

Summaries of Selected Articles

A. Bottomley. "The Structure of Interest Rates in Underdeveloped Rural Areas"
Journal of Farm Economics, May 1964

This paper inquires into the reasons for the existence of monopoly profit (usury) in the high interest rates obtaining throughout underdeveloped rural areas, and suggests ways to minimize this element.

It first analyses the components of the rate of interest in such areas in micro-economic terms. It is assumed that the typical rural money-lender operates as an imperfect competitor or an outright monopolist because he serves a small locality. The demand curve for an individual money-lender at a given interest rate would be relatively inelastic as the farmer seldom estimates the marginal efficiency of his capital while borrowing. So the money-lender would transact at an interest rate which would maximize his net return, *i.e.*, where his marginal cost of lending and the marginal revenue on his loans are equal.

The money-lender's charges must cover *i*) the opportunity cost of his money, *ii*) an administration charge on his loans, and *iii*) a unit premium for risk. Any interest rate covering more than these costs contains *iv*) an element of monopoly profit. The money-lender may have two competing uses for his funds, namely, to invest in avenues other than loans or to satisfy his own demand for liquidity. If competitive forces exist, or if the money-lender has ample reserves, the opportunity cost of money loaned should be close to the rate of return on government bonds, identical to a pure rate of interest. This may hardly be lowered through a planned increase in the money supply by the fiscal authority, because then the pure rate of interest rises in such areas to compensate for the expected fall in purchasing power.

There may be a number of ways of reducing the opportunity cost of money. As most of this lending takes place some time before the harvest, the opportunity cost of money loaned is high during this period. This can be reduced by some fiscal technique like short-term government investments made available to money-lenders during this period, by finding alternative uses for this money during the idle season, or by persuading the farmer to diversify and spread his loans evenly over the year. Such diversification helps in lowering the premium for risk also.

The money-lenders' preference for liquidity may be counteracted by rendering his supply of reserves more elastic by improving his ability to borrow in the organized money market. This would normally require some sort of

security from the farmer which the money-lender may in turn offer the bank. Thus, the provision of collateral against a money-lender's loans becomes crucial in an attempt to reduce the rural interest rate.

The unit administration cost of loans may be lowered in other ways. The loans may be spread over a wider clientele so that more people share in the total costs, they may be distributed in larger single amounts to cut down the cost of administration, or they may be made for longer time periods. Much of this reform involves reforming the farmers, however, so that the problem encompasses the whole field of economic growth. An offer of satisfactory collateral from the farmer can improve matters as a short-term measure.

The high premium of risk involved due to expectation of default raises the total cost of a loan still further. Some estimates show that the average world-wide interest rate which farmers pay in poor countries is around 36 per cent a year, out of which a third, *i.e.*, about 12 per cent is the risk premium. However, a difference exists for secured and unsecured loans and for the secured one too the nature of the security matters. There might also be social or ethical codes in the way of a money-lender while appropriating a security in case of default. Any reduction in this element of the interest rate would, thus, require widening the markets and reducing legal and social restrictions on the sale of collateral. Some social elements such as personal contact with the "character and repaying capacity" of the borrowers in such a system can be helpful though.

The monopoly position of the village money-lender is believed to be a principal cause of high interest rates for farmers. The foregoing discussion shows that the cost of lending in these circumstances is high otherwise so that monopoly profits are a negligible proportion of the rates the farmers pay. Improving the discountability of security is the best way of reducing interest rates, since this would bring in urban money-reserves and thus competition.

The paper concludes that overall economic growth is the prime requisite for any reduction in the rural rate of interest in poor countries. This growth will authenticate the farmer's security, thus giving him access to low interest and institutional sources of funds. This would also increase competition among money-lenders, reduce risk of default, and encourage productive use of capital.

S. Clemhout, "Efficiency, the Heckscher Ohlin-Theorem and Patterns of International Trade as Exemplified by the Leontief Paradox", *Economia Internazionale*, Febbraio 1964.

The Heckscher-Ohlin theory of international trade states that a country finds a comparative advantage in those commodities the production of which requires the most intensive use of its comparatively abundant resources. The Leontief paradox contradicts this well-accepted doctrine by citing the United-States example. The United States is considered to be the most capital-rich country in the world, yet it is an importer of those competitive goods which would require for her more capital and less labour to produce than what is needed for the production of an equivalent amount of her exports (of average 1947 composition). The controversies, which this paradox had given rise to, have brought out four hypotheses, presented hereafter, which can, *a posteriori*, explain the contradictions. The hypotheses are:

- i) that United-States labour, as compared with others in other places, is much more efficient;
- ii) that production functions are not uniform or identical throughout the whole world;
- iii) that the factor-intensity relationship between United-States imports and exports cannot be unambiguously stated; and
- iv) that demand patterns are such that the United-States demand for those goods in which she enjoys a comparative advantage exceeds her domestic supply of them.

An attempt is made in this paper to generalize the Heckscher-Ohlin theory to an extent which can, *a priori*, allow for the possible occurrence of cases like the paradox. This generalized theory is based on intercountry differences in production functions. The differences in production functions are revealed through the parameters which are the measurements of returns to scale and efficiency. Higher returns to scale and greater efficiency of a country in the production of a particular commodity may put her in a comparatively advantageous position with regard to that commodity; and this might well happen irrespective of her natural-factor endowments. If efficiency factors and endowment ratios favour the choice of the same items, well and good. If it is otherwise, their relative merits are to be weighed, and actions taken accordingly. For example, a country which has an absolute (or comparative) advantage in productivity and/or returns to scale in a particular line of activity, will also have advantageous opportunity costs in the same line of activity. The country will, therefore, specialize, produce, and export that commodity even if it is considered to be absolutely

unjustified on factor-proportions grounds. In such a case, it is abundantly clear that it does not really matter whether the advantages accrue from genuine efficiency of the country in question or are merely artificially produced by such means as tariff and protection. The fact that a country which has a factor-endowment which is relatively capital abundant can gainfully export unambiguously labour-intensive products constitutes the Leontief Paradox; and this phenomenon may well be purely the result of a tariff structure.

Thus, by analysing the intercountry differences in production functions and the "parameters pertaining to the econometric analysis" of the input-output relationships in production, the generalized Heckscher-Ohlin theory can even explain, *a priori*, the Leontief Paradox. This new, generalized theory is, therefore, really immune from the oft-made complaint that international-trade theories are guilty of maloperation in their predictive values.

(LATIF REZA)

V. Dubey, "The Marketed Agricultural Surplus and Economic Growth in Underdeveloped Countries", *Economic Journal*, December 1963.

This paper challenges the basis of the generally held view that the proportion of agricultural production that is marketed in the underdeveloped countries behaves in a perverse way. The various behaviour assumptions underlying such a view are: *i*) the peasants have a high marginal propensity to consume; *ii*) a large percentage of increases in consumption is directed to farm-produced goods; *iii*) a negative elasticity of the peasant's demand curve for income in terms of effort. Given these assumptions, as the per-capita income of the farmers increases due to an increase in agricultural productivity and/or a transfer of surplus labour from the farm sector to the nonfarm sector, the marketed agricultural surplus does not increase to the extent of the potential. Leakage in the flow of surplus like the rise in consumption in the farm sector, limits the feasible rate of industrialization.

In contrast to this popular view, it is argued that in the contemporary developing countries there are two main sectors: agricultural sector which is backward; and the industrial sector which is advanced and small, but expanding. The level and pattern of consumption in both these sectors is different and there is seepage of wants of the advanced sector to the backward sector through contacts, migration, and intersectoral flows. This leads to a wide difference between the actual and the desired pattern and level of consumption in the backward (farm) sector. With an increase in per-capita income, one should find the

farmer interested in selling his surplus production in order to secure the necessary cash to buy advanced-sector goods. Once we recognise the gap between the actual and the desired pattern of consumption, the negatively sloping demand curve for income in terms of effort cannot be accepted (assumption *iii*) above). Moreover, assumptions *i*) and *iii*) of the marketed-surplus doctrine are logically inconsistent as they imply the marginal propensity to consume to be high as well as zero at the same time. Assumption *ii*) of the doctrine (that a large increase in consumption is directed to farm-produced goods) has a weak foundation in light of the sectoral interdependence of preferences. However, an empirical test is important.

While direct empirical evidence against the assumptions of the doctrine is not available, some indirect and circumstantial evidence relating to India is considered. Family-budget data in the Punjab and Madras show the income elasticity of food expenditure to be considerably less than unity. Similarly, the National-Sample-Survey data on family expenditure indicates that the expenditure elasticity for food and cereals is less than unity. On the other hand, the expenditure elasticities for sugar, woollen clothing, bedding, amusements, education, medicine, furniture and footwear have been estimated to be more than unity. Furthermore, the family budgets of industrial workers show the income elasticities of food expenditure in line with those found in the richer countries where the real wages are much higher. Hence, the family budgets of peasants and industrial workers are consistent with the hypothesis that low absolute levels of food consumption do not imply an excessive income elasticity of food expenditure as the marketed-surplus doctrine assumes.

Other evidence for the gap between the actual and the desired pattern and level of consumption in the backward sector is that rural demand for credit is elastic at all income levels. Rural indebtedness is not only confined to the low-income farmers, but the farmers with larger holdings and income also make a considerable use of credit. This is due to the seepage of the want pattern of the advanced sector to the backward sector and the *need for cash* to meet these wants along with the limited possibility of securing cash when productivity is low.

All this means that due to the interdependence of sectoral preferences, there is a strong motivation on the part of the farmers to sell more of their produce and secure cash to acquire the desired pattern and level of consumption. In fact, in most developing economies, production for the market is an established feature. This is especially true of economies with a high proportion of large farms. The National Sample Survey indicates that 14.4 per cent of the households

in India have land holdings of more than 10 acres and operate 63.6 per cent of the area. Although, there are not sufficient data on the variation of the marketed surplus with the size of farm, it appears from whatever data are available that the proportion of sales to the total production of food crops increases with the size of the holdings. About 60 per cent of the total marketed surplus in India comes from holdings above 10 acres. Therefore, in economies dominated by large- and medium-size farms, a fair proportion of production should be expected for the market.

In conclusion, it can be said that the assumptions underlying the marketed-surplus doctrine have not much logical and empirical foundation and the real obstacle to the stepping-up of the rate of industrialization is the low productivity in agriculture and the inelasticity of the supply of wage goods rather than the perverse behaviour of marketed agricultural-surplus.

(SYED MUSHTAQ HUSSAIN)

A. Demond, "Public Health and Population Growth", *Population Bulletin*, April 1964.

The lowering of death rates since 1900, because of advancement in the field of medicine and public health, has accelerated the increase of population. The world population has doubled since then. Most of this increase has been in the countries of Africa, Asia and Latin America which are struggling hard to improve their living standards through economic development. The censuses and surveys, taken during the years around 1960 in many of these countries, give a much higher number of people than was expected on the basis of the previous estimates.

The humanitarian solution of this problem is in lowering the birth rates by a major socio-economic-demographic revolution. Family-planning drives in the developing countries should be given an importance equal to economic development itself, otherwise the death rates may go up with further lowering of living standards.

Fortunately, in many of the developing countries the government has realized the urgent need of population control and has started making population policies in favour of family planning. The governments of India, Pakistan and Communist China took the initiatives in this respect, and the others are following. However, the progress of the programmes in these countries is rather slow. None of these programmes begins to match the need and much remains to be

done if birth rates in the developing countries are to decline by twenty to twenty-five points by 1975.

The family-planning programmes can be effective, if they are developed with the cooperation and integrated knowledge of various government departments concerned with health, education, welfare and economic planning, assisted with other groups and voluntary agencies working for the welfare of the people.

In many countries, the ministry of health provides the basic administrative structure for reaching the people for family planning. However, since the concept of public health is new in these countries, the existing facilities are inadequate to carry out the additional burden of family-planning services. Hence, there is an urgent need for further strengthening and expansion of public-health services with more facilities and trained personnel to bring the family-planning information and material within the reach of the masses.

The historic policy statement adopted in 1959 by the American Public Health Association states: "The Public health profession has long taken leadership in defeating disease, disability and death. It must now assume equal leadership in understanding public health implications of population imbalance and taking appropriate action." This was also confirmed in the resolution of the first Asian Population Conference held in December 1963 in New Delhi.

The conspicuous absence of the United Nations World Health Organization (WHO) from the field of population control is surprising. Today, only the economic and social agencies of the United Nations are dealing with the population problem, which in fact is a health problem and comes clearly under the well-defined functions of WHO.

WHO could meet the new challenge by helping the developing countries in expanding health facilities and services, so that health-education and family-planning information could reach the masses. All other United Nations agencies, in addition to those working to stimulate economic development, should help the developing countries in solving this problem. This task is central to the objectives of World Health Organisation, United Nations International Childrens Emergency Fund and United Nations Educational, Scientific and Cultural Organization, the agencies which support programmes to defer death. They must accept now the challenge of balanced health-programmes by supporting action which reduces rapid population growth, as the low birth rates are essential for the health and welfare of the world's people.

(MOHAMMAD AFZAL)

W. P. Falcon, "Farmer Response to Price in a Subsistence Economy: The Case of West Pakistan", *American Economic Review*, May 1964 (Proceedings).

This paper, an article-length summary of the author's doctoral desertation, questions the all-too-general presumption that poor and illiterate farmers are influenced by tradition and noneconomic factors and are not responsive to price and income incentives; the author in this paper sets out to examine "more thoroughly and more quantitatively the direction and magnitude of farmer responses to price" in West Pakistan.

A review of the limited literature indicates that there are three main sources of disagreement on price response:

- i) the difficulties in defining the various variables involved;
- ii) the statistical problems in the estimation of supply elasticities and the use of suggestive questions in micro-surveys; and iii) the misunderstanding arising due to the confusion of words "illiterate" and "irrational" when applied to farmers.

The major hypothesis is that on one-half to two-thirds of the cultivable area there is not likely to be much price sensitivity because foodgrain self-sufficiency is the major objective in farm planning. However, on the remaining area there is likely to be considerable response to relative prices between cash-crop commodities. To test the hypothesis models for cotton acreage, cotton yield, wheat acreage and aggregate output are developed; it is further hypothesized that in any given year the acreage is related to the Pakistani farmers' expectations of relative profitability of the crop.

The empirical results for West Pakistan show a high degree of economic rationality on part of the Punjabi farmers. Relative cotton prices appear to account for as much as 70-per-cent variation in acreage and suggest a short-run acreage supply elasticity for cotton of about $+ 0.4$. The long-run decline in cotton acreage is associated *inter alia* with the increase in waterlogging and salinity profitability of the sugarcane crop, the decrease in farm size, and the decrease in cotton prices. In the case of wheat, several important conclusions are drawn. Water availability appears to be the major determinant of wheat acreage; and in the rain-fed regions relative prices explain very little. Full-planted acreage is highly correlated ($r = 0.7$) with rainfall variables. Water availability also places limits on the amount of rice responsiveness. The analysis further shows that even in the case of foodgrains, there is some price response when climate restrictions are not a limiting factor.

The conclusion emerges that relative prices within agriculture do have some effect on the composition of agricultural output. Therefore, it is possible to shift the composition of agricultural output by adopting a policy of changing relative prices within agriculture.

(M. AHMAD ZIA)

R. Gilbert, "The Works Programme in East Pakistan", *International Labour Review*, March 1964.

Pakistan is one of the poorest of the developing countries. It is estimated that about one-fourth of its manpower resources is wasted in total or partial unemployment. The supply of United-States surplus agricultural commodities was designed to finance, among other things, a works programme to convert idle labour into capital, raise the level of nutrition, and permit the stabilization of basic elements in the cost of living.

There was fear that the programme would be an unproductive one, but the existence of the two creative institutions, the Comilla Academy for Village Development and the Basic Democracies, produced striking results.

To create an instrument of effective local self-government, the Government had established, in 1959, a five-tier structure of Basic Democracies consisting of Union Councils, Thana Councils, District Councils, Divisional Councils and the Provincial Assembly.

The Union Council, the first rung of the ladder, is the local government closest to the villager—to which he sends his representative. The needs and problems of the village are solved by intermingling the representatives of the people with experienced departmental officers at all levels above Union Councils.

The Academy for Rural Development, Comilla, established earlier, has been organizing multipurpose cooperative societies at the village level and a Central Cooperative Federation at the Thana level. It has used the Thana-level officers of all departments as teacher-trainees for farmers and organizers of village cooperatives. A close relationship has been established between the Union Councils, the Thana Councils and the Academy. This played a vital role in the planning and implementation of a pilot rural-works programme in 1961/62.

By this convincing approach, the Director of Academy made the Union-Council Chairman enthusiastic and responsible for planning and implementing the rural works-programme which consisted mainly of flood control,

re-excavation of choked-up channels and construction of embankments and roads. Project Committees, chaired by a member of the Union Council and consisting of villagers from affected villages, were appointed to execute the projects. Labour groups were recruited and the village plans were executed by the Project Committee under the supervision of Circle Officer of the Thana.

The programme provided 45,000 man-days of employment for unskilled labour, plus a substantial amount of work for masons, carpenters and others. An area of 6,000 acres was protected from flood, approximately 7.5 miles of new roads and 14.5 miles of dikes and embankments were constructed at a fraction of cost normally incurred by the Government when work is done through contractors.

In order to extend the pilot works programme throughout the province, the Government provided a sum of 100 million rupees in 1962/63. An orientation course was started in the Academy for the Thana and Union-Council Chairmen so that they could see and examine various aspects of the pilot works programme executed in Comilla Thana in 1961/62. The province-wide programme concentrated on transportation, drainage and flood control. Work was done with remarkable speed at an unprecedentedly low cost per unit of work.

In economic terms, two million man-months of work were provided, the largest mobilization of manpower in the history of the province. By controlling floods, rice crop worth 140 million rupees is estimated to have been saved. Transportation of goods was facilitated to give the benefit of high prices to the farmers while consumers had to pay less.

For 1963/64, the Programme was doubled and the distribution of funds adjusted to place primary emphasis on the Thana and Union Councils. It is designed that the Thana would be the strategic level from which to launch the works programme and the revolution in agricultural methods and village organization which is required.

It is hoped that the programme, which is running so well, will in future be doubled and doubled again and integrated into the national five-year plans.

In the field of transportation, flood control, and irrigation, this programme would do a great job and free the agriculture of the Province from the risks of flood and drought.

In conclusion, it may be said that the works programme in East Pakistan is a success, for it has organized the people to produce essential rural capital with immediate effects upon farm production. The programme has demonstrated

that men, their hands, and their brains, are not only the most abundant, but the greatest of the nation's resources, and that they can be mobilized effectively to produce the capital which is essential to increase their productivity.

(A. Q. ZIAUDDIN)

G. Haberler, "Integration and Growth of the World Economy in Historical Perspective", *American Economic Review*, March 1964.

This paper seeks to bring integration and growth of the world economy, since the later half of the nineteenth century, into a macro-historical perspective. A characteristic feature of the post-War world has been the integration movement, aiming at some sort of international economic cooperation such as the European Economic Community (EEC), the European Free Trade Association (EFTA) and the Latin American Free Trade Area (LAFTA). Haberler has distinguished three main waves of integration in the present study: *i*) "Internal Integration" of the economies of Great Britain, the United States and France ; *ii*) the free trade movement of the late nineteenth century which was followed by disintegration and total disruption of the world economy in the wake of two global wars; *iii*) reconstruction and integration of the post-War world economy.

In the first phase of the movement, integration followed political and economic centralisation. The second phase of the movement, which was characterised by the abolition of Corn Laws in 1846, was pioneered by Great Britain. Commercial policy, tariff rates, and shipping policy were designed in a fashion conducive to integration through freer trade. This period saw a marked improvement in the international payments mechanism following the introduction of the gold standard by many countries. The period, covering the interval 1914-45, saw all the works of these two phases virtually undone by the catastrophic wars and the Great Depression.

During the third phase, world trade has recovered steadily. World exports stood at 140 billion dollars in 1963 as compared with 54 billion dollars in 1948, with the industrialised countries having enjoyed the bulk of the gain. Complete absence of depression and removal of external and internal direct controls facilitated the reconstruction process considerably. The "periphery" of the world also shared in the gain which the expansion of trade brought to the world. This is a confirmation of the proposition, advanced by the classicists and Kenyes, that the poor countries will benefit as a result of the progress of the industrialized countries.

The low rate of growth of the underdeveloped countries, contends Haberler, is due to their pursuance of protectionist policies which prevent them from benefitting more from the gains of international specialisation. The deterioration in the terms of trade of developing countries has not been catastrophic. If the industrialized countries maintain a steady growth rate and there are no revolutionary technological innovations in the field of synthetic substitutes, the terms of trade of the underdeveloped countries are unlikely to deteriorate any further.

The tempo of growth can be maintained and even accelerated if:

- i) the advanced countries maintain a high rate of growth and level of employment, and ;
- ii) there is further liberalization of trade, with a disciplined wage, price and exchange-rate policy.

To achieve this, the regional trading-blocs, such as EEC and LAFTA, will have to turn away from their protectionist policies and develop an "outward-looking" attitude.

(SYED ABDUS SAMAD)

N. Islam, "Concepts and Measurement of Unemployment and Underemployment in Developing Economies", *International Labour Review*, March 1964.

The concept of disguised unemployment in agriculture is distinct from that of visible unemployment. The former refers to nondiminution of output when a part of the labour force is withdrawn, if there has been a change in the form of organization and the form of equipment employed. The concept of disguised unemployment is consistent with a positive marginal productivity of labour if the hypothesis of a positive relationship between wages and efficiency holds. Assuming the wage bill as constant, the loss of output due to reduced employment may then be more than offset by the increase in output following from higher wages, and, thus, higher efficiency. Quantitative evidence supporting the above hypothesis is not yet available, however.

Visible unemployment is characterized by a situation in which work opportunities are not available, resulting in enforced idleness or unemployment. either for a whole or a part of a year, or some part of a month in the course of a working year.

In order to measure underemployment or the extent of withdrawable surplus, it is necessary to establish, above all, a quantitative relationship between an increase in wages and an increase in efficiency, which is to be measured in terms of some sort of work units—a problem which by itself is in no way simple.

When analysing either visible or disguised unemployment, it is important to identify the labour force, to determine the extent of participation in man-days at different seasons, and the number of man-hours per man-day. It may also be necessary to enforce, as well as determine, such labour norms if the measurement of underemployment is to serve as a basis for policy decision.

Early attempts at measurement of unemployment and underemployment in Pakistan were mainly concerned with deriving the aggregate and global estimates of surplus labour on the land. One such attempt at measurement in Pakistan used the concept of a "standard holding" which is assumed to provide full employment for a cultivator. Full employment was defined as 2,500 hours of work per year, and it was assumed that a farmer would require four acres in East and six acres in West Pakistan for full occupation. Following this method, 20 per cent of the agricultural labour-force in Pakistan was judged to be surplus in 1949/50. This method, however, has faults in two vital respects. *First*, it misses the significance of seasonal variations by lumping together peak-season labour shortages with slack-season unemployment. *Secondly*, it assumes a fixed labour-input coefficient irrespective of the quality of the land.

In 1956, an expert team from the International Labour Organization conducted a manpower survey which produced information relevant to the present discussion, despite coverage limitations. Among other findings, the survey concluded that the percentage of the rural labour-force looking for work was very small, varying between 2.2 and 3.1 per cent in different regions.

Also in 1956, Dacca University carried out a sample survey in four regions of East Pakistan. Assuming 250 man-days as the annual potential labour supply per active male, the survey reported visible unemployment for the four sample regions as varying between 11.5 per cent (in Rangpur) and 45.2 per cent (in Feni). Visible unemployment was estimated, for the purposes of the Dacca-University survey, as the difference between potential man-days and actual utilization of man-days expressed as a percentage of potential man-days. The people completely unemployed throughout the year, but seeking employment, comprised less than one per cent of the agricultural labour-force in each sample region.

Subsequently, more intensive surveys were carried out in two areas of East Pakistan, both of which indicated visible unemployment in the rural areas as varying between 15 and 20 per cent of total man-days in the course of a year. Both reported a redirection of the labour force from the urban to the rural areas during the peak seasons. Thus, a proposal for the transfer of the agricultural labour-force to the urban areas is suspect unless there is to be a technological reorganization of agriculture, longer working hours for those who remain, or greater participation by children and females in the labour force.

The measurement of visible unemployment is best attempted by means of a direct observation of farming operations continuously throughout the year, supplemented by interviews of the farmers. Both surveys have identified only the number of days without work, and have not distinguished between voluntary and involuntary unemployment—a distinction which is of some relevance in the case of rich farmers. Neither have they clarified whether days without employment are available for work outside the village either temporarily or permanently and, if so, on what terms and conditions.

Both the surveys avoided any direct measurement of disguised unemployment and provided only certain indications for it, such as the larger number of man-hours per acre in smaller-sized farms fed by family labour. This cannot, however, be held as an indication of disguised unemployment due to pressure of population on the land, unless the labour requirement per acre remains fixed for all farms irrespective of size or quality of land. The identification and measurement of disguised unemployment, which is related to the social marginal product of labour, is more difficult than measurement of visible unemployment. The smaller farmers seem to employ more man-hours per acre than the bigger farmers and usually get a larger product per acre. The rather fragmentary evidence available at present indicates that the average income of a self-employed farmer working on his land is often less than the wage earned by the ordinary labourer. This may be due partly to a lack of free mobility of labour between these occupations, since self-employed labour may consider agricultural employment as a way of life, and partly to the possibility of an inadequate valuation put on household and garden work in the measurement of income of a self-employed person.

G. Z. Johnson, "Health Conditions in Rural and Urban Areas of Developing Countries", *Population Studies*, March 1964.

Only limited relevant statistical data is available for the developing countries of Asia, Africa and Latin America to assess the differences in health status between rural and urban populations.

There is evidence that the medical care and facilities available to urban inhabitants of the developing countries are more adequate in all respects than that provided for the rural people. This advantage enjoyed by the urban population is not always reflected in the differences in the mortality and morbidity indices.

The available statistics show that in general the health status of the urban population of these countries is inferior to that of rural inhabitants (except in Latin America, Mali, Madagascar and the middle valley region of Senegal among the few African countries for which rates could be computed). This may be so because of the inadequate housing conditions and other social problems that urban dwellers have to face, and in particular the housing conditions in sections inhabited by the migrants into the city from rural areas.

On the whole, the statistics show that infant mortality is probably much higher in the medium-sized cities and smaller towns of developing countries than in either metropolitan cities or rural areas, since all types of medical services and sanitary facilities are concentrated in the larger cities, usually in the capital cities. Although, the sanitary facilities are lacking in the rural areas, the low density does not make the health conditions critical.

Previously, health programmes in these countries were primarily concerned with curative measures. Recently, when large-scale programmes on the preventive side started, urban communities were the first to benefit. Work in the rural areas began much later. However, the infant mortality declined much more rapidly in urban areas than in rural areas.

Now that the emphasis in the developing countries has shifted from economic development to balanced economic and social development, there are better prospects of closing the gap in health conditions of rural and urban areas. However, a big effort is still needed to raise the health standards of rural areas. Public health and environmental conditions in cities as well as in rural areas require further improvement, keeping in view the tremendous rate at which the population is growing.

The governments of these countries are already being helped financially and technically by the international organizations and the industrial countries, in addition to their own efforts, to implement their public-health programmes. If the developing countries recognise the need of a policy, regarding population growth, their attempts to raise health standards or living standards would be even more fruitful.

(MOHAMMAD AFZAL)

T. McKeown, "The Next Forty Years in Public Health", *Population Studies*, March 1964.

In this article an attempt is made to assess the major public-health problems to be confronted by the developed countries in the next forty years. Methods appropriate to these problems and the pattern of medical services necessary to deal with them are also examined. The study of the problems is restricted to considerations of mortality and morbidity.

The influence of inheritance is significant among the causes of death after the end of the reproduction period. We cannot, therefore, expect profound changes in the extent and causes of mortality in the *post-reproduction period*.

Deaths in the *prereproductive period* have been reduced greatly. In the *reproductive period* too, there has been a substantial, though smaller, reduction of death rates. These changes have been brought about by advancement in medical sciences and improvements in the standards of environmental sanitation.

Deaths in the *prenatal and neonatal periods* have been considerably reduced but the level is still quite high. In future, it seems probable that deaths between birth and the end of the reproductive period will virtually disappear; most individuals conceived will die before birth or after the completion of their productive period.

Three per cent of the total births have a structural abnormality. Half of the people who have such defects die by the time they are five. There is no evidence that such malformations are declining; and in view of the reduction of other causes, they are becoming relatively more important.

There is a high level of morbidity in the *prereproductive* and the *reproductive periods*. The causes of this are: accidents, rheumatism, bronchitis, and smoking. The main problem of morbidity is mental disease and there is no evidence that this is decreasing. It is difficult to anticipate future trends of mental illness.

In the *post-reproductive* period, chronic bronchitis is the most common cause of morbidity. Also in old age, defects frequently occur in vision and hearing.

Selective breeding can be an answer to the control of mortality and morbidity rates but there are reasons to doubt its effectiveness on human beings inspite of the fact that it has been successfully tried in cases of plants and animals. Thus, we have to rely on changes in the environment; and such changes largely affect human behaviour and personality.

The methods likely to be important in environmental changes are : extension of measures for the control of physical environment; discovery and application of knowledge about social environment; and more effective means of treating disease in the individual.

The pattern of medical services will have to be modified profoundly. Major classes of hospitals—acute, mental, and chronic—should be unified. The preventive and the health services should be associated with each other. Domiciliary medical care should be strengthened.

(IMTIAZUDDIN HUSSAIN)

P. F. M. McLoughlin, "The Sudan's Three Towns: A Demographic and Economic Profile of An Urban Complex. Part III, Labour Force Occupations, Occupational Income, Income Distribution", *Economic Development and Cultural Change*, April 1964.

This is the third part of an article based on the study of the Sudan's three towns, Khartoum, Khartoum North and Omdurman. The first part of the article discusses the demographic characteristics of the country, while its second part describes the output and expenditure phenomena in the three towns.

The three towns (urban regions) comprise 2.4 per cent of total population and contain 2.3 per cent of total labour force. The proportion of labour force to population is 36 per cent. The economy of the towns being nonagricultural, the labour force is paid in terms of monetary wages which is unlike the rural Sudan where the labour force is normally employed on payment-in-kind basis. The urban region has 60 per cent of the Sudan's nontechnical professionals and the same proportion of the Sudan's technical professionals. The technical professionals are only 0.8 per cent of the labour force. This category includes, among others, 339 engineers and 147 medical doctors. The ratio of medical

doctors in these towns (one doctor for every 1,409 persons) is comparable with many European countries. In rest of the Sudan, the ratio is one doctor for every 77,177 persons, which is very high.

The three towns are commercial and industrial centres. Commercial enterprises are typically larger than industrial establishments, few commercial enterprises being the ownership of the Sudanese. The three towns have 20.9, 19.3, and 12.3 per cent of the total supply of craftsmen-mechanics, machinery operators and nonfarm labourers, respectively, of the Sudan. In these towns, 44.4 per cent of the employed are industrial workers, 41.8 per cent white-collar workers, and 11.1 per cent management-professional workers. The corresponding proportions in the country as a whole are 5.6, 5.7, and 1.6 per cent. The remaining 87.1 per cent of the labour force consists of rural workers.

Of the total income earned in these towns, 41.6 per cent is earned by industrial workers, 30.2 per cent by white-collar workers and 26.9 per cent by management-professional workers. The corresponding proportions in the Sudan as a whole are 14.2, 14.3, and 9.1 per cent. The remaining 62.5 per cent of the Sudan's income is earned by her rural workers. The urban areas receive 39, 21, and 26 per cent, respectively, of the Sudan's income in managerial-professional, white-collar, and industrial workers' occupations.

The proportion of real income to money income is higher for the higher-income group than for the lower-income group.

The income distribution in these towns over the labour force reveals that the highest-paid 10 per cent earn 25.5 per cent and the lowest-paid 10 per cent earn only 2.8 per cent. Similarly, in income distribution by regional income 10 per cent of the urban income is earned by the highest paid, who comprise 2.4 per cent of the labour force. The sources of income in the towns are wages, salaries, rents and profits from commercial and industrial enterprise.

(D. M. FAROOQ)

T. Poffenberger, "The Effect of Local Beliefs on Attitudes Towards Vasectomy in Two Indian Villages in Gujrat State", *Population Review*, July 1964.

A small interview-study, conducted to determine the nature of effects of attitudes towards vasectomy in two villages of Gujrat state (India) in 1962, indicates that men, in the areas studied, were very fearful of the operation; and

their fears seemed to have centred around concerns of castration and impotency. Furthermore, these fears, according to the study, may have been supported by folklore in the area concerning a semi-religious order of *paviyas* who are said to be impotent or castrates.

A random sample of 46 men was taken from both the villages. It was found that 57 per cent of the respondents were aware of the family-planning programme and had at least some knowledge of objectives of such a programme; 87 per cent knew the government was encouraging male sterilization to help control population growth; and 72 per cent believed that the vasectomy operation could give them economic relief. It was further found that over half of the sample (58 per cent) had no knowledge as to how a vasectomy is performed, 44 per cent did not know whether the operation was painful, and 35 per cent were convinced that the operation was painful. Slightly less than one-third (30 per cent) of the men believed that intercourse is possible after the operation and that sterilization is different from castration. Seventy per cent were not sure that intercourse is possible after vasectomy, and nearly one-third identified vasectomy with castration.

About three-fourths of the respondents reported that the attitude of the villagers towards those who had vasectomies was negative. Of those who responded in the negative, 40 per cent (30 per cent of the universe) said that a person who underwent a vasectomy would be regarded as feminine, a castrate or a *paviya*; and 41 per cent reported that the villagers had a more positive view of female sterilization than male sterilization.

This study supports the view that the villagers misunderstand the meaning of the vasectomy, and confuse it with castration, impotence and femininity. Many of them do not even know that intercourse is possible after the operation. The success of a vasectomy programme depends very much on dispelling such fears of impotency and castration; and hence, the necessity of a pre-programme survey in this context.

(ABDUL RAZZAQUE RUKNUDDIN)

M. A. Rahman, "Measurement of Regional Income Disparity (A Conceptual Discussion)", *Economic and Business Review*, February 1964.

The two issues on the measurement of regional income-disparity to be discussed here are the implications of regional price-difference and implications of interregional resource-transfer. Discussion of the definition of a region,

D. Seers, "The Stages of Economic Development of a Primary Producer in the Middle of the Twentieth Century", *Economic Bulletin of Ghana*, April 8—12, 1963.

In this article, the author presents a stage-by-stage analysis of the economic development process. Other such analyses, like those of Rostow and Marx, attempt to be all-inclusive but fail, according to the author, to explain specific cases. He, therefore, limits his analysis to the study of the growth processes of the primary-producing countries in the middle of the twentieth century and marks the changes in such institutional features as the foreign-exchange system and industrial patterns. Changes in these institutions are seen as the differentiating factors identifying different stages. In this analysis, Seers includes social and political factors among the main determinants of growth, though he is well aware that professional economists do not generally welcome the introduction of these factors.

The analysis begins with an 'open' economy with a highly backed currency, few quantitative restrictions on imports and low tariffs as its main characteristics. In this sort of economy, there is little scope for import substitution due to the absence of aggressive policies from the political leaders whose powers are curbed by the big countries dominating the economy. Exports and the income-elasticity of demand for imports linking national income and imports mainly determine the long-run rate of growth. Except in cases where there are considerable flows of capital in and out of the economy, imports will rise parallel to exports.

The second stage is characterized by the strain which the economy undergoes due to the political pressures for development stimulated by the growing realization of the ever-widening disparity between the states of developed and underdeveloped economies and the declining trend of the rate of growth of export proceeds. This strain leads to the tendency to shift to a closed economy; but in some cases, foreign assistance and suppressive policies of the dominant powers may check this tendency.

The economy is bound to yield to the growing socio-economic demands. The forces tending to close the economy—labour unions and local industrialists arguing for reduced dependence on imports, politicians favouring solution of the foreign-exchange crisis by import restrictions—will overpower the conservative forces in favour of an open economy, less government expenditure, limited bank-credit, *etc.* This stage will involve establishment of consumption-goods industries to produce import substitutes made necessary and profitable by strict restriction of nonessential imports. Concurrently, the state undertakes

planned expenditure of foreign exchange on imports of capital equipment and industrial materials, an autonomous banking system emerges, the fiscal and monetary mechanism are freed from the grasp of the great foreign powers and the machinery for planning is developed.

The foreign-exchange shortage and acute pressure from the unemployed will push the economy forward to the difficult stage of the establishment of intermediate and capital-goods industries. But the physical and economic constraints, such as the low educational level of labour, small size of the market, inadequate power and transport facilities and food shortages may counteract growth pressure and cause inflation. In this stage, the planning mechanism is further developed, in that it involves input-output projections for supply and demand. Relatively, slack activities in foreign concerns may cause frictions which may lead to socialist policies including nationalization of foreign properties. Land reforms, the egalitarian attitude of the government, and increased direct taxes will give rise to internal tensions involving the richer class.

When the extent of import substitution reaches the feasible limit, the economy will have to move to the fifth stage of exporting manufacture. The underdeveloped countries may form economic unions, thereby increasing the width of the market and enjoying the economies of scale. But even here the scope is small so that these economies will try to be exporters of manufactures to developed countries, following the example of Japan.

The industrial countries of today did not have to pass through all of these stages because political pressures were less compelling, because they had ample time to educate their labour, and last of all, because they were innovators with their manufactures.

The author then proceeds from the theoretical framework to testing its fit to the experience of present-day underdeveloped countries of Latin America. Due to political pressures from developed countries and from the indigenous conservatives, some countries got "stuck" at various early stages and even moved backward. During the 1930's, after the Great Depression, eleven of the twenty Latin-American countries including Cuba and Venezuela, became open economies but continued to experience severe political turmoil. Cuba yielded to the strain and became a closed economy with central planning, land reforms and nationalization of foreign companies. Venezuela also sought planned industrial development with import controls and high tariffs. Other countries of this same group, though backed by the United States and International Monetary Funds, are facing great difficulty. The other nine countries became closed during the 1930's and got through all of the first three stages, (with the exception of Bolivia

and Paraguay, which were handicapped by limited internal markets). They have become arrested at the fourth stage and have not been able to become exporters of manufactures.

(MATI LAL PAL)

N. Yamamoto, "The Possibility of Regional Economic Integration in Southeast Asia, *Developing Economies*, March 1964.

The idea of establishing an Organization for Asian Economic Cooperation (OAEC) was discussed prior to the Eighteenth General Conference of ECAFE held in Tokyo in 1962. The Conference dismissed the project as premature, indicating the difficulty of establishing such an organization.

The fundamental obstacles in the way of forming a common organization in Southeast Asia are partly emotional, such as rash nationalism and radical chauvinism, but mainly they are geographical, economic and political.

Geographical conditions: economic integration means primarily the strengthening, among geographically adjacent countries, of mutual cooperative relations. Hence, the closer the nations are geographically, the stronger their mutual cohesion will be. The idea of forming a strong organization from Afghanistan to Japan seems nearly impossible.

Political conditions: Politically, these countries are unstable, suffering from internal strife, struggles, and conflicts aggravated by external influences. The conflicting interests of the big powers have divided Southeast Asia and prolonged the political instability in this region.

Economic conditions: Subject to colonial rules for many years, these countries aim at economic independence as soon as they gain political freedom. They develop separate economic development plans without regard to the possibility of establishing complementary relations with neighbouring nations.

A more realistic idea than the regional integration is the formation of subregional organizations such as Malaysia, the Southeast Asia Treaty Organization (SEATO), and the Association of South Asia (ASA). The former is, in author's opinion, more expressly aimed at strengthening economic cohesion while the latter two are more in the nature of military and political forms of organization.

If the experiment of Malaysia is a success and it develops smoothly, it could induce similar experiments in this region. However, the attitude of Indonesia and the Philippines towards Malaysia, and the political disputes between India and Pakistan, China and India, Laos and Vietnam, *etc.*, make economic integration, even on a subregional scale, a somewhat remote possibility.

However, in a study of the possibility of regional economic integration, four points seem essential for a satisfactory arrangement.

i) Economic integration should be accompanied by, or merged with, political integration. The countries must seek partially restricted political and economic independence as members of a regional group, and should form a supra-national supreme organization.

ii) Regional economic integration must guarantee economies of scale to the member countries. The countries, instead of making separate plans for domestic markets, should plan economic development for the whole regional market in order to achieve economies of scale.

iii) Economic activities carried on by the member countries should be according to an "agreed specialization programme" decided by the supreme organ; thus, each country would specialize in those industries most suitable to her topographic condition.

iv) Not only free movement of goods but also free interchange of capital and labour is necessary in order to make the economic integration more dynamic.

These four objectives are not easy to achieve, particularly for the newly independent Asian countries, which tend to overstress their respective independent positions. Moreover, lack of mutual trust and understanding, and heavy dependency on developed countries make it difficult to set up even a loose organization.

It is necessary, therefore, to first promote mutual trust and understanding through the United-Nations organizations and then to try to achieve economic integration step by step, progressing from economic cooperation to economic coordination and eventually to economic integration.