

The World's Largest Open Access Agricultural & Applied Economics Digital Library

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

## CLARK W. REYNOLDS

## SOCIAL AND POLITICAL INTERACTION IN THE ECONOMIC DEVELOPMENT OF A DISEQUILIBRIUM SYSTEM: SOME LATIN AMERICAN EXAMPLES\*

Economic analysis has devised theories of exchange in which supply and demand tend to converge at a set of equilibrium prices, based upon elementary axioms of behavior including comparability, transitivity, the independence and convexity of preference orderings, stable expectations, tastes which are fixed or changing in an orderly fashion, and the nature of competition in goods and factor markets. These axioms do not constitute the rules of exchange, but rather the rules of the model of exchange which economists have employed often with considerable success to simulate and predict market behavior.<sup>1</sup> Social scientists in general, and those analyzing events in developing countries in particular, wish to benefit from the analytical power of these economic tools in the examination of social systems while at the same time recognizing that the underlying conditions governing the interaction of production and choice may be far removed from the traditional axioms of the economic model of exchange. This paper explores and tries to make explicit some of the more implicit assumptions about underlying conditions of social and political behavior essential to the functioning of a traditional ceteris paribus economic model. It examines the implications to the model of variations in social and political conditions, investigates some of the more important interactions of factors in the social and political dimensions of a behavioral system, and considers ways in which economic models may be expanded to accommodate these interactions and thereby enhance their analytical and predictive power.

No one familiar with contemporary Latin American history will deny the existence of major periodic disturbances in the path of economic behavior, often altering the fundamental conditions of supply and demand themselves, dis-

<sup>\*</sup> An earlier version of this paper was presented at the second annual meeting of the Latin American Studies Association, Washington, D.C., April 17, 1970. The author acknowledges with many thanks the criticisms and comments of William O. Jones, Albert O. Hirschman, Irving Louis Horowitz, Shane Hunt, Paul Mandell, June Nash, Robert Packenham, and Keith Rosenn.

<sup>&</sup>lt;sup>1</sup> See for example, 32, 18, 19; and textbook treatment of the current state of economic general equilibrium analysis in ascending order of complexity by Walsh, Ferguson, and Quirk and Saposnik (37; 7, especially part V; 28).

turbances which were occasioned by political and social events. Nor is it possible to deny the role of economic behavior in the events themselves, making it impossible to regard them as stochastic shocks or random disturbances in an otherwise orderly expansion path. Certain periods stand out in history as times of cataclysmic fracturing and restructuring of the socio-economic landscape, frequently symptomized by abrupt political transformations, including Cuba and the Dominican Republic in the late 1950s and early 1960s, Peru from 1946-50 and from 1965 to the present, Chile and Ecuador in the late 1960s, north Central America since the mid-1940s, Bolivia since the late 1940s, Mexico in the periods around 1910, 1934, and 1946, Argentina in the mid-1940s, mid-1950s, and mid-1960s, Brazil in the early 1930s and mid-1960s, and Colombia in the late 1940s and 1950s. Social systems, as illustrated by the performance of these countries, are unwilling to hold still in their noneconomic dimensions long enough to permit economic models with their ceteris paribus assumptions to work themselves out. Much of this restiveness is the result of economic changes which alter social relationships and eventually feed back into the economy through the political process.

Such problems are by no means new to economic historians, accustomed to a lack of correspondence between analytical models and behavior. This is not to lessen the significant role of economic analysis as a tool of historiography. For specific markets over short periods of time, and perhaps for some highly developed economic systems which function relatively smoothly, economic relationships may be examined apart from the sociopolitical framework with a minimum of cost. Unfortunately, however, the underlying social conditions of developing systems are subject to major changes along with the economic variables.<sup>2</sup> It is little consolation that the failure of economic models to predict accurately under real world conditions may be used by theoreticians as negative evidence for the validity of their doctrines. Nor is it particularly helpful to note that an increasing number of Latin American governments that abridge free speech, press, assembly, and political choice, are helping the simple models to work by altering political and social institutions in such a way as to eliminate their resistance to the effective functioning of economic policies.

A contemporary traveler through Latin America may well be disconcerted by the number of intelligent well-trained economic technicians applying unidimensional models in an atmosphere of increasing political and social coercion. It could well be argued that this is not coincidental but is the logical consequence of attempts by policy makers to make use of simplistic development models which are based upon theories of production and exchange that fail to specify crucial social and political dimensions. Such models are bound to function properly only when society holds itself, or is held, constant. In addition, the economic equations of development models are often underdetermined by a failure to incorporate elements of interaction among mutually interdependent economic systems. While the increasingly fashionable symbiotic development-underdevelopment theories do begin to meet this shortcoming, as do more conventional international trade models with foreign repercussion effects, they are characteris-

<sup>&</sup>lt;sup>2</sup> See, for instance 34, pp. 222-53, et passim, and 29.

tically a prioristic with respect to economic causal relationships. And they too rarely specify social and political relationships which ideally should be made endogenous.

## THE POLITICAL-ECONOMIC IDENTIFICATION PROBLEM

Economic events may be seen to occur within an institutional structure fashioned by society so as to balance scarce social resources with non-scarce social wants. The implicit and explicit rules by which this structure maintains itself are reflected in systems of laws (common and statutory), ethics, psychological attitudes and social mores determined by prior experience, present behavior, and future expectations. Economic activities figure more or less importantly among the relationships which are to be equilibrated. It is the economic marketplace which has until now received the most systematic analysis. The ways in which scarce resources and non-scarce wants are brought together in non-material dimensions of social behavior are only beginning to be formalized in functional behavioral models (as opposed to descriptive taxonomies). These models lend themselves to tools of analysis which were originally devised to characterize the economic dimensions of social behavior.<sup>3</sup>

Let us regard the formation of a general "social contract" as one or a set of agreements within which an overall social equilibrium may be achieved subject to an appropriate set of objective constraints (representing social technologies, natural resources, and human capital involved as inputs in the social process, and given the total wants of society).<sup>4</sup> It is then possible to envision economic contracts (or acts of exchange) as a partial set of social relationships within this more general social system having a correspondingly greater number of dimensions. This can be illustrated by a society such as that of Chiapas, Mexico, in which there are two distinct subcultures, Indian and Ladino, each with its respective set of economic institutions through which material wants interact with productive capacity in the maximization of an overall social welfare function which includes social, psychological, and political, as well as material dimensions. Both the Indian and non-Indian cultures have economic subsystems, but these economic subsystems are partial functions of the other dimensions of their respective social systems, just as the overall social system of each subculture is partially dependent upon the economic dimensions (24). Under what circumstances is it appropriate to isolate the strictly economic dimensions of each subculture for purposes of analysis? And under what circumstances would it be

<sup>4</sup> We set aside the problem of intransitivity which hampers the satisfaction of generalized social preferences. See on the "possibility theorem" a monography by Kenneth J. Arrow (1). See also the critique of Bergson and Quirk and Saposnik (2, especially pp. 30-35 et passim; 28, p. 108 ff.).

<sup>&</sup>lt;sup>3</sup> General equilibrium analysis as developed in economics provides a potentially useful set of tools for application once theories of production and demand are more fully developed in other dimensions of the social sciences. One such extension of political science which attempts to accommodate political decision making in a developing system to an economic general equilibrium paradigm is that of Ilchman and Uphoff (15). This book deals not with the incorporation of social and political variables in economic models but with a self-contained and relatively hermetic general equilibrium political decision model. The chapter headings are suggestive of the wholesale adoption of economic development terminology—political resources, political exchange, political inflation and deflation, political resource management, political resource accumulation, political and administrative infrastructure, etc. Unfortunately, this highly imaginative lexicography rarely descends to the historical plane or comes to grips with the empirical estimation of behavioral relationships.

appropriate to combine the two systems of economic relationships, both Indian and Ladino, into a general economic model for the whole society, without expressly taking into consideration the other dimensions of social behavior?

If the alternatives open to each subculture are relatively unchanged over time so that relative "prices" or opportunity costs of alternative economic, social, and psychological goods and services remain constant, or vary only slightly at the margin, then separate or partial aspects of behavior may be viewed in isolation. For example, in the economic dimension if relative wages between subcultures change ever so slightly, so that one or a few workers are attracted from the Indian to the Ladino subculture, this would not be expected to have a significant impact on the social, psychological, or political institutions of either group. In this case behavior might be appropriately analyzed by a simple economic model of factor migration in which labor shifts from one sector to the other under ceteris paribus assumptions about surrounding conditions. The relative income distribution of either subculture will be largely unchanged, taste patterns will remain as before except perhaps for the few individuals who make the change, real wages will not rise significantly in the Indian community or fall noticeably among the Ladinos. Marginal analysis might also apply if there were slight increases in trade opportunities between the Indian community and Ladinos. making available manufactured textiles, food products, cooking utensils, and shoes, at relative prices only slightly below those of comparable articles of Indian manufacture while Ladinos offered slightly higher prices for Indian corn meal, wool, and vegetable fibers than could be obtained by trade within the local community.

However, if a payed access road were constructed linking the Indian and Ladino cultures, and merchants were allowed to ply their trade, machine manufactured textiles might be offered at much lower relative prices in terms of foodstuffs and other local raw materials than the existing barter price ratios in the Indian community. Trade induced by the new road might well produce radical changes in the Indian pattern of production, income distribution, social and political power structure, and in the eventual pattern of wants and attitudes. One consequence might well be a decline in profitability and virtual disappearance of artisan manufacturing such as spinning and weaving, pottery making, and the manufacture of sandals and homespun garments. The skill and influence of native artisans would tend to decline in importance relative to that of shepherds and farmers producing commodities demanded by Ladino merchants. The result of economic change through increased trade and specialization could produce a net loss in welfare for a significant share of the population. Economists agree that trade induced by purely competitive market prices need cause no loss in welfare provided that potential losers were compensated out of the proceeds from trade.<sup>5</sup> However this compensation principle is rarely satisfied by the free forces of the marketplace. Rather, it is likely to be applied as the result of a political bargain in which those disadvantaged exchange something (such as social stability or the absence of unrest) for economic compensation. Thus a more complete specification of a dynamic model of economic exchange should allow

<sup>&</sup>lt;sup>5</sup> An extensive examination of the negative impact of international trade on domestic artisan industry in 19th century Colombia is given in 21, especially chapter VII.

for the possibility of achieving compensation for disadvantaged groups whose dissatisfaction could otherwise upset the stability of the economic process.

Since economic models are accustomed to dealing with marginal changes rather than fundamental structural alterations in social systems, it is not surprising that those who apply them tend to shy away from cases such as we have described, in which fundamental social changes may occur, even when such changes are introduced through the economic process and alter future patterns of economic behavior. For example, the impact of migration on host and donor cultures, with certain exceptions, has not been subjected to detailed economic analysis in Latin America even though it has had a basic impact on the economies of major portions of the hemisphere.<sup>6</sup> Massive factor movements cannot be accommodated by a ceteris paribus model of income determination, general equilibrium, or growth. Recent events between Honduras and El Salvador are testimonials to this fact, yet they are symptomatic of a problem which must become increasingly important to those analyzing economic development, as rapid unbalanced rates of population growth in the less developed countries, unmatched by international capital flows, produce massive regional disequilibria in the supply and demand for labor at all skill levels.

Social scientists often excuse themselves from addressing this question by pointing to the present interlocking network of regulations barring the free movement of men among nations. The economic and social pressures of the next few decades may well prove these immigration barriers to be demographic Maginot lines. Other economists point to a body of international trade doctrine as hedged about with unrealistic assumptions as any in the field, arguing that factor prices (and by implication personal incomes) may converge without migration, through increased trade. In the face of such arguments it is not surprising that the Chinese walls against immigration raised since World War I have been surrounded by a widening moat of commercial policies in order to stem the equilibrating flow of commerce that arises when wage levels become increasingly unequal.

A final argument against free trade or migration arises from those who place high values on the integrity of autarchic social systems which might be disrupted through increased mobility of men and materials. The point cannot be lost on those who note with dismay the erosion of long standing social and cultural institutions by the process of trade, migration, international investment, and technological diffusion. The ecological balance has been altered, for example, by the introduction of health and medical technology which has served to reduce the death rate without commensurate adjustments in birth rates. This has come of accelerated population growth in low income countries which may prove more damaging to traditional social systems than any set of economic events. Indeed it is far more likely to bring about inequality in income distribution, political crisis, and violence, than all the accumulated capital and technology of recorded history (including gunpowder and the printing press).

<sup>&</sup>lt;sup>6</sup> Internal migration in Brazil is a conspicuous exception. Recent work by economists on relationships between growth and migration in that country are found in 31 and 8. The case of Chile is dealt with in 11. A classic overview of the geo-economics of international migration by a Latin American economist was presented by Sanford Mosk (23, pp. 53-82).

The legal apparatus within which the economic process of exchange is permitted to take place, the set of institutions which are regarded as given in most economic models, is itself a creature of supply and demand, if these are expanded to include a broader variety of social relations. Take for example the case of migration laws. Such statutes are a function of the political process in response to demands from a constituency faced with competition from immigrants capable of and willing to perform the same tasks for less income. Ways in which the problem might be approached represent the supply alternatives or social "production possibilities." Political scientists such as Ilchman and Uphoff (see footnote 3) regard such possibilities as a function of political resources (factors of production) of which available economic goods and services form a part but which include authority and coercion as well. Any politician will point out that regardless of the demands of society for new laws, these statutes may well be impossible to implement without using up scarce social and material resources which had previously served other purposes, thereby reducing the availability of alternative social services. The extent to which any social system can order its behavior, whether in the material, moral, or psychological dimensions, is delimited in the short run by the resources and technology at its disposal. There is in principle a set of constraints circumscribing the social production possibilities (including the capacity to produce and enforce laws) in any system at any time. In the dimension of political market transactions or political "policy space" this may be called the political production possibility frontier.<sup>7</sup>

By expanding material production possibility sets to include all social production possibilities as well, one arrives at a multidimensional hypersurface of possible social transactions governed by the principle of scarcity. This construct reveals a trade-off among most sets of social outputs (excepting the case of complementarities, and allowing for definitional problems) when one is at the frontier. Immigration barriers represent a restraint on factor movements between countries. These barriers are accepted as initial conditions in most international trade models (which are distinct from more general resource allocation models by the assumption that each region has fixed factor endowments). The imposition of immigration barriers is a frequent result of adverse reaction to observed or anticipated effects of international factor movements on relative wages, prices, and incomes in the host society. If such persons have enough "political purchasing power" (votes, in a democracy) to influence the political process and thereby change the legal structure, the conditions of the economic marketplace will be altered by the imposition of barriers on factor mobility.

By taking economic relationships as given, one may devise a political model in which the effective supply of legislation (enforced laws) is equilibrated with voter preferences within the political "marketplace." The constraint function in this model is the set of production possibilities open to the makers and en-

<sup>&</sup>lt;sup>7</sup> Political transactions are in themselves interesting and subject to the type of "general" equilibrium analysis that economists since Walras have evolved. However, economics is more obviously susceptible to measurement and the problem of devising a numeraire for the political exchange process is yet unresolved (see for example 27 and 13). Ilchman and Uphoff admit to the possibility of no more than ordinal valuation (15, p. 55 ff.); however the work of Arrow and others illustrates the difficulty of achieving consistent political value orderings owing to the problem of intransitivity which such markets face.

forcers of laws. To the extent that economic inputs are involved in the legislation and enforcement procedures, as there must be if agents are required to patrol the borders and repatriate illegal immigrants, a partial equilibrium political model might regard the unit cost of these inputs as given, just as an economic model normally takes as given the available set of social and political institutions which underlie the conditions of supply and demand. However, in a full general equilibrium model of social interaction, which we shall refer to later as a social equilibrium model, it is in principle quite possible to introduce the possibility that the "production" of new social and political institutions will affect relative prices in the economic dimensions, owing to their demand for scarce resources as well as their effect on the conditions of trade. By the same token the elimination (dismantling or gradual depreciation) of old institutions may well entail resource costs.

What we have illustrated in the preceding section is an instance in which the "social contract" is altered by observed and expected changes in relative prices. Social demand interacts with production possibilities, through the political process, in such a way as to alter the legal structure. The agents involved in the transaction have been called "political entrepreneurs" by Montemartini (22, pp. 137-51).<sup>8</sup>

We have characterized the political marketplace as the setting for a process of exchange analogous to the economic process of exchange. It is well known that the economic marketplace does not always function smoothly, that it is subject to concentration of buyers or sellers leading to the existence of monopoly, monopsony, or variations thereof which produce distortions in relative prices and attendant loss of welfare (in the sense that improving the degree of competition would cause the system to approach Pareto optimality, making at least some of the participants better off without worsening the position of anyone else). Except where natural monopolies or monopsonies exist, the departure from pure competition is often associated with man-made barriers to entry which could be construed as threats or coercion used against potential competitors. In a similar manner the process of political exchange whereby social wants and capabilities are equated through the legislative process (or a comparable set of decrees) need not be perfectly competitive. Some participants in the political market can coalesce and by threats or coercion alter the "relative prices" of the political goods

<sup>&</sup>lt;sup>8</sup> This essay, originally published in 1900, presents an ingenious characterization of the political cntrepreneur who earns a political profit from the service of equating social desires and production possibilities under a variety of market structures ranging from despotism to democracy. Montemartini shows how costs of coercion are equated with benefits provided to those purchasing (voting or supporting) the services of the entrepreneur. By making a sharp distinction between the conditions of dcmand for public services and the conditions of supply, the author makes possible an illustration of the trade-off between alternative institutional forms, both political and economic, for the satisfaction of social wants. This lays a foundation for an integration of social and economic production theory. Samuelson's theory of public goods, on the other hand, provides the basis for an explicit extension of preference orderings to a more general set of variables in welfare theory. A combination of these two approaches admits, in principle, an examination of the process of exchange in a broader set of social dimensions than the economic alone. At the level of project evaluation Hirschman takes economists to task for failure to deal with what he calls "broader structural characteristics" of development projects (12). By looking at nonquantifiable implications of project execution including social and political framework. The actual specification of such an analytical framework, however, remains to be done.

and services (laws and decrees) produced. Kenneth Boulding has suggested that political markets are characterized by coercion while economic markets are characterized by exchange (3).<sup>9</sup> In fact there are elements of coercion as well as exchange in both political and economic markets, and while imperfections or inequality may appear to be more predominant in the former than the latter (in Latin America for example) the difference may prove not to be as clear-cut when one takes a closer look at the historical nature of the development process.

By making axiomatic statements about convex production sets and convex preference orderings in all dimensions of social transactions, economic, political. and perhaps even psychological, it becomes possible in principle to formulate a theory of social behavior in which the economic functions comprise a subset of relationships. These relationships, when they have only slight or marginal influences on other dimensions of the social system, may be analyzed in isolation. But when economic events radically alter "relative prices" (or opportunity costs) in other dimensions of social behavior and thereby affect transactions in these dimensions, they must be analyzed within a broader framework to avoid bias in the results. This would not hold if one were only interested in the economy per se and if changes in the other social dimensions did not eventually react upon the economic relationships. This would assume, of course, that economic behavior tended off on a tangent leaving social, political, and psychological dimensions to adjust as they may. This is, in fact, the implicit assumption of most formal economic development models, yet it is an assumption which quite obviously cannot be seriously entertained for any analysis which involves large changes in relative prices, in income, or in levels of output. It is a particularly unrealistic approach for studies covering long periods of time.

Failure to incorporate such social interactions in the analysis of economic development will almost certainly lead to severe bias in the estimated parameters as well as to a substantial error term, supposing, of course, that such disturbances are not randomly distributed or that all structural changes are not directly proportional so that economic parameters could serve as proxies for a more complex set of social parameters. The failure of traditional development models to predict, a problem familiar to students of contemporary Latin American economic growth, may be ascribed in part to errors in the underlying data, partly to shortcomings in the economic theory on which the models are based, partly to errors in specification of the economic relationships in the model, but finally and perhaps most importantly to what may be called the *political-economic identification problem*. This problem refers to cases in which errors arise from the failure to sufficiently specify social or political variables which operate in the economic functions, causing nonrandom disturbances in the economic parameters. It also arises from the absence of social or political functions (incorporating economic

<sup>&</sup>lt;sup>9</sup> Professor Boulding suggests four basic functional divisions for social subsystems: population systems, exchange systems, threat systems, and learning systems, as well as a possible fifth, love systems, in which the positive interdependence of preference functions is posited. We shall not here attempt to deal with these functional classifications, as they are not expressly interrelated in his article, and as aspects of threat as well as exchange appear to enter the transaction process in the more traditionally defined dimensions of social behavior. Since functional categories tend to overlap in similar processes of exchange, it would appear more useful to accept a traditional taxonomy for the political and economic marketplace and then introduce a functional model of exchange in which the two are seen to interact. That procedure is taken in this paper.

variables) in "general equilibrium" economic models. Criticism so often applied to partial equilibrium economic analysis by general equilibrium economists holds as well for general equilibrium economic models which are merely partial in a more general sense of social interaction when that interaction critically affects economic behavior.<sup>30</sup>

## THE ROLE OF RELATIVE INCOMES (EXPENDITURES) IN THE INTERACTION OF POLITICAL AND ECONOMIC CHANGE

If there are two marketplaces, the political and economic, which potentially interact, we must posit a set of axioms which will permit the formulation and testing of hypotheses about such interaction. One potentially fruitful axiom is the assumption that individual utility is a function of relative as well as absolute income (or expenditure, which is often more evident in society than income). Let us suppose that a society does not have widely dissimilar individual preference functions and that they are not wholly independent, such that the expenditure of others influences one's personal welfare. If this influence is negative, as others increase their current expenditure, I will have to increase my own to remain at the same level of utility as before. (It is also conceivable that the influence might be positive, so that as the incomes of others increase my own might decrease without a loss in utility. I do not consider this possibility here, since its social implications are limited, except perhaps for those within the same social group or for those who possess communal values.)

As a matter of fact, despite the traditional assumption of economic value theorists that preference sets are independent, relative income does appear to matter to individuals and groups, as most social historians will testify and as certain political economists from Marx to Duesenberry have asserted.<sup>11</sup> The problem is that the reaction may be reflected in noneconomic as well as economic dimensions of behavior and is difficult to capture in conventional demand analysis. On the other hand, the way in which economic change affects relative incomes is subject to fairly straightforward analysis, although little such analysis has been applied to the contemporary performance of Latin American countries.<sup>12</sup> Even less have models been devised relating changes in the distribution

<sup>10</sup> For a more complete definition of the political-economic identification problem and its applicability to Mexican economic historiography see 30, pp. 11–13.

<sup>12</sup> Some recent examples of work in this relatively neglected area are Shane Hunt's study of the impact of tax and expenditure policy on distributive shares in Peru (14); monographic work on relative price changes and income distribution in Peru by Rosemary Thorpe (35); changes in Mexican income distribution in Reynolds (30, chapter 2); also 5, pp. 15–72; 36, pp. 1–20; and 4.

<sup>&</sup>lt;sup>11</sup> On the role of relative income changes in Marx, see the interpretation by Thomas Sowell (33). Sowell points out that Marx did not predict that the value of real wages of the working class would decline, but rather that their *relative* shares would decline, thereby increasing the disutility of laborers, leading to greater social and political instability. "A crucial but unstated assumption in Marx's increasing misery doctrine is that the workers themselves will judge wage movements from this relative point of view; otherwise Marxian 'misery' when accompanied by material prosperity need never provoke revolution" (33, p. 113). The well-known contemporary version of the role of relative income in consumption, a theory which has not had the attention it deserves among development conomists in recent years, is a monograph by J. S. Duesenberry (6). One application of this analysis to development appeared in 26. That author proposes a "new theory of consumption and saving" arguing that "It is not only the absolute but also the relative level of real income that determines the capacity to save." While his interpretation deals with relative income differentials between countries, we argue above that the income differential and its rate of change within developing countries will have important social behavioral corollaries which may have a significant impact on the path of economic change.

of income among social groups to subsequent changes in the underlying conditions of supply (relative factor prices and technology) or demand (relative commodity prices). Such work as we shall see represents a logical first step in the development of analytical models which will expressly incorporate not only the recursive relationships between changes in output, income distribution, and subsequent supply-demand conditions which feed back upon income distribution, but also the relationships between economic factors such as relative income and key socio-political functions which in turn alter conditions in the economic dimensions of the model.

An example in which such analysis might improve economic predictions would be a case in which an economy, like Mexico prior to 1910, was experiencing rapid economic growth leading to changes in relative income shares to the benefit of a favored few owners of capital and natural resources rather than the mass of the population (30, chapters 1 and 2). If individual utility is associated with relative as well as absolute income, then the welfare of much of the working class in Mexico was enhanced by the absolute change in real wages and worsened by relative declines in distributive shares prior to 1895, and worsened by decline in both real wages and relative shares between the late 1890s and 1910. One possible avenue for redress of this welfare loss could be through attempts by the working class to form unions so as to alter the conditions of exchange in the economic labor market, restrict supply, and thereby raise wages through strikes and collective bargaining. This was in fact attempted in Mexico before 1910 with generally indifferent and sometimes disastrous results, as when the government violently broke strikes of textile and copper workers at Rio Blanco and Cananea. Another approach would be for workers to use their scarce financial and human resources to enter the political marketplace and "hire" political entrepreneurs (finance their campaigns) to exercise their voting power (political purchasing power) to enact legislation favoring income redistribution through regressive taxation, or regressive public expenditures including the provision of social welfare, and through controls on employer abuses. This too was attempted in pre-1910 Mexico with little success, since political purchasing power was concentrated in the hands of the major holders of economic wealth and tended to reinforce existing economic inequalities. A further effort might be made to exercise votes in other dimensions of the social marketplace, calling for example on priests, educators, and other culture brokers to urge social action favoring the working class. Despite earnest efforts by liberal clergymen and academicians, political conditions in the Mexico of Porfirio Diaz did not contribute to effective bargaining in these areas either.

Had effective action been taken through formation of collective bargaining units, through intercession of the church or academic authorities, or through more direct political pressure, one might have expected Mexican economic conditions to have altered before 1910. The expected future absolute and relative income of the majority of the population would have been changed, and with this changes in the conditions of economic supply and demand. Thus actual or anticipated changes in absolute or relative income of the working class might have given rise to pressures to alter future income in a politically more acceptable fashion. A broader view of social development might have suggested that if these pressures were unheeded (if noneconomic markets were not allowed to clear), conditions would arise which could seriously impair the smooth functioning of the economy itself.

Economic "equilibrium" may be seen in this sense to be only partial, subject to changes in institutions which are themselves influenced by actual or anticipated economic change as it alters relative "prices" of other social transactions in other markets, and resource allocation in these other markets. The economic growth of pre-1910 Mexico, stable and rapid as it apparently was by all conventional measures, was not accompanied by a free movement of relative prices in the social and political dimensions. Instead frustrations multiplied as social institutions failed to change so as to offset the negative welfare effect of growing income inequality and declining real wages for the working class (especially after 1895), and the progressive enclosure of private and communal landholdings and monopolization of water rights for the benefit of large-scale commercial growers. Indeed, even the political marketplace became closed to many Mexicans as foreigners and a small group of aging oligarchs increased their monopoly of decision making. This condition was no less disruptive of individual welfare for much of the middle class than was the unequal income distribution resulting from the economic marketplace for the working class.

Growing income inequality, political inequality, and social inequality (including disrespect and abuse of Indian and mestizo elements in the society) all contributed to the widening gap between social supply and demand that brought about a revolutionary explosion in 1910. Mexico, however much her economy was in equilibrium before that date, in fact experienced increasing social disequilibrium throughout the period 1895-1910. It became a disequilibrium system in which convergence in many dimensions could not take place owing to inflexible social institutions. Economic "progress" was an important contributing factor which led to a widening gap in other social dimensions. One may ask what it was in Mexico that prevented social institutions from responding to changes in "relative offer prices" such as the price of free elections and social legislation, changes which reflected demands for greater income equality, social justice, and political participation for all groups. Was this a special case; are the noneconomic dimensions of a social equilibrium model generally divergent or convergent? Could such a model ever guarantee stable equilibrium, or is "social equilibrium" in development a contradiction in terms and are gaps between supply and demand likely to increase to the point of violence as they did in Mexico? We shall see that just as in the economic markets the answer depends upon the nature of social market structure, including the possibilities for free competition, free exchange of goods or services, and full knowledge of the supply of scarce resources and technology and the efficiency of their use (defining the limits of political production possibilities). Economic productive capacity is one potential constraint on the dimensions of political policy space facing society at any point in time. And satisfying social wants in noneconomic markets by drawing upon scarce resources may alter relative prices, income distribution, and wealth in economic markets as well.

#### DO EQUILIBRIA POTENTIALLY "EXIST" IN A GENERAL MODEL OF SOCIAL INTERACTION, AND IS THEIR EXISTENCE ESSENTIAL FOR ANALYSIS AND PREDICTION?

Considerable effort has been expended in recent decades by some of the most competent theoreticians in the economics profession, in investigating the conditions under which unique or multiple equilibria may be said to exist in "general equilibrium" economic models. This has involved a search for the axiomatic basis and logical structure essential to prove existence theorems.<sup>13</sup> In order to generate clear and unambiguous results, the conditions of the economic models underlying these proofs are more restrictive than any customarily employed by development economists, one condition of course being that income distributional changes occurring within dynamic or comparative static models will have little or no influence on the underlying conditions of the model through variables normally considered to be external to the economic process. (For example, it is assumed that the shift in income from one group to another in society will have little effect on the ultimate goal of growth or the trade-off between present and future consumption such as through social or political functions in which economic variables are present.) Development historians must, on the other hand, find themselves examining conditions far removed from the abstract assumptions of these models, however much they may value them as providing useful points of departure for more general theories of social interaction. To make the theoretical substructure more applicable to empirical problem solving, these logical paradigms might well be enhanced by an expansion of their axiomatic base to include, not only the influence of relative income on economic supply and demand conditions, but also the relationship between economic and other social variables in the interaction between production possibilities and preference orderings as they influence the institutional structure of the economic process.

The expansion and generalization of what we have called "partial equilibrium" economic models to more general social equilibrium models may be achieved at a cost in terms of precision such as the certainty that a potential equilibrium which is utility optimal "exists" at some hypothetical future point in time to which the model will ultimately converge.<sup>14</sup> Economists are accustomed to deal with marginal changes in the variables of their models, in order to work out the incremental impact of these changes on prices and output. If nonmarginal changes are introduced the models lose much of their effectiveness. Social scientists attempting to expand the economic models may also have to restrict their attention at the outset to moderate changes in social relationships (e.g., the effect of changes in relative income on political decisions and thereby on fiscal policy) in order to more precisely isolate the impact of these interactions, although the results may produce much more than marginal changes in the economic variables. Indeed it may not be necessary that such a social model have properties of convergence over a hypothetical long run for it to be useful in

<sup>&</sup>lt;sup>13</sup> See Quirk and Saposnik for a summary of the investigations of this problem (28). Needless to say, the difficulties multiply as a system is dynamized or forced to correspond more closely to reality.

reality. <sup>14</sup> For examination of purely economic models in which an optimal growth policy path does not exist see an article by Tjalling Koopmans (17, pp. 225-87).

analysis and prediction, since that long-run path will itself never exist. Too many conditions will be changing during the process of social interaction to allow any unique a priori trajectory to be traced out. What will be observed instead are a series of short runs during which the conditions of the model will be progressively displaced, but for which one may hopefully be able to predict with some degree of accuracy two, five, or even ten years ahead. In fact one of the most difficult problems facing those attempting to determine the welfare implications of economic growth policy stems from the nonconvergence of dynamic models. A given economic system, facing a broad range of production possibilities and social orderings, with accompanying differences in potential income, wealth, productivity, and taste distributions, will almost certainly trace out sharply divergent expansion paths when acted upon by different stimuli or when subjected to alternative policies.

This point might be illustrated by the case of a contemporary Latin American country such as Peru which has at least two distinct major subcultures (1) an impoverished Indian and mestizo subculture along both slopes of the Andes escarpment and in the coastal valleys, and (2) a middle and upper class Europeanized subculture concentrated in the major metropolitan areas and a few export enclaves. The gap in income between these two groups is great and apparently widening (35; 14, pp. 375-428 et passim).<sup>15</sup> Although these subcultures are linked by a variety of interacting markets, reflected, for example, in the growth of slums in and about the major cities, the essential character of each culture is quite unique. Changes in their relative fortunes will depend in part upon the initial stimulus of growth. One possible development trajectory might be set in motion by a major transformation in the productivity of peasant agriculture, along with an expansion in urban and foreign demand for artisan manufactures, causing increases in real income of the Indian and mestizo subculture. The resulting growth process might well lead to an expansion in domestic demand for basic consumer goods such as foodstuffs, textiles, and simple manufactures.

The commodity mix and type of industrialization and trade responding to this expansion path would tend to be relatively labor intensive, reinforcing the income distributional effect produced by the initial shift in food production technology and tastes for artisan manufacture. (One assumes here that at least a reasonable share of the profits, interest, and rent from the commercialization of these innovations is earned by members of the Indian-mestizo subculture.) One extreme result would be the convergence of income distribution between the two subcultures, leading to a higher degree of democratization of society and participation of the lower class in the decision making process. With greater relative income shares, its voting strength in the political marketplace would rise along with its income votes in the economic marketplace, influencing the balance of power in society and shifting the "general equilibrium" of the political-economic system. Unless the elite tried to erect barriers to political or economic exchange,

<sup>&</sup>lt;sup>15</sup> For a more impressionistic and polemical view of dualism in the Peruvian economy and society see 10, pp. 1–18. This paper, a subsequent critique, and the rejoinder are reprinted in *Latin America: Problems in Economic Development (10; 16; 9; 25)*.

these institutional changes would tend to reinforce and perpetuate the initial expansion path.

An alternative development scenario might well be set in motion by an innovation in the technology of minerals extraction or the development of other natural resources, such as copper mining or anchovy fishing (both of which have spurred the Peruvian economy during the past two decades). Much of the income generated by these capital intensive activities (including their large share of economic rent) actually accrues to a small number of entrepreneurs plus the central government through taxation, and tends to be concentrated in the hands of the second subculture, the middle class in the major cities.<sup>16</sup> This may happen not through overt design but simply because of the initial structure of the economy and the kind of stimulus involved. The demand of the urban middle class for goods and services produced by the Indian and mestizo subculture is certain to increase as a result of this increased income flow, but the bulk of increased demand will tend to be concentrated on the purchase of those goods and services which the Indians and mestizos are least capable of producing. Hence the effect of this second type of stimulus to growth will be to expand the income of precisely that class which received the initial benefits, adding to the inequality in income distribution and strengthening the favored position of preexisting social and political institutions (as well as psychological values).<sup>17</sup>

In these two scenarios different economic stimuli are shown to produce different development trajectories, each with its unique income distribution and welfare implications for the two subcultures. Which is the "best" expansion path? Economic value theory can do little to answer this question except to compare results in terms of the criterion of Pareto optimality by which one outcome is said to be better than another if some individuals are made better off without anyone being worse off. By assuming that relative income affects the welfare of individuals, we have introduced the possibility that even with stable or growing real incomes for both groups, increased income inequality could lead to a decline in welfare for the lagging sector.

By such a welfare postulate Pareto optimality conditions would not be satisfied by the second Peruvian growth path unless (1) the absolute income of the lower income group were to rise sufficiently to offset the negative effect of declining relative incomes, or (2) some transfer of the benefits of growth were to take place from the leading to the lagging sectors of the population in order to compensate for the welfare loss of falling relative shares. In the first example the lower income group experiences greater than average income growth, so that relative incomes converge. This case satisfies Pareto optimal criteria without compensation, provided that upper income groups are not disadvantaged by the gradual attainment by Indians and mestizos of their levels of income. Once the assumption is made that relative incomes matter, it may be that neither growth path will satisfy the criterion of Pareto optimality without compensation, and therefore neither is unambiguously better than stagnation.

<sup>16</sup> See especially Hunt, op. cit.

<sup>&</sup>lt;sup>17</sup> We do not consider here the fact that an earlier agricultural and mining elite was displaced by the growth of foreign trade and commerce which led to the establishment of those groups in the urban middle and upper class that now hold sway. A brief but characteristic example of this earlier stage of social transition as it occurred in Bolivia is presented in 20, pp. 177-232.

The importance of the compensation principle, namely that those groups advantaged by economic change compensate the less fortunate in order to prevent a decline in their welfare, may prove a fundamental element in the maintenance of a social and institutional environment essential for the smooth functioning of the economic process. The introduction of additional social and political dimensions of exchange into a development model may indeed be essential to the design of a strategy which will be able to achieve growth targets, however unrealistic they appear from a narrowly economic point of view.<sup>18</sup>

We see, therefore, that growth paths are not likely to be socially or politically neutral, especially as they imply alternative income distributions and associated changes in the relative prices (opportunity cost) of noneconomic relationships in the society. If these relative price changes cause a shift in the pattern of resource allocation in other dimensions of the social system, the results may add to or detract from the possibilities of growth, making it either self-reinforcing or self-destroying. In Mexico during the early decades of this century, the growth process proved to be partially self-destructive. This would suggest that economic development models as they presently exist may be seriously underdetermined when applied to social systems which have a high degree of present or expected income inequality. Alternative expansion paths will cause the present distribution of wealth to differ among members of society by varying the path of expected income from existing physical and human resources. This may be expected to influence the state of political equilibrium to the extent that future consumption is discounted over cost of the present. Grasshoppers value stocks of physical and human capital at a much lower price than ants. Development model builders tend to side with the ants, but this does not excuse them from the responsibility of incorporating the behavior of grasshoppers into their models. The more important present over future inequality, the less likely the possibility of future convergence will offset the fact of historical divergence of relative shares.

The foregoing paragraphs are not meant to suggest that economic development models, or Latin American historical trajectories in general, are necessarily divergent (self-reinforcing or self-destructive) in nature if policy-induced adjustments to relative shares are ignored. One should not underestimate the power of compound interest which, if applied to lower income groups with initially

<sup>&</sup>lt;sup>18</sup> The mere establishment of growth targets is a function of the initial income distribution and expectations of political decision makers. Preferences between present and future consumption may well differ according to the degree of income inequality in the system at the outset as well as expected changes in inequality over time as elites attempt to maintain their consumption superiority while lower classes tend to emulate the behavior of the wealthy. Thus the shape of one's personal preferences between present and future consumption will differ according to one's place in the income distribution and the expected change in that position over time. If, for example, income inequality is considerable at the outset, then unless this inequality diverges sharply, the attempt by individuals to emulate the expenditure patterns of their peers, combined with conspicuous consumption by the wealthy, will have a negative effect on savings rates, whereas a more equal income distribution, such as may arise after a social revolution, will reduce pressures for emulation by the poor and maintenance of expenditure gaps by the rich, tending to lower the social discount rate and increase the rate of savings for a given set of transformation possibilities between present and future production. Of course, in cases where the share of income of the upper income groups is not large enough to significantly increase per capita income of the mass of the population when redistributed and where the majority are at very low levels of living, it may be even more difficult to elicit voluntary personal savings after redistribution than before. The subsistence level of living for all will then be so close to the level of income as to admit only a fraction available for saving, and the unit cost of mobilizing these diffused savings voluntarily might be prohibitive at the early stages of development.

higher savings rates, may permit such groups or social classes to bypass traditional elites. This has already happened in the commercial and manufacturing middle classes of many Latin American countries, which have replaced the landed gentry as institutional arbiters. Indeed the Porfirian elite in prerevolutionary Mexico was in many respects a "new group" which had recently assumed responsibility for the direction of society and did so in terms of its own interpretation of its best interests. The point is rather that this group failed to appreciate the opportunity cost of the maintenance of institutional rigidity essential for what it regarded as an optimal economic growth path. That opportunity cost turned out to prove excessive in terms of men and materials, since the unrest which the initial conditions of unbridled growth provoked could not be relieved without revolution. The eventual opportunity costs were underestimated if not altogether ignored by these decision makers, and the end result was institutional chaos, economic stagnation, and the loss of hundreds of thousands of lives. The Mexican experience is an illustration of the way in which those who benefit from previous institutional flexibility may eventually rigidify the structure and thereby impede subsequent social change, even when this leads to a net loss in welfare over the long run. There is a failure to perceive a sufficient variety of social "price signals." Such groups are not rational maximizers in the best sense of the word. The emergence of more comprehensive social equilibrium analysis might enable decision makers to adopt a more rational set of policies by setting up functional models which portray the opportunity cost of failure to fully consider social and political factors and the benefits achieved by alternative policies such as those favoring income redistribution for the disadvantaged (30, chapter 1).

## THE COMPENSATION PRINCIPLE AS A METHOD OF INCORPORATING SOCIAL AND POLITICAL BEHAVIOR IN ECONOMIC DEVELOPMENT MODELS

We have seen that once relative income is incorporated in the utility function, even those growth models which provide for increases in the income of all sectors may reduce the welfare of certain groups, leading to shifts in supply and demand in other social dimensions with an attendant pressure on the economic relationships. If these social or political pressures are resisted, preventing new equilibria from being achieved (e.g., through the formation of new legal or other institutions through the legislative process) then the process of economic growth, however much it may apear to be in equilibrium, will have as a byproduct disequilibrium in other social dimensions. Such social disequilibria will entail welfare costs, will require the imposition of controls if they are to be sustained, just as each new policy-induced disequilibrium in the economic dimensions (excess supply or demand) entails a new policy instrument to prevent an adjustment in prices and output. Repressed inflation under price control is such a case. Military and police coercion is an analogous example of repressed demand for political change. As with economic disequilibrium models, policy makers facing a social disequilibrium must relate the costs of sustaining such a disequilibrium to their benefit(s). In a repressed inflation model the benefits associated with price stability that is maintained by wage or price controls must be set against the cost of those controls. By the same token the benefits of rigidities in

the political dimensions must be set against their cost. Obviously in both cases the calculation of cost and benefits must take into consideration not only present but future consequences of such policies, subject to an appropriate rate of discount. Some of the consequences may be reflected in lower long-term rates of growth.

The convenience of Pareto optimality as a criterion for resource allocation in the economic process is that it provides a guideline for policy, once one introduces the possibility of providing compensation for those who are disadvantaged by a given path of economic change. One function of a political entrepreneur is to determine the amount of compensation necessary to elicit the support of those disaffected groups capable of obstructing a desired expansion path. In economic analysis it is customary to assume that compensation takes place in a costless fashion so that the movement from one to another equilibrium will be unobstructed. In this section we introduce the possibility that compensation has resource costs (incorporated in the shape of the political production possibility frontier) and social benefits, both of which are of importance to economic growth. Inclusion of the compensation principle in a general model of political-economic interaction may provide the basis for designing development strategies that will not leave some members of the society worse off and make growth objectives less capable of realization, as, for example, through the disequilibriating effect of deterioration in relative or absolute incomes.

Once the compensation principle is formally introduced into development models it then becomes possible to go beyond the positing of simple threat systems, under which those who do not like the pattern of change must either acquiesce or rebel, to exchange systems that are able to adjust to new equilibria in the economic and social dimensions. In the second Peruvian scenario, for example, once the possibility of compensation is introduced it becomes possible for the middle class to offer greater participation in the political and social marketplace as well as increased economic income redistribution for the lower income groups in order to obtain their support for a growth policy favoring copper or fish meal exports. Under the criterion of Pareto optimality the level of compensation would be at least that amount of income which would leave each member of the Indian and mestizo subculture no worse off than he was before the growth process began (if relative incomes matter this would require that some balance between absolute income growth and relative income be maintained for all members of the lower class). However, in practice the actual transfer will depend upon the relative economic, social, and political power of the two groups. The amount of transfer may vary from a minimum exchange in which the marginal cost to the middle class will just equal the benefits from reduced opposition by the Indians and mestizos; at the other extreme the marginal benefits to the middle class from additional growth would be just equal to the marginal cost of the transfer.

While the solution to such a bargaining situation is no more determinate than that of most complex economic oligopoly problems, certain central tendencies may be predicted. If a particular growth path brings about substantial increases in inequality of income, one may hypothesize that pressures for income redistribution will increase and that the opportunity cost of failure to attend to these

105

pressures will rise, increasing the cost of enforcement of social and political disequilibria. On the other hand, if economic growth paths bring about convergence in income, while there may be some pressures on the part of the upper income class to maintain its relative position, the social and political consequences of this type of growth are likely to be less severe with fewer transfers necessary to maintain social stability. Also the higher the rate of growth of absolute income of poorer groups for a given degree of inequality, the less need for transfers.

What does this imply for the historical analysis of development or the formulation of planning models? One implication is that the traditional trade-off between growth and income distributive policies of the public sector is unrealistic -since an economy without an explicit policy design for income redistribution to maintain balance in underlying social and political relationships may not possess sufficent conditions for stable growth. Regardless of the objective transformation possibilities of the system (i.e., capacity to convert present to future production), the institutional conditions for the achievement of a particular target income or rate of growth may depend upon an appropriate degree of compensation to disadvantaged groups. A second implication is that this kind of analysis calls for more factual evidence on the relationship between growth and income distribution (functional, geographical, sectoral, personal, and by politically significant social groups), than the present literature on development provides. Additional research should focus not only on such facts but also on the pattern of political "revealed preferences" reflected in law codes, enforcement procedures, and other indicators of institutional change as influenced by changes in both institutional social "production possibilities" (the capacity to produce alternative mixes of real goods and services) and the pattern of social wants. Since the latter may be strongly influenced by relative as well as absolute income changes, key links between economic and other dimensions of social change should be examined. For example it may well be possible to uncover significant interactions among (i) income distributional and other aspects of economic change, (ii) the latter and shifts in government propensities to tax and spend (for example the degree of progressivity of tax and regressivity of expenditure policies), and (iii) the subsequent impact of fiscal policy on growth and income distribution.

Needless to say there are few studies of the incidence of fiscal policy in Latin America on distributive shares, much less examinations of the relationship between relative income changes and the structure of public finance. Hopefully such studies will begin to provide the raw data by which relationships between political and economic change may be more fully identified. Inductive theories of social behavior which may be generated from such empirical analysis will be welcomed by those economists and other students of development who are anxious to avoid political-economic identification problems in their own analysis. In addition, such empirical research may assist development planners in avoiding the pitfalls of overemphasis on strictly economic relationships caused by a disregard of the economic cost of social and political stability on which their theories depend. By explicitly estimating the opportunity cost of underdetermination of economic development models which would result from ignoring key political and social relationships, it may become possible to determine the amount of compensation necessary to permit the efficient working of alternative development plans. Economic and political decisions are not independent, nor are they isolated from their social consequences. The principle of compensation itself influences all three, permitting a system of exchange to substitute for one of threats and coercion, greatly expanding the dimensions of policy space open to planners, and permitting the possibility of greater improvements in social welfare for all groups in society.

#### CITATIONS

1 K. J. Arrow, Social Choice and Individual Values, 2nd ed. (New York, 1963).

2 Abram Bergson, Essays in Normative Economics (Cambridge, 1966).

3 Kenneth Boulding, "The Relations of Economic, Political, and Social Systems," 1962, reprinted in Beyond Economics: Essays on Society, Religion, and Ethics (Ann Arbor, 1969).

4 W. R. Cline, "The Potential Effect of Income Redistribution on Economic Growth in Six Latin American Countries," Woodrow Wilson School Research Program in Economic Development, Discussion Paper 13, Princeton, Aug. 1970.

5 I. M. de Navarrete, "La distribución del ingreso en México: Tendencias y Proyección a 1980," in El perfil de México en 1980, Inst. de Invest. Soc. de la Univ. Nac. Aut. de México, Siglo XXI, 1970.

6 J. S. Duesenberry, Income, Saving, and the Theory of Consumer Behavior (Cambridge, 1949).

7 C. E. Ferguson, Microeconomic Theory (Homewood, Ill., 1969).

8 D. H. Graham, "Divergent and Convergent Regional Economic Growth and Internal Migration in Brazil, 1940–1960," Econ. Dev. and Cult. Change, 18(3), April 1970.

9 Keith Griffin, "Latin American Development: Further Thoughts," Oxford Econ. Papers, March 1968.

10 -----, "Reflections on Latin American Development," Oxford Econ. Papers, March 1966.

11 Bruce Herrick, Urban Migration and Economic Development in Chile (Cambridge, 1965).

12 A. O. Hirschman, Development Projects Observed (Brookings Inst., Washington, D.C., 1967).

13 G. C. Homans, Social Behavior: Its Elementary Forms (Chicago, 1961).

14 S. J. Hunt, "Distribution, Growth, and Government Economic Behavior in Peru," in Government and Economic Development, ed. by Gustav Ranis (New Haven, 1971).

15 W. F. Ilchman and N. T. Uphoff, The Political Economy of Change (Berkeley, 1969).

16 L. L. Johnson, "Problems in Evaluating Latin American Development," Oxford Econ. Papers, July 1967.

17 T. C. Koopmans, "On the Concept of Optimal Economic Growth," in Study Week on the Econometric Approach to Development Planning (Amsterdam, 1965).

18 -----, Three Essays on the State of Economic Science (New York, 1957).

19 Kelvin Lancaster, Mathematical Economics (New York, 1968).

20 James Malloy, "Revolution and Development in Bolivia," in Constructive

Change in Latin America, ed. by Cole Blasier (Pittsburgh, 1968). 21 W. P. McGreevey, "The Anatomy of Economic Decline in Nineteenth Century Colombia," An Economic History of Colombia, 1845-1930 (Cambridge, 1971).

22 Giovanni Montemartini, "The Fundamental Principles of a Pure Theory of Public Finance," in *Classics in the Theory of Public Finance*, ed. by R. A. Musgrave and A. T. Peacock (New York, 1958).

23 Sanford Mosk, "Latin America and the World Economy, 1850-1914," Latin Am. Econ. Affairs, 2, 1948.

24 June Nash, In the Eyes of the Ancestors: Belief and Behavior in a Maya Community (New Haven, 1970).

25 C. T. Nisbet, Latin America: Problems in Economic Development (New York, 1969).

26 Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries (New York, 1962).

27 Talcott Parsons and N. J. Smelser, Economy and Society: A Study in the Integration of Economic and Social Theory (New York, 1957).

28 James Quirk and Rubin Saposnik, Introduction to General Equilibrium Theory and Welfare Economics (New York, 1968).

29 C. W. Reynolds, "The Economic Historiography of Twentieth Century Mexico," paper delivered to the Third Meeting of Mexico-United States Historians, Oaxtepec, Mexico, Nov. 3-9, 1969 (forthcoming in conference papers and proceedings, Univ. of Texas Press, 1971).

30 — , The Mexican Economy: Twentieth Century Structure and Growth (New Haven, 1970).

31 G. S. Sahota, "An Economic Analysis of Internal Migration in Brazil," J. Pol. Econ., 76, 2, Mar./Apr. 1968.

32 P. A. Samuelson, Foundations of Economic Analysis (Cambridge, 1965). 33 Thomas Sowell, "Marx's 'Increasing Misery' Doctrine," Am. Econ. Rev., Dec. 1960 (reprinted in Readings in the History of Economic Theory, ed. by Ingrid H. Rima, New York, 1970).

34 Stanley Stein and S. J. Hunt, "Principle Currents in the Economic Historiography of Latin America," J. Econ. History, Mar. 1971. 35 Rosemary Thorpe, "A Note on Food Supplies, the Distribution of Income and

National Income Accounting in Peru," Bull. Oxford Univ. Inst. Econ. and Stat., 31, 4, Nov. 1969.

36 Miguel Urrutia and C. E. de Sandoval, "La distribución de ingreso entre los preceptores de Renta en Colombia, 1964," Revista del Banco de la República, (Bogotá), July 1970. 37 V. C. Walsh, Introduction to Contemporary Microeconomics (New York,

1970).