Summaries of Selected Articles

H.B. Chenery, "Development Policies for Southern Italy", *Quarterly Journal of Economics*, November 1962.

Chenery first indicates the significance for development policy of the differences between Southern Italy and the typical economy of its per-capita income level. He then attempts an explanation of the lower growth rate in the South and suggests the required structural changes for successful future development.

By utilizing the results of a statistical comparison of production by sector in fifty countries, Chenery found that Southern Italy concentrates more in agricultural output and less in industrial output (both measured as percentages of regional product) as compared to a typical country of the same per-capita income level. He shows that the pattern of such specialization is a distinct handicap for Southern growth; and argues that, in this respect, belonging to a national economy will be a liability if it inhibits future structural changes. However, he finds two other features of economic integration as definite assets for future growth—income transfer to the South from the North which contributed 20 per cent of Southern resources between 1951 and 1960, and a high emigration rate (the 1.4-per-cent natural increase in population being reduced as a consequence to 0.5 per cent) which makes the task of per-capita income growth easier—at least in the short run.

Chenery uses a regional model of development which serves to allocate a given growth in G.N.P. among regions and sectors according to the values of certain parameters: annual rate of export growth, income elasticity of total final demand for each sector (for the whole country as well as for each region), supply coefficients (fraction of total supply of any commodity that is furnished by each region in each time period) and regional income transfers.

The growth in output of any commodity in any region may be split into two parts: the demand effect and the supply effect. The demand effect assumes no change in the regional supply coefficients and shows the change resulting from change in total national absorption. Output in each sector is, therefore, assumed to increase at the same rate in all regions. The supply effect shows the result of a change in the regional supply coefficient (which may or may not be the result of deliberate policy).

The fact that the South lags behind the North and Centre can be explained partly on the basis of demand factors alone, since the South provides only 9 per cent of national supply of manufactured products and 16 per cent of minerals and these are the only sectors in which total demand elasticity is substantially greater than one. Conversely, the weight of agriculture (which has a total demand elasticity of only 0.7) is much higher in the South than in the other regions.

The net supply effect was negative for the South during the period, mainly reflecting the fact that, for Italy as a whole, the proportion of imports in total supply of many commodities, especially those in which the South specializes (*e.g.*, agriculture) increased over the period. Thus, Southern production in these sectors failed to keep up with the growth of national demand.

There are three principal policies of structural change to be considered for future development: *i*) growth of agricultural production in an amount and composition that will permit the South to supply a larger share of Italy's total demand; *ii*) growth of industrial production sufficient to permit the South to supply a larger fraction of total Italian market; *iii*) increasing emigration to compensate for any shortfall in growth of production.

A combination of all three seems to be desirable although the prospects for *i*) may be limited by demand factors, natural resources and cost of production. The main policy alternatives are, therefore, industrial development and emigration. The burden on the industrial sector will be higher the smaller are the possibilities for agricultural growth and emigration and it seems that optimum policy for future would require that the increase in output be roughly divided between agriculture and industry in the ratio of 30:70 in contrast to the 50:50 ratio that characterized the past decade.

(AZIZUR RAHMAN KHAN)

G. S. Becker, "Investment in Human Capital: A Theoretical Analysis", *Journal of Political Economy*, Part 2, Supplement, October 1962.

This paper attempts to develop a theory of investment in human capital, with an emphasis on empirical implications although little empirical material is presented.

The analysis proceeds from a discussion of different kinds of investment in human capital, such as on-the-job training, schooling, medical care and the like to a general theory applying to any kind. The greatest attention is paid to the analysis of on-the-job training because it clearly illustrates some common effects produced by very different kinds of human capital, and provides the basis for a general theory.

Investment in human capital raises future productivity but it has a cost. In addition to the direct costs, there are the foregone costs also, since a trainee could be used for producing current output if he was not used in raising future output. Foregone costs equal opportunity marginal product less actual marginal product of the trainee. Investment in human capital is usually 'written off' during the training period; and, in most kinds of investment, the trainees bear the cost and collect the future return. On-the-job training in a competitive labour market is a typical example. Trained workers have lower earnings during the training period because costs are deducted from earnings then; and have higher earnings at later ages when the increased return is added to earnings.

Learning, on and off the job, and other activities which improve the future productivity of workers appear to have exactly the same effects on observed earnings as do educationl training and other traditional investments in human capital. All such activities with identical effects are covered by a general concept of investment in human capital. The cost of investing in human capital equals the net earnings foregone during the training period by choosing to invest rather than by choosing an activity requiring no investment. The rate of return is the most important single determinant of the amount invested in human capital. Although the return on human capital is not empirically separated from other earnings and the cost of such capital is only sometimes and incompletely separated, it is argued that the total amount invested and its rate of return can be estimated from information on net earnings streams alone, of two activities—one with initial investment and the other with no investment.

Some investments in human capital do not affect earnings because costs are paid and returns are collected by the firms, industries or countries using the capital. These "specific" investments range from hiring costs to executive training and are more important than commonly believed. It is argued that, because of the investment "in specific" human capital, the rates of quits and layoffs are both low in these cases.

The general theory of investment in human capital is claimed to have a wide variety of important implications ranging from interpersonal and interarea differences in earnings to the shape of the age-earnings profiles to the effect of specialization on skill. For example, since earnings are gross of the return on human capital, some persons may earn more than others simply because they invest more in themselves. And since "abler" persons tend to invest more than others, the distribution of earnings could be very unequal and even skewed, even though "ability" were symmetrically and not too unequally distributed.

(SWADESH RANJAN BOSE)

A. I. Macbean, "Problems of Stabilization Policy in Underdeveloped Countries (Illustrated From A Study of Jute in Pakistan)", *Oxford Economic Papers*, October 1962.

The article discusses the difficulties of making generalizations about stabilization policies for primary-producing underdeveloped countries. The case of jute in Pakistan is used as an illustration.

The first part of the paper contains data on the supply and demand for raw jute and shows why some stabilization policy is needed in the interest of sound economic planning in Pakistan. The second part of the paper evaluates alternative stabilization policies.

Jute production is determined mainly by the previous season's prices for jute and rice. The elasticity of acreage response to changes in the ratio of jute to rice prices for the period 1949/50—1959/60 for Pakistan works out at +0.56 with a standard deviation of 0.33. Price elasticity of the supply of jute exports for the same period is about +0.42.

The short-run demand for raw jute of Pakistan is determined by the general level of economic activity and the possibilities of substitution in the consuming countries. The price elasticity of demand for Pakistan's jute for the period 1948/49—1959/60 was —0.042. The substitution of jutecloth for other packaging materials takes place at a rate of 7 per cent in response to a 10-per-cent change in the relative prices.

The long-term demand for jute depends on the degree of instability in the jute market. The shifts from jute to other packaging materials are to some extent irreversible.

The supply and demand conditions are such that a Cobweb Cycle operates in the jute market. The cycle has neither strongly convergent nor divergent tendencies since the price elasticities of supply and demand are roughly of the same magnitude.

The instability in the jute market has serious short- and long-term effects on the economy of Pakistan. Fluctuations in the export proceeds have damaging effects on the ability to import, capacity to service debts, government revenues and the regional income of East Pakistan. These effects establish a *prima facie* case for some form of stabilization policy.

Seven alternative policies are considered regarding their potential to stabilize either one or several of the following: *i*) peasant's prices; *ii*) peasant's output; *iii*) cash income of peasants; *iv*) real income of peasants; *v*) export prices; *vi*) export earnings; *vii*) national income.

upon the presence of surplus labour and excess capacity in the capital-goods producing industry. Whether Title I-financed investment has resulted in an increase in temporary real income is a debatable point. The incomplete utilization of certain kinds of domestic capacity may have been the result of deficiencies in demand reflecting also an underlying balance-of-payments problem. Foreign aid could have provided the needed effective demand, permitting a genuine temporary expansion in G.N.P.

One reason for questioning whether Title I aid had any temporary real income effects due to the investment it finances is that the spending of that money merely returns to the market the purchasing power absorbed in the prior sales of these imports. There is, thus, merely a transfer of purchasing power from the purchasing sector to the capital-goods sector and so national income need not rise.

To the extent that sales of surplus commodities are diversionary (*i.e.*, at the expense of normal commercial imports) and not incremental, a net expansion of expenditure occurs in the recipient country, just as if free foreign exchange had been made available. Conversely, if the increased availability of surplus commodities results in greater expenditures at given levels of income, then sales absorb purchasing power and reduce domestic income. Investment of the proceeds of the surplus commodity sales then restores national income and expenditure to its previous level.

Capital imports-in-kind and ordinary capital imports will both be non-inflationary if the government reduces the intensity of restrictions on imports in the light of the prospective availability of foreign exchange. In Israel's case the inflow of commodities under Title I resulted in the freeing of foreign-exchange reserves and made possible the suppression of inflationary pressures.

More important than the temporary income effects are the permanent income effects. It has been estimated that the permanent contribution of Title I-financed capital exceeded the temporary effects within three years of the programme's initiation; it was about three times as large after six years. The multiplier cannot be applied to the permanent income effect of Title I investment since the effect is on the supply side.

The increased output has an anti-inflationary impact, but against this must be weighed the obligation of the recipient country to repay the loan although it is not certain to what extent repayment will be required.

In Israel's case, both the short- and long-run effects of the programme were deflationary. In the short run, a substantial portion of Title I imports supplanted commercial imports and the government was able to relax its trade and consumption controls. The longer-range effects were also deflationary since about twenty-four per cent of all incremental income went into savings and taxes, to finance expanded production capacity. The use of this expanded production capacity in consumption and investment sectors will determine the monetary balance as well as the economy's ability to eventually dispense with foreign aid.

One of the conclusions is that the major portion of shipments under Title I to Israel were at the expense of normal commercial sales rather than satisfying incremental demand generated by the programme itself. This caused injury to competing exporters of surplus agricultural commodities, especially if Title I aid is conceived as an alternative to foreign aid. However, the programme made capital formation possible, and as a result a higher level of imports can be permanently sustained.

Although not an ideal agricultural policy from the viewpoint of Israel, it has contributed to the stabilization of growth and the ultimate viability of the Israel economy.

(Irshad Ahmed)

C.E. Staley, "Central American Economic Integration", *Southern Economic Journal*, October 1962.

This paper is an attempt to evaluate the Central American Common Market in the light of the propositions of customs union theory.

Central American countries have made two different treaties of integration in recent years. The first was signed in 1958 by five countries. In 1960 a radically modified form of this treaty was signed by four countries, namely, El Salvador, Gautemala, Honduras and Nicaragua. The major provisions of this treaty are that all interregional trade is made duty-free immediately, excluding some items specifically listed, and a five-year transition period has been planned for the removal of most of the remaining restrictions. A central bank for integration is established in order to promote regional economic development, and a permanent secretariat, and economic and executive councils have been set up.

The process of negotiating uniform tariff levels for the Central American Common Market is still under way, but most duties negotiated so far fall between the high and the low rates of the respective countries.

The Central American countries are basically agricultural, and at roughly the same stage of economic development, though Gautemala and El Salvador are more important economically, and it is possible that there may be a polarization of future growth in the region.

The benefits of integration are lessened if the economic and trade policies, as well as the wage-price structures in individual countries are too divergent, since these countries may find it difficult to adjust their intraregional balance of payments if one country runs up large deficits because its cost structure is out of line with the rest or because it is more inflation prone. The Central American countries have had roughly the same policies to stabilize their economies in the face of inflationary pressures and to meet government deficits and declining holdings of foreign-exchange reserves. The 1960 treaty makes no specific provisions for meeting balance-of-payments difficulties but leaves it to the executive councils and central bank to make recommendations compatible with the maintenance of free trade.

The Central American countries have also agreed to set up a commission to decide upon the allocation of those industries whose marketing and technological characteristics are such that the minimum capacity of these plants requires access to the entire Central American market in order to operate economically. The location, minimum size and quality of products of such industries will be decided by mutual agreement, but no country can have two such industries until all countries have at least one. However, this will not establish a legal monopoly since other similar industries will be permitted though they will not have some of the advantages of the integrated plants such as immediate free intraregional trade and preference in government contracts.

There are considerable prospects of achieving economies of scale in Central America. It has been estimated that current sales in these countries are in the zone of 25 per cent to 50 per cent of maximum capacity, and unit costs can be substantially reduced through increased production. The limited expansion of industries is due to lack of demand for their products. Hence, a customs union should result in increased industrial production.

External economies of scale can also be achieved if integration results in increased investment. In Central America the wealthier classes have a preference for investment in land, foreign securities and deposits. It is possible that the widening of the market through integration may lower the risks of investment and lead to its increase.

The effectiveness of integration is increased by competition which eliminates inefficient producers and forces others to adopt new cost-reducing techniques. In Central America, resources are devoted to similar industries and it is expected that, as a result of the 1960 treaty, there will be a reallocation of resources in each country, resulting in a complementary relationship between Nicaragua and Honduras as agricultural producers and the other two as relatively more industrialized countries.

In conclusion the author states that the 1960 treaty shows promise of economically benefiting the region and that the major question mark in the success of integration is not the economic soundness of the union but the problem of political instabilities and jealousies which has hampered the region.

(SALMAN QURESHI)

W. Baer, "Inflation and Economic Growth: An Interpretation of the Brazilian Case", *Economic Development and Cultural Change*, October 1962.

The purpose of this paper is to show that, under certain circumstances which are close to the situation of many underdeveloped countries, some inflation is inevitable and beneficial. The author first develops a growth model similar to the Lewis-Schumpeter approach and then interprets the model in terms of the Brazilian situation.

He postulates a situation where the country is committed to a high rate of growth but faced with a severe balance-of-payments problem. Export earnings are either stagnant or falling whereas imports are gradually rising. Such a situation calls for a change in the structure of imports in favour of investment goods and against consumer goods. Under the assumption of wages lagging behind prices, this will lead to a redistribution of income in favour of importers and import-competing industries which in turn will lead to further investments in those industries. An expansionary credit policy followed by the government will encourage this process.

Thus, inflation acts as a rationing device forcing the consumer sector to tighten its belt and generate forced saving in the economy.

The inflationary pressure might be less drastic if there is a fall in the domestic currency earnings of the export sector, since this would somewhat alleviate the demand for the declining supply of imported goods.

The length of the period in which inflation is likely to persist will depend upon the gestation period of the new industries. The magnitude of the inflationary pressures, however, will depend on the extent to which rise in wages can be checked.

Brazil experienced a substantial amount of inflation during the post-War period. Both exports and imports as percentages of G.N.P. fell sharply over the period. But data show that economic growth did take place in Brazil in that period.

The most striking feature of the period is that there was a steady decline in the imports of consumer goods in favour of investment goods. This enabled the country to maintain a high rate of investment. Another feature is that public investment increased in importance relative to private investment. The inflationary impact of both these policies is quite strong.

The inflationary pressure brought about some structural changes in the economy in the form of redistribution of income. Wages have been lagging behind prices throughout the post-War period. The future growth of Brazilian economy will depend on the effective utilization of this potential growth element in the inflationary mechanism.

(A.N.M. AZIZUR RAHMAN)

T. Goering, "Public Law 480 in Colombia", *Journal of Farm Economics*, November 1962.

Public Law 480 has been enacted to dispose of farm surpluses to the best advantage of both the United States and recipient countries. Recipient countries are required to absorb these surpluses in addition to their normal commercial imports. This condition was prescribed to safeguard the interests of the competing exporters. Colombia receives surplus farm products under Titles I and III of the Law.

Production and price data were examined to determine the impact of the programme on Colombian agriculture. Imports of wheat, cotton and edible oils were significant. During 1955-60, the general price level rose 58 per cent; farm prices of cotton, seasame and barley rose more than the general level of prices while those of wheat, corn, potatoes and beans rose less. Domestic production of wheat increased little, while that of cotton and seasame, a close substitute for PL 480 edible oil imports, registered a rise of 138 and 67 per cent respectively.

High prices and production of PL 480 commodities except wheat were made possible by official price support and agricultural extension measure. Wheat support price was not raised in view of consumer pressures. Barley price was allowed to rise substantially so as to offer greater incentive to its producers since barley could not be imported under the programme although it was also in domestic deficit like wheat. A result of the programme on the Colombian agriculture was a shift from wheat to barley production. The changed production pattern did not harm the farmers because the two crops were close alternatives.

The noteworthy feature of the PL 480 programme was its loan operations out of the accrued local currency funds. The economic environment was appropriate for the use of those funds in Colombia. Though the money supply during 1954-1960 rose 216 per cent, the price level increased less than 10 per cent a year. Thus, the 58-per-cent rise in the price level during 1955-1960 was mainly due to higher money supply. Besides, there was no deficit financing by the government in eight out of eleven years. Moreover, these loans were less than 8 per cent of total internal debt and only 1.3 per cent of gross investment expenditures. Loans were largely channelled into agriculture and closely related industries.

Domestic production of basic foodstuff was not keeping pace with population growth. Arrivals of PL 480 farm products increased the domestic availabilities, and thereby held up the retail prices from soaring skyhigh.

PL 480 programme in Colombia coincided with a fall in world coffee prices. In view of the weak balance-of-payments position, commercial imports were severely curtailed but the shipments under PL 480 programme partly matched the decline in those imports.

A significant proportion of the PL 480 local currency funds was used to meet the local obligations of the United States Government. In the absence of the programme, most of these obligations would have been financed with dollars, thereby adding to the dollar availabilities of Colombia.

The programme has altered the trade pattern of Colombia: in 1955-1960, imports of Canadian wheat and wheatflour were 32 and 37 per cent respectively of the earlier shipments; cotton imports from Peru were only 30 per cent of the 1951-54 purchases; oil imports from countries other than the United States were 114 per cent of 1951-54 level whereas the arrivals from the United States registered an eight-fold increase.

PL 480 is a many-faceted programme with economic, political and social ramifications. The conclusions reached do not necessarily form judgements for the continuation of the programme. Other measures may exist which could serve the domestic and foreign goals in a better way. The United States might have been the real victim of the programme, had it prevented the needed structural adjustment in her own agriculture.

(Rafique Ahmad Khan)

R.S. Bhambri, "Customs Unions and Underdeveloped Countries", *Economia Internazionale*, Maggio 1962.

The small size of the domestic market in underdeveloped countries is generally considered a major obstacle in the way of industrial growth. Accordingly, it has often been suggested that underdeveloped countries should from customs unions or enter into preferential trading arrangements.

Many economists doubt that abolition of tariffs alone will entail substantial economic benefits for members of a customs union. It is generally held that a customs union is more likely to raise welfare if the proportion of trade with a country's union partner is high and if the total volume of foreign trade in proportion to domestic product is low. The author argues that on both counts, the case for customs union among underdeveloped countries seems very weak. Trade among underdeveloped countries of different geographical regions is often a very small proportion of their total trade and the ratio of their foreign trade to gross domestic product is often very high. Furthermore, the removal of trade restrictions alone is not likely to increase the size of the market because per-capita incomes are low and transport facilities are inadequate.

Inspite of discouraging advice from economists, the customs-union movement has gathered increasing support during the last few years. Much of the enthusiasm for customs union in underdeveloped countries is based ultimately on political considerations. It has been argued that changed circumstances in the international economy virtually rule out the possibility of economic development through international trade in primary products with the industrialized countries. There is little hope that these countries will be able to increase their exports of either primary products or manufactured goods rapidly in the near future. Nor does it seem likely that they will attract foreign capital on a large scale.

In the light of these observations, the effects of a customs union on inter-union trade in manufactures and the rate of growth of industrial production are analysed. Assumed are two countries (A and B), two lists of manufactures (L_i—goods produced in both countries, and L_{ii}—goods produced in only one of the countries), complete absence of tariffs and quota restrictions on trade in manufactures between the two countries and a common external tariff giving effective protection to high-cost industries in both countries.

The impact of free trade on both these countries is examined with regard to its trade-creating and trade-diverting effects. Provided the degree of utilization of resources in both countries does not decrease as a result of free trade, trade creation would increase the welfare of the world and of the union partners by shifting the production of goods from relatively less efficient to relatively more efficient sources of supply. However, trade diversion results in a loss of welfare for the international economy since each country shifts its sources of supply from a low-cost to a high-cost area. By turning the terms of trade in favour of the union, trade diversion may increase the welfare of the union partners, but this may be at the expense of a more than proportionate loss for the rest of the world.

Intra-union trade will increase if each country is able to produce some products at a lower cost than the other at a given rate of exchange. Customs union between countries at different stages of development places the less developed country at a disadvantage. It is frequently suggested that this difficulty can be removed if duties are reduced gradually and if provisions are made for the smooth development of less developed country. The author argues that such special provisions would not enhance the prospects of economic growth in the less developed country; even if the less developed country can secure a comparative advantage in the production of simple manufactures, a customs union is bound to contribute more to the growth of the relatively more developed country because of a higher rate of growth of demand for durables and capital goods and low income elasticity of demand for simple manufactures.

Regarding the argument that changes in the exchange rate can be used to solve problems of cost differences, the author contends that devaluation is an unwise policy for countries facing inelastic demand for their exports and imports, a rapidly increasing burden of foreign debt and inflationary pressure at home. The only practical solution is to allow the less developed country to subsidize high-cost industries for a short period. This alone will enable her to exploit the wider market economies of scale. Multiple exchange rates, although viewed with suspicion by orthodox economists and vehemently opposed by the IMF, could also be used by the less developed country to achieve the same objective. However, with multiple exchange rates governments have no incentive to press for increased efficiency whereas subsidies would encourage them to keep a watchful eye on the level of efficiency in the industries concerned.

(MD. IRSHAD KHAN)

U. Tun Wai, "Taxation Problems and Policies of Underdeveloped Countries," *International Monetary Fund Staff Papers*, November 1962.

Taxation policies in underdeveloped countries differ in emphasis and importance from those in developed countries. The latter do not determine government expenditures by the amount of revenue obtainable; rather tax revenues are geared to the socially desired amount of expenditure. In the underdeveloped countries, it is difficult to increase the level of taxation, and for maintaining financial stability, governments are forced to limit much-needed development expenditures. The function of tax revenue in relation to business cycles also differs between developed and underdeveloped countries. In both types of economies, tax revenues fluctuate with the level of business activity; but whereas the developed countries can dampen the fluctuations of business cycles substantially through tax measures, the underdeveloped countries are unable to do so.

A few general characteristics of the tax systems in underdeveloped countries are discussed.

First, the tax systems do not provide the governments much revenue. The proportion of national income raised in taxes is low in underdeveloped countries partly because most governments think it is undesirable to tax the masses when the per-capita income is very low. Lesser monetization of these economies is another reason for the low yield. Illiteracy, lack of systematic accounting, inefficient tax administration, tax evasion and avoidance, a social code of behaviour not requiring voluntary compliance, political influence, *etc.*, are other contributory factors. The relation of government revenues to national income often depends on the economic philosophy of the country. Mexico, a basically free enterprise economy, raises only 8.1 per cent of national income in taxes, while tax revenues form more than 20 per cent of national income in Burma and Ceylon.

A second characteristics of tax systems in underdeveloped countries is the small proportion of total revenue raised from direct taxes. The ease of collection from indirect taxes makes reliance on them more attractive; the rates of direct taxes on income are lower in the underdeveloped countries, and the tax base is much smaller. The income which is exempt from income tax is often more than 15 times the average per-capita income in underdeveloped countries while in many developed countries it is no more than about twice the average per-capita income. Preponderance of indirect taxes in the tax system makes government revenues lag behind the increases in money income and prices. If expenditures increase with rising prices, the budget deficit grows rapidly and adds to the inflationary pressures.

Thirdly, the tax structure in most underdeveloped countries relies heavily on foreign-trade taxes because that sector is large in relation to national income. On the other hand, foreign trade is conducted only through a few points of entry. Imposition of taxes on foreign trade is, therefore, an efficient way of collecting revenues.

A variety of tax measures are used in underdeveloped countries. The chief direct taxes used are taxes on personal income, taxes on incomes of corporations and other business taxes on capital gains and net worth and land tax. The indirect taxes are mainly in the form of sales tax or turnover taxes, excise taxes, export and import duties, marketing boards, and price policy for government enterprises. The prospects of success of the individual tax measures vary from country to country. The marketing board, quite a success in Burma and Thailand, failed in Indonesia.

Several suggestions are made for the future development of the tax systems in underdeveloped countries.

Acquiring more refined knowledge of the kind of taxes which will yield most revenues with least economic and political disturbance is important. But lack of knowledge is a small part of the basic problem. A better tax administration to implement tax policies has to be evolved. Enlarging the number of tax collecting staff, higher salary, security of tenure, better training in accounting and in making assessments are necessary. Finally, a social and political will to succeed in raising more tax revenues is needed. Political indecision has prevented many a good tax measures from being adopted, while it has been shown that government revenues increase markedly when a government makes determined efforts to improve collection.

(A.H.M. NURUDDIN CHOWDHURY)

P.S. Laumas, "Schumpeter's Theory of Economic Development and Underdeveloped Countries", *Quarterly Journal of Economics,* November 1962.

The paper attempts to relate Schumpeter's theory to the process of development in the underdeveloped countries. Accordingly, emphasis is on the growth of entrepreneurship as influenced by the government participation in economic activity and the size, character and financing of innovations.

Although government action in creating infrastructure may be conducive to the growth of private entrepreneurship, it may also have adverse effects on the social climate in which private entrepreneurs function. In particular the social climate is affected by competition in factor markets between the public and the private sectors. The public sector acts from a position of strength in these markets and can attract more capital, skilled labour, imported raw materials, and machinery. The private sector is fed mostly from the residual of these resources. Furthermore, the competition in factor markets increases factor prices, affecting profits. Low profitability reduces incentive to invest.

The financing of innovations in the absence of adequate banking facilities and the inability of entrepreneurs to offer adequate collaterals is a problem often ignored by growth theorists. The cost and the nonavailability of credit limit the size of industrial unit. Hence, the size of innovations is likely to be small and the disturbance in the economy cannot be sufficiently large to break the underdevelopment equilibrium. Furthermore, if innovation is minor, its profitability is small, and the propensity to imitate is negligible.

(MANSOOR ELAHI)

R. Weintraub, "The Birth Rate and Economic Development: An Empirical Study", *Econometrica*, October 1962.

Population growth and economic development are interdependent. Excessive population growth is known to be an obstacle to economic growth. But whether economic growth, *per se*, will dampen birth rates automatically is debatable. This paper proposes to test empirically the relationship between national birth rates and three basic measures of economic development: per-capita income; ratio of population in farming; and infant mortality. The study ignores the relationship between birth rates and other demographic factors such as age structures of populations as well as the role played by various birth-control devices.

A priori, it may be suggested that a nation's birth rate is positively related to both its ratio of population in farming and infant mortality, while it is popularly thought to be negatively related to per-capita income, though this latter is not yet conclusively proved either by theoretical considerations or empirical studies. Income increments may provide opportunities to families to raise additional children, thus raising the birth rate. Intercountry comparisons for this purpose may not give valid conclusions due to the various differences other than income between nations. Thus, an empirical test would require controlling some of the factors other than income which strategically affect birth rate.

The procedure for the statistical test conducted in this paper is as follows: Data for thirty countries for early 1950's are selected; both the countries and time universe were selected with regard to availability and reliability of data. The partial regression of birth rate (X_1) on the three independent variables *viz.*, per-capita income in 1948 U.S. dollars (X_2), ratio of population in farming (X_3) and infant mortality rate (X_4) was computed.

The results tend to confirm the Malthusian hypothesis that income increments generate birth-rate increases as well as the more widely held hypothesis that birth rates decline with urbanization and decreases in infant mortality.

The results are mixed as to the effect of economic development, *per se*, to dampen birth rates. Birth rates would definitely decline when family reproductivity is affected by improved infant mortality due to economic development; the effect of urbanization would be similar. However, the income effect appears likely to bring higher birth rates.

The effect of economic development on family reproductivity cannot be clarified definitively with the data of this research. Some may believe that these data support the proposition that economic development will operate to dampen birth rates. This hypothesis is illustrated with a case study of Venezuela, which indicates that over the next ten years with given changes in X_2, X_3 and X_4.

$$-16.0 \qquad dX_1 \qquad + \qquad .09$$

Thus, the principal objection to the inference that economic development operates to dampen birth rates on the basis of this data is that a negative dX_1 is not certain. If this objection is set aside, the important conclusion is that the population explosion in underdeveloped countries is not a major problem but one that will be solved automatically with economic growth.

(NIGHAT SARFRAZ)

F. M. Gottheil, "Increasing Misery of the Proletariat: An Analysis of Marx's Wage and Employment Theory", *Canadian Journal of Economics and Political Science*, February 1962.

The purpose of this study is to show *i*) that Marx's analysis of the workers' fate under capitalism is not as scientific as professed by him, and *ii*) that his analysis of wages and employment is not as misleading as many critics contend.

First, the study examines Marx's theory of *subsistence wages* which in the long-run was to measure the level of wages in a capitalist economy. The theoretical basis of the prediction of increasing misery is found in the proposition that the subsistence wage under capitalism varies inversely with accumulation of capital and the progress of technology.

In Marx's analysis, the determination of wages is by supply and demand in the competitive labour market. An increase in the 'organic composition of capital' on the one hand tends to increase the size of industrial reserve army (excess labour supply) by reducing the amount of labour required in production. On the other side, additional profits are forthcoming. With the increase in profits, additional demand for labour is generated by capital accumulation. However, Marx made a special assumption that the increase in the industrial reserve army will exceed the increase in the demand for labour created by capital accumulation; unemployment will rise and the wage rate will decline.

As the labour productivity increases (by the innovation effect), profits are augmented and value of capital accumulation depends upon the proportion of profits not consumed, and the magnitude of the additional profits. Since Marx does not relate magnitude of additional profits to the change in technology, the demand for labour resulting from the capital accumulation cannot be determined.

A similar situation arises in Marx's treatment of the centralization of production. Centralization augments the industrial reserve army of displacing a number of smaller individual capitalists. But here too, Marx fails to establish a specific relationship between the increase in productivity and the change in technology. Thus, the effect of centralization upon the industrial reserve army is also indeterminate within the model.

In short, the change in the industrial reserve army resulting from the development of capitalism is indeterminate within the system, since Marx set down no precise relation between increasing organic composition of capital and increasing productivity. The defect in Marx's theoretical development of the prediction of increasing misery was that he treated a judgement of the magnitudes of the variables in his system as if they were logical derivatives of the model. His model of wage and employment determination (by assigning realistic values to the variables) can in fact be employed to disprove his increasing misery prediction.

However Marx's theoretical attempt to explain the determination of wages and employment under capitalism, when considered apart from the misery prediction, has great merit. His theory, as an abstraction of capitalism, was designed to measure quantitatively such effects as the organic composition of capital (akin to modern capital-output and capital-labour ratios). The inaccuracies in the analysis are not to be found in the model (as an abstraction of capitalism) but rather in the misuse of the model.

(AHMAD ZIA)

G.W. Roberts and L. Braithwaite, "Mating Among East Indian and Non-Indian Women in Trinidad", *Social and Economic Studies*, September 1962.

This paper is based on material collected during a survey in Trinidad in 1958 and is concerned primarily with comparing mating patterns between East Indian and non-Indian women. The comparison has been done in strictly quantitative terms through several tables. The mating unions in which the females in the survey participate fall into three types—visiting, common law and marriage. In the visiting type, a woman has sexual relations with a man more or less regularly although the two do not share a common household and are not formally married. In common law unions, partners live together in same household but are not formally married. Married unions include all couples formally married and living together. A woman is treated as single if she has never been involved in any type of union or if the union with which she has been concerned has been terminated more than one year ago. Analytically each one of the unions, whatever the type, has also been divided into one of three stages—initial, second and terminal.

The analysis of the sample material reveals that visiting and common law unions dominate the mating history of non-Indians, whereas marriage is by far the more important mating pattern of East Indians. Marriage, in case of non-Indians and visiting and common law unions among East Indians, play a relatively modest role. East Indians are characterized by their high rate of marriage and the early ages at which they marry. The average age at marriage among East Indian women stands at 17.4 years, whereas that among non-Indians it is 27.5 years. This average covers marriages of all three stages. The average age at entry into initial marriages among non-Indians is lower at 23.2 years. It is still higher than the average age at which they establish initial visiting union (20.1 years). Reverse is the case among East Indians who show that the average age at which initial married unions are contracted is 16.2 years which is 4 years lower than the average age at which initial visiting unions are established (20.4 years). Initial common law unions take place at an average age midway between those of married and visiting unions.

The most stable of the three types of unions is marriage, the least stable is visiting, while the common law occupies an intermediate position. It seems that the average age at entry into initial unions varies directly with the degree of stability of unions in the case of non-Indians, while it varies inversely with the degree of stability among East Indians.

East Indians pass on the average 20.4 years or about 66 per cent of their childbearing span in married union, whereas marriage accounts for less than one-third of childbearing span of women of other races. Total years spent by East Indians in one type of union or another is 25 years, while that spent by non- Indian women is only 20 years.

In general, union stability is higher among East Indians than among other racial groups. This is linked up with the fact that initial common law and visiting unions among East Indian women are of rare occurance. But a peculiar feature of married unions among East Indians is that it shows an appreciably lower index of stability, 60 per cent as compared with 68 per cent for non-Indians. Non-Indians do not marry frequently, but when they do, their marriages remain more stable when compared with those among East Indians.

Hindus constitute 63 per cent of all the East Indian women in the survey. Hindu women form initial marriages earlier and at much higher rates than women of other religions. The survey reports further that Hindus are much more prone to break their early marriages and either become single or establish common law union. Apparently, the traditional forms of early marriages among Hindu women do not usually assure durable unions. A discussion of this aspect of mating behaviour by age groups shows that a relatively large proportion of the marriages taking place before women attain age 20 is soon dissolved. Formal marriages initiated when women are over 20 years of age are shown to be much more durable.

(MASIHUR RAHMAN KHAN)

L. N. Trachtman, "The Labour Movement of Ghana: A Study in Political Unionism," *Economic Development and Cultural Change*, January 1962.

The changing conditions in Africa are significant for all those concerned with world problems. In the struggle for independence in today's Africa, labour problems and incipient labour movement occupy a significant role. Due to dissimilarity between conditions in the contemporary Africa and the historical pattern of Western economic development, the latter did not provide a model.

The first objective of the labour unions in colonial countries was the attainment of independence; hence, the labour movement became associated with political unionism through its alliance with the nationalistic centre.

Following independence, the government's desire for rapid economic growth with limited capital calls for extensive control over the entire economy. The need to curtail purchasing power in order to have resources for development might entail workers' protest causing constant struggle between the government and the trade unions. Ghana provides an example where government-labour conflict has been avoided through party domination of the labour movement.

The labour movement in Ghana was officially born in 1941, when the British Colonial Government recognized trade unions. Small unions limited to separate enterprises emerged. Labour movement did not wield strength due to lack of finances, leadership and organization. In 1943 the Gold Coast Trades Union Congress (TUC) was founded. It suffered from the same weaknesses; nonetheless most of the unions belonged to it. From its very beginning, it was politically oriented. The general strike in 1950, which coincided with Nkrumah's call for nonviolent civil disobedience, gave it a setback; and the TUC disintegrated. It could not regain momentum till 1953. With Nkrumah and his Covention People's Party (CPP) in power, on Ghana's independence in March 1957 the TUC openly declared its alliance with CPP. In 1958 the government through the Industrial Relations Act restricted the labour movement on the initiative of TUC. The multitude of individual unions became part of a centralized structure responsible to formulate policy and direct operations. Thus, TUC became the recognized legal representatives of organized labour in the Union of Ghana. Ghana's legislative framework, however, provided sufficient control to the government over the labour movement and severely limited the right to strike.

The passage of Industrial Relations Act was a culmination of the alliance between the CPP and the TUC leadership. Quotations from Nkrumah and other leaders' speeches and declarations amply demonstrate that the labour movement is to serve as an instrument to CPP policy. The plea that the welfare and development of Ghana can only be achieved under organized and disciplined leadership serves as a binding force.

The CPP maintains its domination over the union movement through financial aid. This is provided through government subsidies in different forms, for example, assistance to the programme for workers' education.

The CPP and TUC ties are no secret. CPP leaders have often been speaking from TUC platform thereby mustering public support for it. The role of the TUC as conceived by Nkrumah is different from the one traditionally played by trade unions. According to him, trade unions in Africa have a double role: to contribute to economic and political development of the country and also to the political emancipation of Africa.

On the economic development side, the TUC plays a major role in the domestic plans of the CPP. It disciplines labour to enhance production. It minimizes industrial disputes. Also, it develops enterprises of its own in agriculture and industry like 'Histadrut', the Israeli labour movement.

TUC tries to accomplish its programme through workers' education, both in skill and political consciousness.

Great similarities exist in the policies of Ghana TUC and the unions in a communist society; but the two are not the same.

This system of union and government alliance is based on a number of considerations. First, there is TUC leaders' prejudice against everything British; secondly, the desire to achieve leadership of Pan African trade union body; and thirdly, the use of TUC as a dynamic instrument winning public support for CPP.

The corollary of the labour unions enhancing production is the workers' welfare becoming the direct responsibility of the State.

A theoretical question is the relevance of Western values and standards in an underdeveloped area particularly one like Ghana. Rapid economic progress in such context mainly depends on a powerful central government. The labour movement has traditionally been viewed as a reaction to the challenge of capitalism, but this view is not valid in Ghana where private enterprise occupies a secondary role in the economy.

As the labour movement is a means to develop the economy, the traditional theories of labour movement are not relevant for evaluating the Ghanaian labour movement.

Later events of Ghana have shown the potential pitfalls of political unionism, namely a revolt of the rank and file. The strike of September 1961 has shown the need both for strong party control of the movement and of government's greater attention to workers' discontent. For the success of political unionism, equality of sacrifice among all sectors of the society is necessary.

(YASMIN AZRA JAN)