitution.

REPLY BY RANIS

In responding to my main critics, Ruggles, on the one hand, and Eckstein and Stolper, on the other, I find myself in somewhat the unenviable position of the man in the childhood fairy tale caught between a crocodile and a lion; the only thing to do is get out of the way. Ruggles vehemently objects to the notion that a developing country may benefit substantially from trying to utilize the market mechanism in support of its development effort—especially during the second or export-substituting phase of development. Eckstein and

¹See Jack Baranson, "Integrated Automobiles for Latin America?" Finance and Development, December 1968.

Stolper, on the other hand, just as vehemently disagree with the notion that some deviation from the market mechanism—such as in the first or import-substituting phase of development—may be necessary or desirable. I have tried to make my own position amply clear, on the basis of economic reasoning, not ideology or religious conviction. I believe that it makes sense to distinguish between these two phases, and that our judgment has to be sensitive to where the economy finds itself in historical perspective.

Let me also assure Stolper at the outset that I do not view "marketoriented" as synonymous with "capitalist"-witness the East European use of the market mechanism. What we are all concerned with is development in the institutional context of the so-called mixed, garden variety of developing economy which, as a Myrdal "soft state," is typically in danger of suffering from the worst of both worlds. Here I am afraid Stolper was looking for a straw man, since there is no disagreement between us. With respect to his more substantive criticism, however, i.e., his questioning of the need for any import substitution phase at all, I can only re-emphasize, as economist and not fatherconfessor, the possible need for temporary distortions while major structural change is being effected. The principal objective during this early postindependence phase is not necessarily to have more resources at that particular moment for immediate allocation, but to transform such resources, e.g., people, and to provide the necessary overheads, e.g., irrigation contours, so that the second phase of sustained growth can get under way. Stolper certainly would not say that the infant-industry argument or the infant-industry entrepreneurial argument is entirely invalid-or deny that the creation of overheads may be essential. Or would he? What would he really substitute in place of a period of import substitution after independence is reached? He says that "no one in his right mind has ever claimed that correct prices will automatically lead to development." But what do he and Eckstein really have in mind? Given the initial severe colonial distortions of the entire economy, with structure and infrastructure poorly designed for sustained domestically oriented growth, what would they advocate for the newly emerging developing society? Complete laissez faire? Eckstein asserts that the infant-industry entrepreneurial argument favors subsidization through schools of business, special training programs, and development of entrepreneurial skills. But what in fact is the best training program for previously commercial entrepreneurs or landlords who are having their first real experience in industrial activity?

Let me be very clear. I agree that whatever conflict between growth. and efficiency may exist "does not justify the kinds and magnitudes of [the] price distortions typically adopted to encourage import substitution" (Eckstein). But that is different from reading all distortions out of the party. I would rather take my stand with Bhagwati, who pointed out that import substitution may be necessary but that it is a question of how far it is taken and when and how the structure is ultimately dismantled. Surely we can all agree that departures from the market are required to handle externalities, indirect returns, decreasing costs. Why then is it so difficult to conceive of a purposive deviation from efficiency to facilitate the emergence of industrial entrepreneurship and the creation of a domestic agricultural infrastructure? One suspects Stolper and Eckstein of failing to recall, whenever it is convenient, that earlier colonial policy had usually been one of rigged prices, lack of spillover, lack of involvement of domestic agriculture, and lack of generalized infrastructure beyond that required for the exploration of cash crops or minerals for export. Can they really fail to give any weight to the setup and learning costs of people moving into unfamiliar pursuits and the decline of cost curves according to the infant-industry entrepreneurial argument? We must also not forget, as Linder has pointed out, that comparative advantage may be acquired, at least in part, by first producing for the domestic market before one reaches international competitiveness. Eckstein's only advice seems to be equilibrium prices right off the bat and "independent 'of the type of economy' . . . and the 'phase of development' "-a prescription he calls "as relevant for Burma as the United States."

How would Eckstein go about nurturing truly infant industries with that prescription in mind? We can all join in our profound disapproval of many of the policies which have been followed in the name of import substitution. We can also agree that the neutral version of infant-industry protection has a better chance of separating the "men from the boys" over time than the crazy quilt of preferences for particular industries and particular individuals which we find all too often in the less developed world. But let us not confuse our distaste for the particular way in which import substitution has often been carried out in response to all kinds of vested interests—and continued in force long beyond the point of rational application—and the basic merits of the case, as put forward in my paper. All the countries cited by Eckstein as examples of possible continuous market-oriented growth as they emerge from colonialism into independence are either relatively small ones with an unusually strong entrepreneurial base and a small agricultural hinterland, e.g., Hong Kong and Singapore; or an unusually strong natural resource endowment, e.g., Malaysia; or they don't really fit his own description, e.g., Peru and Mexico.

All in all, I cannot avoid the uneasy feeling that Stolper's and Eckstein's views on the role of government intervention, regardless of the country, the time, and the quality and longevity of the tools applied, verge on the religious. My position, on the other hand, is not that the more you sin (in the early phase) the greater the salvation (in the later phase) but that the need for a basic postindependence restructuring usually requires government action. One can then distinguish between good and bad forms of intervention, e.g., I believe that indirect policies, working through the market, are better than direct policies that rely on administrative controls; that any distortions created should be as neutral and nondiscriminating as between industries as possible; and, most importantly, that they should have a built-in downward trend over time. In my view, it is just as sinful to believe that the invisible hand alone can solve all the problems of developing societies as it is to believe that the visible hand of enlightened bureaucrats can continue to manage their lives efficiently.

Turning now to Ruggles, near the other end of the spectrum, his criticisms are perhaps more difficult to meet, since he more or less ignores my import substitution argument and tackles only my views concerning the longer-run development pattern. While my Michigan friends see red at any mention of government intervention, Ruggles seems to have the same reaction at any mention of the market mechanism. All I can do is reiterate that I clearly do not believe in the unfettered market at work, but that the method of government intervention and the rules of the game established over time can make a good deal of difference. If market determination would lead to undesirable levels of luxury housing or luxury imports, which both Ruggles

and I would object to, let us put appropriate taxes and tariffs into place. If the market yields undesirable distribution patterns, let us use tax and expenditure policies, including education, to ameliorate it; but let us not fall prey to the fallacy of trying to solve all problems directly, and thus getting ourselves into an unmanageable network of across-the-board interventions. Otherwise, even with the best intentions, the very people Ruggles is concerned about will usually get hurt.

A good example of this relates to his assertion that higher interest rates would favor the capitalist, a situation that would offend his egalitarianism. But the diagnosis is, in fact, wrong for all LDC's I am familiar with. The Ruggles-proposed low-interest-rate policy which, in fact, usually obtains, ensures that only the large, established capitalists can get loans, guaranteeing them substantial windfall profits in a disequilibrium situation. I am afraid I must also strongly reject, in this context, Ruggles' view of the West Pakistan and Korean success cases, which are cited in my paper, as simply related to devaluation. We have had lots of devaluations across the developing world over the past two decades, without similar results. What is essential is the accompaniment of devaluation by such other measures as import liberalization, i.e., a freeing up of the foreign exchange market, thus providing more equal access to imports at closer to realistic prices.

It is not my position that the only role for government is to facilitate the "working of the unseen hand." In fact, government has many functions to fulfill. I am also not suggesting that the government should take its hands off and go back to a textbook laissez faire nineteenth century stance. Markets themselves are admittedly imperfect; private returns do not equal social returns. The time horizon of private entrepreneurs may be too short. The question rather is, What role should government play in lessening the impact of these imperfections without returning the society to colonialism or a rampant market mechanism? In my view, that role is one of trying to bridge the gap between social and private returns and of trying to perfect the markets just a little, by indirect rather than direct means. In other words, once it has decided, for one reason or another, what activities should be in the public sector, in affecting what goes on in the rest of the economy, it should attempt to work through taxes, tariffs, and subsidies, and as evenhandedly as possible, e.g., through objective, uniform fiscal and monetary rules, rather than through the low-interest and overvalued exchange rates and the variety of other licensing packages which are bound to be inefficient, discretionary, and whimsical.

Just because it happens to be the conventional wisdom, there is no need to abandon our view that government must also provide the overheads, must see to it that markets operate better, must provide information to ensure that weaker elements in the market are not disadvantaged by monopoly or oligopoly power. It must provide information on new technologies, including intermediate technology; it must be in a position to provide technical assistance when entrepreneurs have little at their disposal but the blueprints of the advanced countries, and those made available by avid salesmen from abroad. Government cannot simply step aside and let the signals speak for themselves. It has a tremendous responsibility to direct the development effort. It is merely a question of what tools are more effective for that purpose.

It is a serious mistake to permit one's concern with the possible excesses of the market to lead one to an acceptance of across-the-board government intervention in its place. Neither the information nor the civil service capacities exist—not to speak of the possibilities for vested interests really to go to work once the rules of the game become completely absurd. If it is not considered economically or socially desirable to let certain industrial and civil service minority groups come into substantial power in the course of the import substitution phase, the best way to achieve that objective is not necessarily to implement a number of complicated direct controls on foreign exchange, housing, etc., but to set substantial tariffs and excise taxes while giving everyone equal access to the required resources.

The crucial question to be kept in mind in this discussion, it seems to me, is how the government can give direction to the economy while ensuring maximum participation of its economically disenfranchised actors, i.e., the farmer and the medium- and small-scale industrialist. A maze of direct controls is most likely to impede the emergence of all kinds of domestic innovative talents. Even if it is politically determined that a particular group is to be discriminated against, e.g., expatriate minorities in Africa or the Chinese in Southeast Asia, discriminatory taxes and subsidies are much to be preferred to abrogation of the market. The tail of unequal market power, in other words, should not be allowed to wag the dog of development.

Ruggles writes as if administrative talent and the knowledge of just what to do existed in ample supply among the bureaucracies of the developing world. My position is that neither the knowledge nor the ability nor the depth of talent is available. Consequently I would rather, in this second phase, let the government do what it is best at, i.e., set its controls in a vertical and impersonal rather than a horizontal and personal fashion, and thus induce the broadest possible participation of millions of dispersed decision makers and innovators in all parts of the economy.