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**KALECKI'S INGENIOUS EXPENDITURE RATIONING SCHEME:
HOW TO IMPROVE THE RANGE OF ECONOMIC
CHOICE UNDER TRYING CONDITIONS**

GEORGE R. FEIWEL

SPECIFIC RATIONING

When the problem is to get more equitable distribution of commodities among consumers than could be achieved by taxation or by open inflation, the most direct method of controlling expenditures is outright *specific* rationing over a wide range of consumer goods.¹ A way of adjusting consumers' spending to available supplies is for the government deliberately to reduce or dry up the opportunities for private spending. Direct outright allocation at a stroke cuts down the claims against products (shifts downwards the demand curve) to equality with appropriated supplies and allows rearrangement of distribution in what is regarded an optimal and equitable way. Allocation by ration tickets becomes not only a device for blocking or sterilizing excess demand, but also for ensuring distribution of products in short supply along preordained patterns, however determined. Of course, such a method of allocation where everybody can count on getting his fair quota of the limited supply (which may, or may not, be on a completely egalitarian basis) is only one of the variants of the distributional arrangement. Distribution according to some weighted scale of priorities or various discriminatory or differentiated treatments is possible.²

Kalecki noted that the specific rationing scheme is not devoid of serious and familiar drawbacks. To be effective, such a scheme must be fairly comprehensive, embracing an enormous number of goods, resulting in considerable regimentation and inconvenience for shoppers, and creating serious problems of control of implementation.³ Of course, rationing of the entire range of commodities by description is quite impractical. In case of certain non-standardized articles, it becomes quite unmanageable or inapplicable. As a result, resources are needlessly wasted and consumers' satisfaction is diminished.

One of the principal difficulties of specific rationing is coping satisfactorily with the problem of transferability of ration coupons from poorer people (entitling them as generally everybody else to buy a limited quantity of a commodity, usually

¹ Michal Kalecki, "General Rationing", *OIS*, January 11, 1941, p. 3. *OIS* (Oxford University Institute of Statistics Bulletin)

² Cf. Lionel Robbins, *The Economic Problems of Peace and War* (London: Macmillan, 1947), pp. 5 ff; and W. K. Hancock and M. M. Owing, *British War Economy* (London: His Majesty's Stationary Office, 1949), *passim*.

³ Kalecki, *op. cit.*, p. 3; Cf. John Maynard Keynes, *How to Pay for the War* (London: Macmillan, 1940), pp. 51-57.

at a fixed price) who do not consume in toto their allotted rations, via the retailer or otherwise, for the benefit of those who can afford to consume more. Those who, due to the budget constraint, may not fully use their coupons may be persuaded to sell the residue of their coupons or to use them to buy goods for other persons as prices higher than fixed for rationed goods. A black market develops. The distribution of goods allocated, but not consumed by the low income groups tends to be haphazard, inequitable, and inefficient. Furthermore, in anticipation of the introduction of rationing, the retailers tend to deplete sharply their stocks and to sell promptly without coupons (i.e., using the "rationing function of money rather than coupons as rationing devices"). Here lies the danger that unless permanently controlled (with all the inherent difficulties of such policing) stocks will reach critically low levels.⁴

What was needed was a scheme to adopt the rationing mechanism to the exigencies and limitations of a war economy and to allow maximum freedom of choice, compatible with full war effort.

THE EXPENDITURE RATIONING SCHEME

In this area the central quest of the day was for a better arrangement for curtailing consumers' spending which would overcome the nuisances of specific rationing of individual groups of consumer goods. An arrangement that would attain the same aim (limiting consumers' total expenditures in shops) by less cumbersome means and with less inconvenience to the buyer and the seller and thus would reduce the limiting effects of rationing on the consumer's freedom of choice and would promote a better shopkeepers' service.

Such an arrangement could be found *grosso modo* in rationing retail expenditures in the aggregate. This was the essence of the very clever and subtle device invented by Kalecki, allowing to improve the range of economic choice under trying conditions.⁵ Kalecki's scheme is based on a simple principle. A total maximum limit of expenditure in retail shops is fixed at, say 25/- a week per adult and 15/- per child under 14. Coupons are issued to this effect. Any sale by a

⁴ Kalecki, op. cit., p. 3 and "The Budget and Inflation", *OIS*, April 26, 1941, pp. 112-13.

⁵ The original scheme devised by Kalecki was published under the title "A Scheme of Curtailment of Consumption" in *OIS*, June 30, 1940, pp. 7-9 and elaborated in *OIS*, January 11, 1941 under the title "General Rationing", pp. 1-6. In introducing Kalecki's final version of the scheme the Editor of *OIS* prefaced it as follows: "A year ago one of the most important topics of discussion in the Press was the first draft of Mr. Keynes' plan of compulsory savings . . . Important objections were made against the Keynes plan . . . and last June we published in the typed Bulletin an alternative scheme, for the rationing of expenditure in shops, devised by Mr. Kalecki. Although this scheme received some attention we consider it important that it should reach a wider public. In nearly all newspapers and journals recently there has been a demand for widespread rationing, but few concrete suggestions have been made as to how this object can best be achieved. Mr. Kalecki has now elaborated the original scheme, paying particular attention to problems of administration, and we publish here the amplified version. *OIS* January 11, 1941, p. 1.

retailed without coupons, subject to exceptions noted below, is prohibited and considered a punishable offence.

The general principle of the scheme is rationing of expenditures on goods in retail shops. There is little to be gained from rationing of services, for it would release inconsequentially in the way of raw materials and labor. In fact, some services, like education and entertainment, were not scarce. If a need arose, other services could be controlled much more expediently by direct methods (*e.g.*, dwelling space assigned by billeting, gas and electricity by direct rationing, traveling by reducing the number of trains and abolishing first class, *etc.*). In addition to services, certain categories of products could be bought without coupons, such as medicine, newspapers and books, *etc.* Special allowances would have to be made for people who lost their furniture and household goods as a result of bombing, for newly married couples, *etc.* If restaurant meals were not rationed (as indeed was the case in Britain during the war) restaurant customers would not be treated equally with the rest of the population. But the coupons entitling to buy meals in restaurants should be only a certain definite proportion of their price, since the price includes the charge for service.⁶

It is noteworthy that in the elaboration of his scheme, Kalecki paid particular attention to the problems of administration and how to avoid certain difficulties and hardships. The most intricate problem envisaged was to prevent sales of goods without coupons. In contrast to a flat rate issue of coupons procedure (which could be arranged on the same line as the then existing rationing of specific goods), the adoption of the income percentage maximum provision complicates to a great extent the administration of the scheme. Kalecki advocated establishment of a retailers' controlling office to which retailers would have to return all coupons received to obtain retailers' coupons which they must in turn surrender to wholesalers when obtaining goods from them. The returned retailers' coupons must cover their entire turnover as ascertained for payment of purchase tax to the authorities.

If an egalitarian method of rationing is adopted, *i.e.*, if all are issued coupons entitling them to the same amount of spending, the low income people will not fully use their coupons and might be induced to sell the residue of coupons to the better-off, or to purchase the goods for them or for resale on the black market. To prevent this two different courses of action may be taken. Like in the case of specific rationing of goods, the transfer of coupons is prohibited under severe penalty, but it is unlikely that the penalty would be a sufficient deterrent (while very harsh penalties must be ruled out), to appreciably reduce such transfers. For all practical purposes, the reduction in expenditures which can be fully relied

⁶ Rules would have to be elaborated determining the number of coupons of various categories to be surrendered for various types of meals. This would be indicated in the menus. The general principle is that total coupon value of a meal must be equal to the retail value of the ingredients and thus lower than the price of the meal by the cost of services involved. In this manner the restaurant customers would be treated equally with the rest of the population.

upon is then limited to the difference between the actual amount spent in shops prior to the introduction of the limiting of spending scheme and that which would ensure the full use of their coupons by everyone.⁷

In the operation of every rationing allocation there arises the problem of low incomes groups being unable to purchase the full ration. This causes rationing to fail the desired criteria of equitable distribution, and the more so since the poor, being unable to spend some of their coupons, are likely to use them for the benefit of the better-off. In designing the rationing scheme Kalecki offered two alternatives of distribution of "expenditure coupons": 1) coupons are distributed at a flat rate as previously noted; and 2) as a device to reduce the transferability of coupons, apart from the maximum amount of total spending limit, a maximum percentage of income to be spent in shops is fixed at a level equal approximately to the upper limit of the actual percentage spent in shops by the poorer population.

The administrative problem is to issue coupons for the amount corresponding to the lower of these two maxima. If the income percentage maximum were 30 per cent, then a family consisting of a couple with a child under 14, having an income of 60/- per week, would get coupons only for 48/-, although on the basis of the standard maximum of 25/- per adult and 15/- per child, it would be entitled to an expenditure ration of 65/-. The second alternative complicates appreciably the administrative task of the scheme and does not make any attempt at exploiting the rationing as an opportunity to correct striking inequities at the outset and to increase the consumption of the poorest segments of the population.⁸

In the further elaboration of the general rationing scheme, Kalecki suggested that the government distribute the spending coupons at an egalitarian rate, but simultaneously promulgate that it is prepared to repurchase unused coupons at the values to which they relate. Consequently, anyone unable to make use of a certain part of his coupons because of insufficient purchasing power could sell half of the unused coupons to the government and in such a way secure the wherewithal for making use of the other half of the coupons. As a result allowances are granted automatically to the lower income groups, while simultaneously the transfer of their coupons to the better-off by sale on the black market is discouraged (a black market already existed in clothing coupons)/. Implementation of such a scheme entails a certain increase in budgetary expenditures, but every coupon purchased by the government ensures that the consumption of rationed articles will be below the level corresponding to the full use of coupons emitted. Kalecki pointed out that putting into effect such a measure would create a fairly comprehensive, democratic and elastic system of distributing commodities in short supply, though it would probably be advantageous to include in the rationing scheme additional categories of non-food articles and services.⁹

⁷ Kalecki, "General Rationing", *op. cit.*, pp. 2-5.

⁸ Kalecki, "A Scheme of Curtailment of Consumption", *op. cit.*, pp. 8-9 and "Notes on General Rationing", *OIS*, April 5, 1941, pp. 103-105.

⁹ Kalecki, "Inflation, Wages and Rationing," *The Banker*, October, 1941.

This improved arrangement is in many respects superior to the original formulation of the scheme, viz.

1. The transferability of coupons from the poorer to the richer segments of the population is largely prevented or reduced. In Kalecki's view, a poor man being able to sell his coupons to the government on the above terms would rather prefer to do this, than to sell them (or the product obtained with them) on the black market even should the price offered be higher. Probably this would be the case if the differential were small, but large difference between the legal and illegal price tends to corrupt. The scheme discourages the rich from procuring coupons illegally as they would have to pay for the coupons more than their face value, and consequently pay for the purchase of any particular article more than twice its price.

2. Allowances are granted automatically to the poorer segments of the population.

3. The advantages outlined above are secured without any administrative machinery, such as census of incomes, filling fairly detailed forms by each income earner to establish income percentage maximum; audits whether a higher income was declared in order to benefit from more coupons, etc.

4. Admittedly, the "coupon repurchase" scheme entails some increase in government outlays, but after allowing for this increase, the reduction of aggregate expenditures in shops is still larger than it would be if all coupon recipients used them fully.¹⁰

Kalecki concluded that the general rationing scheme offers certain definite advantages: 1) Above all it constitutes a real safeguard against inflation and can be expediently adapted to the most stringent supply shortages; 2) the rationing of expenditures scheme is a more comprehensive and more convenient device than the specific rationing of a corresponding range of consumers articles, "instead of struggling with an avalanche of coupons, for boots, clothing, electric torches, pots and pans, etc. etc." the consumer and retailer have to master only one set of coupons; 3) whereas for particular reasons, like ensuring nutrition standards, it is necessary to ration some goods specifically, among the remainder, the general rationing scheme offers the consumer the widest possible freedom of choice; and 4) the administrative complication of the issue of coupons according to income graduation was introduced only to cope with the problem of transferability of coupons. Insofar as this device could not be used in case of specific rationing of goods, it was another advantage of the scheme. However, the device might be dropped if the administrative difficulties involved should outweigh the advantages derived from reducing transferability.

Just as in the case of other rationing schemes, the timing of instituting this scheme was of paramount importance for it had to be introduced before stocks

¹⁰ Kalecki, "Notes on General Rationing", *OIS*, April 5, 1941, p. 104, and "General Rationing", *op. cit.*, pp. 4-5.

reached critically low levels for two reasons: 1) to secure a higher uniform ration for a longer period (the not too promising alternative is unnecessarily high and inequitable distributed consumption until inventories are exhausted followed by a very low ration thereafter); and 2) run down stocks are always accompanied by serious dislocations and disturbances in the distribution process.¹¹

Although income tax and specific rationing of commodities were criticized by Kalecki as methods for curtailing general expenditure, he emphasized that "they not only do not interfere with the [Kalecki's] scheme, but actually supplement it."¹² But he argued that the savings accumulating as a consequence of the functioning of the scheme should be at least partially siphoned off not by borrowing, but by taxation. For this reason income the tax rate should be increased. In some cases, this was likely to involve expenditure and so reduce the possibilities of evasion from the rationing of spending scheme.¹³

The general rationing scheme does not preclude the specific rationing of some essential goods. The latter becomes necessary component of the general rationing scheme, because the scheme does only reduce, but does not abolish entirely the inequality of spending. For this reason, Kalecki considered it advantageous to "differentiate the scheme" by introducing food and non-food coupons—to be discussed at greater length in the section on non-egalitarian rationing.

SIMULTANEOUS SCARCITIES AND SURPLUSES OF GOODS

The scheme of rationing expenditures can be advantageously applied in countries facing a simultaneous scarcity and substantial surplus of some consumer goods.¹⁴ For example, in Australia, the problem during World War II was to induce the population to consume more of the surplus products (mainly meat, sugar, butter, fruits), instead of the scarce consumer goods (imported textiles and other imports, highly processed foodstuffs that absorb scarce labor needed for the war effort). The dual objective of restricting consumption of goods in short supply and of maintaining or increasing consumption of surplus products could be tackled by rationing total spending on scarce goods, along the lines suggested by Kalecki, while permitting the population to spend on surplus goods as much as it chose. The modification of the scheme allows to direct the additional earnings recompensing the increasing war effort into activities where spending is innocuous and does not cause shortages.

Most of the surplus goods belong to the foodstuffs category that wage-earners consume in increasing quantities as their income increases. An increase in the lower incomes, resulting from war outlays leads to increased consumption of meat, milk, dairy products, fruit, etc. The increase is probably limited as income

¹¹ Kalecki, "The Budget and Inflation", April 26, 1941, *OIS*, pp. 112-13.

¹² Kalecki, "General Rationing", *op. cit.*, p. 6.

¹³ *Ibid.*, p. 6.

¹⁴ See Joseph Steinds, "Rationing and Surplus Goods", *OIS*, November 1, 1941, pp. 346-48.

increases. But if spending on other goods is rationed, then the rise in consumption will probably be larger than if rationing had been avoided. Being incapable of spending part of the income on rationed goods, the population is likely to buy surplus goods in larger quantities in order to enjoy immediately its larger income.

Without resorting to rationing and permitting unimpeded price increases, there would be open inflation in the sector of scarce goods, while prices of surplus goods would rise slightly. The change in price ratios between surplus and scarce goods would probably lead to the substitution of the former for the latter. While this would mitigate inflationary pressures, the substitution effect of the price discrepancy would be limited. A considerable share of any increase in money income would be spent on scarce goods and their prices would climb up again.

But under rationing, inflation in the scarce goods sector will be checked by fixing the spending ration for scarce goods so as to equal their limited supply. Any surplus purchasing power above the allotted expenditure ration could be used for surplus goods and services or would be saved. In effect, scarce goods above the expenditure ration having, as it were, an infinitely high price, the substitution will be considerably greater than an unimpeded price mechanism could achieve and the consumption of the surplus goods will be increased.

In countries with substantial surpluses of some consumable goods financing the war by taxation or compulsory saving imposed partly on middle and lower income groups involves even greater disadvantages than elsewhere. Taxation not only arrests a rise in lower incomes, but simultaneously prevents a rise in consumption of surplus goods. If taxation reduces disposable incomes of lower income groups in order to curtail consumption of scarce goods, then the consumption of the surplus goods also declines.

TOWARDS COMPREHENSIVE RATIONING

In war-time Britain rationing was introduced gradually and hesitantly. The hesitation over rationing corresponded to the faltering of the early war period.¹⁵ At first only a few foodstuffs in particularly short supply were allotted by this distribution mechanism. In time more and more foodstuffs were brought within the ingenious points scheme.¹⁶ The point scheme has the great advantage of

¹⁵ For a description of rationing in Britain and the controversies surrounding the introduction of various schemes see Hancock and Gowing, *op. cit.*, pp. 49–52, 173–76, 209–23, and 325–32. See also Dexter M. Keezer, "Observations on Rationing and Price Control in Great Britain", *AER*, June 1943, pp. 264–82.

¹⁶ The discussion about rationing of consumer goods began in November, 1940. Many proposals were presented. Economists in the Treasury and the War Cabinet favored rather comprehensive rationing scheme. They argued that rationing of individual or group foodstuffs would be insufficient and that entire food consumption should be rationed by value or by the points system. The economists from the War Cabinet tried to convince the administrators of the advantages of points rationing. Such a scheme would contain aggregate demand for foodstuffs covered by it and approximately balance the supply and demand for a large number of foods by

flexibility. The points are adjusted upwards and downwards pending on the shifts in the supply and demand conditions of goods sold on points. It does not favor larger stores and requires far less regimentation of retailers and consumers than specific rationing.¹⁷

As the supply situation deteriorated during the winter and spring of 1940–41 extension of rationing became a major problem. The need for rationing was held most urgent in case of foodstuffs and clothing. The extension of rationing in 1941 was rather under the pressures of events than a part of a comprehensive plan to prevent a divergence between demand and supply from arising.¹⁸ In August, 1941, Kalecki noted that since the publication of the final version of his scheme at the beginning of the year, the piecemeal rationing of foodstuffs was considerably stepped up and rationing of clothing was introduced. Thus his plan for rationing expenditures in shops “has been superseded to a certain extent by a substantial expansion of specific rationing which has taken place in the meantime.”¹⁹ To

a points price system. Moreover, no registration would be required. In contrast the Ministry of Food preferred schemes dealing with specific foods (a straight ration for cheese was put into effect.) In June, 1941 the Ministry of Food rejected any system of food rationing in aggregate either by value or by points. In March, 1941, the Committee of the War Cabinet came out in favor of a wider extension of rationing and deliberated on the desirability of a value or points scheme for food. Notwithstanding objections from the Ministry of Food, the Committee objected to the instigation of piecemeal rationing and expediency measures to deal with particular foods only as acute shortages arose. It was held that such an approach would result in excess demand shifted to unrationed goods, rampant inflation, and dissatisfaction with inequitable distribution of goods. Hancock and Gowing, *op. cit.*, pp. 325–32.

¹⁷ After prolonged controversy, the Ministry of Food agreed to the experiment with points rationing of canned meat, fish, and beans, and to extend the experiment pending on its results. Some practical difficulties in launching the scheme were encountered. Now ration books had to be produced and distributed. The procedure for passing the coupons back had to be elaborated. Initial schedule of points prices had to be drawn up. Stores had to be provided with inventories. But the difficulties were overcome without grave problems and the points rationing began to function on December 1, 1941. Reportedly, the “public’s approval was instantaneous. The Government had achieved one of its big home front successes of the war.” Preparations for a points rationing of clothes went off smoother than for food. At the time the points scheme for foodstuffs was only ready, a point system for clothes rationing was already operating satisfactorily. Hancock and Gowing, *op. cit.*, p. 332. According to Lord Robbins, the point rationing had re-established, at least on the demand side, the essential features of the price system, price points values were prices and point allotments cash. Robbins argued that the difference was solely that the initial distribution of power to demand was altered. Robbins, *op. cit.*, pp. 6–7. For an illuminating discussion see George D. N. Worswick, “Points, Prices, and Consumers’ Choice”, *OIS*, February 26, 1944, pp. 33–39. An American observer who conducted a first hand study of the British point system remarked: “The point system of rationing . . . is generally recognized as introducing into the economic life of Great Britain something in the nature of a new currency, having social, political, and economic implications which are not likely to vanish at the close of the war.” Keezer, *op. cit.*, p. 243.

¹⁸ Cf. Kalecki, “The Budget”, *OIS*, April 25, 1942.

¹⁹ Kalecki, “Towards Comprehensive Rationing”, *OIS*, August 30, 1941, p. 269. Early in 1942 the government decided that it would have adverse effects on war production to impose further reduction of food and tobacco. However, further cuts were imposed on some goods. In the spring of 1942 a decision was reached to reduce the general clothing ration for 1942–43 by about a quarter. In effect, the adult clothing purchases were cut to about half the pre-war level, and the volume of children’s clothing to about 60 per cent. (This rate was maintained until February, 1945). Hancock and Gowing, *op. cit.*, p. 493.

superimpose rationing of expenditures on the then existing rather elaborate specific rationing of food and clothing would have been cumbersome. A system of great complexity would have been created since for a wide range of articles two types of coupons would have had to be surrendered. Under the circumstances, Kalecki proposed that the rationing of expenditures be used for closing loopholes in the existing rationing arrangements. Among the most important of these gaps was non-rationed foodstuffs, which constituted two-thirds of the aggregate expenditures on food, drink, and tobacco. (In practice beer was excluded from rationing for reasons of tax revenue and for reasons of morale it was decided to abstain from rationing tobacco. Kalecki advocated as a minimum program, the rationing of joint retail expenditures on these items. In addition, the cloth rationing scheme should have been amended and stringent rationing of coal, gas, and electricity started at once. While rendering rationing fairly comprehensive, such measures would still leave a considerable number of non-food commodities outside the rationing system whose further extension could be considered in the future.²⁰

The restriction of the total expenditures on food then unrationed (including drink and tobacco) had two principal advantages over a further extension of specific rationing in this sphere: 1) Further extension of the list of rationed foodstuffs would render the rationing system very complicated and cumbersome. It was not possible to go very far with the extension of the traditional specific rationing scheme before its limitations became apparent. 2) More importantly, commodities rationed thus far were universally consumed, which was not the case for many goods that remained unrationed. While the striking examples were alcohol and tobacco, in the case of many foodstuffs, consumption depends on individual tastes, and habits. It was, therefore, a matter of fundamental importance to secure freedom of choice of consumption of these remaining commodities.²¹

²⁰ Kalecki, "Towards Comprehensive Rationing." *op. cit.*, cf. Hancock and Gowing, *op. cit.*, pp. 492-93.

²¹ Obviously under a regime of rationing, the consumption of certain articles is restricted and the consumer, facing the decision how to spend his money, is more constricted in exercising his freedom of choice than he was prior to the institution of rationing. It cannot be assumed that at the prevailing prices the individual would purchase the same commodities and in the same quantities as he would in the absence of the rationing constraint. In estimating changes in real income, some allowance should be made for the effects of such limitations on the consumers' freedom of choice. Jerome L. Nicholson developed a method by which the loss in real income ensuing from rationing may be approximately estimated. Basing himself on fragmentary data and realizing that the estimate gives only some idea of the probable order of magnitudes involved, he obtained an estimate of the effects of rationing on the cost of living of the working class during the first few years of the war in Britain. He considered only rationed foods, since the rationing of clothing was assumed to have probably a negligible effect on most working class households. Family budget studies in 1937-38 relating to industrial working class households indicated that expenditures on rationed foods amounted to about a quarter of total outlays. For the period between 1938 and 1941, estimates, allowing for goods which were not included in the official index, showed that the cost of living of wage earners increased by 33 per cent. Prices of rationed foods rose by 26 per cent in the same periods so that prices of unrationed goods increased by 35 per

In general rationing by value is more cumbersome than allotments by weight or points, because of differences between wholesale and retail prices. But in the case of foodstuffs, drink, and tobacco such impediments may be easily overcome for here most prices have a uniform level all over the country. Thus it would be possible to enforce the following rule: When the retailer procures these goods from the distributor or producer, he must surrender coupons for the amount representing their retail value.²² The value of the expenditure ration on foodstuffs, not allotted specifically,²³ had to be fixed at such a level that: 1) disinvestment in inventories would cease; 2) prices in general would stop from advancing, and in the case of such goods where price increases had been very acute, prices would actually decline;²⁴ and 3) acute shortages, queues, and other aspects of haphazard distribution would be avoided.

In addition, Kalecki suggested that: 1) The point rationing of clothing and footwear be supplemented by forbidding the production or import of commodities over a certain price limit, which would render allotments by points nearly corresponding to rationing by value; 2) a stringent combined point rationing of coal, gas, and electricity be introduced without delay; and 3) similarly to Kalecki's general rationing scheme restaurant meals be incorporated in food rationing, but the total value of coupons surrendered be equal not to the price of the meal—which includes a markup for cooking and services—but to the retail value of the ingredients.²⁵

The chief drawback of the point rationing of clothing and footwear scheme in operation was that it placed no limit on the value of commodities bought. Such an arrangement tended to induce the better-off people to buy cloth of very high quality and thus led to absorption of labor for producing such goods at the cost of the war effort, and also of foreign exchange in cases when high quality production requires more expensive material imports. The simplest way of coping with this

cent. The average reduction in the consumption of rationed goods, including foodstuffs, no longer obtainables was somewhere between a half and a third. Allowing for the elasticity of substitution between rationed and all other goods (between 0.6 and 0.8), Nicholson estimated the additional increase in the cost of living, on account of rationing, at between 4 and 11 per cent. Consequently, the final index for the period from 1938 to 1941 was raised from 133 to between 137 and 144. Allowing only for the rationing of food, the rough results indicated that rationing had indeed an appreciable effect on real income. Jerome L. Nicholson, "Rationing and Index Numbers," *Restud.* No. 1, 1942, pp. 68-72; Cf. Worswick, *op. cit.*

²² By this procedure rationing by value would function similarly to allotments by points and could be organized along the same lines as the rationing schemes then operating.

²³ Since the statistics on food imports and production were unavailable, it would have been very difficult to make even a very rough estimate of the expenditure ration in question. Clearly it might have been difficult to estimate it even with more reliable statistics and thus it might have been necessary to determine it by trial and error. Kalecki, "Towards Comprehensive Rationing", *op. cit.*

²⁴ In consequence the fall of prices of certain goods might render their production unprofitable, and might require granting appropriate subsidies to the producers.

²⁵ Kalecki, "Inflation, Wages and Rationing", *op. cit.*,

problem was to prohibit the manufacture or import of cloth or clothing over a certain price limit.

Kalecki argued that the measures he advocated would create a fairly comprehensive and equitable distribution system of goods in short supply.²⁶

Clearly Kalecki's scheme was likely to give rise to objections of various kinds and he attempted to anticipate some of them:

1. The question might be raised: Why would it be necessary to curtail the expenditure on consumption by the vexing device of comprehensive rationing? Could not income tax, or Keynes's deferred income scheme, do the job in a less troublesome way? Again the answer to this objection is that an increased burden of income tax or the imposition of "blocked forced savings" may produce chiefly a cut in voluntary savings or even dissaving. More importantly, such reduced spending might be channelled in the wrong direction. It is quite impossible to achieve by taxation or any other indirect ways the same results as by direct rationing of food expenditures.

2. Another crucial question that may be posed is: What will be the effects of possible wage increases on the scheme of comprehensive rationing? It is the vicious spiral that really pushes wages up. When prices rise the workers who have to pay for their objects of consumption are indifferent to the way the rise in cost of living has climbed. Once the problem of price level has been tackled by comprehensive rationing, the agitation for higher wages lose in force. The rise in wages will mainly have the character of adjustments on a rather fairly moderate scale. Moreover, wage increases would then offer the demand for actually scarce goods on to the extent that they enable the lower income groups to take fuller advantage of the rations to which they will be entitled. Clearly, this might conceivably entail some curtailment in general ration. Nevertheless, if the arrangement of granting allowances by buying up unused coupons is accepted, such adjustments could only be small.

Under comprehensive rationing the problem of a rise in wage income is largely divorced from that of the demand for commodities in critically short supply. The impact of a rise in wages on prices via costs constitutes only a special case of a more general problem; for instance, a rise in costs of securing imported raw materials creates exactly the same predicament. It is in such cases that price controls and subsidies (which will be discussed later) may play their proper role. While the policy of price control and subsidies cannot win the battle against inflation arising out of the deficient supply of goods, it may be used effectively to prevent price inflation coming not from the demand, but from the cost side.

3. The objection that comprehensive rationing considerably affects labor performance, reducing the incentives to work harder and better, because it puts brakes

²⁶ "In discussing rationing problems with those trying to solve them in Great Britain, I was frequently told emphatically that the British people are so constituted that they will stand almost any degree of rationing if they are convinced that everyone is being treated equally, but that they decisively resent any arrangement which smacks of discrimination." Keezer, *op. cit.*, p. 271.

on spending of earnings over a certain limit warrants serious consideration. Although savings are neither a palpable nor powerful incentive, they are undeniably a certain stimulus and reward for greater effort. Moreover, a certain range of commodities, and particularly of services, remains beyond the scope of rationing. But, above all, the incentive system can be strengthened by differential rationing. For instance, it was officially recognized that heavy work has to be compensated by higher food rations. There is a wide scope for introducing a more refined differentiation (*e.g.*, based on working time). It would be advisable to introduce non-food coupon premia for extra work or improved performance.²⁷ Lastly, it cannot be overemphasized that comprehensive rationing of foodstuffs would remove these obstacles to work resulting from haphazard distribution, acute shortages, and waste of time and aggravation in queues.²⁸

NON-EQUALITARIAN RATIONING

It is necessary to introduce differential (non-egalitarian) rationing for mainly three reasons: 1) the nature of the work may necessitate that some workers get more than an average ration of a particular commodity; 2) flat rationing in fact discriminate against low income groups because a) the consumption of the product in question constitutes an appreciably higher share of total spending of the poor than those of moderate or high income,²⁹ and b) the better-off have a greater opportunity of compensation for the curtailing in the consumption of the particular product by consuming more expensive substitutes as their purchases are less restricted by the rationing by the purse; and 3) unequal distribution of stocks of this product at the time of introduction of the scheme and thus opportunity to re-arrange distribution of available produce not only according to the power of the purse, but also according to the initial distribution of stocks.³⁰

Bread Rationing. The rationing of bread may become necessary as a result of the shortage of shipping facilities (in practice bread was left unrationed for morale and other reasons).³¹

²⁷ "To suggest that the heavy worker can remain really efficient, happy, and healthy on the same diet as the sedentary worker plus a little extra bread, is like suggesting that a Rolls Royce can run on the same petrol as a seven h.p. car with the addition of a little coal." A. V. Hill, *Hansard*, October 2, 1941, quoted after Jozef Goldmann, "Differential Rationing in Practice", *OIS*, October 10, 1945.

²⁸ Kalecki, "Inflation, Wages and Rationing, *op. cit.*

²⁹ For percentage of household expenditures on food in 1938 and 1943 together with the corresponding percentages in industrial working-class households and middle-class households. see Nicholson, *op. cit.*

³⁰ Kalecki, "Differential Rationing", *OIS*, August 8, 1942, pp. 215-17.

³¹ One of the main aims of shipping policy was to avoid cutting essential military requirements. However, the heavy military demands on cargo shipping arose partly from the inflated requirements and extravagance of the military for transport and equipment. The War Office was pressed to strive for economics in transport. The most pronounced source of shipping economics was

Usually not only manual workers require more bread as an energy food, but also flat rations would cause greater hardship for the poor than for the better-off. A prudent rationing of bread should differentiate the rations, giving to the manual workers rations considerably above those for the rest. The higher rations should be allowed not only to those who exert greater physical effort, but also those who belong to the lower income group. The workers' large families would still be at a disadvantage since they usually belong to the poorest strata of the population and because the higher bread ration would only be given to the wage-earner. To mitigate the situation, relatively high rations should be allowed for children in general. Productivity considerations require that rations be differentiated among various members of the workforce, for example, heavy workers, like miners, should get higher rations than other manual laborers.

An important consideration is the likely repercussions of a cut in bread consumption on the consumption of other foodstuffs. While consumption of a substitute like potatoes would probably increase, such a development would create no difficulty as the supply of potatoes was abundant and could easily be augmented. (In fact, the proposal of substantial admixture of potato flour in bread in order to economize on wheat was really equivalent to a flat rationing of wheat bread). Measures to cut consumption of bread were likely to intensify demand pressures for other goods. Hence rationing would have to be extended, in particular to goods which were more or less close substitutes for bread (*e.g.*, cake which could be included in the points scheme or the scheme for sweets).

Kalecki argued that to relieve the burden of low income groups it would be advisable to cut the prices of goods included in the point scheme. Such action would enable persons who could not afford to utilize their ration, to purchase more. However, if the supply of points food was kept constant this would require the curtailment of the rations. While bread consumption in war-time was considerably higher than in peace-time, as the population tries to compensate in such a manner for the deficiency in protein foods, a lower bread ration could be imposed without great hardships if some portion of the shipping space economized thereby could be appropriated for increased imports of cheese or dehydrated meats.

While it was clear that an increase in the supply of protein foods would contain bread consumption, it was not certain whether the scheme was practical. But even ruling out an increase in imports of cheese and meat, there still remained an opportunity of easing the bread situation to a certain extent by differential rationing of meat. In fact, Kalecki argued that differential rationing of meat was

in food imports. Among other measures, bread rationing was seriously considered, but the War Cabinet was reluctant to adopt such a drastic step, fearing that such a basic change in food policy, fraught with so many dangers, would not be worth while unless it was going to save an appreciable volume of wheat imports. The Minister of Food envisaged no prospect of such a saving and the bread rationing scheme was abandoned in August, 1942. Hancock and Gowing, *op. cit.*, pp. 417-461.

already in effect, but it took a particular form. As we noted restaurant meals were not rationed and most workers had canteens at their work places. Actually, people who had their meals in restaurants and canteens benefited from a differential ration of meat (apart from a moderate price), for no coupons were surrendered when eating out. Such a situation was hardly equitable. Canteens might be considered a substitute for differential rationing in favor of manual workers, but even here the rationing was of haphazard character, since not all workers (e.g., miners and agricultural laborers) were able to use these facilities. The situation could be rectified by making it mandatory for all to surrender meat coupons in restaurants and canteens and to use the meat saved for increasing uniformly the ratios of manual workers; i.e., shifting a certain amount of meat consumption from the better-off to the workers. This could allow for a certain lowering of the bread ration, if introduced. However, differential rationing of meat would be useful in order to save shipping space, even if bread would remain unrationed (i.e., higher meat rations for workers would probably reduce considerably bread consumption). On the other hand, those generally eating out were unlikely to compensate the reduction in their consumption of meat by appreciably increasing consumption of bread. They might rather direct their spending to other goods which might in turn require some further expansion of the scope of rationing.³²

Coal Rationing. Retail distribution of fuel was one of the most intricate and controversial problems and a key bottleneck in non-food consumer goods' distribution.³³ As the war was progressing it was increasingly clear that the measures adopted to cope with the shortages of coal were insufficient to balance demand and supply and were likely to reduce stocks to intolerably low levels.³⁴ Without substantial increase in coal production, it became increasingly evident—as Kalecki argued—that the missing link in the system of distribution was clearly rationing.³⁵

One of the big problems was to design a scheme for the distribution of fuel which would not provide considerably more fuel to the men in large houses than to those in small ones. In fact, the requirement of families for fuel is not necessarily proportionate to the number of members of the household as it depends to a certain extent on the number of habitable rooms. Generally households with a relatively large number of rooms per capita will be those of the better-off. Those families are likely to be in possession of larger stocks of clothing and may thus, with less hardship, abstain from the purchase of new clothing. In fact, a satis-

³² Kalecki, "Differential Rationing", *op. cit.*, pp. 215-217.

³³ Cf. Hancock and Gowing, *op. cit.*, pp. 175 & 471.

³⁴ Cf. Hancock and Gowing, p. 175.

³⁵ Opinions as to the possibility of an appreciable increase in the production of coal differed. But whatever increase in output may have been achieved, the need to build up large and dispersed inventories was urgent. In view of the deteriorating fuel situation, the curtailment of domestic fuel consumption was necessary. It was increasingly agreed that the only equitable way of distributing the shrinking supplies was by rationing.

factory solution to fuel rationing could be devised by combining it with the scheme of footwear and clothing rationing.

Sir William Beveridge had suggested that in case of older people and invalids, clothing coupons could be used for fuel purposes. Following Beveridge, Fritz Burchardt proposed that this scheme be extended and that fuel and clothing coupons be interchangeable.³⁶ Kalecki supported Burchardt's argument. He pointed out that the problem of the point relation between clothing and coal in a combined rationing scheme would have to be solved.³⁷ The poor could be permitted to use "surplus" fuel coupons to purchase clothes, the rich clothing coupons for buying fuel. Such a combined rationing by points would allow to avoid differential rationing of each category taken separately and to contrive a scheme which would cut down import of materials and would not interfere with coal consumption. Kalecki elaborated on the proposed scheme of mutual substitution, concentration on the problem of fixing the point relation between clothing and coal.

Let a denote the number of clothing coupons after a moderate reduction as compared with the then prevailing level; x the unknown number of coupons to be increased for coal. Thence, $a + x$ denotes the total number of interchangeable coupons for clothing and coal. Assume further that the amount of fuel per coupon is represented by y . A poor man will be unable to reduce his consumption of clothing (i.e., saving from consumption of clothing is nil), therefore, his fuel consumption will be xy . Let b denote the level at which xy is fixed, so that $xy = b$. A very rich man may choose not to spend any coupons on clothing and all his coupons on fuel. In such a case his purchases would amount to $(a + x)y$. With the constraints that a rich man's purchases of fuel should not exceed that of the poor by more than m per cent, the second equation is:

$$(a + x)y = b\left(1 + \frac{m}{100}\right)$$

Solving the simultaneous equations we obtain:

$$x = a\frac{100}{m} \quad \text{and} \quad y = \frac{b}{a} \frac{m}{100}$$

If, for instance, $m = 50$ per cent; then $x = 2a$ and $y = 1\frac{1}{2}, b/a$. The value b of the fuel purchases per head of a poor household must be fixed so as to balance the total demand for and available supply of fuel for civilian use. It is claimed that the scheme has the additional advantage of resolving the difficulties of households with many children which usually need more clothes and less fuel, enabling them to use the coupons to their better advantage: more on clothes and less on fuels.

The number of clothing fuel coupons which should be allowed to children should

³⁶ *Fuel Rationing: Report by Sir W. Beveridge, to the President of the Board of Trade.* Cmd. 6352; Fritz A. Burchardt, "Shipping, the Bottleneck", *OIS*, July 18, 1942, pp. 193-97.

³⁷ Kalecki, "Some Problems of Non-Food Rationing", *OIS*, December 12, 1942, p. 326.

depend primarily on two principal considerations: 1) large house holds require less fuel per capita if they would heat only one or two rooms; and 2) children require more clothes and footwear, which is accounted for in the scheme devised by Kalecki. Some allowances for differences in climatic conditions of various regions could be accounted for by varying the number of clothing-fuel coupons geographically. Also, in the clothing-fuel scheme the hardships due to diversity of climatic conditions would be lessened to a certain extent by the opportunity open to the consumer of purchasing less clothing and more fuel.³⁸

Rationing of Food Expenditures. While it is possible to go quite far with the rationing scheme of total retail spending, the scheme does not fully solve the critical food problem as such. An individual pattern of preferred expenditure depends, *inter alia*, on the initial distribution of power to demand and initial distribution of stocks of various commodities. An individual whose total spending in shops is limited, say, to 25/- per week exercises choice as to the composition of his purchases:³⁹ one may very well spend nearly all of it on food, especially if one is fortunate to possess a fairly large stock of chattel, durables, or semi-durable consumer goods. If in patterning expenditures the choices are overwhelmingly or inordinately in favor of foodstuffs, in fact the curtailment of food consumption may be disproportionately low, the critical depletion of food stocks may not be prevented, and food prices may be climbing. To preclude such a development, it is necessary not only to retain the specific rationing of foodstuffs besides the general rationing of retail expenditures, but it is also desirable and advantageous to differentiate the rationing scheme, by introducing food and non-food coupons.

Here arises the problem of determining the level of the food expenditure ration. Given the marked deficiency in food imports and assuming that there is no considerable increase in domestic food production, stocks of foodstuffs must decline correspondingly. This critical development may be prevented by curtailing the total spending on food. A rough estimate suggested that 12/6 per week per adult and 8/- per child was the level of food expenditure ration required to keep the demand in balance with the then current value of food imports.⁴⁰ However, even if the aggregate food spending were brought into balance with the value of food import, the food problem would not be entirely resolved. The resulting composition of food spending might be such as to require disproportionately high demand in terms of the critical shipping space—one of the major bottlenecks. Nevertheless specific rationing of crucial products would probably suffice in general to allow for the shortage of shipping space constraint.

NoneFood Rationing. While there was a notable expansion in the scope of food rationing, the extraordinarily intricate problem of retail distribution of non-food articles during prevailing shortages remained to be tackled. In fact, non-food

³⁸ Kalecki, "Differential Rationing", *OIS*, August 8, 1942, p. 217 and "Some Problems of Non-Food Rationing", *op. cit.*, pp. 325-28.

³⁹ Worswock, *op. cit.*, pp. 33ff.

⁴⁰ Kalecki, "Notes on General Rationing", *op. cit.*, p. 104.

rationing did not expand after the introduction of the point system for clothing and footwear (exception for the introduction of towels, tea towels and curtains in the clothing scheme). The most urgent bottlenecks in non-food consumption were 1) household goods, and 2) long-range travelling. Measures had to be devised to cope successfully with the shortages.

1. In the case of household goods, rationing had to be supplemented by licensing. The problem was that rationing could take account only of the calculated requirements arising out of replacement demand for durables in existing households. But an arrangement was required to provide adequate supplies for the newly married and for victims of bombing. The distribution of household goods would have to be based on a) a small personal point or value ration, corresponding to the wear and tear requirements; and b) licensing in special cases. While it would be fairly easy to operate such a scheme in case of new production (which overwhelmingly consisted of utility lines), its extension to merchandise in stock would encounter considerable difficulties as the merchandise was not standardized and the coupon control would be hardly effective. One way out of the dilemma was simply to leave the existing inventories outside the rationing scheme (indeed, a procedure followed for expediency reasons by the Board of Trade which licensed only newly manufactured utility furniture). Kalecki objected to the solution adopted, primarily on the following grounds: a) it was unfair as everybody with sufficiently large means could buy from the existing stocks at high prices; and b) the inclusion of existing stocks, at least partly in the rationing and licensing scheme would allow for greater reduction in current consumption or for storing up emergency reserves of household goods to be distributed among victims of future bombings.

Kalecki suggested that a government agency earmark household articles suitable for mass consumption in shops, pay a reasonable price to the dealers for them, and fix on them prices comparable with those of utility goods,⁴¹ (which are likely to be lower than those paid to the dealers). The goods so procured would be made available then for the rationing and licensing scheme (reducing the requirements on current production) or stored for emergency purposes. The proceeds from the sale of these goods would be transferred to the account of the government agency that would control the shops by taking periodic inventories of earmarked merchandise.

2. Travelling is not quite propitious to rationing. The demand for travelling services fluctuates widely. The natural system for equitable curtailment of travel is comprehensive licensing of travel, but the volume of cumbersome administrative work is prohibitive.

Train services had been progressively reduced after the outbreak of the war, but by fall of 1941, trains became so overcrowded that it was more reasonable to reduce

⁴¹ On utility policy and utility schemes and prices see Kalecki, "Some Problems of Non-Food Rationing," *op. cit.*, p. 326; and Peter H. Ady, "Utility Goods", *OIS*, October 31, 1942, pp. 281-87.

the number of passengers before imposing further cuts on the frequency of services. While rationing of travel was being considered by the government, objections were raised on the grounds that the administrative barriers would be virtually insuperable and the savings would be small, as the bulk of long-distance travelling was done by service men. In lieu of rationing of travelling services, it was decided to launch a campaign to ask the population to abstain from "unnecessary" travel and some minor restrictions were introduced (withdrawal of restaurant and sleeping cars, restrictions on luggage, and prohibition of service men from travelling on public holidays, and later, in 1943, cheap day far tickets were abolished). Probably the measures contained somewhat the travelling urge, but they were important in preventing the number of passenger journeys from soaring.⁴²

The bottleneck in travelling was mainly attacked by reducing the number of trains and suspending some bus lines. Attempts were made to cut out as much dispensable traffic as possible. Passenger trains became overcrowded, services less frequent, and travellers either had to put up with the discomfort or cut down on travelling. But the discouragement (including higher fares) was not effective enough and the burden fell inequitably on passengers. As the situation became more strained, the methods used for economy of transport became unsatisfactory.

Kalecki proposed a combined licensing-rationing scheme. He stressed that the scheme would not be easy to implement, but seemed practicable. The licensing part of the scheme provided that a) workmen's tickets would not be affected by rationing; b) holders of season tickets could renew them, and those who did not possess such tickets at the time of the institution of the scheme and who required them for transportation to and from work could obtain them; c) people who travelled regularly in connection with their duties, but not frequently enough to warrant purchase of a normal season ticket, would get cheaper season tickets of a special type; and d) for irregular travelling on duty emergency tickets would be provided. With the exception of soldiers, the rest of travelling would be rationed by distance. The scheme should provide for a relatively high personal ration, since the demand for some travelling services is high, while a large share of the population travelled little. In some cases, even a relatively high ration might involve serious hardships. Thus the scheme would permit the substitution of other non-food and perhaps also some food coupons for travelling, (but not in reverse order) at established rates of substitution. Such an arrangement would make the travelling scheme more elastic while simultaneously more travelling would entail a sacrifice in other spheres of rationed consumption. A reduction in travelling could be induced both by the cut of the basic travel ration and by an increase in the rate of exchange of the other coupons to be surrendered for a given amount of travelling coupons. Due to the uneven demand for travelling, it was mandatory to copy with the problem of preventing transferability of coupons. Admittedly, the proposal involved substantial administrative work, but with further straining of transportation ser-

⁴² Hancock and Gowing, *op. cit.*, pp. 480-90.

vices, something along these lines would become unavoidable.⁴³

RATIONING AND PRICE CONTROL

Rationing With and Without Price Control. While a good case can be made for the proposition that price control without rationing is not effective in combatting inflation in war-time, the contention that rationing makes price control superfluous is questionable. By proceeding from the simple case of allocation by rationing of a single article of consumption and then turning to the more complex one of the point rationing scheme, one may examine the problem.⁴⁴

The idea behind rationing a certain commodity is that it should be effective in preventing the price of this good from rising and that the rations should be fixed at a level corresponding to the available current supplies. If the ration is too high in relation to the available supply, the price will tend to advance. Yet, in some cases, prices may go up after introduction of rationing even if the ration has been made equal to the available supply. For example, when rationing is instituted in case of a "demand push" tendency for inflationary price advances. Assuming, that rations have been properly matched with available supply, and that rationing brings into balance the quantities demanded and supplied. Prices may nevertheless go up for a *different reason*. It is probable, at least for some commodities, that institution of rationing reduces the sensitiveness of buyers to price differences between alternate sources of supply. Rationing may cause the market to become considerably more imperfect; competition becomes less intense, the consumer less choosy, and the price may rise although the imbalance between demand and supply has been removed by rationing. Kalecki argued that to cope with such a situation price control is required.

If there are good reasons for accompanying rationing by price control in order to keep the price at the level which prevailed at the time when rationing was put into operation, price control is even more necessary if price reduction is the goal. For example, this would be the case when rationing is introduced after the price of a given product has risen appreciably in proportion to its prime costs, under the pressure of demand. Under such circumstances rationing alone cannot be expected to do the trick.

Rationing is usually combined with a system of allocation of supplies to firms in certain fixed proportions. The firms cannot tend to increase their sales by competing between themselves. But even if this factor is ineffective because rations have been fixed somewhat below the level matching available supply, it is very uncertain whether price would decline. The reason is, as noted, that rationing tends to increase market imperfections and prevents the forces of competition from pushing the price down. In order to reduce the inflated price to the level

⁴³ Kalecki, "Some Problems of Non-Food Rationing", *op. cit.*, pp. 325-28.

⁴⁴ Kalecki, "Rationing and Price Control", *OIS*, February 5, 1944, pp. 29-32.

which shows a "normal" ratio to prime cost, it is necessary to accompany rationing by price control. However, if prices are reduced considerably below the level they had previously reached, the price fall may increase quantity demanded by prompting those who at higher prices abstained from purchases to use fully their coupons. This may necessitate some reduction in the ration. The ration in general must be somewhat smaller than that which would match current supplies at the price which prevailed at the time of putting the rationing scheme into effect.

The Point Rationing and Price Control. The same conclusions arrived in the simple case of rationing of a single commodity are applicable to the point system of rationing. The requirement still holds, of course, that the ration in terms of points must match the current supplies in terms of point. It is desirable to accompany rationing by price control, if it is proposed to keep the prices at the level which prevailed at the time when rationing was instituted, but it is necessary if the aim is to reduce prices below that level. There are also some additional problems. While previously rationing was examined with reference to a single commodity, the problem now is complicated by dealing with an aggregate of commodities. Given that demand and supply are equilibrated by rationing for all commodities in terms of points, it does not follow that such a "partial" equilibrium exists for each commodity in question, taken separately. In case of disequilibrium for a particular product, demand and supply for such a specific commodity may be adjusted and brought into equilibrium either by the automatic movement of uncontrolled prices or by variations in point values, i.e., affecting change in points that must be surrendered to buy a unit of a given commodity.

If the equilibrating adjustments are left to the mechanism of the free movement of prices, it is by no means certain that the price index of the commodity group considered would remain stable. Examine, for instance the case of only two commodities A and B in the point scheme. Assume that the total number of points in the ration is divided equally between these two commodities and so is their value in terms of money. Suppose now that demand shifts from A to B, while the supply of either commodity is fixed. In addition, assume that A has closer substitutes among the commodities outside the group than B. Under such conditions, the relative price rise of B will be higher than the relative price decline of A, and the price index of the group will record an increase. Contrariwise, when demand shifts from B to A, there will be a fall in the price index of the group. However, the presence of a factor which tends for the price index of the group rather to rise than to decline when relative demand shifts from one commodity to another cannot be ignored. So far it was assumed that price changes have to be such that the volume of sales of either good would remain invariable. In fact, that will be the case only of the good in greater demand if its supply cannot be augmented. On the other hand, the price of the less demanded good may not decline at all, or at least not sufficiently to prevent a fall in the volume of its sales. The decrease in demand may cause a curtailment in supply or an increase in inventories.

It would be preferable to stabilize the price index of the group by exercising control over prices of goods concerned and *varying* the relative point values until equilibrium of supply and demand is attained for all goods. It would be advisable to supplement this measure by changes in the relations of the controlled prices, especially when a considerable number of consumers do not use fully the coupons to which they are entitled and thus are not subject to the influence of alterations in relative point values.⁴⁵

Conclusion. Price control *by itself* offers no answer to inflation. When the state fixes prices by fiat or promulgates legal restrictions on price increases, it might be relieving a spectacular symptom, but it is not curing the disease, if at the decreed price supply and demand do not match. It is always useful and in most cases necessary to supplement rationing by price control. Kalecki argued that this conclusion is of some practical importance for the post-war transitional period. As long as some goods are very scarce, both rationing and price control must be maintained. Even after the acute and prolonged shortages are eradicated, and rationing become obsolete by the prevalence of ample supplies, price control does not cease to be an archaic relic of a war economy. Price control "may be usefully applied for pressing down prices which are 'high' owing to a considerable degree of market imperfection or the existence of industrial monopolies."⁴⁶

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⁴⁵ The institution of rationing of clothing and footwear in Great Britain during the war was a case in point of rationing unaccompanied by price control. After rationing went into effect in June, 1941, the retail price index of the Ministry of Labour continued to climb until March, 1942, registering an overall rise from June, 1941 to March, 1942 of about 10 per cent. While some increases of prices of raw materials and labor inputs occurred, there were not of such order as to justify the rise of prices of finished goods by 10 per cent. Simultaneously, a shortage of cheaper (lower quality) products was noticeable. Probably, it was chiefly prices of the cheaper assortments that pushed the increase in the price index. The increase in prices after the institution of rationing might have been partly due to the allowed rations being too high in relation to the available supply. However, the prevailing shortages of cheaper assortments pointed to an influence of a factor which appears to be more weighty in this context, viz, a *relative* shift in demand. The introduction of rationing of food and clothing reduced drastically the consumption of the higher income groups, while that of the lower income groups was little or not affected. The composition of output did not adapt itself to the shift in the structure of demand for some time. (The quota of producers specializing in manufacturing cheap and expensive clothing were probably reduced in the same proportion initially). As a consequence, prices of cheaper products tended to rise, while those of the more expensive assortments did not decline. The increased market imperfection resulting from rationing and reduced buyers' sensitiveness to price differentials between alternate sources of supply (especially for products purchased by the richer segments of the population whose consumption was reduced considerably by rationing, below the level they could afford with their incomes) may have been an important contributing factor here. Thus the price index of clothing tended to increase independently even of the possibility that the rations might have been fixed somewhat higher in relation to the available supply. After some time, in order to promote change in the composition of output, price controlled utility goods were introduced. In order to meet essential needs, standard utility articles were manufactured in a simple design and were moderately priced, so as to bring them within the range of the lower income groups. Consequently, after March, 1942, the price of clothing ceased to increase and in September of that year it started to decline. Kalecki, "Rationing and Price Control", *op. cit.* pp. 31-32.

⁴⁶ *Ibid.*, p. 32.