

Summaries of Selected Articles

A.K. Bagchi, "Protection and Rationalization: A Problem of Economic Policy in Underdeveloped Countries", *Arthaniti*, January 1964.

The *raison d'être* of this paper is to show that a game theoretic model, crude though it may be, can throw some light on the problems the government faces in policy-making in a mixed or partially planned economy. The government's policy of tariff protection to an 'infant' industry may lead to an inducement of no drastic technical and organisational change (*i.e.*, rationalisation, for short) by businessmen. A non-zero-sum game situation can develop under such circumstances in which both parties are aware that the final outcome is jointly determined albeit neither party can wholly determine the outcome and one party's gains are not the other party's losses. Section I deals with the theoretical framework. Section II gives the empirical evidence from the actual situation in the Indian cotton textile industry in the thirties. Section III makes certain arresting conclusions about the choices of policy.

Consider protecting and not protecting fully by means of a tariff as strategies I and II, respectively, of the government and rationalising fully or not rationalising as strategies I and II, respectively, of businessmen. The businessmen's gains are tabulated as businessmen's pay-off matrix $[BPM]_{2 \times 2}$ and the government's gains are tabulated as the government's pay-off matrix $[GPM]_{2 \times 2}$. The elements a, b, c, d of these matrices denote the values of the corresponding strategy combinations from either party's point of view. The row vectors $[a, b]$ $[c, d]$ correspond to the government's strategies and the column vectors $\begin{bmatrix} a \\ c \end{bmatrix}$, $\begin{bmatrix} b \\ d \end{bmatrix}$ correspond to businessmen's strategies, the numbers, a, b, c, d being assumed to be unique upto a linear transformation. The ranking of the value of the outcomes from the government's point of view is $c > a > b > d$, *i.e.*, the best outcome is that in which the government has not had to protect the industry and yet the industry has survived by rationalising its production methods and the least preferred outcome is the death of the industry when the government does not grant protection and the industry does not rationalise its methods of production. The ordering of the values of the outcomes from the businessmen's point of view is $b > a > c > d$, *i.e.*, the best situation is that in which the State grants protection to the industry and the industry does not have to rationalise, since rationalisation involves additional cost that narrows the margin of profit and the worst situation is when businessmen have to go out of business for they do not rationalise and the government does not afford protection. Although it is the

worst outcome from the point of view of both the parties, the game is a non-zero-sum non-cooperative one. The objective of both the parties is to maximise the minimum gains that it can obtain irrespective of what the other party does. The strategy which ensures this is called the 'maximin' strategy. An inspection of the respective pay-off matrices makes obvious that the 'maximin' strategies of the government and businessmen are to protect the industry and always adopt rationalisation, respectively. These two strategies are not in equilibrium with each other if one party knows before hand what the other is going to do. The best policy for the government is to make sure that it can carry out the policy of not protecting the industry even when the industry does not carry out rationalisation and is faced with the possibility of ruin. However, there is an equilibrium pair of mixed strategies, such that the government and businessmen both use their strategies I and II in equal proportion and the pay-off of each party amounts to $\frac{1}{2}$, although no party acting by itself can ensure this gain of $\frac{1}{2}$.

The empirical evidence cited to illustrate the model refers to the case of the Indian cotton textile industry in the inter-war years. The industry took shelter under the umbrella of protection and inspite of repeated urging by the Indian Tariff Board and Millowner's Association, no substantial reorganisation of mills (which would include the elimination of sub-marginal units and raising the efficiency of all units) took place. On the other hand, the adoption of automatic looms by the Indian cotton mills was also substantially delayed. For certain classes of cotton goods, automatic looms were economic in India even in the 'thirties, and protection of the industry was one factor enabling the Indian cotton mill industry to keep techniques unchanged, and still survive. Several other factors help a complete explanation of the technical backwardness, but it cannot ignore the fact that once businessmen know what the government's policy is going to be, it becomes rational for them not to introduce rationalisation, whereas in the absence of such knowledge, the opposite policy could have been rational.

The best policy to be pursued depends on what one regards as the main objective of economic policy and one's judgement regarding the way businessmen's incentive to invest is affected by variations in government policy. If the encouragement of private investment is the most important thing and considerations of efficiency are subordinate to that, protection has to be afforded. If efficiency considerations are uppermost, protection should not be given, although initially it may not grow up for lack of protection since a time lag is involved in learning efficient methods. Encouragement of investment and adoption of efficient methods can be simultaneously accomplished if the responsibility is

divided between the government and businessmen and in that case the game ceases to be a game in the real sense. It is wise for the government to introduce an element of uncertainty in its policy for in that case if the more efficient firms know that the government might not protect the industry after all, they might be compelled to invest in more up-to-date methods, whereas when they are enjoying tariff protection along with less efficient firms, they might not introduce rationalisation even if they have the financial resources to do so.

(ZAHURUL ISLAM AL-MAZI)

Kumudini Dandekar, "Vital Rates and the Efforts at Family Planning in the Various States of India", *Artha Vijnana*, December 1964.

Inter-state differences in vital rates in India between 1951 and 1961 and the recent efforts at promotion of family planning are analysed in the article.

Birth rates are the lowest in the Southern States of Madras, Kerala and Andhra Pradesh and highest in Assam, Gujrat and Punjab. But differences among states are not large. The vital rate pattern has not changed much in twenty years.

The author compares these birth rates with those of 1941-1950. The Eastern state of Assam had the highest birth rate (49.3 in 1951-1960 and 46.7 in 1941-1950), while Madras' birth rate was the lowest during the 1951-1961 period (34.9) as well as during 1941-50 period (35.7). Punjab also had a high birth rate for many decades.

There is little possibility that Madras or its nearby areas used any devices of population control. Part of the low birth rates there may be explained by cultural differences, later marriages, level of education, *etc.* Birth rates may also have been affected by out-migration of young people. States with the lowest birth rates (Madras, Kerala and Andhra Pradesh) also send out emigrants to other parts of India in the largest proportion.

Bihar, West Bengal and Uttar Pradesh were the "slowest" states in implementing family planning programmes. Kerala, Maharashtra and Gujrat were broadly ahead of other states in family planning.

In Madhya Pradesh in Central India, work on family planning seemed appreciable as measured by number of clinics or expenditure but tangible results (reduction in fertility and increase in sterilization) are not visible. In Andhra Pradesh the efforts at family planning are poor but even so the State's birth rate is low.

Overall, Mrs. Dandekar finds no strong relationship between family planning programmes and the vital rates in India. The desired effects of family planning on the population are yet to be clearly seen.

(IMTIAZUDDIN HUSAIN)

B.N. Datar, "Unemployment in India", *Artha Vijnana*, June 1965.

This paper is an attempt to discuss the qualitative aspects of unemployment, whereas the analysis of the unemployment situation in urban areas, so far, has laid emphasis on the quantitative aspects only. To make the employment exchange data more useful, certain relationships, such as: *a*) between the total unemployed and those who register at the exchanges; and *b*) between the proportion seeking better prospects and total registration are necessary. In most of the cases it has been found that the proportion of registering for better prospects has been higher than is usually assumed.

The qualitative analysis further reveals that the technical skills are in short supply and a major portion of persons on the live registers with technical skills are already employed and the registration is usually for better employment opportunities. Moreover, the skilled people are taking the overtime work as a matter of routine and such trend is on an increase.

The fluctuations in the live registers shown in quantitative terms are not significant and can be explained by the fluctuation in expectations of employment through exchanges over the period under study (1960-1964). The author feels that the increase in unemployment of educated class could be as a result of Compulsory Notification of Vacancies Act and the expectations raised by *emergency* and the *government* channels through which these expectations could materialise, namely the employment exchanges. Whereas the increase in educated class could provide with a partial explanation of the phenomenon discussed above, the study has not tried to explore this possibility.

A study group, formed in October 1963 to discuss and define under-employment and unemployment so as to make it meaningful in terms of remedial measures, could not reach a specific conclusion and it was agreed that these terms are inextricably mixed. The criterion to be adopted for understanding the situation could be the willingness to offer for work at a specified wage. It is felt that to measure the unemployment in rural sector, more attention will have to be paid to interpret the statistics like; *a*) rural wages; *b*) consumer patterns, and *c*) the availability of work.

The conclusion emerging from the qualitative analysis indicates that the unemployment situation in the country, as revealed by quantitative analysis, is relatively less disturbing than what the statistics show.

(M. AHMAD ZIA)

Edmundo Flores, "The Economics of Land Reform", *International Labour Review*, July 1965.

The ideas on land reform held by the different professional groups are biased by their own outlook. As a result, many of them consider land reform to be an improvement in the yield through modern farm practices. Majority of the contemporary general economists have almost discarded its study in favour of agronomists and agricultural economists, though they are better placed to detect the impact of intersectoral shifts which accompany land reform. This is regrettable.

The concept of "optimum size of farm" or "optimum size of collective units", depending on ideological attitudes, is untenable as it ignores the dynamic characteristics of variables. Keeness to find out optimum size in agriculture is partially due to undue importance attached to scale of production. Scale of successful agricultural units vary from region to region. Empirical evidence shows that size is not the variable that accounts for success.

Politicians have a thoroughly professional, though dogmatic and narrow in character, understanding of the problem of land reform. Modern economic analysis of land reform, developed first by agricultural and development economists and then by economic historians, is clumsy due to the influence of the classical dogmas, policies and their application, irrespective of different political, economic and social settings.

The classical economists like Ricardo, Malthus, Mill, and Marshall lacked dynamic concepts of resources and hence failed to understand the importance of location and space. Proper land reform policies cannot be evolved from static concepts. Neo-classical and Keynesian economics also failed to live above the classical influence. Marx, Lenin, and Henry George had more dynamic outlook than the English classicists and they emphasized the importance of changing technology and the appropriation of means of production to the resource use. However, the acceptance of the Ricardian theory of rent led Henry George to overemphasize the role of land and Marx and Lenin to form a faulty notion about the importance of economics of scale in agriculture and to make an underestimation of the role of peasantry. Mao tse-Tung and Chi Guevara understood the role of the peasant but could not realise Lenin's wrong emphasis on large scale farming. Controversy about farm size is ideological. The critical question in transforming traditional agriculture is not one of scale but of factor proportionality.

Land reforms have often been confused with improved farm practices and techniques which go for increasing production and do not basically alter income

distribution or socio-political structure. Measures for reclamation of land and purchase of land at market prices do not fall under land reform. The latter is a mere real-estate transaction. Taxation is different from land reform though it has also the income redistribution effect. Land reform is more effective for re-allocation of land.

Land reform policies vary depending on the objectives and the instrumentality applied to achieve them. The important variables are: the distribution of political power and income among the various groups of the community; the relative importance of industry, agriculture and services in the economy; nature of trade and balance of payments position and finally the economic goals the country in question wants to achieve.

Land reform is a distributive measure, revolutionary in character, and is a "form of capital levy on a few landlords that is distributed among many peasants and the State." It exerts influence on the propensities to consume and save; on employment, on composition of exports and imports and it enables agriculture to support industrialisation by generating surplus. To be effective land reform should fulfill certain conditions: *i*) productive land, above certain ceiling determined by political forces, should be taken without immediate compensation; *ii*) it must take place as rapidly as possible; and *iii*) it is to be accompanied by various development policies within and outside agriculture.

Availability of development capital made three different types of land reform policies: first, land reform for industrially developed countries; second, for countries with access to savings or assistance from abroad; or for developing countries with no serious balance of payments problems; and third, for under-developed countries with acute capital scarcity.

Japan falls in the first category. It was industrially developed before land reform began in 1947. The percentage of owner farmers has increased from 54 to 92. The inflation that followed the reform and the existence of financial resources in the economy hastened the process of transfer. There was an overall improvement of agriculture due to this reform.

Taiwan, example of the first type in the second group, had not sufficient resource to transfer. Seventy per cent of the values of land was paid in commodity bonds in twenty instalments and the remaining 30 per cent was paid outright in stocks. Forty per cent of the compensation was invested. The capital needed for transfer came from external financial assistance.

Venezuela, an example of second type in the second category, began land reform in 1958. Land for redistribution is purchased at the market prices and

is sold to new owners who pay in twenty to thirty years. It is costly and hence slow.

Mexico is the example of the third category. It started land reform in 1917. Reform in Mexico was confiscatory for lands in excess of 100 hectares. Along with the reform other development policies were followed. As a result GNP has increased during last thirty years at an average annual rate of 6.2 and agricultural product at a rate of 5.4 per cent. Mexico is today economically well developed.

Predominantly agricultural countries looking for economic development need to undertake a land reform policy of Mexican type.

(MOHAMMAD RAQUIBUZZAMAN)

K. Krishnamurty, "Private Investment Behaviour in India", *Arthaniti*, January 1964.

The present paper is an empirical analysis of private investment behaviour in India.

Time series, based on ordinary least square method, for the period 1948-61 have been calculated at 1948-49 prices by disaggregating the gross private capital formation into three types: a) investment in machinery and other equipment, b) construction, c) inventories.

Private gross investment in machinery and other equipment includes 'usual' capital goods as well as scooters, cars, sewing machines, *etc.*, which can be classified both as consumer durables and capital goods. Simple acceleration principle is rejected as a determinant of private investment, and instead, the variables considered are:

- i) industrial profit index with one year lag, II_{-1} .
- ii) deflated industrial profit index with one year lag, $\left(\frac{II}{P_{me}} \right)_{-1}$
- iii) industrial utilization capacity indices with $1\frac{1}{2}$ and 1 year lags; $U_{-1\frac{1}{2}}$, U_{-1}
- iv) rate of interest (percentage yield on Government of India securities) with one year lag, i_{L-1}
- v) private disposable income with no lag, Y .

The study explains the variance in the level of stock rather than changes in stocks because very low explanation was obtained for the latter.

There are as many as six explanatory variables explaining the level of stock:

- I) $(Y - I_p^s - I_g^s)$ = National income less private and government investment in changes in stock at 1948-49 prices
- II) i_{s_1} = Average of treasury bill rate and three month deposit rate of schedule banks.
- i_{s_2} = Average of (i_{s_1}) and call loan rate
- i_{s_3} = Average of (i_{s_2}) and Bazar bill rate
- I_p^s = Private investment in changes in stock at 1948-49 prices.

$\Delta p = P_t - P_{t-1}$ change in implicit N.N.P deflator.

$(Y - I_p^s - I_g^s)$ alone explained 93 per cent of the variance in stocks and is significant at 5 per cent level. The sign for the coefficient was positive in all of thirteen equations, as was expected. Inclusion of Δp did not improve the explanation much.

In three equations explanatory variables are $i_{s_1}, i_{s_2}, i_{s_3}$ in addition to $(Y - I_p^s - I_g^s), \Delta p$ and $\sum_{i=1}^{t-1} I_p^s$. The results are discouraging because the interest rates and the lagged stock variable have wrong signs, i.e., former is positive and the latter is negative. Some equations also posed the problem of multicollinearity and/or non significant results. This left the author to choose from the following two equations:

$$\sum_{i=1}^t I_{p_i}^s = -30.1839 + 0.3524^* (Y - I_p^s - I_g^s) \quad \dots \dots \dots (1)$$

(0.0314)

$$R^2 = 0.9309$$

$$\bar{S} = 1.363$$

(* significant at 5 per cent)

$$\sum_{i=1}^t I_{p_i}^s = -24.7683 + 0.3165 (Y - I_p^s - I_g^s) + 0.1722 \sum_{i=1}^{t-1} I_{p_i}^s \quad \dots \dots (2)$$

(0.1493) \hspace{10em} (0.3790)

$$R^2 = 0.9328$$

$$\bar{S} = 1.1410$$

Equation (1) is static whereas Equation (2) is dynamic because they make distinction between short-run and long-run responses of stocks to output. The author prefers the latter equation to the former because of the instability resulting from instantaneous changes of stocks to output in the static model.

(M. TARIQ DURRANI)

M. L. Lakhera, "Growth Patterns in the Economies of South and East Asia", *Asian Economic Review*, May 1965.

South and East Asia far from being homogenous presents a spectrum of economies widely different in their stages of industrial development, their physical and social endowments and their attitudes to the process of economic growth. Despite this, some distinctive patterns of growth can be identified in the economies of this region over the last 'fifties. All the economies except that of Indonesia experienced economic growth in terms of national income. But due to population explosion there was no positive change in the per capita income. Here the growth of national income will be considered to examine whether the change has followed similar pattern in all the economies. The criteria for differentiation of these patterns can be many and varied; but here the following criteria will be used: a) capital-output ratios adopted in the economic development plans of these countries; b) achieved domestic rate of savings, the margin between the rates of savings and the rates of capital formation and the manner of realising domestic savings; c) the relative role of public and private sectors in the course of economic development.

By 1958 almost all the countries of this region had formulated economic development plans. The capital-output ratios adopted in their formulations are the best indicators to their process of economic development. The capital-output ratios considered here are aggregates.

In this region countries with high rate of savings have their capital-output ratios ranging between 2.5 and 4.3; compared to the capital-output ratios of advanced countries this is very low. This is due to their limited resources to employ highest level of Western technology and differently oriented growth patterns. Countries in this group are Burma, Ceylon, China, Japan, Thailand and India. Despite high rate of saving in Burma, Ceylon and Thailand industrialization is taking place at a very slow pace. This is due to their large investment in infrastructure which has failed to generate demand for manufactured goods. Only in Japan, China and India the strategy of economic growth follows the priority of development of heavy industry. But due to population pressure they have to compromise between capital intensive and labour intensive techniques.

In the remaining group of countries with lower capital-output ratio, economic development is occurring through the development of consumption goods sector. This is true for Pakistan, Philippines, South Korea, Taiwan, Hong Kong, Indonesia and few others. The emphasis on consumption goods sector in Pakistan, Philippines, *etc.*, is justified by their less pressing population problem. This is not true for others. Due to their limited natural endowments, dictates of foreign capital and choice of export oriented growth, Hong Kong, Taiwan, *etc.*, have adopted the strategy of consumption goods sector.

According to the second criterion, economies can be divided into two classes—one where growth is mainly through domestic efforts and the other where it is largely through foreign aid. Economies dependent on domestic efforts can further be divided into two parts—one where chief mechanism of surplus realisation is the domestic market while in the other it is the foreign market. In the first category fall India, Indonesia, China and Ceylon. While the second category includes Burma, Malaya, Singapore, Philippines and Pakistan. Foreign demand is independent of the economies of the latter group. So their economic growth is characteristically tied up with the growth of advanced economies characterised by cyclical fluctuation. So economic planning is not much helpful here in realising surplus resources.

Besides the above general case in some countries in the last decade foreign aid has been the fountain head of economic growth. In this group come Cambodia, Taiwan, South Korea, South Vietnam, Laos and partly Pakistan.

According to public-private sector relationship criterion, three types of economies are visible in the region, their ideal being given by Japan, China and Burma. In the Japanese model state's role is to sponsor and retire in favour of private enterprise once the stage is set for industrialisation. This model is perceptible in Pakistan, Philippines, Taiwan, *etc.* In the Chinese model reduction of the private sector is a matter of principle. This is followed by North Korea and North Viet Nam. In all of them the process of socialisation of the economy has gone very far not only in industry but also in agriculture. During the period 1952-57 the share of private sector in the national income of China fell from 78.7 per cent to 2.7 per cent.

The Burmese model has accepted socialism in some form or other as their final objective. This is followed by Ceylon, India and Indonesia. All these countries have been following fiscal and monetary policies contributory to the growth of private enterprise to a permissible size. The conviction behind this policy of encouraging private sector has been that under present circumstances private sector should be given ample scope in the interest of speedy industrialisation.

(AZIZUL HAQUE CHAUDHURY)

Kiyoshi Matsu, "Problems of the Developing Countries", *Kyoto University Economic Review*, Vol. XXXIV, April 1964.

The so-called neo-colonialism in the post Second World War period indicates different features compared with that of the pre-War period. The United States, by taking the place of the old colonialistic empires, has acquired considerably increased power.

Another feature of neo-colonialism, according to Mr. Huang-Chan Peng of China, is that it has adopted a reformistic style and is not so brutal as the old colonialism. Its ideological symbol is "underdevelopment economics", now in vogue in and around the U.S.A., and R. Nurkse, as cited by Mr. Huang, is its example. Nurkse's Theory of "Vicious Circle of Poverty" deserves considerable attention. This means the standard of net income of the people of the underdeveloped countries is low, and saving ability is commensurately less. The low net income is the result of low productive power, and the latter is mainly due to want of capital. The want of capital is the result of minimal saving ability. The way to get out of this "Vicious Circle of Poverty" is, according to Nurkse, mobilization of surplus labour in the villages for industry. Nurkse's opinion is that the development of an underdeveloped country is needed for the accumulation of capital inside the country itself, a process resembling the so-called 'self-reliance' of China. Nonetheless it demands agricultural reform in the interests of the peasants. Moreover, when the capital so accumulated is invested, democratic national planning is essential.

Myrdal's view is also reformistic. He deals with the international inequality produced by the old colonialism. Inequality, according to him, arises from: i) the result of international trade, the international movement of capital and immigration; ii) the bad influence and legacy of colonialism; iii) lack of a world-wide government. Myrdal emphasises the necessity of promoting nationalism and national economic planning. But national political and economic independence cannot be attained without struggling against foreign imperialism. W. W. Rostow who is one of the most reactionary bourgeois economists of America also suggests in the "Main Points of Foreign Aid Plan" of the United States that America should start to put in hand a long term plan as early as possible, in order to promote the self-sustaining economic growth of the free world—the investment standard proposed in this plan must be enough to increase net income per capita by 1.5 to 2 per cent per year, covering all the underdeveloped countries of the free world.

Marxist economics which criticizes economics for underdeveloped countries does not deny the possibilities of constructing and developing an independent

national economy. Professor Bettelheim cites anti-imperialistic, anti-feudalistic struggles as a condition for the construction of an independent national economy.

It can, however, be inferred from his views that Bettelheim shows the possibility of economic development even through the way of capitalism, but with certain limits.

The economic construction of the newly emerging nations has to be performed mainly through their own efforts. Economic cooperation with foreign nations appears to be necessary, but it is, in every sense, only a subordinate method to self-reliance. Ideas in regard to the relation between self-reliance and economic cooperation are the valued lessons which, China learnt from her 15 years' experience of socialist construction which involved various difficulties. Mr. Chou En-lai, Prime Minister of China, has thrown much light on these points in the form of "eight principles" during his travels in Africa and Asia in 1964. The foundation of these eight principles is that when a newly emerging nation tries to construct her own independent national economy, the fundamental way is "self-reliance" and that economic aid from foreign countries is only a subordinate element. It should, however, not be concluded from this way of thinking that China denies the importance of international division of labour.

Adam Smith advocated free trade, but the free trade which he supported was that which is based upon the development of national economy and contained no inconsistency with the so-called self-reliance of to-day. It can be safely said that it was after David Ricardo that the theory of free trade came to be inconsistent with self-reliance. But in order that each country's trading may get advantage from the trade, the fundamental principles of equality, mutual profit and non-intervention into domestic affairs should be respected.

The countries situated in Asia and Africa, despite their different social and economic systems, can enlarge their trade and enjoy the advantage thereof, if the fundamental principles of equality, mutual profit and non-intervention in domestic affairs are observed. It was not due to the differences in social and economic systems that the development of Japan-China trade was prevented after the Second World War. It happened because the political situation of the world prevented the establishment of friendly relations between these two nations on the basis of equality, mutual profit, and non-intervention in domestic affairs. The unfriendly policies pursued by the Japanese Government towards China are now undergoing a change as a result of the earnest hope of the Japanese people to extend economic cooperative relations with Afro-Asian countries on the basis of Bandung principles.

With regard to trade relations between Japan and Africa, it can be safely said that Japanese trade with Africa, just like that with Asia, is gradually changing its pattern from the goods of light industry centering textiles to the products of the heavy-chemical industry. This may be due to the fact that African newly emerging countries also are trying to carry out industrialization in order to construct independent national economies and as a result the demands for the goods of the heavy-chemical industry are increasing. It is, therefore, better to encourage Japanese export to cooperate positively for the industrialization of the newly emerging countries.

Prime Minister Chou En-lai of China along with Vice-Prime-cum-Minister for External Affairs Chen Yi visited U.A.R., Algeria, Morocco, Tunisia, Ghana, Mali, Guinea, Sudan, Ethiopia and Somalia from December 1963 to February 1964. In view of friendly atmosphere created by such visits it is realized that economic cooperation between China and Africa, especially in trade, would undergoing a big expansion in the near future.

(N. H. NIZAMI)

Vernon W. Ruttan, "Growth Stage Theories and Agriculture Development Policy", *Economic Weekly*, August 7, 1965.

In this paper the author has attempted an evaluation of growth stage theories—both general stage models and agricultural stage models—so as to find out how far analyses within the framework of these models are helpful in resolving agricultural development policy issues.

He started the paper by pointing out that growth stage theories can be traced as far back as in the literature of the 19th Century and then went on discussing various approaches in their historical perspective.

List, one of the earlier writers of growth stage theory, distinguished five development stages: a) savage, b) pastoral, c) agriculture, d) agriculture and manufacturing, and e) agriculture manufacturing and commercial; and was particularly interested in demonstrating that industrial protectionism had a positive role for countries which were in transition from a high level of agricultural development to industrialisation while free trade was more appropriate for countries which were at a low level of agricultural development or at a high level of industrial development.

The concept of structural transformation from primary to secondary and from secondary to tertiary production achieved by steady shift of employment and investment from the essential 'primary' activities . . . to 'secondary' activi-

ties of all kinds, and even to still greater extent into 'tertiary' production was developed by Fisher and Clark in the 1930's. This approach held sway in both economic thought and policy during post World War II decade but began to lose ground by the mid-1950's with the emergence of Rostow's leading sector growth stage approach. Rostow distinguished five stages of development; *a)* the traditional society; *b)* the preconditions for take-off; *c)* the take-off; *d)* the drive to maturity; and *e)* the age of high mass consumption, and sought to explain the movement from one stage to another by introducing, on the supply side, the concept of sequence of leading sectors which succeed each other as the basic generators of growth and "on the demand side, declining rates of growth in demand . . . as factors dampening the growth rates of leading sectors and transforming them to sustaining or declining sectors." Technology was an important factor in the process. Rostow first recognised the critical role of agricultural sector in the development process.

At a 1960 conference of the International Economic Association on "The Economic of the Take-off into Sustained Growth" majority opinion rejected *a)* either Rostow's dating of take-off for presently advanced countries or *b)* the concept of take-off itself. Rostow's approach is also being questioned as *a)* no particular stage fits in most of the now less developed countries, *b)* it fails to explain why the economy of the Philippines immediately slipped back into 'preconditions' stage after entering into the take-off' stage in 1957, and *c)* it contains no mechanism to explain why countries such as Argentina, Chile, Ceylon, India, and Burma, which were experiencing rapid growth in the latter years of the 19th Century, failed to achieve a successful take-off.

So far about the general stage approaches. The author then passed on to a discussion of the agricultural development stage approaches.

From Fisher-Clark structural transformation model Schultz developed what is known as industrial impact hypothesis which appeared to be particularly relevant for the less developed regions of the more industrial countries and to have less scope in most of the less developed countries.

A number of economists suggested a sequence of three agricultural development stages namely stage I (static), stage II (transitional) and stage III (dynamic). It has been emphasised that biological innovations and intensity of labour use was particularly important during the transition from stage I to stage II while higher inputs of "power" was to be employed in transition from stage II to stage III. Some authors have also emphasised the importance of leading commercial sector within agriculture while there are others who "emphasise the

possibilities of transforming the subsistence sector into a small scale commercial sector'.

The question that remains to be answered is: can the persistent agricultural development policy issues be resolved by one or other of the approaches so as to achieve growth"

Neither the general stage approaches nor the agricultural development stage approaches provide any definite answers to the question. The basic limitation of the growth stage approach in this respect is that this is a "search for economic doctrine in the form of historical generalisations" and not so much "for the development of analytical power". Further the "differentiation of stages in both general and agricultural development stage approaches represents a 'blind alley' rather than a new revolution in economic thought."

However, the recognition of the critical role of agricultural sector in the development process particularly in Rostow's leading sector model and suggestion of tenure reform, fiscal policy reform *etc.*, so as to enfranchise the peasants to facilitate the emergence of a middle class so necessary for providing the mass purchasing power needed to sustain an expanding urban industrial sector, are potentially useful tools for the development of analytical power.

(QAZI KHALIQUEZZAMAN AHMAD)

Vito Tanzi and Joseph Aschheim, "Saving, Investment, and Taxation in Under-developed Countries", *Kyklos*, Vol. XVIII, 1965.

This paper examines the relationship between the distribution of tax burden on the one hand and the propensity to save as well as the incentive to invest on the other hand. The approach is one of analysing the effects of a progressive income tax in the context of Duesenberry's theory of the consumption function. Duesenberry argues that consumption is not determined by the absolute level of income but by the relative position of the individual in the income distribution. There is demonstration effect not only between countries but also within a country between various income groups. Thus, the consumption habits of the persons at the top are emulated by those just below them and the latter by those below them and so on. In this way the consumption of all groups reaches a level higher than it would have attained if the distribution of income had been more even. It follows that progressive income tax, by making the distribution of income more even, need not necessarily lead to a reduction in saving.

So far the effect of progressive income tax on investment decision is concerned it may be argued first, that as long as the correlation between personal effort and personal income is not high, the effect of progressive taxation on personal effort will be weak. This for example is the case of incomes in the form of rents. Second, there are in the system two main types of private economic decision makers: households and firms. The economic objectives of households are consumption and accumulation of wealth. The objectives of firms are more complex involving the growth of the firm, the increase of profits and the increase in the value of its assets, *etc.*

According to Duesenberry's theory, the rate of change in the consumption of an individual depends on the rate of change in the consumption of others in the economy. If the consumption of the others is not increasing, an increase in consumption of a given individual will not be a very important objective, and productive effort will not hinge on that objective. The other objective, however, will remain important. It has been observed that people continue to work hard and accumulate wealth even when their income far surpasses their future, as well as present, consumption needs. It seems to follow from this that efforts on the part of individual investors would not be greatly hampered if their relative consumption did not change while their wealth was permitted to continue to increase. Hence, what is called for is a system of taxation which permits wealth to accumulate while limiting consumption. Kaldor's proposal for taxing consumption expenditure and exempting saving, involves some serious practical difficulties of measuring personal consumption. A simpler and more practicable solution is to impose high progressive rates on the incomes of individuals coupled with low rates, or no tax at all, on the incomes of corporations and on unrealized capital gains. It would induce the corporations to retain most of their profits and reinvest them. The retention of profits and their investment will in the long run lead to an increase in the value of stocks and will thereby make the stockholders wealthier. At the same time total saving and total investment would be increased.

It would also induce the rentiers to try to limit their taxable income by disposing of wealth in the form of land and buildings and acquiring wealth in the form of shares in corporations.

(GHULAM MOHAMMAD RADHU)

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