On the Economic Theory of Socialism: Part One

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The Review of Economic Studies, Vol. 4, No. 1. (Oct., 1936), pp. 53-71.

Stable URL:
http://links.jstor.org/sici?sici=0034-6527%28193610%294%3A1%3C53%3AOTETOS%3E2.0.CO%3B2-F

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On the Economic Theory of Socialism[1]

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PART ONE

I. THE PRESENT STATE OF THE DEBATE

SOCIALISTS have certainly good reason to be grateful to Professor Mises, the great *advocatus diaboli* of their cause. For it was his powerful challenge that forced the socialists to recognise the importance of an adequate system of economic accounting to guide the allocation of resources in a socialist economy. Even more, it was chiefly due to Professor Mises' challenge that many socialists became aware of the very existence of such a problem. And although Professor Mises was not the first to raise it, and although not all socialists were as completely unaware of the problem as is frequently held, it is true, nevertheless, that, particularly on the European Continent (outside of Italy), the merit of having caused the socialists to approach this problem systematically belongs entirely to Professor Mises. Both as an expression of recognition for the great service rendered by him and as a memento of the prime importance of sound economic accounting, a statue of Professor Mises ought to occupy an honourable place in the great hall of the Ministry of Socialisation or of the Central Planning Board of the socialist state. However, I am afraid that Professor Mises would scarcely enjoy what seems the only adequate way to repay the debt of recognition incurred by the socialists, and it is difficult to blame him for not doing so. First, he might have to share his place with the great leaders of the socialist movement, and this company might not suit him. And then, to complete the misfortune, a socialist teacher might invite his students in a class on dialectical materialism to go and look at the statue, in order to exemplify the Hegelian *List der Vernunft* which made even the staunchest of *bourgeois* economists unwittingly serve the proletarian cause.

Since the clear and distinct formulation of a problem is certainly a major contribution to science, the economist will have to join the socialists in their recognition of Professor Mises' work on economic calculation in a socialist

[1] Part Two of this article will be published in the next number of the REVIEW OF ECONOMIC STUDIES.

economy. As Professor Hayek has put it: to Professor Mises belongs "the distinction of having first formulated the central problem of socialist economics in such a form as to make it impossible that it should ever again disappear from the discussion." [1] But, unfortunately, besides formulating the problem, Professor Mises has also claimed to have demonstrated that economic calculation is impossible in a socialist society. The economist will scarcely find it possible to accept this claim. From the economist's point of view, he would have done better to confine himself to the formulation of the problem, as Pierson did; though, if he would have done so, he probably would not have merited the great recognition of the socialists. For it was exactly Professor Mises' denial of the possibility of economic accounting under socialism that provided his challenge with such force and power. Thus the socialist and the economist will view the achievement of Professor Mises differently: a strange instance of the divergence of their opinions, which, as Professor Mises thinks, must be always the rule. A solution of the problem, different from that advanced by Professor Mises, was suggested by Pareto as early as 1897 [2] and was later elaborated by Barone.[3] The further discussion of the problem, with one exception, which will be mentioned later, has scarcely gone beyond what is contained already in Barone's paper.

Professor Mises' contention that a socialist economy cannot solve the problem of rational allocation of its resources is based on a confusion concerning the nature of prices. As Wicksteed has pointed out, the term price has two meanings. It may mean either price in the ordinary sense, i.e. the exchange ratio of two commodities on a market, or it may have the generalised meaning of "terms on which alternatives are offered." "'Price,' then,—says Wicksteed—in the narrower sense of 'the money for which a material thing, a service, or a privilege can be obtained,' is simply a special case of 'price' in the wider sense of 'the terms on which alternatives are offered to us.'" [4] It is only "prices" in the generalised sense which are indispensable to solve the problem of allocation of resources. The economic problem is a problem of *choice* between different alternatives. To solve the problem three data are needed: (1) a preference scale which guides the activity of choice, (2) knowledge of the "terms on which alternatives are offered," and, finally, (3) knowledge of the amount of resources available. Those three data given, the problem of choice is soluble. Now it is obvious that a socialist economy may

[1] *Collectivist Economic Planning*, London, 1935. *Vide* Professor Hayek's introduction, p. 32.

[2] *Cours d'économie politique*, vol. II, Lausanne, 1897. p. 364 et seq. Cf. also *Manuel d'économie politique*, Paris, 1910. p. 362–4.

[3] " Il ministerio della produzione nello stato collettivista," *Giornale degli Economisti*, 1908. This paper has been published in English as an appendix to the volume on *Collectivist Economic Planning* edited by Professor Hayek. A very lucid exposition of the problem and its solution in a non-mathematical form has been given by Dickinson, " Price Formation in a Socialist Community, the *Economic Journal*, June, 1933. Cf. also Heimann, *Sozialistische Wirtschafts- und Arbeitsordnung*, Potsdam, 1932; Zassenhaus, " Ueber die oekonomische Theorie der Planwirtschaft," *Zeitschrift fuer Nationaloekonomie*, Bd. V, 1934; and Knight, " The Place of Marginal Economics in a Collectivist System," the *American Economic Review Supplement*, March, 1936.

[4] *The Common Sense of Political Economy*, 2nd ed., London, 1933. p. 28. Similarly Professor Schumpeter has stated that the term " exchange ratio " may be used in a wider sense to indicate the alternatives available, so that production may be regarded as an " exchange " *sui generis*. Cf. *Das Wesen und der Hauptinhalt der theoretischen Nationaloekonomie*, Leipzig, 1908. p. 50 et seq.

regard the data under (1) and (3) as given, at least in the degree in which they are given in the capitalist economy. The data under (1) may be given either by the demand schedules of the individuals, or be established by the judgment of the authorities administering the economic system. The question remains whether the data under (2) are accessible to the administrators of a socialist economy. Professor Mises denies this. However, a careful study of price theory and of the theory of production convinces us that, the data under (1) and under (3) being given, the " terms on which alternatives are given " are determined ultimately by the technical possibilities of transformation of one commodity into another, i.e. by the production functions. The administrators of a socialist economy will have exactly the same knowledge, or lack of knowledge, of the production functions as the capitalist entrepreneurs have. But Professor Mises seems to have confused prices in the narrower sense, i.e. the exchange ratios of commodities on a market, with prices in the wider sense of " terms on which alternatives are offered." As, in consequence of public ownership of the means of production, there is in a socialist economy no market on which capital goods are actually exchanged there are obviously no prices of capital goods in the sense of exchange ratios on a market. And, hence, Professor Mises argues, there is no " index of alternatives " available in the sphere of capital goods. But this conclusion is based on a confusion of " price " in the narrower sense with " price " in the wider sense of an index of alternatives. It is only in the latter sense that " prices " are indispensable for the allocation of resources, and on the basis of the technical possibilities of transformation of one commodity into another they are also given in a socialist economy.

Professor Mises argues that private ownership of the means of production is indispensable for a rational allocation of resources. As, according to him, without private ownership of the means of production no determinate index of alternatives exists (at least in the sphere of capital goods), the economic principles of choice between different alternatives are applicable only to a special institutional set-up, i.e. to a society which recognises private ownership of the means of production. It has been maintained, indeed, by Marx[1] and by the historical school (in so far as the latter recognised any economic laws at all), that all economic laws have only historico-relative validity. But it is most surprising to find this institutionalist view supported by a prominent member of the Austrian school,[2] which did so much to emphasise the universal validity of the fundamental principles of economic theory.

Thus Professor Mises' denial of the possibility of economic calculation in a socialist system must be rejected. However, Professor Mises' argument has been taken up recently in a more refined form by Professor Hayek and

[1] With regard to Marx this statement requires certain qualifications. Cf. the Appendix.

[2] I am, of course, perfectly aware that Professor Mises does not regard himself as an institutionalist and that he has stated explicitly the universal validity of economic theory (cf. *Grundprobleme der Nationaloekonomie*, Jena, 1933, pp. 27–26). But there is a spectacular contradiction between this statement and his assertion that private ownership of the means of production is indispensable for a rational allocation of resources. For if this assertion is true, economics as the theory of allocation of resources is applicable only to a society with private ownership of the means of production. The implications of the denial of the possibility of rational choice in a socialist economy are plainly institutionalist.

Professor Robbins. They do not deny the *theoretical* possibility of a rational allocation of resources in a socialist economy, they only doubt the possibility of a satisfactory *practical* solution of the problem. Discussing the solution offered by Barone, Dickinson, and others, Professor Hayek says that: "it must be admitted that this is not an impossibility in the sense that it is logically contradictory." [1] But he denies that the problem is capable of a practical solution in a society without private ownership of the means of production.[2] The issue has been put very clearly by Professor Robbins. "On paper," he says "we can conceive this problem to be solved by a series of mathematical calculations. . . . But in practice this solution is quite unworkable. It would necessitate the drawing up of millions of equations on the basis of millions of statistical data based on many more millions of individual computations. By the time the equations were solved, the information on which they were based would have become obsolete and they would need to be calculated anew. The suggestion that a practical solution of the problem of planning is possible on the basis of the Paretian equations simply indicates that those who put it forward have not grasped what these equations mean." [3] Thus Professor Hayek and Professor Robbins have given up the essential point of Professor Mises' position and retreated to a second line of defence. On principle, they admit, the problem is soluble, but it is to be doubted whether in a socialist community it can be solved by a simple method of *trial and error*, as it is solved in the capitalist economy. The significance of the private ownership of the means of production and of an actual market for capital goods has shifted. Theoretically prices in the generalised sense of "terms on which alternatives are offered" are admitted to be given also without an actual market. The function of the market is, according to them, a different one, namely, to provide a method of allocating resources by trial and error. And it is this latter possibility a socialist economy would be deprived of.

The position taken by Professor Hayek and by Professor Robbins is a significant step forward in the discussion of the problem. It promises a much more fruitful approach than Professor Mises' wholesale denial of the possibility of economic accounting under socialism. Whether by having taken this step they, too, will merit an honourable statue, or at least a memorial tablet, in the building of the Ministry of Socialisation or of the Central Planning Board is yet to be seen. The great importance of the problem makes it quite possible. Already Barone has pointed to the fact that the equations of economic equilibrium must be solved also in a socialist society by trial and error.[4] He regarded such a solution as possible but failed to indicate how it would be done. However, the way in which a socialist economy would solve the problem by a method of trial and error has been indicated quite clearly by Fred M. Taylor in a paper published in 1929.[5] This paper provides in substance the answer to Professor

[1] *Collectivist Economic Planning*, p. 207.

[2] *Ibidem*, p. 208 et seq.

[3] *The Great Depression*, London, 1934, p. 151.

[4] See: "The Ministry of Production in the Collectivist State," reprinted in *Collectivist Economic Planning*, pp. 286–9.

[5] "The Guidance of Production in a Socialist State," the *American Economic Review*, March, 1929. Cf. particularly pp. 6–8. Unfortunately, Professor Hayek seems not to have read this

Hayek's and Professor Robbins' argument, and it is the first contribution which really goes beyond what is contained in Barone's paper. But the great importance of their argument necessitates a more detailed investigation of the problem. It is, therefore, the purpose of the present paper to elucidate the way in which the allocation of resources is effected by trial and error on a competitive market and to find out whether a similar trial and error procedure is not possible in a socialist economy.

2. THE DETERMINATION OF EQUILIBRIUM ON A COMPETITIVE MARKET

Let us see how economic equilibrium is established by trial and error on a competitive market. By a competitive market we mean a market in which : (1) the number of individuals is so great that no one can influence prices appreciably by varying his demand or supply and, therefore, is forced to regard prices as constant parameters independent of his behaviour ; (2) there is free entry into and exodus from each trade or industry.

The conditions of equilibrium are twofold : (A) all individuals participating in the economic system must attain their maximum positions on the basis of equilibrium prices, and (B) the equilibrium prices are determined by the condition that the demand for each commodity is equal to its supply. We may call the first the *subjective* and the latter the *objective* conditions. However, these two conditions do not determine equilibrium unless there is added a third condition which expresses the social organisation of the economic system. In our case this condition states that : (C) the incomes of the consumers are equal to their receipts from selling the services of the productive resources they own. This condition is no equilibrium condition in the strict sense, for it holds independently of whether the economic system is in equilibrium or not. Notwithstanding, it is necessary to make equilibrium determinate. Let us call these three conditions A, B, and C, respectively, A and B being the equilibrium conditions *sensu stricto*.

A. The subjective conditions of equilibrium are carried out by the individuals[1] maximising their utility, profit, or income from the ownership of productive resources :

(1) The consumers maximise the total utility they derive from their income by spending it so that the marginal utility of the amount obtainable for a unit of income (expressed in money) is equal for all commodities. Their incomes and the prices being given (the latter are necessary to determine what is the amount of a commodity obtainable for a unit of income) the demand for consumers' goods is determined.

paper, which has so much bearing on his argument, though he quotes it. He quotes it as one of the theoretical solutions alongside of that of Barone, Dickinson, etc., whereas Taylor indicates a solution by trial and error. It is also to be regretted that this paper, which is the only step forward since the treatment of the problem by Barone, has not been reprinted in the volume on *Collectivist Economic Planning*.

[1] The term "individual" is used here in the broad connotation of *Wirtschaftssubjekt* so as to include also collective units (family households, joint-stock companies, for instance).

(2) The producers (in attempting to maximise their profit) minimise their average cost of production.[1] The process of minimising the average cost of production is composed of two parts: (a) the determination of the optimum combination of factors, and (b) the determination of the optimum scale of output. The first is attained by combining the factors of productions in such proportion as to equalise the marginal productivity of the amount of each factor which can be purchased for a unit of money.[2] The prices of the factors being given, so that it is possible to determine what is the amount of each factor obtainable for a unit of money, this condition determines the minimum cost curve of the producer. The optimum scale of output is determined by two conditions, each resulting from a different property of the competitive market. First, the marginal cost has to be equal to the price of the product (which is given on the market) and, second, the average cost has also to be equal to the price of the product. The first results from the producer's aiming to maximise his profit while the price of the product is practically independent of the scale of his output (because of the great number of competing producers), and determines the output of the single producer, the second results from the free entry of producers into or exodus from any industry, and determines the output of the whole industry. Thus, the prices of the products and of the factors being given, the supply of products and the demand for factors is determined.

(3) The owners of the ultimate productive resources (labour, capital, and natural resources) maximise their income by selling services of resources to the highest bidder. The prices of services of resources being given, their distribution between the different industries is determined.[3]

B. The subjective conditions of equilibrium can be carried out only on the basis of a *given* set of prices and of consumers' incomes. The prices are regarded by the individuals as constants independent of their behaviour. For each set of prices and of consumers' incomes we get different quantities of

[1] By average cost the average cost per unit of output is meant throughout this paper.

[2] This statement has to be corrected if limitational factors are used in production. There are two kinds of limitational factors, according as to whether the amount of the limitational factor which must be used in production is a function of the quantity of product we wish to obtain, or of the amount of another factor used. If limitational factors of the first kind are used the statement in the text holds for the substitutional factors, the amount of limitational factors necessary being determined by the scale of output chosen. If limitational factors of the second kind are used the marginal productivity of the substitutional factors must be proportional to their prices *plus* the marginal expenditure for the limitational factors which are a function of the substitutional factor in question; the amount of the limitational factors necessary is then determined by the amount of the substitutional factors used. As to limitational factors of the first kind, cf. Georgescu-Roegen, "Fixed Coefficients of Production and the Marginal Productivity Theory," REVIEW OF ECONOMIC STUDIES, October, 1935. Dr. Tord Palander has drawn my attention to the existence of the second kind of limitational factors.

[3] In order to simplify the exposition we disregard the fact that the amount of the resources available, instead of being constant, may depend on their price. Thus the total supply of labour may be a function of the wage-rate. As to capital, its amount may be regarded in the short period as constant, whereas in the long run the rate of interest certainly affects saving. In long-period equilibrium the amount of capital is determined by the condition that the rate of its marginal *net* productivity (i.e. the interest rate) is equal to the time preference of the individuals (which may be, and probably is, zero). See my paper "The Place of Interest in the Theory of Production," REVIEW OF ECONOMIC STUDIES, June, 1936., cf. also Knight, "Professor Fisher's Theory of Interest," *Journal of Political Economy*, April, 1931, p. 197 et seq., and Hayek, "Utility Analysis and Interest," the *Economic Journal*, March, 1936, pp. 58–60.

commodities demanded and supplied. Condition C states that the incomes of the consumers are equal to their receipts from selling the services of the ultimate productive resources they own.[1] In virtue of this condition incomes of consumers are determined by prices of the services of ultimate productive resources, so that, finally, prices alone remain as the variables determining demand and supply of commodities. By assuming different sets of prices we obtain the demand and supply schedules. Now, the objective conditions of equilibrium serve to pick out a special set of prices as the only one which assures the compatibility of the subjective maximum positions of all individuals participating in the economic system. These conditions mean that the demand and the supply of each commodity has to be equal. Prices which satisfy these conditions are the equilibrium prices. If the demand and supply schedules are all monotonic functions there exists only one set of prices which satisfies the objective equilibrium condition; otherwise, there may be a multiple solution, but some of the price sets obtained represent unstable equilibria.[2]

Such is the theoretical solution of the problem of equlibrium on a competitive market. Now let us see how the problem is solved actually by *trial and error*. The solution by trial and error is based on what may be called the *parametric function of prices*, i.e. on the fact that, although the prices are a resultant of the behaviour of all individuals on the market, each individual separately regards the actual market prices as given data to which he has to adjust himself. Each individual tries to exploit the market situation confronting him which he cannot control. Market prices are thus parameters determining the behaviour of the individuals. The equilibrium value of these parameters is determined by the objective equilibrium conditions B. As Walras has so brilliantly shown[3] this is done by a series of successive trials (*tâtonnements*).

Let us start with a set of prices given *at random* (for instance, by drawing numbers from an urn). On the basis of this *random* set of prices (Walras's *prix criés par hasard*) the individuals fulfil their subjective equilibrium conditions and attain their maximum positions. For each commodity a quantity demanded and a quantity supplied is established. Now the objective equilibrium conditions come into play. If the quantity demanded and the quantity supplied of each commodity happen to be equal the entire situation is settled and the prices are the equilibrium prices. If, however, the quantities demanded and the quantities supplied diverge, the competition of the buyers and sellers will alter the prices. Prices of those commodities the demand for which exceeds the supply rise while the prices of the commodities where the reverse is the case fall. As a result we get a *new* set of prices which serves as a new

[1] During periods of transition from one equilibrium to another also entrepreneurs' profits have to be added to the right-hand side of this equality.

[2] If the demand and supply schedules are not monotonic functions the first must have an increasing and the latter must have a decreasing branch. Demand can be an increasing function of price in the case of competing commodities and, as Walras has shown, supply can be a decreasing function of price when the commodity in question has a personal utility for the seller. If either demand is an increasing or supply is a decreasing function of price there may be a multiple solution even if those functions are monotonic. However, these are quite exceptional cases.

[3] Cf. *Elements d'économie politique pure*, éd. définitive, Paris, 1926, pp. 65, 132–3, 214–15, 217 et seq., 259–60, 261 et seq.

basis for the individuals striving to satisfy their subjective equilibrium conditions. The subjective equilibrium conditions being carried out, we get a new set of quantities demanded and supplied. If demand and supply are not equal for each commodity, prices change again and we have *another* set of prices which now again serves as a basis for the individuals rearranging their choices; and thus we get a new set of quantities demanded and supplied. And so the process goes on until the objective equilibrium conditions are satisfied and equilibrium finally reached.[1] Actually it is the *historically given* prices which serve as a basis for the process of successive trials.

We have to apologise to the reader for having occupied his attention with this textbook exposition of the elements of the theory of economic equilibrium. But the very fact that the possibility of determining prices (in the wider sense of " terms on which alternatives are offered ") in a socialist economy has been denied seems to indicate that the meaning of these elements has not been fully grasped. Now let us see whether a similar method of trial and error cannot be applied in a socialist economy.

3. THE TRIAL AND ERROR PROCEDURE IN A SOCIALIST ECONOMY

In order to discuss the method of allocating resources in a socialist economy we have to state what kind of socialist society we have in mind. The fact of public ownership of the means of production does not in itself determine the system of distributing consumers' goods and of allocating people to various occupations, nor the principles guiding the production of commodities. Let us now assume that freedom of choice in consumption and freedom of choice of occupation is maintained and that the preferences of consumers, as expressed by their demand prices, are the guiding criteria in production and in the allocation of resources. Later we shall pass to the study of a more centralised socialist system.[2]

In the socialist system as described we have a genuine market (in the institutional sense of the word) for consumers' goods and for the services of

[1] Thus each successive set of prices is nearer to satisfying the objective equilibrium conditions than the preceding one. However, as a change of the quantity supplied generally requires a period of time some qualification must be made. In industries where changes of output can be effected in a more or less continuous way, by varying some factors of production and leaving the others unchanged, and by extending, as time goes on, the number of factors which are made variable, the process of adaptation is determined by a family of short-period supply (and cost) curves. With this type of adaptation, which may be called the Marshallian, each successive price is nearer to the equilibrium price. But where output can be varied only by jerks, as in the case of crops, the mechanism described by the cobweb theorem comes into action and successive trials approach equilibrium only under special conditions. However, the Marshallian type of adaptation of supply seems to be the dominant one. Cf. on this point my paper " Formen der Angebotsanpassung und wirtschaftliches Gleichgewicht," *Zeitschrift fuer Nationaloekonomie*, Bd. VI, Heft 3, 1935.

[2] In pre-War literature the terms socialism and collectivism were used to designate a socialist system as described above, and the word communism was used to denote more centralised systems. The classical definition of socialism (and of collectivism) was that of a system which socialises production alone while communism was defined as socialising both production and consumption. At present these words have become political terms with special connotations.

labour. But there is no market for capital goods and productive resources outside of labour.[1] The prices of capital goods and productive resources outside of labour are thus prices in the generalised sense, i.e. mere indices of alternatives available, fixed for accounting purposes. Let us see how economic equilibrium is determined in such a system. Just as in a competitive individualist régime, the determination of equilibrium consists of two parts. (A) On the basis of *given* indices of alternatives (which are market prices in the case of consumers' goods and of the services of labour and accounting prices in all other cases) both the individuals participating in the economic system as consumers and as owners of the services of labour, and the managers of production and of the ultimate resources outside of labour (i.e. of capital and of natural resources) make decisions according to certain principles. These managers are assumed to be public officials. (B) The prices (whether market or accounting) are determined by the condition that the quantity demanded of each commodity is equal to the quantity supplied. The conditions determining the decisions under (A) are the *subjective* while those under (B) are the *objective* equilibrium conditions. Finally, we have also a condition C expressing the social organisation of the economic system. As the productive resources outside of labour are public property, the incomes of the consumers are divorced from the ownership of those resources and the form of condition C is determined by the principles of income formation adopted. The possibility of determining condition C in different ways gives to a socialist society a considerable freedom in matters of distribution of income. But the necessity of maintaining freedom of the choice of occupation limits the arbitrary use of this freedom, for there must be some connection between the income of a consumer and the services of labour performed by him. It seems, therefore, convenient to regard the income of consumers as being composed of two parts: one part being the receipts for the labour services performed and the other part being a social dividend constituting the individual's share in the income derived from the capital and the natural resources owned by society. We assume that the distribution of the social dividend is based on certain principles, reserving the content of those principles for later discussion. Thus condition C is determinate and determines the incomes of the consumers in terms of prices of the services of labour and social dividend, which, in turn, may be regarded as determined by the total yield of capital and of the natural resources and by the principles adopted in distributing this yield.[2]

A. Let us consider the subjective equilibrium conditions in a socialist economy:

(1) Freedom of choice in consumption being assumed,[3] the subjective

[1] To simplify the problem we assume that all means of production are public property. Needless to say, in any actual socialist community there must be a large number of means of production privately owned (e.g. by peasants, artisans, and small-scale entrepreneurs). But this does not introduce any new theoretical problem.

[2] In formulating condition C capital accumulation has to be taken into account. Capital accumulation may be done either "corporately" by deducting a certain part of the national income before the social dividend is distributed, or it may be left to the savings of individuals, or both methods may be combined. But "corporate" accumulation must certainly be the dominant form of capital formation in a socialist economy.

[3] Of course, there may be also a sector of socialised consumption the cost of which is met by

equilibrium conditions of a competitive market apply also to the market of consumers' goods in a socialist economy. The incomes of the consumers and the prices of consumers' goods being given, the demand for consumers' goods is determined.

(2) The decisions of the managers of production are no longer guided by the aim to maximise profit. Instead, there are certain rules imposed on them by the Central Planning Board which aim at satisfying consumers' preferences in the best way possible. One rule must impose on each production plant the choice of the combination of factors of production and the scale of output which minimises the average cost of production. The output of the whole industry must be determined by the rule to produce exactly as much of a commodity, no more nor less, than can be sold to consumers or " accounted for " to other industries at a price which equals the average cost of production. The first rule replaces the private producer's aiming to maximise his profit, while the prices of factors and of the product are independent of the amount of each factor used and of the scale of output. This rule leads to the factors being combined in such proportion that the marginal productivity of that amount of each factor which is worth a unit of money is the same for all factors,[1] and further, to the scale of output of a plant being such as to equalise marginal cost and the price of the product. The second rule replaces the free entry of firms into an industry or their exodus from it. This leads to an equality of average cost and the price of the product. Both rules together determine the number of plants in each industry. To enable the managers of production to follow these rules the prices of the factors and of the products must be given. In the case of consumers' goods and services of labour they are determined on a market, in all other cases they are fixed by the Central Planning Board. Those prices being given, the supply of products and the demand for factors are determined.

The reasons for adopting the two rules mentioned are obvious. Since prices are indices of " terms on which alternatives are offered " the method and scale of production which minimises average cost also minimises the alternatives sacrificed. Thus the first rule means simply that each commodity has to be produced with a minimum sacrifice of alternatives. The second rule is a necessary consequence of following consumers' preferences. If the second rule were not carried out certain lower preferences would be satisfied while other preferences higher up on the scale were left unsatisfied.

(3) Freedom of choice of occupation being assumed, labourers offer their services to the industry or occupation paying the highest wages. For the publicly owned capital and natural resources a price has to be fixed by the Central Planning Board with the provision that these resources can be directed only to industries which are able to " pay," or rather to " account for," this price. This is a consequence of following the consumers' preferences. The

taxation. Such a sector exists also in capitalist society and comprises not only the provision of collective wants, in Cassel's sense, but also of such other wants the satisfaction of which is of too high social importance to be left to the free choice of individuals (for instance, free hospital service and free education). But this problem does not represent any theoretical difficulty and we may disregard it.

[1] See, however, the correction for limitational factors in footnote 2 on p. 58.

prices of the services of the ultimate productive resources being given, their distribution between the different industries is also determined.

B. The subjective equilibrium conditions can be carried out only when prices are *given*. This is also true of the decisions of the managers of production and of the productive resources in public ownership. Only when prices are given can the minimum average cost, the output which equalises average cost and the price of the product, and the best allocation of the ultimate productive resources be determined. But if there is no market (in the institutional sense of the word) for capital goods nor for the ultimate productive resources outside of labour, can their prices be determined objectively? Must not the prices fixed by the Central Planning Board necessarily be quite arbitrary? If so, their arbitrary character would deprive them of any economic significance as indices of " the terms on which alternatives are offered." This is, indeed, the opinion of Professor Mises.[1] And the view is shared by Mr. Cole, who says: " A planless economy, in which each entrepreneur takes his decisions apart from the rest, obviously confronts each entrepreneur with a broadly given structure of costs, represented by the current level of wages, rent, and interest. . . . In a planned socialist economy there can be no objective structure of costs. Costs can be imputed to any desired extent. . . . But these imputed costs are not objective, but *fiat* costs determined by the public policy of the State." [2] However, this view is easily refuted by recalling the very elements of price theory.

Why is there an objective price structure in a competitive market? Because, as a result of the parametric function of prices, there is generally only *one* set of prices which satisfies the objective equilibrium conditions, i.e. equalises demand and supply of each commodity. The same objective price structure can be obtained in a socialist economy if the *parametric function of prices* is retained. On a competitive market the parametric function of prices results from the number of competing individuals being too large to enable any one to influence prices by his own action. In a socialist economy, production and ownership of the productive resources outside of labour being centralised, the managers certainly can and do influence prices by their decisions. Therefore, the parametric function of prices must be imposed on them by the Central Planning Board as an *accounting rule*. All accounting has to be done *as if* prices were independent of the decisions taken. For purposes of accounting prices must be treated as constant, as they are treated by entrepreneurs on a competitive market. The technique of attaining this end is very simple: the Central Planning Board has to fix prices and see to it that all managers of plants, industries, and resources do their accounting on the basis of the prices fixed by the Central Planning Board, and not tolerate any use of other accounting. Once the parametric function of prices is adopted as an accounting rule, the price structure is established by the objective equilibrium conditions. For each set of prices and consumers' incomes a definite amount of each commodity is supplied and demanded. Condition C determines the

[1] *Vide* " Economic Calculation in the Socialist Commonwealth," reprinted in *Collectivist Economic Planning*, p. 112.

[2] G. D. H. Cole, *Economic Planning*, New York, 1935, pp. 183–4.

incomes of the consumers by the prices of the services of ultimate productive resources and the principles adopted for the distribution of the social dividend. With those principles given, prices alone are the variables determining the demand and supply of commodities. The condition that the quantity demanded and supplied has to be equal for each commodity serves to select the equilibrium prices which alone assure the compatibility of all decisions taken. *Any price different from the equilibrium price would show at the end of the accounting period a surplus or a shortage of the commodity in question.* Thus the accounting prices in a socialist economy, far from being arbitrary, have quite the same objective character as the market prices in a régime of competition. Any mistake made by the Central Planning Board in fixing prices would announce itself in a very objective way: by a physical shortage or surplus of the quantity of the commodity or resources in question, and would have to be corrected in order to keep production running smoothly. As there is generally only one set of prices which satisfies the objective equilibrium conditions both the prices of products and costs [1] are uniquely determined.[2]

Our study of the determination of equilibrium prices in a socialist economy has shown that the process of price determination is quite analogous to that in a competitive market. The Central Planning Board performs the functions of the market. It establishes the rules for combining factors of production and choosing the scale of output of a plant, for determining the output of an industry, for the allocation of resources, and for the parametric use of prices in accounting. Finally, it fixes the prices so as to balance the quantity supplied and demanded of each commodity. It follows that a substitution of planning for the functions of the market is quite possible and workable.

Two problems deserve some special attention. The first relates to the determination of the best distribution of the social dividend. Freedom of choice of occupation assumed, the distribution of the social dividend may affect the amount of services of labour offered to different industries. If certain occupations received a larger social dividend than others, labour would be diverted into the occupations receiving a larger dividend. Therefore, the distribution of the social dividend must be such as not to interfere with the optimum distribution of labour services between the different industries and occupations. The optimum distribution is that which makes the value of the marginal product of the services of labour in different industries and occupations proportional to the marginal disutility[3] of working in those industries

[1] Professor Hayek maintains that it would be impossible to determine the value of durable instruments of production because, in consequence of changes, " the value of most of the more durable instruments of production has little or no connection with the costs which have been incurred in their production," (*Collectivist Economic Planning*, p. 227). It is quite true that the value of such durable instruments is essentially a capitalised quasi-rent and, therefore, can be determined only after the price which will be obtained for the product is known (cf. *ibidem* p. 228). But there is no reason why the price of the product should be any less determinate in a socialist economy than on a competitive market. The managers of the industrial plant in question have simply to take the price fixed by the Central Planning Board as the basis of their calculation. The Central Planning Board would fix this price so as to satisfy the objective equilibrium conditions, just as a competitive market does.

[2] However, in certain cases there may be a multiple solution. Cf. p. 59 above.

[3] It is only the *relative* disutility of different occupations that counts. The absolute disutility may be zero or even negative. By putting leisure, safety, agreeableness of work, etc.,

or occupations.[1] To secure this not only wages but also the social dividend received by individuals must bear some relation to the marginal disutility of the particular kind of labour services performed. The social dividend paid to each individual must be such as not to disturb the proportionality of the supply price of the different services of labour and of the disutility of performing them. This is attained by making the social dividend a *fixed percentage* of the wage rate. As a result of this principle of distributing the social dividend the money incomes earned in different occupations are proportional to the value of the marginal product of the labour services performed by each occupation, but they are not equal to it. The excess of money incomes over the value of the marginal product of the services of labour is the social dividend.

The other problem is the determination of the rate of interest. We have to distinguish between a short-period and a long-period solution of the problem. For the former the amount of capital is regarded as constant and the rate of interest is simply determined by the condition that the demand for capital is equal to the amount available. When the rate of interest is set too low the socialised banking system would be unable to meet the demand of industries for capital; when the interest rate is set too high there would be a surplus of capital available for investment. However, in the long period the amount of capital can be increased by accumulation. If the accumulation of capital is performed " corporately " before distributing the social dividend to the individuals, the rate of accumulation can be determined by the Central Planning Board *arbitrarily*. The Central Planning Board will probably aim at accumulating as much as to make the marginal *net* productivity of capital zero,[2] this aim being never attained because of technical progress (new labour-saving devices), of the increase of population and discovery of new natural resources, and, possibly, because of the shift of demand towards commodities produced by more capital-intensive methods. But the rate, i.e. the *speed*, at which accumulation progresses is arbitrary. The arbitrariness of the rate of capital accumulation " corporately " performed means simply that the decision regarding the rate of accumulation reflects how the Central Planning Board, and not the consumers, evaluate the optimum time shape of the income stream. One may argue, of course, that this involves a diminution of consumers' welfare. This difficulty could be overcome only by leaving all accumulation to the saving of individuals.[3] But this is scarcely compatible with the organisation of a socialist society. The loss of his power to determine the rate of accumulation of capital is the price the consumer has to pay for living in a socialist

into the preference scales, all labour costs may be expressed as opportunity costs. If such a device is adopted each industry or occupation may be regarded as producing a joint product: the commodity or service in question *and* leisure, safety, agreeableness of work, etc. The services of labour have to be allocated so that the value of this marginal *joint* product is the same in all industries and occupations.

[1] If any limitational factors are used it is the *difference* between the value of the marginal product of the services of labour and the marginal expenditure for the limitational factors which has to be proportional to the marginal disutility.

[2] Cf. Wicksell, " Professor Cassel's System of Economics," reprinted in *Lectures on Political Economy*, vol. I, London, 1935, p. 241.

[3] This method has been advocated by Barone. Cf. *The Ministry of Production in the Collectivist State*, pp. 278–9.

society.[1] It seems to us that this price would be well overcompensated by the advantages a socialist economy offers, but the discussion of this point is postponed.

Having treated the theoretical determination of economic equilibrium in a socialist society, let us see how equilibrium can be determined by a method of *trial and error* similar to that in a competitive market. This method of trial and error is based on the *parametric function of prices*. Let the Central Planning Board start with a given set of prices chosen *at random*. All decision of the managers of production and of the productive resources in public ownership and also all decisions of individuals as consumers and as suppliers of labour are made on the basis of these prices. As a result of these decisions the quantity demanded and supplied of each commodity is determined. If the quantity demanded of a commodity is not equal to the quantity supplied the price of that commodity has to be changed. It has to be raised if demand exceeds supply and lowered if the reverse is the case. Thus the Central Planning Board fixes a new set of prices which serves as a basis for new decisions, and which results in a new set of quantities demanded and supplied. Through this process of trial and error equilibrium prices are finally determined. Actually the process of trial and error would, of course, proceed on the basis of the prices *historically given*. Relatively small adjustments of those prices would constantly be made, and there would be no necessity of building up an entirely new price system.

This process of trial and error has been described excellently by the late Professor Fred M. Taylor. He assumes that the administrators of the socialist economy would assign provisional values to the factors of production (as well as to all other commodities) and he continues : " If, in regulating productive processes, the authorities were actually using for any particular factor a valuation which was too high or too low, that fact would soon disclose itself in unmistakable ways. Thus, supposing that, in the case of a particular factor, the valuation . . . was too high, that fact would inevitably lead the authorities to be unduly economical in the use of that factor ; and this conduct, in turn, would make the amount of that factor which was available for the current production period larger than the amount which was consumed during that period. In other words, too high a valuation of any factor would cause the stock of that factor to show a surplus at the end of the productive period." [2] Similarly, too low a valuation would cause a deficit in the stock of that factor. " Surplus or deficit—one or the other of these would result from every wrong valuation of a factor." [3] By a set of successive trials the right accounting prices of the factors are found.

Thus the accounting prices in a socialist economy can be determined by the same process of trial and error by which prices on a competitive market are determined. To determine the prices the Central Planning Board does not need to have " complete lists of the different quantities of all commodities

[1] Of course, the consumers remain free to save as much as they want out of the income which is actually paid out to them, and the socialised banks could (and in order to prevent hoarding would have to) pay interest on savings. But *this* rate of interest would not have any necessary connection with the marginal *net* productivity of capital. It would be quite arbitrary.

[2] *The Guidance of Production in a Socialist State*, p. 7.

[3] *Ibidem*, p. 8.

which would be bought at any possible combination of prices of the different commodities which might be available." [1] Neither would the Central Planning Board have to solve hundreds of thousands (as Professor Hayek expects[2]) or millions (as Professor Robbins thinks[3]) of equations. The only " equations " which would have to be " solved " would be those of the consumers and the managers of production plants. These are exactly the same " equations " which are solved in the present economic system and the persons who do the " solving " are the same also. Consumers " solve " them by spending their income so as to get out of it the maximum total utility ; and the managers of production plans " solve " them by finding the combination of factors and the scale of output which minimises average cost. They " solve " them by a method of trial and error, making (or imagining) small variations *at the margin*, as Marshall used to say, and watching what effect those variations have either on the total utility or on the average cost of production. And only few of them have been graduated in higher mathematics. Professor Hayek and Professor Robbins themselves " solve " at least hundreds of equations daily, for instance, in buying a newspaper or in deciding to take a meal in a restaurant, and presumably they do not use determinants or Jacobians for that purpose. And each entrepreneur who hires or discharges a worker, or who buys a bale of cotton, " solves equations," too. Exactly the same " equations," no less and no more, have to be " solved " in a socialist economy and exactly the same kind of persons, the consumers and the managers of production plants, have to " solve " them. To establish the prices which serve to the persons " solving equations " as parameters no mathematics are needed either. Neither is there needed any knowledge of the demand and supply functions. The right prices are simply found out by watching the quantities demanded and the quantities supplied and by raising the price of a commodity or service whenever there is an excess of demand over supply and lowering it whenever the reverse is the case, until, by trial and error, the price is found at which demand and supply are in balance.

As we have seen, there is not the slightest reason why a trial and error procedure, similar to that in a competitive market, could not work in a socialist economy to determine the accounting prices of capital goods and of the productive resources in public ownership. Indeed, it seems that it would, or at least could, work *much better* in a socialist economy than it does in a competitive market. For the Central Planning Board has a much wider knowledge of what is going on in the whole economic system than any private entrepreneur can ever have ; and, consequently, may be able to reach the right equilibrium prices by a much shorter series of successive trials than a competitive market actually does.[4] The argument that in a socialist economy the accounting

[1] Professor Hayek in *Collectivist Economic Planning*, p. 211.

[2] *Ibidem* p. 212.

[3] *The Great Depression*, p. 151.

[4] In reducing the number of trials necessary a knowledge of the demand and supply schedules derived from statistics, on which Mr. Dickinson wants to base the pricing of goods in a socialist economy, may be of great service, but such knowledge, though useful, is not necessary to find out the equilibrium prices. However, if the managers of production units adhere literally to treating as constant the prices fixed by the Central Planning Board, in certain branches of production the fluctuations described by the cobweb theorem might appear also in a socialist economy.

prices of capital goods and of productive resources in public ownership cannot be determined objectively, either because this is theoretically impossible, or because there is no adequate trial and error procedure available, cannot be maintained. In 1911 Professor Taussig classified the argument that " goods could not be valued " among the objections to socialism that are " of little weight." [1] After all the discussions since that time, no reason can be found to change this opinion.

4. A GENERALISATION OF THE PRECEDING THEORY

The procedure of trial and error described is also applicable to a socialist system where freedom of choice in consumption and freedom of choice of occupation is non-existent and where the allocation of resources, instead of being directed by the preferences of consumers, is directed by the aims and valuations of the bureaucracy in charge of the administration of the economic system. In such a system the Central Planning Board decides which commodities are to be produced and in what quantities, the consumers' goods produced being administered to the citizens by rationing and the various occupations being filled by assignment. In such a system also rational economic accounting is possible, only that the accounting reflects the preferences of the bureaucrats in the Central Planning Board, instead of the consumers. The Central Planning Board has to fix a scale of preferences which serves as the basis of valuation of consumers' goods. The construction of such a preference scale is by no means a practical impossibility. The consumer on a competitive market is never in doubt as what to choose if only the prices of the commodities are given, though he certainly would find it impossible to write down the mathematical formula of his utility (or rather preference) function. Similarly, the Central Planning Board does not need to have an elaborate formula of its preferences. By simple judgment it would assign, for instance, to a hat the valuation of ten monetary units, when 100,000 hats are produced monthly, whereas it would assign a valuation of eight monetary units to a hat when 150,000 hats per month are produced.

The preference scale of the Central Planning Board being given, the prices, which in this case are *all* accounting prices, are determined in exactly the same way as before. The Central Planning Board has to impose on the managers of production plants the rule that factors of production should be combined and the scale of output chosen so as to minimise the average cost of production. For each industry the rule must be adopted to produce exactly as much of a commodity as can be " accounted for " at a price equalling average cost, and on the managers of ultimate productive resources the rule must be imposed to direct them only to the industries which can " account for " the price fixed by the Central Planning Board. The last two rules were formerly consequences of following the preferences of the consumers, now they are consequences of

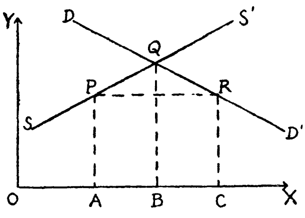
But in such cases the Planning Board would not have much difficulty in modifying the rules about the parametric character of prices so as to avoid such fluctuations.

[1] Cf. *Principles of Economics*, vol. II, New York, 1911, p. xvi. Cf. also pp. 456–7.

keeping to the preference scale fixed by the Central Planning Board. They are thus rules which make the decisions of the managers of production and of productive resources consistent with the aims set by the Central Planning Board. In other words : they are rules of internal *consistency* of the planned economy. The first rule secures *efficiency* in carrying out the plan. Finally, the Central Planning Board has to impose the parametric function of the accounting prices fixed by itself and to fix them so as to balance the quantity supplied and the quantity demanded for each commodity. The price fixing can be done by trial and error, exactly as in the case studied before, and the equilibrium prices thus fixed have a definite objective meaning. The prices are " planned " in so far as the preference scale is fixed by the Central Planning Board ; but once the scale is fixed, they are quite determinate. Any price different from the equilibrium price would leave at the end of the accounting period a surplus or a shortage of the commodity in question and thus impair the smooth running of the production process. The use of the right accounting prices is vital to avoid disturbances in the *physical* course of production and those prices are far from being arbitrary.

The determinateness of the accounting prices holds, however, only if all discrepancies between demand and supply of a commodity are met by an appropriate change of its price. Thus, outside of the distribution of consumers' goods to the citizens, rationing has to be excluded as a method of equalising supply and demand. If rationing is used for this purpose the prices become arbitrary. But it is interesting to observe that, even if rationing is used, within certain limits, there is a tendency towards producing the same quantities of commodities as would have been produced if all adjustments between demand and supply were made exclusively by price fixing. If, for instance, the accounting price has been set too low, there is an excess of demand over supply. The Central Planning Board would have to interfere in such a case and order the industry producing the commodity in question to increase its output while ordering the industries using this commodity as a factor of production to be more economical in its use.[1] Thus the method of rationing leads, by a very rough approximation, to the point where fixing the equilibrium price would have led. But if rationing becomes a general procedure the rules enumerated above cease to be reliable indices of the consistency between the decisions of the managers of production and the aims established by the plan. The consistency of those decisions with the plan can be, instead, measured by fixing quotas of output and comparing them with the actual achievement (as is done in the Soviet Union). But there is no way of measuring the *efficiency* in carrying out the plan without a system of

[1]



Let DD' and SS' be the demand and the supply curve respectively. BQ is the equilibrium price and OB the equilibrium quantity. If the price is set at AP the quantity OA is forthcoming while OC is demanded. As a result of the intervention of the Planning Board the quantity produced will be set somewhere between OA and OC.

accounting prices which satisfy the objective equilibrium conditions, for the rule to produce at the minimum average cost has no significance with regard to the aims of the plan unless prices represent the relative scarcity of the factors of production.[1]

By demonstrating the economic consistency and workability of a socialist economy with free choice neither in consumption nor in occupation, but directed rather by a preference scale imposed by the bureaucrats in the Central Planning Board, we do not mean, of course, to recommend such a system. Mr. Lerner has sufficiently shown the undemocratic character of such a system and its incompatibility with the ideals of the socialist movement.[2] Such a system would scarcely be tolerated by any civilised people. A distribution of consumers' goods by rationing was possible in the Soviet Union at a time when the standard of living was at a physiological minimum and an increase of the ration of any food, clothing, or housing accommodation was welcome, no matter what it was. But as soon as the national income increased sufficiently, rationing was given up, to be replaced to a large extent by a market for consumers' goods. And, outside of certain exceptions, there was always freedom of choice of occupation in the Soviet Union. A distribution of consumers' goods by rationing is quite unimaginable in the countries of Western Europe or in the United States.

But freedom of choice in consumption does not imply that production is actually guided by the choices of the consumers. One may well imagine a system in which production and the allocation of resources is guided by a preference scale fixed by the Central Planning Board while the price system is used to distribute the consumers' goods produced. In such a system there is freedom of choice in consumption but the consumers have no influence whatever on the decisions of the managers of production and of the productive resources.[3] There would be two sets of prices of consumers' goods. One

[1] There exists, however, a special case where prices are not needed to carry out the plan efficiently. This is the case of constant coefficients of production. If all factors of production are limitational there is no economic problem in finding out the best combination of factors. The combination of factors of production is imposed by the technological exigencies of production. But there remains the problem of determining the optimum scale of output and for this purpose the prices of the factors of production are needed. But if the amount required of all factors of production is simply proportional either to the quantity of the product (if the limitational factors are of the first kind) or to the quantity of another factor used (if the limitational factors are of the second kind)—this is Pareto's case of constant coefficients of production—average cost per unit of output is independent of the scale of output. The problem of choosing the optimum scale of output is thus ruled out, too. In this particular case where all coefficients of production are constant, no prices and no cost accounting whatever are needed. Efficiency in production is maintained merely by technological considerations of avoiding waste of materials, etc. It seems that those who deny the necessity of an adequate price system in a socialist economy have this case in mind. If the quotas of consumers' goods to be produced are given, all further problems of planning production are purely technological and no price system or cost accounting is needed. But we need not say how extremely unrealistic the assumption that all coefficients of production are constant is. The very fact that in the Soviet Union such great stress is laid on cost accounting shows how far from reality this special case is removed. But if cost accounting is to fulfil its purpose of securing efficiency in carrying out the plan, the accounting prices cannot be arbitrary.

[2] Cf. " Economic Theory and Socialist Economy," REVIEW OF ECONOMIC STUDIES, October, 1934.

[3] Of course, there remains the possibility of influence through political channels, but there is no regular economic mechanism through which the consumers automatically influence the direction of production. Dr. Zassenhaus has suggested a very interesting theoretical formulation

would be the market prices at which the goods are sold to the consumers; the other, the accounting prices derived from the preferences scale fixed by the Central Planning Board. The latter would be the prices on the basis of which the managers of production make their decisions. However, it does not seem very probable that such a system would be tolerated by the citizens of a socialist community. The dual system of prices of consumers' goods would reveal to the people that the bureaucrats in the Central Planning Board allocate the community's productive resources according to a preference scale different from that of the citizens. The existence of a dual price system of consumers' goods could scarcely be concealed from the people, especially if there existed an institution (like the Workers' and Peasants' Inspection in the Soviet Union[1]) giving to the rank and file citizen the right to pry into the book-keeping and into the management of the community's resources. As a result the accounting prices of consumers' goods would be permitted to deviate from the market prices only in exceptional cases in which there is general agreement that such deviation is in the interest of social welfare. For instance, it might be agreed upon that the consumption of whisky ought to be discouraged while the reading the works of Karl Marx, or of the Bible (or of both, as certainly would be the case in an Anglo-Saxon community), ought to be encouraged, and the prices of those things would be fixed accordingly. But such things do happen also in capitalist society. If the bureaucrats want successfully to impose a preference scale of their own for the guidance of production, they have to camouflage the inconsistency of their preference scale with that of the citizens by resorting to rationing in the sphere of producers' goods and of resources.[2] Thus a socialist community which has been able to impose the principle that rationing must be excluded and price fixing used as the only method of balancing quantities demanded and quantities supplied,[3] may be fairly confident that it will be able to insure that the Central Planning Board follows the preferences of the consumers.

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of the influence through political channels, analogous to the economic theory of choice. Cf. *Ueber die oekonomische Theorie der Planwirtschaft*, p. 511 et seq.

[1] This institution was abolished in June, 1934, and replaced by the Commission of Soviet Control. A part of its functions have been taken over by the trade unions. Cf. Webb, *Soviet Communism*, vol. I, London, 1935, pp. 99 and 474–8.

[2] It seems highly probable that the great extent to which rationing was used in the Soviet Union in allocating factors of production and resources was dictated by the necessity to conceal the real cost of the programme of industrialisation. However, this remark is not intended as a criticism of the industrial policy of the Soviet Government, which was justified on political grounds, chiefly those of national defence.

[3] One may think of a Supreme Economic Court whose function would be to safeguard the use of the nation's productive resources in accordance with the public interest and having the power to repeal decisions of the Central Planning Board which are in contradiction to the general rules of consistency and efficiency enumerated above just as the United States Supreme Court has the power to repeal laws held unconstitutional. This court would have to repeal any decisions involving rationing.