A NEOCLASSICAL APPROACH TO THE ECONOMIC THEORY OF SOCIALIST ECONOMY

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Burnham Beckwith is one of the authors who, soon after World War Two ended, produced systematic and exhaustive treatises on the political economy of socialism. His book**) has the ambition to offer »pure theory« of socialist economy and so represents a direct continuation of the work of the few authors who between the two world wars — stimulated by Mieses' and Hayek's critique of economic rationality in the environment of the ruling socialist institutions in abstracto rather than by the real problems of the only socialist economic practice of the time — endeavoured to outline the first substantial theoretical systems of socialist economy. However, since it followed Dickinson's, Durbin's, Lange's and Lerner's work, Beckwith's treatise had a wider scope and more details. Though lacking the originality of the first pioneering works on the subject, it approaches the problems of socialist economy from the standpoint of the theory of welfare economics, i.e. from the standpoint of neoclassical microeconomics, more comprehensively and more methodically than its predecessors.

In his subsequent work, Beckwith has been concerned with philosophy, methodology and application of marginalism in the sphere of economic calculations, so that the second edition of his *Economic Theory of Socialist Economy* is considerably enlarged and has more depth. It has developed into a pure theory of liberal socialism, i.e. into a »pure theory of the welfare economics of the liberal socialist system«.

What is the contribution of Beckwith's maturescence to the theory of socialist economy? He offers an economic model of the liberal market socialism. Tightly connected with the model, he presents a normative theory of the behaviour of its economic object, by and large falling back upon the neoclassical economic tradition, but also incorporating some amendments.

Since it rests upon the government of executive bodies, experts and universal monopoly (»each socialist firm has to be a perfect monopoly«) and advocates centralized supreme control of each political economic unit, at first glance, the model appears to be centralistic and bureaucratic. Ho-

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**) Bernham P. Beckwith, *Liberal Socialism, The Pure Welfare Economics of a Liberal Socialist Economy*, Exposition Press, Jericho, New York, 1974 (second edition), XV + 463.

wever, the principles of organization of the economic system include »democratic election of executives and decentralization of all decision makers below the level of national, central control (whose function is strictly legislative, concerned with basic economic policy decisions and never dealing with specific, administrative decisions referring to individual investments income policy, change of prices, revision of tariffs, subsidies, research programs and similar)«. Beckwith's model is functional, as well; it opts for the functional as against the regional principle of organization of the socialist system, so that the executives — the entire decentralized system of executives — work for a central agency which assigns a major function or a group of tightly interconnected functions to the nation as a whole. In short, although its author does not say it explicitly, Beckwith's model of organization of socialist system appears to be deeply influenced by the ideas of guild socialism about the functionaly based organization of socialist system of production.

For this reason, Beckwith's ideas contribute to the development of pure economic theory rather than to that of theory of organization. Admitedly, his point of departure is not completely new; it is present in various treatises dealing with problems of mechanisms and systems of socialist economy, based on neoclassical price and value theories and concerned with determining the optimal criteria for the functioning of economic subjects.

Beckwith points out that the economic theory of socialism is, as a matter of fact, »an application of the orthodox neoclassical theory, i.e. the theory of full competition, to the problems of socialist economy«. Also, he endeavours to transfer the traditional theorems and descriptions of the theory of competition, from Marshall to Lerner, to the normative principles of socialist economy. At last, Beckwith makes a step backwards towards the modern welfare economics since he believe the welfare economics of the neoclassicists to be healthier and more useful for the socialist economy than the »new welfare theory«.

In this framework, Beckwith is at the same time a neoclassical eclectic, a reformist and a revisionist. He adjusts some of the basic postulates of the neoclassical theory of adjustment and reinterprets them to meet the standards of the socialist blueprint. But on the whole, he is more close to Marshall's and Pigo's than to Pareto's and Baron's treatments, both as concerns welfare functions and in questions of economic philosophy, tradition and methodology.

Beckwith's main contributions would be as follows:

(a) Application of neoclassical marginal rather than Marxist analysis, since the former is more useful to the socialist than to the capitalist economy.

(b) Production control through the mechanism of profits and losses, making possible complete decentralisation of control while rendering planning superfluous.

(c) Consumer sovereignty indirectly controlled by the changes in prices and personal income.

(d) Special treatment of the workers which can, whenever and wherever desired, get jobs for which they are qualified and can be fined but not fired.

(e) Price formation on the basis of the marginal cost price system for individual types of costs (variable short-term costs) and on the basis of cost-benefit analysis for the major lumpy cost adjustments in factor utilization (i.e. for nonmarginal long-term costs).

(f) Repeal of the principle of marginal productivity factors in reference to the workers (»many workers couldn't and wouldn't be given an income equivalent to their marginal product«).

We shall deal in detail with the above contributions.

We have already mentioned that the ideal of the neoclassical theory, based on the marginal method of setting up a normative and functional economic behaviour theory in socialism, is neither new nor only Beckwith's. We should add that, as concerns the practical problems of administration, (short-term price formation and market consumer behaviour in socialism), the marginal methods and marginal techniques can be and already are applied both as fundamental and applicative disciplines. However, in this connection, Beckwith makes two types of mistakes: (a) he rejects the Marxian dynamic long-term trend analysis of the basic aggregates of social product as a basis for long-term conceptualization of normal price of reproduction factors and products in socialism and (b) discards both Marxian and modern total analyisis based on averages (average overall costs, average socially required time labour etc.) Instead, he uses the total cost-benefit analysis which is at least as inprecise an instrument for solving practical problems as the concepts of average costs and values which he rejects. Beckwith's interpretation of the Marxist theory of capitalism and the applicability of his analytical procedure to the problems of socialism is, on the whole, superfluous. Alowing that (a) any evaluation on the basis of average labour costs comes »much closer to marginal costs than an evaluation using total costs« (p. 18), (b) that »the application of Marxian labour theory of value for determining prices brings prices much closer to the ideal, marginal costs than would the application of any other theory of average costs or theory of production«, and (c) that »by insisting on marginal analysis one does not discard Marxs implication that prices should be based on labour costs exclusively« (p. 213), Beckwith is not consequential and his analyses of factors that determine prices include as costs other elements, as well.

Beckwith should be looked upon as one of the major if not the greatest protagonist of the idea that the economic calculations of price formation cost in socialist blueprint, should differentiate clearly between marginal and total analysis, i.e. between price determination on the basis of marginal and fixed costs. He had payed special attention to this problem already in one of his earlier books in which he followed the problem of development of economic welfare calculation from Wicksel, Pareto and Clark to Fleming, Bergson, Reder, Wickrey, Little and Ruggles, i.e. through a span of half a century[1]).

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[1]) *Marginal Cost-Price-Output Control*, Columbia University Press, New York, 1955.

Consequently, he introduces into economic literature the idea that the concept of marginal costs should include only continuous variable costs, rejecting in this way all attempt to allocate total and lumpy costs to individual units of production (i.e. to long-run marginal costs). This is actually his major contribution to the economic doctrine of pure theory of socialism. However, after making this consequential discrimination, when classifying marginal costs, he is forced to acknowledge a whole range of exceptions and replace and mitigate his analytic rigidity with conventions. As a matter of fact, consequential application of marginal rules is possible only in a static analysis; as soon as we have to deal with a dynamic cost category, uncertainties and conventions replace theoretic rules. The complicacy of the principle of calculation and the impossibility to cover it by a unique general principle become even more prominent when Beckwith comes to analyse the nonmarginal total costs (overhead indirect fixed costs). To wit, Beckwith's discrimination between marginal and lumpy (fixed) costs is operative and functional: the same category can be both marginal and lumpy depending on whether and to what an extent it does or does not necessarily follow every change in production. Whereas, each change of existing production is connected with marginal cost analysis, i.e. with the decision on how much to produce, each intended production of new goods dealing with the problem of which goods to produce as well as with the requirements for investment into durable capital goods, represents an element of total adjustment to the use of factors, i.e. to the changes in the scope of nonmarginal costs.

What are the criteria for these changes? What are the criteria for measuring the changes in the scope of total lumpy costs? To discover them, Beckith developes his general theory of total analysis which singles out some quantitative and some functional determinants and is somewhat different from the theories of either the neoclassicists or those of the modern analysts. For Beckwith, total analysis is a theory for »measuring and comparing total, largest intra-marginal quantities, i.e. total gains (in income or pleasure) and total losses (outlays or real costs), which cause overall changes in use of factors« (p. 214). One should point out that the instruments that Beckwith offers for the classification of cost elements are complicated; he uses the familiar categories of the neoclasicists with new implications or constructs new categories which are strongly reminiscent of the neoclassical ones. His total analysis is based on the implicit assumptions that (a) economic welfare is an expression of net surplus, economic pleasure in relation to economic subjective pain in the framework of production and consumption of commodities; (b) any lumpy change in use of factors refers to production of commodities required by consumers, (c) prices are measured by real costs and benefits and (d) marginal analysis is unapplicable to the changes of total factors used. According to him, economic surplus originating as a difference between the relevant incomes and costs can be measured *n* number of years in advance, which, in turn, presupposes forecasts of all relevant future sales prices, all cost prices, wage rates, rates of interest and other factors.

Unlike the other modern analysts of economic behaviour in a socialist model, Beckwith insists on the complicacy of motivation hidden under the welfare criterion. In it he sees the *differentium specificum* of socialism as against capitalism. For, while the capitalist firms, endeavouring to maximize profit (and not welfare), in their application of total analysis are prone to forget some changes of economic surplus which measure the changes in real benefits, since these influence the scope of profit (consumer and production surpluses) and are, out of the same reason — maximization of profit — very sensitive to some actually irrelevant changes in disbenefits certain changes in rent and quasi-rental surpluses), »the socialist producers can measure and use in overall analyses all the excess changes which measure the relevant effects and forget about other changes in surplus« (p. 221).

According to Beckwith, the surpluses, the maximization of which becomes the very target of production capacity optimalization, include rental and quasi-rental surpluses, consumer surpluses ,worker's surpluses and savings surpluses. These »surpluses«, as defined by Beckwith (in the spirit of marginalist neoclassicism), are essentially a certain type of total real benefits, resulting from additional investment in durable capital goods. At the same time, the additional capital goods cause costs.

Production goes on as long as the sum total surpluses is greater than the sum of total costs, i.e. as long as there is some kind of net benefit.

However, according to Beckwith, and in general according to the marginal rule approach, net surplus is possible only under the assumption that marginal costs per unit of product are equal to or smaller than market prices.

This causes the problem of which the first proponents of the marginal rule were aware: optimal volume of production, i.e consequential application of the rule of equality of marginal variable costs in market prices, has to lead to deficient investments. This problem becomes more serious if the necessary empirical assumption about the industrial returns to scale is introduced into the analysis. When the level of population is optimal i.e. when personal incomes absorb the totality of national income, the investment deficit is closer to the level of interest and rent payments, and that for the value to be added to meet optimal investment requirements.

The question of how to satisfy deficit while keeping prices at the level of marginal (variable) costs boils down to the question of how to forecast future income and cost of lumpy production.

Beckwith sees three solutions: (1) new money, (2) »very high rentals and interest-income« to be absorbed by the socialist government and (3) some kind of poll taxes which do not influence directly either prices and production or the differences in personal incomes (p. 353—54). (Income tax in Beckwith's model covers only current, non-investment budgetary costs). Whether ths sum is sufficient is irrelevant for Beckwith, since his sole aim is to keep up the prices of finished products and consumer incomes and secure for that purpose funds by curtailing investments and accumulation, i.e. allocative resources.

This brings us back to the question of combining the factors of allocative and control mechanisms. Beckwith is very critical towards the theory of marginal productivity, both because it does not technically define marginal cost (this term can mean current, short-term, long-term or usual marginal product) and because it uses apologetically the capitalist combination of factors (p. 248). But, postulated as a welfare rule without unnecessary assumptions that total or near-total competition is narrowed down to the problem of control of variable factor trends, the theory, according to Beckwith, can be easily adjusted to the theoretical requirements of control of factor combination in socialism.

Beckwith rejects the neoclassical theorem about factor combination on the basis of equality of marginal product of variable factors and marginal costs as unacceptable for the production of free goods, at least in reference to the factors given in fixed proportions. He, likewise, rejects, the possibility to apply neoclassical theory to calculate lumpy costs. Whereas marginal costs cover only direct labour costs, »the largest item in the framework of marginal costs« (material and depreciation costs, interest on loans and loan funds, insurance and sales costs), the overall cost, incurred by the proposed total changes in production and measured by the comparison of total benefits or disbenefits resulting from them, represent a completely different category of costs, to which marginal production control cannot be applied.

In what way should one determine the costs and their prices when they do not refer to benefits and dis-benefits resulting from each change out of a chain of changes throughout a long term period and also when each forecast has to cover total disbenefits and outline the future changes in cost and sales prices and, accordingly, in income? Beckwith does not answer this question but only states that these forecasts are »less accurate than those of marginal production control«. Therefore, this part of his analysis is least satisfying, especially since it refers to many important categories of costs, e.g. to overhead, indirect or fixed costs. This means that many important cost items, such as rentals, interest, cost of maintenance of fixed capital, royalties, cost of research and design, cost of advertizing, personal income costs, administrative costs (earmarked for training of personnel) cannot be determined on the basis of the marginal rule.

We would like to refer briefly to two other important parts of Beckwith's system which contain interesting ideas and conceptual solutions, lacking, by and large, in other treatises of the kind.

First of all, we would like to turn to the theory of free goods, which is inseparable from the overall conceptual framework of formation of normative rule of prices in Beckwith's system. Beckwith rightly concludes that this problem has been neglected both in Western and in Soviet, Marxist, literature. According to him, free goods are those goods that the consumer consumes freely irrespective of whatever direct or indirect charge and price variation. He points out that both in the West (about one fifth of GNP in USA) and in the East (about 38 per cent of non-capital goods in the Soviet Union) are so distributed and that their respective shares are increasing. Although the price system is of advantage for national accounting and distribution of goods, the system of free goods rests upon sound economic reasoning: the consumption of free goods redistributes real income in a way which contributes to the egalitarian principle of socialism, increases consumption, decreases cost of sales and purchases and similar (p. 317). In this (nonprice) category Beckwith includes a great number of consumer goods and services such as education, research, newspaper and magazine consumption, radio and TV services, use of public libraries, visits to museums and zoos as well as child care and health services, legal and administrative services, insurance, public benefits (gass, electricity, telephone) and some transport services. These category is important out of two reasons. First of all, Beckwith maintains that the cost of production of these services and goods has to be included in the GNP estimates and subjected to economic analysis although they are met through taxation. Second, these goods have to be subject to production control and their effective consumption has to be restricted by economic and not by arbitrary and political criteria. The major economic factors of production control and restriction, like those of new capital investments, are in connection with total rather than marginal price analyisis.

And now a few words on Beckwith's theory of personal income distribution. The latter is based on the critique of the theory of marginal productivity factors and on the somewhat revised neoclassical theory of wages. For, though the concept of marginal product is irrevocably both a theoretical and a practical category, it is, accorging to Beckwith, very difficult to define the share of each individual in its creation, that product very often being the result of the working of many variable factors. The variable costs of application of variable factors do not coincide with the marginal value of production of these factors.

What are, according to Beckwith, the factors determining personal incomes, i.e. wages? One cannot say that Beckwith has answered this question precisely, though his analysis is based upon a careful analysis of a great number of principles. If the nonessential factors are removed, one is left with three elements: marginal real labour costs, »relevant« value of additional product which can be attributed to labour and the magnitude which can attract a definite number of workers in each work group (i.e. demand of workers). However, Beckwith's treatment of real labour to labour, in this as in all other parts of the treatise, shows that real labour costs cannot be directly fixed, that the determination of the value of marginal production (services) which can be precisely attributed to labour is very restricted and, consequently, the problem is reduced to a suggestion about the empirical itterative procedure of adjustment of personal income to the volume of required labour (of a given quality and quantity), i.e. to the mechanism of offer and demand. Because of Beckwith's vagueness and due to the inadequacy of his analysis of the socialist market, this mechanism is not quite clear. Yet, Beckwith's theory of wages, i.e. personal incomes, contains a range of very sound principles and axioms, such as the principle that the function of price factors in the socialist economy must be clearly and completely separated from the determination of personal income, the principle that wage cost must be evaluated independent of wage income, that the theoretic definition of income should be substantially differentiated from income tax, that differences in personal incomes should under socialism be smaller than (but, because of economic and technical reasons, not levelled) those in capitalism, that determination of income should be as little as possible institutionally influenced.

At the end, Beckwith devotes a whole chapter to the important problems of distribution of income originating in different ways: through abolishment of private property, creation of profits of socialist trusts, monetary funds and special taxation. The implicit distribution is independent of price policy. If these remain unchanged, the elimination of rentals and interest enables all socialist trusts to pay higher personal incomes. The latter would, of course, be differentiated since the share of rentals and interest payments varies from trust to trust. The explicit distribution of personal incomes will be made explicit when rates on independent and forced savings in excess of the funds of the bureau for capital funds are payed. Thereby, the excess profit will not be used to change the volume of personal incomes but rather to finance various ideal deficits whereas the income created by new money will come back to the consumers through general consumption financement. This income, according to Beckwith, represents a special type of mixture of expropriated rent, interest and even personal income, for the creation of new money impedes decrease of price levels and increase of real personal incomes and is effectuated as a certain type of income tax. In a similar way, the earmarked taxes are indirectly returned to the tax payers, thus, through general consumption, increasing real incomes.

On the whole, Beckwith's treatise is an interesting, important and up to date, most exhaustive study of the major theoretical problems of the socialist economic system from the point of view of the neoclassical school and welfare economics. Within the framework of neoclassical tradition, it undoubtedly represents a deep analytic discussion of the famous normative principle on which the price mechanism (»the marginal rule«) has to rely and a consequential elaboration of some central categories of the system: optimal factor combination, factor allocation and marginal cost output control. His consequential separation of the calculation of the production factor costs from personal income distribution, his theory of taxation and theory of free goods contain important normative considerations to which socialist economic practice should not fail to pay heed.

Still, Beckwith remains within the tradition of the neoclassical approach and of necessity reiterates some essential restrictions of this doctrinary theoretic trend. His approach is essentially microeconomic, static and short-term; his total analysis which should replace the long-term macro-theoretical approach is based upon unqualified terms such as total benefit and maximization of social welfare. Beckwith fails to touch upon one of the basic questions of modern economics — the problem of planing normatives and criteria — and, in spite of his explicit denials, insists upon the hidden assumption of perfectly competittive economic model. Finally, his model of institutional system organization is based upon the principles of universal economic monopoly and upon the sovereignty of bureaucrats and experts which, it must be admitted, correspond to some tendencies in socialism, nowadays opposed by self-government.