Part Three

THE CONCEPT OF INCOME PARITY FOR AGRICULTURE

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The Concept of Income Parity for Agriculture

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FARMERS IN THE UNITED STATES have not escaped the age-old struggle against periodically declining prices for their products. When, after the middle of the last century, farmers and their families ceased to be a majority of the population, they tended more and more to blame their ills on certain nonfarm groups. The struggle became focused on improving their economic status. But only in the last two decades have the objectives of this struggle been made explicit, officially been recognized, received considerable public support, and taken on at least the appearance of concreteness and reality in terms of the 'parity' concept; and only since the middle of the last decade has the concept of income parity acquired some prominence.

Since 1933 'parity' has played a continuously important role as a guide to agricultural programs. Recently it has been accepted as one of the limiting factors on the administration of price control as it affects agricultural commodities. But in all cases, the working formulas have been based on price parity rather than income parity, the latter being referred to merely as a more comprehensive measure of the relative economic status of farmers and as a more satisfactory measure of the combined effect of the various agricultural programs on the welfare of farm people.

During the last few years the Department of Agriculture has conducted an intensive study of income parity, collecting and analyzing the data necessary for its measurement. Preliminary results on various phases have been published from time to time in a series of reports. A summary of these preliminary results was recently published by the Bureau of Agricultural Economics.[1] Not the least

[1] An early prospectus of the study appears in 'Income Parity for Agriculture' by O. C. Stine, *Studies in Income and Wealth,* Volume One (National Bureau of Economic Research, 1937). The series of preliminary reports, prepared under the direction of a Departmental committee of which O. C. Stine is chairman, have appeared under (1) Farm Income, (2) Expenses of Agricultural Production, (3) Prices Paid by Farmers for Commodities and Services, (4) Income to Farmers from Nonfarm Sources, and (5) Population, Farms, and Farmers.

The income of the nonfarm population has also been estimated annually. A summary appears in 'Material Bearing on Parity Prices' presented by Howard R. Tolley at a hearing on parity prices and income for agriculture before a subcommittee of the Committee on Agriculture and Forestry, U. S. Senate, July 1941 (U. S. Department of Agriculture, Bureau of Agricultural Economics; mimeographed). The same summary material is given in the printed report of the hearings ('Formula for Determining Parity Prices', Part 2, pp. 303-73).

of the difficulties and problems encountered were questions concerning the essential nature and purpose of income parity, the type of estimates best suited to its measurement, and the validity of income comparisons of this type. This paper discusses these questions and indicates some tentative answers.

For a complete understanding of income parity, however, it has seemed desirable first to trace briefly the growth of the general concept of parity, indicating the historical and conceptual setting from which income parity arose.

I Origin and Development of the Parity Concept

The present concept of parity for agriculture developed as a result of conditions prevailing during the first World War and the 1921 depression.[2] During the war prices of agricultural products were relatively high, and the idea of price controls or guarantees became widely accepted. When prices of farm products dropped fast and far in 1920-21, it was only natural that there should be much agitation for aid to farmers and that measures designed to raise and guarantee prices should have a dominant place in proposals for such aid. And as the smaller decline of nonagricultural prices relative to farm prices was impressed on the minds of farmers by the squeeze between their production and living costs and the receipts from the sale of their products, it was also natural perhaps that arguments for special assistance to farmers should stress the 'disparity' between farm and nonfarm prices, between prices received and prices paid.

It was possible to advocate 'equality for agriculture' and to make a good case for the existence of 'disparity' between farm and nonfarm prices in 1921, without precisely defining equality, and without having any very definite idea about what price relationships should be considered as constituting 'parity'. As a matter of fact, the term 'parity' was seldom used in these early postwar years, and did not become common usage in the sense applied to agriculture until its legal recognition and definition in 1933. But it was not possible to provide any quantitative measures of the disparity without first establishing a set of relationships between prices, either

[2] Some highlights in the historical development of parity are given in 'Agriculture and the Parity Yardstick', an address by Howard R. Tolley before the National Cooperative Milk Producers Federation, Chicago, Illinois, Nov. 11, 1941 (U. S. Department of Agriculture, Bureau of Agricultural Economics, mimeographed). See also 'Parity: What Is It?' by O. C. Stine, *The Agricultural Situation,* Sept. 1941, pp. 11-15.

historical or based on abstract considerations, that could be considered as parity. The base periods now taken as embodying the parity relationships stem directly from these early attempts to measure postwar price disparity.

During the period of economic maladjustment following the war, the popular rallying cry was 'back to normalcy'. The years immediately preceding the war's outbreak were naturally viewed by many persons as a sort of golden age to be restored as nearly and as soon as possible. It was inevitable, therefore, that some average of price relationships prevailing during the years just before the war should be taken as parity, especially as these years had the additional recommendations of recency, relative stability, and price relationships more favorable to farm products than in most earlier years.

It does not seem possible to give primary credit to any one individual or group of individuals, either within or outside the United States Department of Agriculture, for originating the parity concept. The general idea seems to have occurred at about the same time to many people interested in agricultural problems. But the Department of Agriculture, through the collection of data and the construction of price indexes, probably was primarily responsible for the ultimate form and specific content of parity. In 1921 it published its first indexes of the prices of all farm products.[3] The practical reasons for selection of the base period August 1909-July 1914 were probably threefold: (1) it was the 60 months immediately preceding the outbreak of the war in Europe; (2) August-July approximately represents the annual marketing season for many of the more important farm products; (3) as monthly data on prices paid to farmers were not available before 1908, the range of choice for a prewar base period was rather narrow.

The Bureau of Labor Statistics all-commodity index of wholesale prices was converted to the August 1909-July 1914 base period, and the 'purchasing power of farm products' was determined by dividing the new index of farm prices by it. In stating that "if the purchasing power is 100, it means that the [farm] products can be exchanged for the *usual quantity* of other things", but that "low purchasing power of farm products has made it impossible for farmers to buy the *normal amount* of other things",[4] this early

[3] G. F. Warren, 'Prices of Farm Products in the United States', U. S. Department of Agriculture *Bulletin 999*, Aug. 26, 1921.

[4] *Ibid.*, pp. 25, 56.

publication obviously contained all the essentials of the price parity concept.

The Joint Commission of Agricultural Inquiry, appointed by Congress in June 1921 to investigate and report on the current condition of agriculture, studied 'the relation of prices of commodities other than agricultural products to such products'. Part I of its report, published late in 1921, contained considerable material pointing toward a concept of parity prices, much of which had been prepared in the Department of Agriculture.[5]

By dividing the indexes of wholesale prices of farm products by the indexes of wholesale prices of all commodities, both on a *1913* base, the Commission concluded that the 'purchasing power of the farmer's dollar' was only 77 cents in May 1921. The purchasing power of farm products was also shown in terms of the index for all commodities other than food and farm products. Probably the fact that the Bureau of Labor Statistics indexes of wholesale prices were then based on 1913 as 100 had much to do with the selection of 1913 price relationships as the basis for comparison.

In 1922 a pamphlet advocating 'equality for agriculture' was published in which the 1906-15 average ratios of prices of farm products in major wholesale markets to all wholesale prices were considered as representing the 'fair exchange values' of farm products.[6] A second edition contained a supplementary memorandum and tables prepared in the Department of Agriculture in which calculations of disparity were based on average wholesale price ratios for the decade 1905-14, the period specified in the first McNary-Haugen bill in 1924 for determining 'ratio prices' (i.e., parity prices) for agricultural commodities. The Department memorandum, however, "recognized that farm prices for farm products and retail prices for the things farmers buy would be the appropriate data to use in such a compilation if they were available".

Shortly after the collection of data on prices received was started, the Department of Agriculture began to collect data on prices paid by farmers. In the *Yearbook of Agriculture* for 1918 and 1919 the prices of some 85 commodities purchased by farmers are shown for 1909 and 1914 and for the current and preceding years, together with the number of units of each commodity purchasable by the

[5] *The Agricultural Crisis and Its Causes* (67th Cong., 1st Sess., House of Representatives, No. 408).

[6] George N. Peek, and Hugh S. Johnson, 'Equality for Agriculture' (Moline Plow Company, Moline, Illinois, 1922).

average crop value per acre. In the *Yearbook* for 1920 and 1921 prices paid and purchasing power per acre are converted to percentages of 1914, and rough indexes are given in the form of simple unweighted averages of the price and purchasing power relatives. The germination of the parity concept can be seen in this change in the manner of the presentation of the data on prices paid. And an article in the 1921 *Yearbook* goes a step further in the direction of price parity, comparing prices of wheat for 1910-21 with average prices of articles bought by farmers, using 1913 as the base period.[7]

To provide a satisfactory measure of price parity, however, more accurate indexes of prices paid by farmers were needed. And in 1928 such indexes showing prices paid for 'commodities bought for family maintenance' and for 'commodities bought to be used in production', were first published.[8] Because only annual data were collected before 1923, the five years 1910-14 were used as the base period.

Until the appearance of these new indexes of prices paid, the determination of price parity on the basis of 1913 relationships had been quite common. Although the index of prices received for farm products was published with August 1909-July 1914 as 100, it so happened that the average for 1913 on this basis was practically 100. And as the Bureau of Labor Statistics wholesale price index, constructed on a 1913 base, had to be used as a substitute for prices paid, it was simple and convenient to assume that 1913 average price relationships constituted parity. But with the publication of the prices-paid index on a 5-year base, and the shift of the Bureau of Labor Statistics index to a 1926 base at about the same time, the use of 1913 relationships as parity was abandoned.

As the idea of parity prices was reasonably simple, easily understood or misunderstood by farmers, farm lobbyists, Congressmen, and the general public, and was readily adapted to the support of almost any proposal for farm relief, it is not surprising that it became widely accepted as the correct, or at least the best available

[7] C. R. Ball, C. E. Leighty, O. C. Stine, and O. E. Baker, 'Wheat Production and Marketing' (U. S. Department of Agriculture, 1922), p. 119. On page 148 there is a chart showing 'purchasing power' per bushel and per acre yield of wheat 'in 1913 dollars' for 1866-1921, the decline in purchasing power following World War I being compared with that following the Civil War.

[8] C. M. Purves, 'Index Numbers of Prices Farmers Pay for Commodities Purchased' (U. S. Department of Agriculture, Bureau of Agricultural Economics, Division of Statistical and Historical Research, Aug. 1928; mimeographed).

measure of the relative economic status of agriculture.[9] The collection of data on prices received and prices paid by farmers and the construction of indexes were improved from time to time. The use of the 5-year prewar base period became more or less standardized. Finally, in 1933, parity prices for farm products became a major goal of the agricultural program.

The Agricultural Adjustment Act of 1933 stated that it was the policy of Congress to "reestablish prices to farmers at a level that will give agricultural commodities a purchasing power with respect to articles that farmers buy, equivalent to the purchasing power of agricultural commodities in the base period. The base period in the case of all agricultural commodities except tobacco shall be the prewar period August 1909-July 1914. In the case of tobacco, the base period shall be the postwar period August 1919-July 1929." Although there have been several extensions and modifications since the passage of the original Agricultural Adjustment Act, the essential features of the price parity concept have remained unchanged.[10]

II Development of the Income Parity Concept

From the very beginnings of the parity idea, there had been some recognition of the fact that satisfactory prices for agricultural commodities did not necessarily mean satisfactory returns to farmers when production was below normal. In some of the earliest publications in which the idea of parity prices was developed, the purchasing power of an average acre's yield was shown as well as the purchasing power per unit of the commodity. But with production of the major farm products fairly large and fairly stable during the later 1920's and early 1930's, major emphasis tended to be put on the price factor. The marked decline in agricultural production, especially of grains, in 1934-36, brought about more by the droughts of 1934 and 1936 than by the adjustment program itself, caused a renewed awareness on the part of farmers that high prices for their products could be of little benefit if they had nothing to sell. It was recognized that, since prices tended to be high when the harvest

[9] There were, of course, some dissenters; see, e.g., Joseph S. Davis, 'An Evaluation of the Present Economic Position of Agriculture by Regions and in General: I. Prices of Farm Products', and the discussion by O. C. Stine, *Journal of Farm Economics*, April 1933, pp. 247-59.

[10] Legislative extracts relating to parity are given in 'Material Bearing on Parity Prices'.

was small and low when the harvest was large, parity prices could be achieved through a program of production curtailment without necessarily bringing the farmer much money. The important thing was price multiplied by quantity, or income. And this was probably the major consideration in the extension of the parity concept to include 'income parity' in 1936.

Farm and nonfarm incomes had been compared in 1921-22 as evidence supplementary to farm price disparities pointing to the unfavorable economic situation of farmers. But the disparity between farm and nonfarm incomes was studied in absolute terms, not in relation to the incomes of some earlier period taken to be equitable or normal. The comparisons were based on income estimates for 1909-19, then just completed by W. I. King and others on the National Bureau of Economic Research staff showing net income from agriculture as a percentage of total national income for each year.[11] The National Bureau pointed out "that while about 30 per cent of the gainfully employed persons in the United States are engaged in agriculture, the industry normally receives only about 17 per cent of the national income", and concluded that "the average farmer can scarcely with justice be considered a pampered child of fortune".

The report of the Joint Commission of Agricultural Inquiry in 1921 reproduced this information.[12] And the 1921 report of the Secretary of Agriculture presented it in the form of a pie chart contrasting the 1909-18 average percentages of national income received by the several industry groups with the corresponding percentages of gainful workers determined by averaging data from the 1910 and 1920 Censuses.[13] It pointed out that the income of persons engaged in agriculture averaged only a little over half that of persons engaged in other industries.

These data and later revisions of the National Bureau's income estimates were frequently used in this way during the 1920's. The National Industrial Conference Board[14] carried the contrast between the percentage of the working population engaged in agriculture and agriculture's share in the national income back to

[11] W. I. King, Oswald W. Knauth, and Frederick R. Macaulay, *Income in the United States, its Amount and Distribution, 1909-19*, Vol. II (National Bureau of Economic Research, 1922), pp. 62-4.

[12] P. 51; see footnote 5, above.

[13] *Yearbook*, 1921 (U. S. Department of Agriculture, 1922), p. 2.

[14] *The Agricultural Problem in the United States* (1926), pp. 45-9.

1850 on the basis of King's earlier work,[15] and concluded, probably incorrectly, that the decline in the relative economic status of agriculture began in 1900, not in 1920.

In 1927 H. C. Taylor and Jacob Perlman presented National Bureau and Department of Agriculture data to show agriculture's share in total national income annually, 1909-25, and contrasted the results with changes in the farm population relative to the total population, instead of with changes in the ratio of persons engaged in agriculture to the total gainfully occupied as had been the practice.[16] Approaching the present concept of income parity, they compared the 1925 relationship between agriculture's share in national income and its proportion of the total population with the same relationship for prewar years, and concluded that farm income would have had to be 15 per cent of total national income, or 50 per cent greater than it actually was, "in order to be on a parity with the prewar period". They used the Bureau of Labor Statistics cost of living index to derive the "purchasing power of the net income from agriculture" for 1909-25.

These contrasts between agriculture's share in national income and its proportion of gainful workers were frequently accompanied by estimates of farmers' labor and property income in comparison with similar data for other industries. The net income of farmers was reduced (1) by an allowance for interest on the value of farm property to yield the estimated return for farmers' labor and management, or (2) by a wage allowance for farmers' labor to yield the estimated return on farm property.

The National Bureau of Economic Research, in its 1922 publication on *Income in the United States* (p. 63), allowed an annual interest rate on the value of farm property of 5 per cent for 1909-18, 5.5 per cent for 1919, and 6.5 per cent for 1920. After deducting these allowances from agriculture's net income excluding wages paid to hired labor, it was concluded that, except in 1918 and 1919, the average farmer's reward for labor and management was less than the average earnings of all employees in the United States. The report of the Joint Commission of Agricultural Inquiry reproduced these data, and made a more detailed comparison with employees' earnings in other industries.[17]

[15] *The Wealth and Income of the People of the United States* (Macmillan, 1915).

[16] 'The Share of Agriculture in the National Income', *Journal of Land and Public Utility Economics*, May 1927, pp. 145-62.

[17] P. 57; see footnote 5, above.

In 1925, L. H. Bean and O. C. Stine, considering "the portion of national wealth represented by agricultural wealth" as one possible criterion for determining whether agriculture was receiving a fair share of the national income, reversed the process.[18] Deducting a wage allowance for farmers and unpaid family labor based on the earnings of hired farm laborers, the return for capital and management was obtained and expressed as a percentage of the total value of farm property. National Bureau data for 1909-20 and new Department of Agriculture estimates for the crop years 1919-20 to 1923-24 were used. Although difficulties in the way of comparing property returns in agriculture with those for other industries were conceded, it was pointed out that earnings for capital and management in agriculture "have generally been below the current commercial rates of interest". But the results thus obtained represented all property returns, including those going to nonfarmers. After deducting interest on farm mortgages and rent paid to nonfarm landlords, the rate earned on 'operators' net capital investment' was found to be even lower, negative in fact for 1920-21 and 1921-22.

The same authors also determined the labor income of farmers in a manner similar to that first used by the National Bureau. The latter's results were shown for 1909-20; additional estimates for 1919-20 to 1923-24 were computed assuming an interest rate of 4.5 per cent on farmers' own capital and 6-7 per cent on borrowed capital. The results were compared with annual wages paid to hired farm labor, with the conclusion that "the average farmer could have obtained a larger income if he had hired himself out as a farm hand". The same data were presented by Henry C. Wallace in 1925.[19]

In *The Agricultural Problem in the United States* the National Industrial Conference Board computed farmers' labor and property income, but included in farmers' income an allowance for the rental value of farm dwellings.[20] Farmers' average annual 'labor earnings' were divided by the cost of living index; and the results, expressed as percentages of 1914, were then contrasted graphically with earnings per worker in other occupations treated in similar fashion. It was concluded that the "real annual labor earnings of

[18] 'Income from Agricultural Production', in 'The Agricultural Situation in the United States', *Annals of the American Academy of Political and Social Science,* Jan. 1925, pp. 27-34.

[19] *Our Debt and Duty to the Farmer* (Century, 1925), pp. 90-6.

[20] Pp. 55-61.

farmers in 1924-25 were 3 per cent below the level of 1914, while those of other workers had risen 22 per cent". This was the closest approach to the present concept of income parity.

In its annual reports on income from agricultural production appearing in *Crops and Markets,* the Department of Agriculture continued to present the type of data developed by Stine and Bean, and made additional comparisons from time to time. In 1926 the purchasing power of the average labor income per farm was contrasted with that of average earnings per factory employee on the basis of 1919-20 as 100;[21] and in 1931 the same comparison was made on the basis of 1924-29 as 100.[22] In 1927 annual rates of earnings on farm operators' net capital investment were contrasted with rates of corporate earnings on capital stock at market values.[23]

In 1929 John D. Black further refined the technique of determining the property income of farmers, allowing a flat $500 per year as wages of farm management in addition to the usual farm-hand wage allowance for operators, and doubling the farm value of food and fuel consumed on the farm "to bring it roughly to a comparable urban basis".[24]

The type of income comparisons made during the 1920's was determined, in part at least, by the nature of the available data. Estimates of both farm and national income were in the experimental stage, and were less comparable than now. Except for some 1909 estimates based on 1910 Census data[25] and the early estimates of King for Census years back to 1850,[26] the National Bureau's *Income in the United States* included the first serious attempt at annual estimates of net income from agriculture. And they were based on inadequate data, especially as to expenses of production.

The Department of Agriculture did not attempt to estimate farm income on an adequate scale until several years later. Estimates of the total value of farm production for 1919-21 at December 1 prices were published in 1921.[27] But these were unsatisfactory even as measures of gross income because of failure to allow for amounts used for feed and seed. In 1924 crop-year estimates of gross and net

[21] *Crops and Markets,* Monthly Supplement, July 1926, p. 229.

[22] *Crops and Markets,* Sept. 1931, p. 400.

[23] *Ibid.,* July 1927, p. 254.

[24] *Agricultural Reform in the United States* (McGraw-Hill, 1929), pp. 24-7.

[25] E. A. Goldenweiser, 'The Farmer's Income', *American Economic Review,* March 1916, pp. 42-8.

[26] *Wealth and Income of the People of the United States.*

[27] *Monthly Crop Reporter,* Dec. 1921, p. 146.

farm income beginning with 1919-20 were published.[28] These data were kept up to date, revised, improved, and supplemented with new information from time to time, the results appearing in various issues of *Crops and Markets.* In 1925 monthly estimates of cash income from marketings appeared. In 1930 gross and net income were put more nearly on a calendar-year basis beginning with 1924; and state estimates of gross and cash income appeared. In 1932 estimates of gross income and the more important production expenditures were extended back to 1909.

The scope and methods of research relating to agricultural income were surveyed in 1933 under the direction of a Social Science Research Council committee.[29] Work already done and its uses were discussed and new projects proposed. Research on agricultural income was undoubtedly stimulated by the publication of this report. But only in recent years have satisfactory estimates of net farm income back to 1909 become available.

The early comparisons of farm and nonfarm income were not without their critics, both as to the adequacy of the data for the use made of them and as to the general conclusions reached on the relative submergence of agriculture. In 1922 David Friday criticized current statements "that there has been a great disparity in the growth of agricultural income as compared with that of other industries".[30] From Department of Agriculture estimates of the annual gross value of farm products, he concluded that whatever "distress in agriculture" might exist was "not due to any failure of agricultural income to increase during the last twenty-five years, nor to hold the increase which had been attained in 1913".

The chief critics in recent years, however, have been John D. Black and the late George M. Peterson. The latter criticized attempts to compare corporate and agricultural rates of return on invested capital.[31] He also analyzed and recalculated the National Bureau and Department of Agriculture estimates of national and farm income for 1924-29, concluding that farm incomes compared not unfavorably with industrial wages in those years.[32] Black has repeatedly pointed out elements of incomparability in data on farm

[28] *Crops and Markets,* Monthly Supplement, Aug. 1924, pp. 286-7.

[29] 'Research in Agricultural Income; Scope and Method', *Bulletin 6,* June 1933.

[30] 'The Course of Agricultural Income during the Last Twenty-five Years', *American Economic Review,* Supplement, March 1923, pp. 147-58.

[31] 'Corporate Versus Agricultural Rates of Return on Invested Capital', *Journal of Farm Economics,* Jan. 1930, pp. 175-80.

[32] 'Wealth, Income, and Living', *ibid.,* July 1933, pp. 421-48.

and nonfarm incomes, and fallacies in their use, and has stressed the greater validity of comparing changes in terms of indexes over direct comparisons on an absolute basis.[33] The latter consideration, too frequently overlooked in early comparisons of farm and nonfarm incomes, was taken into account in 1936 legislation defining income parity.

Several students of the farm problem had recognized the definite superiority of income over prices as a measure of farmers' welfare. Henry C. Wallace wrote: "the prosperity of the farmer is not measured by the prices he gets for what he sells. It is measured by his total income and what that income will buy".[34] And J. S. Davis stated: "prices and indexes of prices are incomparably less useful in evaluating the position of agriculture than national, regional, and group measures of gross, cash, and net income. . . ." [35] But the legislation establishing income parity seems to have constituted a recognition of this viewpoint only to a limited extent.

A declared purpose of the Soil Conservation and Domestic Allotment Act of 1936 was the "reestablishment, at as rapid a rate as the Secretary of Agriculture determines to be practicable and in the general public interest, of the ratio between the purchasing power of the net income per person on farms and the income per person not on farms that prevailed during the 5-year period August 1909-July 1914, inclusive, as determined from statistics available in the United States Department of Agriculture and the maintenance of such ratio". This was a simple extension of the price parity concept to the field of income, parity income being the 5-year prewar ratio of per capita real incomes, just as parity price was the 5-year prewar ratio of average prices. It did not supersede or displace parity prices as a major goal of agricultural policy. It was rather intended as a more accurate over-all measure of the relative economic status of farmers than parity prices, the latter remaining nevertheless the major guides to the farm program as applied to individual agricultural commodities.

Unlike parity prices, parity income as thus defined was not merely legislative crystallization of a concept already fully developed. The form given income parity was undoubtedly conditioned by the com-

[33] Discussion of papers by David Friday and L. C. Gray, *American Economic Review,* Supplement, March 1923, pp. 181-4; 'Agriculture Now', *Journal of Farm Economics,* April 1927, pp. 137-62; 'Agricultural Reform in the United States', pp. 23-31; 'Research in Agricultural Income; Scope and Method', pp. 63-5, 76-8.

[34] *Op. cit.,* p. 82.

[35] *Op. cit.,* p. 248.

parisons of farm and nonfarm income, by the type of estimates that had been made, and by criticisms of the estimates and their use. But income parity itself bore little resemblance to most of its predecessors. Because satisfactory data for prewar years were lacking, income parity as defined in 1936 was conceivable but not measurable until a few years before that date. And the information available in 1936 was hardly adequate for its proper measurement. The base period specified was the same as that for price parity, regardless of the lack of data on nonfarm income for prewar years on anything except a calendar-year basis. The conclusion is inescapable that income parity had its roots more in the existing concept of price parity than in the earlier comparisons between farm and nonfarm income. It was originally intended merely to close up a noticeable gap in the ranks of price parity.

Perhaps because of this fact, the terms of its definition seemed somewhat ambiguous or inconsistent; and there was considerable criticism of its provisions and disagreement over its interpretation.[36] In general, it would seem that the confusion created by the definition arose from an inadequate recognition on the part of its formulators of the questions it raised and of the difficulties involved in providing quantitative answers. More specifically, the distinction between income from agriculture and income of persons on farms was not clear; and the deficiencies of current income estimates as measures of either were ignored.

In the Agricultural Adjustment Act of 1938 the definition of parity income was changed to read as follows: " 'Parity', as applied to income, shall be that per capita net income of individuals on farms from farming operations that bears to the per capita net income of individuals not on farms, the same relation as prevailed during the period from August 1909 to July 1914." A supplementary definition of parity income to be used in apportioning parity payments among individual crops appears in later legislation. But the definition quoted above remains in effect for the general purpose of appraising the economic status of farmers.

The 1938 definition of parity income differs from the 1936 definition in four respects. (1) The term 'net', apparently omitted from the earlier definition by an oversight, is applied to per capita income of persons not on farms as well as to that of persons on farms.

[36] See the discussion of 'Income Parity for Agriculture' by O. C. Stine, M. R. Benedict, and J. D. Black in *Studies in Income and Wealth*, Vol. One (National Bureau of Economic Research, 1937).

(2) The 'purchasing power' provision in the 1936 definition, omitted apparently because it was intended that the comparison should be one of incomes in current dollars instead of real incomes, was presumably excluded because of the lack of suitable price indexes to be used in determining the purchasing power of income going to persons not on farms, and in the belief that the validity of the comparison would not be improved by putting it in terms of purchasing power on the basis of the inadequate data available. (3) Income of persons on farms is to include income from farming operations alone; presumably because of the lack of adequate data on income of persons on farms from nonfarm sources. (4) The phrase "as determined from statistics available in the United States Department of Agriculture" is omitted from the later definition. As this phrase in the earlier definition had the effect of making it legally possible to overlook the inadequacies of the data available, its later omission together with other changes might be interpreted as indicating a growing recognition that parity income could no longer be considered a simple extension of parity prices but must be viewed as a separate concept with important problems of its own.

III Principles underlying Parity

The foregoing recital of the origins and evolution of the idea of parity for agriculture is intended to show that the concept as we now know it did not spring full-blown from the brain of some economic Jupiter, but rather grew out of the continuous groping for a concrete measure of justice for the farmer, and was steadily modified by the conditions prevailing in the economic life of farmers and the nation. In other words, parity did not develop as the practical application of an economic theory immaculately conceived, free from all taint of original sin in the form of class interest. On the contrary, parity, like Topsy, just growed; and whatever economic justification can be found for it in its present form may be considered largely a rationalization.

In view of these aspects of the problem, a considerable unreality is evident in any attempt to expound a theory of parity. Parity is a practical economic and political expedient, not a theory.

It cannot be denied, however, that the concept of parity is an important fact of present-day economic life, and as such deserves to be analyzed and placed in its proper theoretical setting. Moreover, and this point provides the main justification for this paper, an economic rationale of parity is essential for the development of satisfactory statistical yardsticks to be used in its measurement. Even persons who may disagree with the fundamental objectives of the parity concept will doubtless agree that, given those objectives, it is imperative that they be understood and their underlying philosophy analyzed if suitable measures of their attainment are to be provided. We therefore discuss the major principles underlying the parity concept in general and the income-parity concept in particular, apply these principles to the selection of appropriate statistical series for the measurement of income parity, and discuss the validity of conclusions drawn from comparisons of the type embodied in the income-parity concept.

Another reason for tracing the development of the idea of parity from its inception was to make clear that the concept of income parity cannot properly be considered in isolation from the rest of the parity concept. Income parity has been a relatively recent offshoot from the parity plant, one that, although growing in practical application and importance, is as yet definitely secondary to parity prices. It can be properly understood only in terms of the whole plant and its growth.

From the very beginnings of the parity concept, it has apparently been based on two more or less separate and distinct ideas: the principles of 'welfare' and of 'balance'. These principles have not been clearly distinguished by most of the advocates of parity for agriculture. But there has been some recognition of the difference from earliest years. Thus, the 1921 report of the Joint Commission of Agricultural Inquiry may have had the two points of view in mind when it stated that "the condition of agriculture as a whole, as distinguished from the condition . . . of individuals in agriculture, may be measured by the prices which the farmer receives . . . in their relation to the prices of other commodities".[37] And even when the different principles are not explicitly recognized, they can usually be seen in the arguments advanced in favor of parity.

Proponents of parity have in general argued that higher prices for farm products and larger incomes to farmers are necessary (1) to give farmers and their families a decent standard of living and a fair share of the national income, and (2) to restore and maintain the economic stability and prosperity of the nation as a whole. It

[37] *Op. cit.*, p. 26.

goes without saying that the improvement of the welfare of farmers has always been the prime motivation in the advancement of the parity idea. But it has also been argued, with evident sincerity, that a better economic status for farmers was the easiest and most obvious, if not necessarily the sole way, to achieve economic salvation for the nation as a whole. And the latter argument has frequently been displayed with such prominence and advanced with such force as almost to obscure the merits of the primary contention.[38] This was especially true in the earlier years of the development of the parity concept, and perhaps for that reason in its earlier stages the idea of parity was based mainly on the principle of balance.

In seeking to interpret the course of development of the parity concept, it seems reasonable to conclude (1) that it has always rested on the dual philosophy of 'balance' and 'welfare', (2) that parity price, although frequently used as though it measured farmers' welfare directly, is chiefly a concept of balance, and (3) that parity income is a welfare concept, although early comparisons of farm and nonfarm incomes sometimes contained implications of balance. Farmers' costs of production are recognized in one way or another in both price and income parity, but neither is a cost of production concept in the sense often advocated for the determination of fair prices of farm products. It may be further concluded (4) that there has been some shift in emphasis from balance to welfare in recent years, coinciding with the development of the income parity concept.

Parity price deals with the relation between two sets of prices, the prices of commodities sold by farmers and the prices of the things bought by farmers. The parity price concept is thus directly analogous to the terms of trade concept in international exchange. It is concerned with the terms of trade between the farm and nonfarm sectors of the national economy.

The parity price concept implies a fundamental stability in the price system. Assuming that certain relationships among prices may be considered to represent a balanced or equilibrium condition, it implies that any deviation from these price relationships involves imbalance and maladjustment, and that, if such maladjustment does not disappear of itself in reasonably short order, steps should be taken to correct it.

These ideas of balance and stability in price relationships possess

[38] See Arthur Capper, *The Agricultural Bloc* (Harcourt Brace, 1922), pp. 3-4.

some degree of respectability in economics.[39] Observation of pronounced and rapid changes in price relationships combined with knowledge concerning the actual factors creating inflexibility in parts of the price system can create a strong prima facie case for the existence of price disparities. But it is seldom, if ever, possible to determine objectively what should be considered as constituting parity relationships except on the always dubious basis of relationships actually existing in the past. And it is not always possible to determine whether the observed price disparity is a cause or merely a symptom of the economic maladjustment accompanying it. Some probable validity, therefore, can be conceded to the concept of balance underlying price parity without necessarily accepting as parity the particular price relationships established as such in existing legislation, and without necessarily concluding that a direct attack on the prices themselves constitutes the most appropriate remedy for any observed disparities.

The concept of price parity was first developed and was later incorporated by legislation in official agricultural policy during periods of pronounced economic depression, when farm prices had dropped to very low levels while nonfarm prices had declined much less. In 1921-22 it was argued that the low purchasing power of farm products in terms of their current prices was a main contributing cause of industrial unemployment and depression, and that a return to the prewar price relationships as between farm and nonfarm products was an essential step in the restoration of general prosperity. During the remainder of the 1920's, however, when the country as a whole was prosperous, the idea of parity prices did not make much additional headway even though farmers as a whole were not fully sharing in the nation's prosperity and there was much agitation for some form of farm relief. The disparity between farm prices as measured from prewar relationships and nonfarm prices was frequently referred to; and the parity concept was often implicitly endorsed, even by some nonfarm groups.[40] But in the absence of

[39] See Frederick C. Mills, *Prices in Recession and Recovery* (National Bureau of Economic Research, 1936), particularly pp. 33-7, 'On price disparities'. See also Raymond T. Bye, 'An Appraisal of Frederick C. Mills' *The Behavior of Prices*, Social Science Research Council *Bulletin 45*, 1940, and the panel discussion.

[40] See e.g., 'The Condition of Agriculture in the United States and Measures for its Improvement', report by the Business Men's Commission on Agriculture (published jointly by the National Industrial Conference Board and the Chamber of Commerce of the United States, 1927), p. 45.

general economic distress, pressure was insufficient to put the parity concept into practical effect.

With the coming of the depression in the early 1930's and the intensification of farm price disparities as measured from the prewar base, interest in the parity concept increased and agitation for the restoration of 'balanced' prices as an aid to farmers and as a recovery measure was renewed. It would be idle to deny that the original Agricultural Adjustment Act in 1933 was intended to improve the economic welfare of farmers; but it was primarily designed as an integral part of the national recovery program which embraced also corrective currency and banking measures, direct stimulation of industrial revival, and governmental and work relief programs. The maintenance and improvement of farmers' standards of living were clearly intended but chiefly because the restoration of farmers' purchasing power in the form of parity prices was considered an essential part of the general recovery program.[41] Had the welfare of farm people been the primary consideration in this early legislation, the fact that curtailing production to raise prices would not necessarily raise farmers' income could not have been so readily blinked. The principle of balance was still the dominant philosophy underlying parity.

This idea of balance in price relationships had its counterpart in other phases of the agricultural program. The 'adjustment' philosophy itself, embodied in the first Agricultural Adjustment Act, implied that such changes should be made in the nation's agriculture as would achieve "as sound a 'balance' as possible in the structure and functioning of agriculture in relation to other parts of our whole economic system".[42] And the idea of balance continues to play an important part in the philosophy of present agricultural programs and policies as illustrated by the frequent use of such expressions as 'balanced abundance' and 'a balanced agriculture'.[43]

IV Recent Emphasis on Welfare

About the middle of the last decade, however, a tendency appeared to give the welfare aspects of agricultural programs more attention

[41] See Mordecai Ezekiel and Louis H. Bean, 'The Economic Bases for the Agricultural Adjustment Act' (U. S. Department of Agriculture, Dec. 1933).

[42] Edwin G. Nourse, Joseph S. Davis, and John D. Black, *Three Years of the Agricultural Adjustment Administration* (Brookings Institution, 1937), p. 453.

[43] See 'Achieving a Balanced Agriculture' (U. S. Department of Agriculture, Sept. 1934, revised April 1940).

and emphasis. "Economic adjustment occupied the center of the stage in the first half of the decade; human welfare began to be stressed in the second." [44] The gradual change in policy was a reaction to and a defense against the recurrent charges that the farm program was based on 'scarcity economics', that it tended to promote 'monopolistic prices' for farm products fixed in line with historical price relationships, not in accord with current conditions,[45] and that it was a program designed to aid commercial farmers only. The reorientation of agricultural policy stressed the welfare of farmers and other persons dependent on agriculture. But the perspective was also broadened to give more consideration to the effect of farm programs on the welfare of the nation as a whole, and lengthened to give more consideration to their long run as against their immediate bearing on farm and national welfare.

The beginnings of this emphasis on welfare may be seen in the creation of the Rural Resettlement Administration in 1935 and in the shift of Agricultural Adjustment Administration policy from production limitation to soil conservation in 1936. And the emphasis on welfare has gradually increased, as shown by the greater attention paid to problems of low income farm families and farm laborers, the development of programs for rural rehabilitation and for providing better rural facilities for medical care and hospitalization, promotion of family-size owner-operated farms, the ever-normal granary, the food-stamp plan, etc.[46]

The development of the concept of income parity in 1936 may reasonably be interpreted as a part of the growing emphasis on welfare in agricultural policy. As already indicated, income parity developed from the existing price parity concept and from the latter's inadequacy as an indication of farmers' actual income in times of declining farm production. But a revival of purchasing power per acre's yield, as used in some of the earlier publications on price parity, would have been the simplest and most obvious way of allowing for reduced output of farm products not associated with acreage reduction. The newly defined income parity, on the

[44] Mordecai Ezekiel, 'The Shift in Agricultural Policy Toward Human Welfare', paper delivered before the American Economic and American Farm Economic Associations, New York City, Dec. 29, 1941 (U. S. Department of Agriculture; mimeographed), p. 2.
[45] See 'Statistics Relating to Agriculture', memorandum to the Secretary of Agriculture, Committee on Government Statistics and Information Services, Dec. 1934 (mimeographed), pp. 35-7.
[46] Ezekiel, *op. cit.*, pp. 3-9.

other hand, was a distinct departure from the older parity concept, a departure of which its formulators could not have been entirely unaware. Doubtless they hoped in part to overcome the objections frequently raised to the rigid historical price relationships constituting the goal of price parity. Income parity avoided the question of what constitutes 'balance' in price relationships, though raising the no less difficult question as to what distribution should be made of the nation's income. Possibly the use of income parity along with price parity may be interpreted as indicating a growing recognition that "the problem of the best allocation of income" must be considered separately from "the problem of the best allocation of resources".[47]

Price parity, with its contrast between prices paid and received, had as its goal a constant purchasing power per unit of farmers' output. If parity prices were maintained with no changes in farm production, farmers would presumably enjoy a constant level of material welfare equal to that of the base period regardless of changes in nonfarm production and income. Income parity, on the other hand, tied farmers' welfare to that of the nation as a whole with the apparent intention that they should share proportionately in any general increases in productivity.

Such welfare implications as price parity possessed involved the assumption that farmers were entitled to a standard of living equal to that enjoyed in the base period; whereas income parity would attain for farmers, not a minimum standard of living, but a *fair share* of the total national income. If per capita output of commodities and services in the United States increased, the farmer was to receive a share, even though his own output may not have increased. But if real national income declined materially, parity income for the farmer might represent a standard of living much lower than that which he enjoyed in the 1910-14 base period.

The placement of the comparison on a *per capita* instead of a unit of output basis, the inclusion in the comparison of all persons on farms and not merely those actually engaged in agriculture, and the counting, in the original definition, of all income to persons on farms and not just farm income, were additional features of the new income parity concept with definite implications of greater emphasis on the welfare of farm people.

[47] T. W. Schultz, 'Economic Effects of Agricultural Programs', *American Economic Review*, Feb. 1941, pp. 128-33.

V Philosophy of Income Parity

In brief and simple terms the underlying philosophy of income parity is apparently about as follows: What the farmer can produce, and what he gets for it, are determined less by his own effort and ingenuity than by physical, technical, and market factors largely beyond his control. Moreover, the farmer is a human being; his labor is as good as any other man's; and he is entitled to receive a decent living and a fair return for that labor, and to share in any material progress made by the nation as a whole. This philosophy is in accord with the recent trend in politico-economic thought toward increased recognition of the responsibility of society as a whole for individual welfare. Whether one accepts the income parity concept may depend, therefore, on one's attitude toward this trend.

It is possible to accept the concept of income parity in principle without necessarily endorsing the prewar standard of comparative welfare established by law for the farm and nonfarm populations. In 1910-14 urban wages were relatively low, whereas agriculture was more prosperous than in previous years.[48] It was conceded in 1909 that "there has never been a time when the American farmer was as well off as he is today, when we consider not only his earning power, but the comforts and advantages he may secure".[49] Therefore, it seems fair to conclude that, broadly speaking, the farm population has never until now been so well off in comparison with the nonfarm population as in 1910-14, with the exception of a few war years immediately thereafter.

On the other hand, even in years of relative prosperity for agriculture, farmers were leaving for industry in large numbers; and it is probable that the well-being of persons on farms averaged considerably below that of persons not on farms. Per capita farm income was about one-fourth as large as per capita nonfarm income in 1910-14; and it is unlikely that elements of incomparability in incomes as measures of relative welfare could fully account for this big difference. Although agriculture's prosperity was admitted in 1909, it was also stated that "notwithstanding all this progress as measured by historical standards—agriculture is not commercially

[48] John D. Black, 'Measures for the Improvement of Agriculture', *ibid.*, pp. 166-7.

[49] 'Report of the Country Life Commission', Senate Document 705, 60th Cong., 2nd Sess., p. 21.

as profitable as it is entitled to be for the labor and energy that the farmer expends and the risks that he assumes", and that "the farming interest is not, as a whole, receiving the full reward to which it is entitled".[50] Certainly the question of what the relative economic rewards of farmers and nonfarmers should be is difficult and ticklish. Fortunately this paper is not concerned with it.

As most recently defined in the 1938 Agricultural Adjustment Act, the essential question involved in income parity is something like the following: Are persons living on farms receiving their fair share of the nation's currently available supply of the good things of life? Or, since what constitutes a fair share has been defined as the share actually received during 1910-14, the question may be reworded as follows: Compared with the nonfarm population, are people on farms as well off, on an average, now as they were in 1910-14? If not, to what extent? Everything there seems to be on a fairly objective basis except for the concept of 'well-being', or what constitutes being well off. The definition itself does not use these terms but defines 'parity as applied to income' on the evident assumption that the relative welfare of the two segments of the nation's population can be determined on the basis of their respective income. The validity of this assumption and the limitations inherent in any welfare comparison will be discussed after consideration of the most appropriate measures of income for use in determining parity.

VI Content of Income for Measuring Parity

Income estimates could conceivably be constructed with some purpose other than the measurement of economic welfare.[51] But those now in use seem to be based, either explicitly or implicitly, on some concept of welfare. At any rate, all the comprehensive estimates of national income now in use are essentially *appraisals,* necessarily *subjective,* of the contribution of economic activity to the nation's welfare.[52] The implications of this fact are not always fully realized even by the makers of the estimates. And it is certainly true that

[50] *Ibid.*, pp. 14, 22.

[51] See J. R. Hicks, 'The Valuation of the Social Income', *Economica,* May 1940, for a discussion of income as a measure of *productivity* versus income as a measure of *welfare.*

[52] See Simon Kuznets, *National Income and Its Composition, 1919-1938* (National Bureau of Economic Research, 1941), Ch. 1, for the best and most recent discussion of the nature, significance, and limitations of national income estimates.

users of national income estimates are commonly unaware of their nature, treating them as objectively observed facts, and accordingly drawing conclusions that are frequently unwarranted.

As estimates of income on a national scale are essentially measures of economic welfare, and as the income parity analysis requires that the nation's population and income be split into two parts for the purpose of determining the relative well-being of the two groups on the basis of ratios of per capita income, the derivation of appropriate estimates of income for this purpose may seem at first glance to be a very simple problem or no problem at all, aside from possible statistical difficulties arising from inadequacies of data needed in their construction. But there are various types of income estimates on a national scale corresponding to differences in content, differences in method of valuation, the time interval used, and the stage in the process of production, distribution, and consumption to which they apply. And some selection from these types must be made before income estimates can be constructed for the parity analysis. It seems desirable, therefore, to consider briefly the possible variants in the measurement of income in relation to the purpose of income parity and the specific requirements of its legal definition before a final choice is made.

Income is a flow of goods. Like any other continuous flow, it can be measured only in terms of a unit of magnitude in combination with a unit of time. The Agricultural Adjustment Act does not specify the time unit to be used in the parity comparison. So it must be selected on the basis of the purpose of that comparison modified by the possibilities of the available information. As a guide to agricultural policy, frequent and up to date measures of the welfare of people on farms compared with that of nonfarm people are needed. With this in mind, monthly income comparisons would be desirable. But because of the seasonal character of agricultural production, it is doubtful whether monthly estimates of farm income that would be significant for comparative purposes could be developed even if all the necessary data were available on a monthly basis. So the parity analysis must be based on annual estimates of income.

As the 5-year base period runs from August through July, it might be inferred that the annual comparisons should represent the same 12 months. But the base period itself was merely a carry-over from price parity; and it is doubtful that too much significance should be attached to it. Moreover, the lack of satisfactory estimates

of nonagricultural income on other than a calendar-year basis dictates the choice of the calendar year.

The various goods of which income is composed can be combined only on the basis of some system of weights, that is, on the basis of some evaluation of their relative usefulness, desirability, or importance. As the supply and demand evaluations of the market place constitute the one generally accepted system of values, the weights must be prices, and the unit of magnitude, the dollar. But income can be measured in terms of fixed prices as of some particular time, or in terms of fluctuating prices current in each time unit used in the measurement, or in terms of any conceivable combination of or compromise between these two extremes. In the definition of income parity 'income' is apparently used in its popular sense as a flow of money instead of in its more strictly economic sense as a flow of goods. In view of this fact and of the fact that the 'purchasing power' provision of the 1936 Act was eliminated from the 1938 Act, it is evident that the most appropriate unit of magnitude for the purpose is the dollar at current prices.

Ideally, income should include all items possessing utility. But the necessity of measuring it in dollars results in narrowing its content to commodities and services that have either passed through the market place or are similar in kind to goods actually passing through the market place. This means the exclusion of all 'free' goods as well as of economic goods, chiefly services, that are produced and consumed outside the exchange economy.

From this brief consideration of the essential nature of income, the methods that must be used in its measurement, the implications of the legal definition of parity, and some of the limitations in the data available for constructing the estimates, it may be concluded that income of the farm population and income of the nonfarm population as determined for purposes of parity analysis should each represent a flow of economic goods, valued at current prices, and measured for calendar years. But what is the most suitable content of income for the purpose? What particular flow of commodities and services should income represent? And at what point in the stream should the flow be measured?

The requirements that the estimates of income be confined to the flow of economic goods and that their valuation be based on market prices do not of themselves preclude the possibility of selectivity in the choice of goods to be included. Should income represent all commodities and services that command, or could command, a price in the market? Or should certain moral or legal judgments be superimposed on those of the market place, excluding some items for which people are willing to pay a price on the ground that what they think is good for them and what actually is good for them are not necessarily the same? The question is aptly illustrated by alcoholic beverages. Should they be counted in the income estimates for all years? Or only for those years in which they were legal? Or not at all?

Another similar question relates to charges for human maintenance. Is the relative well-being of farm and nonfarm people affected by all commodities and services, or only by those in excess of minimum subsistence requirements? If, for example, $400 a year should be fixed upon as necessary for an absolute minimum living standard, is a man receiving $1,000 a year twice or six times as 'well off' as a man receiving $500 a year? Or is any real comparison possible without deducting minimum subsistence requirements? If the contribution to an individual's welfare of that part of his income necessary to keep him alive is measurable at all, it must be infinitely large. And what sort of a comparison is possible when infinity is one item in both sides of the comparison?

Because of the far-reaching effect such decisions must have on the conclusions derived from the parity analysis, it is worth while to raise these questions even though there is really no choice as to the answers. There are no objective standards by which it could be decided that certain items should be excluded from income on the ground that they add nothing to human welfare or actually detract from it. And there is no way of determining precisely what charges might be deductible as 'costs of human maintenance'. Moreover, the definition in the Agricultural Adjustment Act does not seem to provide any authority for such arbitrary decisions. By its apparently popular use of the term 'income', the Act seems to assume implicitly that the relative welfare of farm and nonfarm people is affected by all the commodities and services that money can buy; in other words, the welfare of the two groups is to be compared in terms of the respective aggregates of all economic goods at their disposal.

Several borderline items of income such as transfer payments, loans, and capital gains or losses, are usually omitted from estimates of national income as a whole on the ground that they represent mere shifts in purchasing power and have no counterpart in

commodities produced or services rendered. Such shifts in purchasing power, however, may be of considerable significance in their effects on the incomes of individuals or groups of individuals within the nation. And there is a question whether they should not be considered when comparing the welfare of farm and nonfarm people. On the whole it seems likely that, for groups so large, the net effect of such items will usually be insignificant and may be safely ignored. An individual farmer might cash in on an increase in land values, but obviously farmers as a whole could not. Similarly, an individual farmer might increase his purchasing power considerably by going into debt, but the net change in the debt position of farmers or nonfarmers as a whole in most years is not likely to be significant in relation to their total income. Nor, aside from the question of government benefit and direct relief payments, is the net shift in purchasing power between the two population groups resulting from gifts or other transfer payments likely to be significant.

The definition of income parity specifies 'net' income. The several items of difference between 'net' income produced and the various types of 'gross' income are not significant in a measure of economic well-being except for relatively short periods. So, even were net income not specified by law, gross income in all its forms should be ruled out on the ground that the parity analysis must concern itself with *significant* changes in the relative welfare of farm and nonfarm people, not with their transient fluctuations.

The decision concerning the appropriate content of income for the parity comparison has been narrowed to a choice between net income produced, or the current value of commodities and services produced minus the current value of commodities and services consumed in their production, and income consumed, or the current value of commodities and services entering into final consumption. As 'income paid out', interpreted as the current value of commodities and services "transferred to individuals by business enterprise", in a sense lies between net income produced and income consumed, it too must be given some consideration.

Goods are made for men, not men for goods; and consumption, not production for its own sake, is in the last analysis the sole justification for economic activity. Consequently it is difficult to disagree with the often expressed viewpoint that human welfare, so far as it is affected by economic goods, is dependent on consumption rather than on production.[53] Were data separating 'consumers' outlay' of farm and nonfarm people from their total incomes available, much might be said for its use in determining income parity. Consumption is ordinarily more stable than production; and income parity measured in terms of income consumed would probably provide a more accurate *current* indicator of relative well-being than income produced.

But there is something unrealistic and paradoxical about any argument leading to the conclusion that a man earning $1,000 a year and spending it all is as 'well off' as another man who earns $2,000 a year but saves half, or that a man living on $1,000 of savings is as 'well off' as one living on $1,000 of current income. If a man has a certain 'purchasing power' or quantity of goods at his disposal, it does not seem entirely reasonable to consider him less well off merely because he chooses to save some of that purchasing power or to postpone the consumption of some of those goods. What has been said of national income (net income produced), that it "may be treated . . . as a type of maximum fund for current consumption",[54] is true of the total incomes produced by the farm and nonfarm populations. In a sense, at least, it is all available for current consumption if the individuals involved choose so to use it.

The crucial issue is whether welfare is affected by income saved as well as by income consumed. With this in mind, income paid out, which includes 'individual savings' but not 'business savings', seems a question-begging compromise. The artificial nature of income paid out as applied to individual entrepreneurs is self-evident. Any breakdown of farmers' net income as between 'entrepreneurial withdrawals' and 'business savings' is meaningless except so far as the estimates of farmers' 'withdrawals' from the business may be considered to approximate their outlay for consumption, or income consumed. But what about the savings of corporations? Can it be said that the welfare of a small individual stockholder is enhanced by undistributed profits of a corporation, by goods 'accruing' to him but whose use he does not control as an individual? Perhaps not. While an individual stockholder usually has little or no actual control over the disposition of a corporate surplus, the stockholders

[53] See, e.g., A. C. Pigou, *The Economics of Welfare* (London, 4th ed., 1932), pp. 36 and 89; Oscar L. Altman and Thomas C. Blaisdell, Jr., 'National Income Estimates in Relation to Economic Policy', Conference on Research in Income and Wealth, May 1941 (mimeographed); and Hicks, *op. cit.*, p. 123.

[54] Kuznets, *op. cit.*, p. 154.

as a group do exercise such control, theoretically at least. And for the nation as a whole, that control is obviously more than theoretical. So in comparing the welfare of such large groups as farm and nonfarm, there seems to be no reason to exclude corporate savings from the measures of welfare if individual savings are included. As income of farm people is to be confined to that derived from farming operations, the problem of allocating stockholders' equity in corporate savings between the few stockholders on farms and those not on farms does not have to be faced. If it had to be faced, the best answer would probably be that workers and creditors have as much of an equity in corporate surpluses as stockholders, and that all except a very few are nonfarmers.

Until recently tentative computations of income parity were based on a comparison of net farm income produced and nonagricultural income paid out.[55] Use of the latter to represent the income of the nonfarm population was dictated, in part at least, by limitations in the data readily at hand. But there does not seem any justification for comparing one content of income for farm people with a different content of income for nonfarm. If the income parity analysis is to have any real meaning, the two income series must be constructed on a comparable basis. Whatever the decision as to the inclusion or exclusion of savings, their inclusion in one series and partial exclusion from the other will tend to give misleading results, especially during periods of rapid change in national income. Thus, during some of the depression years of the last decade, both the farm and nonfarm populations consumed more than they produced, living in part on their savings. Estimates of net farm income do not include any of this excess of consumption over production in those years. If they are compared with nonfarm income paid out, which *does* include some of the excess, the disparity between farm and nonfarm income may be considerably exaggerated. Similarly, when national income is expanding rapidly, as in recent years, both individual and business savings may become quite large. And if net farm income, including farmers' entire savings, is compared with nonagricultural income paid out, excluding the savings of nonfarm business enterprise, the per capita farm

[55] See, e.g., L. H. Bean, 'Income Parity for Agriculture', Agricultural Adjustment Administration, U. S. Department of Agriculture, March 1936 (mimeographed). The first published statement concerning the derivation of the estimates of nonagricultural income used in this connection appears in 'Nonagricultural Income as a Measure of Domestic Demand' by L. H. Bean, P. H. Bollinger, and O. V. Wells (Agricultural Adjustment Administration, U. S. Department of Agriculture, 1937).

income necessary to achieve parity may be seriously underestimated.

As a precise measure of the actual *current* well-being of farm people compared with nonfarm people, income consumed would probably be more satisfactory than income produced. But the ability to consume rests ultimately on the ability to produce; and income produced is a more accurate indicator of changes in the underlying conditions affecting welfare in the long run.[56]

The longer the interval under consideration, the less significant is the difference between income consumed and income produced likely to be. As a general guide to agricultural policy, we need *frequent* measures of farmers' relative economic status. Yet the best guide is not necessarily one that reflects accurately their actual current status. Farm people might maintain their standard of living for a while even though net farm income had declined materially. But as net farm income is the barometer of the farmer's well-being, a decline in it, presaging lower living standards to come, should be heeded in shaping agricultural policy.

It is suggested, therefore, that the prime purpose of the income parity analysis should be to provide frequent measures of the underlying long time shifts in the relative well-being of farm and nonfarm groups. Just as a moving average can give a short time indication of the current status of a longer time movement, so our income measures should provide current indications of the basic trend in the welfare of farm people. For this purpose income produced is better than income consumed.

In line with this conclusion, "net income of individuals on farms from farming operations", for purposes of the parity analysis, has been taken to mean the part of the current value of the net output of agricultural commodities that is received by, or accrues to, persons living on farms. And "net income of individuals not on farms" has been interpreted to mean total national income, that is, the current value of the nation's net output of commodities and services, after the deduction of the total income of persons on farms, both from farming operations and from nonfarm sources. It is no part of the purpose of this paper to discuss the statistical difficulties encountered in making the preliminary estimates recently published by the Bureau of Agricultural Economics or the extent to which they may fail to embody the concepts here developed.

[56] Pigou considered whether income produced or income consumed is the more appropriate measure of the 'national dividend' (*op. cit.*, pp. 34-7). He concluded that income consumed was better for the *measurement* of "comparative amounts of economic welfare . . . over a long series of years". But he claimed to be chiefly concerned "not with measurement, but with causation". And, as the total effect of any cause operating through the national dividend in a given year can be shown only in terms of income produced, the latter was the more useful measure for his purpose. The report on 'Research in Agricultural Income' (pp. 6-7) concluded flatly that income produced was "more expressive of the economic welfare of a group", and "for purposes of indicating the changes in economic welfare . . . more usable" than income consumed.

VII Validity of the Income Parity Concept: Income as a Measure of Welfare

Because the chief purpose of this paper is to interpret the concept of income parity in terms of an already established legal definition and goal, it was convenient to discuss the selection of appropriate income estimates to be used in measuring the attainment of that goal before considering the implicit assumption that welfare could be satisfactorily compared on the basis of income. In a sense, this was putting the cart before the horse; and the important question, the validity of any relative welfare evaluation of the type implied in the concept of income parity, is now discussed.

In connection with price parity it was briefly concluded that the principle of balance underlying it possessed some degree of validity though the historical price relationships set up as parity and some of the remedies proposed might be open to serious question. Any attempt to judge what should be the legal base period for income parity has already been disclaimed, and this paper is not now concerned with practicable methods for removing any income disparity that may be found to exist. But given the goal, and disregarding the methods used to achieve it, does the income comparison itself have any real meaning or validity as a measure of relative welfare?

Since the first publication in 1920 of Pigou's *Economics of Welfare,* the role of economics in the solution of problems of human welfare and the statistical difficulties involved in attempting to measure changes or differences in welfare have received considerable attention from economists and statisticians. The issues involved have become entangled with those having to do with the proper scope and purpose of economic science and have not as yet been fully resolved to anyone's complete satisfaction, nor is it likely that they will be in the immediate future.

The extreme divergence of viewpoints actually taken on the question of welfare comparisons can be aptly and simply illustrated by quoting from two well-known economists. A. L. Bowley has concluded that "in the end the concept of real income is as much psychological as it is statistical, and statisticians even who have measured as best they can all that is conceivably measurable will not be able to answer the apparently simple question: How much better or worse off are we than our predecessors or our neighbors?" [57] On the other hand, Colin Clark states that, although "there is a good deal of rather ignorant sophistication on this subject nowadays", some economists going "so far as to say that it is impossible to compare the level of income between two communities or between two individuals, or even between the same individual at different times", nevertheless it has been "clearly shown that economic welfare can be compared between times and places. . . ." [58]

In view of its broad and controversial character, it will not be possible, in this paper, to attempt a complete survey and evaluation of the subject. It must suffice to raise some of the salient issues and to consider their bearing on the measurement of income parity.[59]

Although the definition may seem to imply a direct comparison between the welfare of persons on farms and that of persons not on farms, such a comparison is not *necessarily* involved in income parity. What constitutes parity income for the farm population in any given year can be computed (1) as the product of per capita nonfarm income in the given year and the base-period ratio of per capita farm to per capita nonfarm incomes, or (2) as the product of per capita farm income in the base period and the ratio of per capita nonfarm income in the given year to that of the base period. The measures used, therefore, should reflect accurately either (1) the actual differences in welfare as between farm and nonfarm people for each year, or (2) the annual changes in welfare enjoyed by each group. It is not essential that they should be accurate from both points of view.

In the last analysis, whatever validity may be attached to the

[57] 'The Measurement of Real Income' (Transactions of the Manchester Statistical Society, Session 1939-40), p. 28.

[58] *The Conditions of Economic Progress* (London, 1940), p. 27.

[59] Recent noteworthy discussions of the question include 'The Valuation of the Social Income' by J. R. Hicks, *Economica*, May 1940; 'Wealth and Welfare' by Edmund Whittaker, *American Economic Review*, Sept. 1940; and the following articles or notes in *The Economic Journal:* 'Scope and Method of Economics' by R. F. Harrod, Sept. 1938; 'Interpersonal Comparisons of Utility: A Comment' by Lionel Robbins, Dec. 1938; 'Welfare Propositions of Economics and Interpersonal Comparisons of Utility' by Nicholas Kaldor, Sept. 1939; 'Economic Welfare' by L. G. Melville, Sept. 1939; 'The Foundations of Welfare Economics' by J. R. Hicks, Dec. 1939; and 'Economic Welfare: A Comment' by Roy W. Jastram, March 1940.

concept of income parity will rest on the assumption of identical or unchanged wants and tastes. That is to say, it will have to be assumed (1) that consumption patterns and general mode of life have been substantially the same for farm people as for nonfarm, or (2) that there have been no significant changes since the base period in the wants and mode of life of either group. It is hard to say which assumption is less inaccurate. Since 1910-14 tremendous changes have occurred in the way of life of both farm and nonfarm people; and the trend toward the urbanization of farm life has probably tended to narrow the gap between the farm and nonfarm mode of living.[60] On the whole, however, it seems probable that that gap has been and still is so great that the second assumption must be considered as doing less violence to the facts.

With this consideration in mind, and in view of the severe criticisms of direct comparisons between farm and nonfarm incomes, the concept of income parity can probably be appraised more favorably in terms of changes over time than as a direct comparison. On the other hand, the measurement of income parity in current dollars instead of 'real' income might be considered as involving a direct comparison on the assumption that farm and nonfarm people have the same wants and tastes. But whichever point of view is adopted, the difficulties in the way of satisfactory comparison are of the same type. And the general characteristics of these difficulties must be considered first.

Any use of income estimates as a quantitative indication of relative welfare—and in either of its aspects, income parity involves comparing the welfare of one group of people with that of another—will encounter three major obstacles: [61] (1) the possibility of interpersonal comparisons of utility must be conceded; and certain assumptions must be made concerning the relation between needs, income, and satisfaction; (2) it must be assumed that changes in economic welfare and in total welfare are closely and directly correlated; (3) even granting the first and second assumptions, there remains the insuperable difficulty that the thing to be measured is not actually measurable, necessitating the use of some less satisfactory substitute. Brief consideration is given below to each of these problems in their relation to income parity.

To say that two things must be comparable if they are to be

[60] John A. Hopkins, 'Changing Technology and Employment in Agriculture', U. S. Department of Agriculture, Bureau of Agricultural Economics, May 1941, pp. 33-4.

[61] Hicks, 'The Foundations of Welfare Economics', pp. 697-8.

compared is a truism. But in comparing the welfare of farm and of nonfarm people, or of people on farms today and of people on farms 30 years ago, an unverifiable assumption is involved: namely, that the groups are made up of essentially the same kind of people with similar wants and capacities for satisfaction. In effect, some sort of equality of individuals is postulated, although it can be argued that for large groups, such as farm and nonfarm, only the equality of the groups, not that of the individuals composing them, need be assumed.

Use of income to compare the welfare of individuals further involves the correlative assumption that the equality of the individuals in their capacity for satisfaction is not disturbed by any *inequalities* in the distribution of income itself. Thus, it can be argued that the rich, by virtue of being rich, have acquired a greater capacity for satisfaction than the poor; and any redistribution of incomes would diminish the welfare of the former without immediately adding to that of the latter.[62] Or, conversely, it can be argued that welfare is a function of income and needs, but that needs increase or decrease with income so that, in the long run, welfare is a constant for any individual regardless of his income.[63] Both arguments must be rejected or welfare cannot be measured and compared on the basis of income.

The assumption of equality may be based more on ethical than on scientific grounds; but even those who insist that the 'normative' and 'positive' elements in economics should not be confused concede that "it is fitting that such assumptions should be made and their implications explored. . . ." [64] The postulate of the equality of farm and nonfarm people, or of farm and nonfarm people now and 30 years ago is not likely to cause objection.

The second necessary assumption, that differences or changes in economic welfare reflect those in total welfare, presents a somewhat higher hurdle, but perhaps not an insurmountable one. Economic welfare may be defined as "that part of social welfare that can be brought directly or indirectly into relation with the measuring rod of money".[65] But an adequate definition of total welfare has yet to be devised. Man does not live by bread alone; but what he does live by eludes the wisdom of the wise.

[62] Pigou, *op. cit.*, pp. 90-2, and Jastram, *op. cit.*, p. 156.

[63] Pigou, *op. cit.*, p. 84.

[64] Robbins, *op. cit.*, p. 641.

[65] Pigou, *op. cit.*, p. 11.

The noneconomic aspects of welfare are many and varied, though difficult to specify. Perhaps the most important are derived from wholesome and sanely adjusted conditions of daily work and surroundings and from carefree time or leisure. The relative importance of economic and noneconomic welfare varies with the wants and preferences of the individual. But for most people the noneconomic items are of considerable importance. "It is an exaggeration which may be useful to say that economic goods as a class are predominantly 'necessary' rather than truly valuable. The importance of economic provision is chiefly that of a prerequisite to the enjoyment of the free goods of the world. . . ." [66]

Yet with social institutions and attitudes what they are, it is probably fair to say that, for the average person, economic welfare represents a sufficiently large part of total welfare to be a fairly satisfactory index of the latter, except when important noneconomic satisfactions have to be foregone in order to gain those included on the economic list. This exception, however, casts doubt on the validity of any direct comparison of farm and nonfarm incomes, for it is obvious that farm people enjoy many noneconomic satisfactions not available to the majority of nonfarm people.[67] In other words, economic welfare probably represents a smaller part of total welfare for farm than for nonfarm people.

On the other hand, there is no reason to suppose that the ratio of economic to total welfare has changed significantly in the last 30 years for either the farm or nonfarm population considered as a whole. Changes in economic welfare, for such large groups, probably represent changes in total welfare with reasonable accuracy. Considered from this viewpoint, therefore, there is little or no reason to question the validity of income parity.

Third and most heroic of the assumptions involved in any welfare comparison is that the estimates of income that are available or can be constructed are suitable measures of differences or changes in economic welfare. For a precise quantitative comparison, the measures should reflect the sum of the consumers' surpluses derived by the individuals involved from each economic good and service at their disposal.[68] In other words, income as a measure of

[66] F. H. Knight, quoted by Eugene Staley in 'World Economy in Transition; Technology vs. Politics, Laissez Faire vs. Planning, Power vs. Welfare' (Council on Foreign Relations, 1939), p. 67.

[67] Whittaker, *op. cit.*, gives a forceful statement of this point.

[68] Pigou, *op. cit.*, p. 57.

welfare should represent the sum of the utilities or satisfactions derived from the net output of commodities and services minus the sum of the disutilities or dissatisfactions associated with the effort involved in their production.

This is clearly an unworkable concept. Income estimates embodying it are nonexistent and statistically impossible of realization. Net income as usually conceived is 'net' in the sense that the value of goods consumed in the process of production has been deducted. But it is not 'net' in the sense of deducting the total disutility of the effort involved in production from the total utility derived from that production. It does not even represent total utility without deducting disutility. To do so, the weights applied to the various commodities and services included in income would have to be proportionate to the average utility per unit received from each commodity and service. Assuming free markets the price weights actually used may be presumed to represent marginal utilities.[69] But that is not the same thing at all.

The ideal measure of economic welfare, therefore, could not be based on fixed weights. As the available supply of a commodity is reduced, the 'average' consumers' surplus received from it would tend to become larger, and the weight assigned to it should be increased proportionately. If income at current prices could be abstracted from purely monetary changes, it would partly fulfill this requirement in the sense that price changes would ordinarily be in the right direction. But the difficulty would remain that prices are presumably proportionate to marginal utilities rather than average consumers' surpluses.

In the absence of more appropriate measures, it is customary to rely on estimates of 'real' income to indicate changes in welfare, the flow of commodities and services being valued at fixed prices, or, more often, the same thing being approximated by dividing money income by a suitable index of prices. The first definition of income parity specified measures of this type.

Assuming no change in tastes, and no change in the distribution of purchasing power, measures of real income can be relied on to show whether economic welfare is *more* or *less* at one time than another. But they cannot be counted on to indicate the precise *amount* or percentage of change. The implications of this fact are serious. Where the comparison is over a period as long as 30 years,

[69] Hicks, 'The Valuation of the Social Income', p. 113.

the assumption of no change in tastes is hardly reasonable. And where the point at issue is the precise amount of disparity in the change for one group as contrasted with that for another, the inability of the data to show actual amounts of change puts the comparison in a rather dubious light.

The current definition of income parity, however, abandons real income for income in current prices as the basis for comparison. This change was presumably made on the ground that prices paid by farm and nonfarm people, though different, have probably fluctuated fairly closely together. That is, the differences between the price fluctuations for the two groups were not considered to be as great as the errors that might be introduced by the deflation process with available price index numbers. The differences between the changes in the two current price income series are then to be taken as approximating the differences between the changes in real income for the two groups.

In sum, therefore, income parity is determined on the basis of approximations to a yardstick which, even if precisely constructed, would not be the true measure sought. It must be concluded that the economic foundations of income parity as now measured are shaky in the extreme. As already noted, income parity is still definitely secondary to price parity in its importance as a guide to agricultural policy. Practical decisions relating to specific action programs and to the determination of price ceilings for farm products have been made on the basis of parity prices rather than parity income. Though the latter may have much to recommend it as a general indication of the relative economic status of farm people, it is evidently not a precise measure at all.

But perhaps all these scientific and quasi-scientific considerations are really beside the point. Perhaps the only appropriate test of the validity of income parity is whether the people whose welfare is contrasted consider it valid. As already pointed out, the development of the parity concept and the way it has been used make it more of a political than an economic concept, and any attempt to force it into a framework of economic theory is a rationalization largely lacking in reality. The popular mind is not cluttered up with notions about individual differences in wants and patterns of consumption, or with distinctions between economic and noneconomic aspects of welfare. It considers income a matter of dollars and cents; and a dollar is a dollar in anyone's pocket. So the prescribed method of determining income parity may be politically valid even if it fails to pass other tests of validity.

Because of the difference in tastes and patterns of consumption between farm and nonfarm populations, particularly because of their difference with respect to the noneconomic elements in the content of living, it was concluded that income parity made more economic sense when appraised as a measure of changes from the base period for each group than as a direct year by year contrast between the two groups. But the definition of income parity may be interpreted as calling for direct comparisons. Moreover, the reference to 'income' without the 'purchasing power' modification may be similarly interpreted, the assumption that farm and nonfarm people have identical wants and standards of welfare being implied.

If the latter assumption were granted, together with the corollary assumption that differences in noneconomic aspects of welfare between farm and nonfarm people are nonexistent or can be ignored, then the method used for measuring income parity would be largely valid. It would still not give the precise measure required in the sense of a summation of farm and nonfarm 'consumers' surpluses'; but it would be close enough for all practical purposes.

The average farmer or nonfarmer, if he knows anything about it at all, probably views income parity as a direct comparison of farm and nonfarm incomes with assumptions similar to those just stated in the back of his mind. He probably does not assign much significance to noneconomic elements in welfare. And this, together with his ideas concerning the equality of men, probably blinds him to the effect of differences in wants and tastes on the significance of money income. Perhaps we ought to grant forthwith the assumptions underlying this viewpoint, and let it go at that.

In any event, it is sure that income comparisons will continue to be made whether or not they really mean what some take them to mean. We must strive to improve our knowledge and estimates of income as measures of welfare to the end that the inevitable comparisons based on them will be more reliable. A major objection to the present concept of income parity is its determination on the basis of over-all national averages, ignoring regional and individual differences. Comparisons of incomes as between farm and nonfarm people are likely to be more reliable and meaningful if made for areas smaller than the nation as a whole, with due consideration for the respective size distributions of income. So more

detailed income data, by regions and size classes, might provide the basis for a better approach to the problem of income parity for agriculture.

Discussion

A. G. HART

In interpreting 'parity', Mr. Grove indicates that two concepts underlie it: 'balance' (associated with price parity) and 'welfare' (associated with income parity). It should never be forgotten, however, that, while 'balance' is presented as a necessary and sufficient condition for national prosperity, the farm bloc look upon parity as a program of retaliation against the rest of the economy. Whenever a farm leader is pressed on the point, we find that the back of his mind is filled with bitter thoughts about tariffs, monopoly practices, freight-rate discrimination, and the like. The reality of these grievances is, of course, undeniable. What is relevant here, though, is that they underlie the movement for 'parity', and that the most favored means of attaining parity is to imitate the industrial monopolist and withhold goods from the market so far as may be necessary to reach the desired price.

Retaliation infects not merely the concept of 'balance' but also that of 'welfare'. If the notion of welfare were taken seriously, it should mean trying to correct the distribution of income by size in favor of low income farmers. Needless to say, a great deal of stress is placed by the farm movement on the low incomes of many of its members. But in the distribution of farm benefits (which is roughly proportionate to gross farm income, I understand), the higher income farmers get the lion's share. From the standpoint of the low income farmer, it is a sort of community fund campaign for his benefit, under which the promoters pocket roughly a 75 per cent collection commission. The politics of the situation make it impractical for the low income farmer to object, since it is the political power of the more prosperous farmers that gets favorable governmental action. Because the low income farmer contributes only his needs as a pretext for agitation, and the prosperous farmer contributes the power, the logic of politics awards the prosperous farmer most of the results. But is this 'welfare'?

Economists concerned with national income should certainly have a hand in the discussion of farm parity. But in that discussion they are under obligation to insist on the recognition of two facts:

1) The notion of 'balance' cannot mask the fact that pushing farm prices up means getting more out of the national income by putting less in. The farm groups prefer price increases for their products to cash subsidies, on the ground that the former represent 'earned' income. The idea that an increase in income can be 'earned' by a decrease in output should be punctured.

2) The notion of 'welfare', adequately analyzed, means leveling up incomes that fall below minimum standards. By leaving the notion imperfectly analyzed we make it possible to distort the legitimate claims of the low income farmer into a source of gain for the prosperous farmer. What is called for is simply to popularize the elementary notion that an average is not a perfect representation of a statistical distribution, with special reference to the fact that, though the average farm income is low relative to the average nonfarm, the two distributions overlap. If recognition of this notion leads to the thought that low income urban consumers should not be burdened to benefit high income farmers, nobody has any right to object.

Even the complete abandonment of the parity concept would not leave the farmer without claims. (1) To begin with, his grievances against the price policy of the industrial community are valid, and in the public interest corrective steps are called for. (2) While we can scarcely expect the adoption of wholesale income-equalizing measures, the time is ripe to advocate shifting tax burdens to those who can best bear them and providing free services (public health and the like) to the public in general. (3) Farmers are right in arguing that they are rearing the bulk of the next generation in this country; consequently, rural education, recreation, child health, and housing are largely the responsibility of the urban community. Action along these lines would take care of the legitimate claims which the farmer and the urban public sense lie behind 'parity'.

O. C. STINE

We must do more than concede that the prescriptions of parity in agricultural legislation are imperfect. The legal prescriptions have been determined to some extent by the availability of data, and to a considerable extent represent compromises of different viewpoints

as to what is desirable or practicable. It is our responsibility not only to construct the best possible measures from the data now available, but also to improve the data, to try to clarify concepts, and to prepare the way for an improvement in practice, i.e., in the use of parity concepts and parity measures in determining national policies.

The concept of parity is useful in considering welfare and the utilization of resources. In view of the obvious limitations dollar income has in measuring welfare, we should try to find other measures. Sociologists are experimenting. We need measures that are generally accepted in terms of physical units or concrete achievements for which we can determine the monetary requirements. Parity can be defined in terms of the income necessary to provide equivalent food, clothing, housing, health, education, and other opportunities. In other words, parity should be a measure of the income distribution necessary to provide equality of opportunity as between urban and rural communities.

Another valid use of the parity concept would be to extend it to the consideration of how to make the best possible use of national resources. We should ask with reference to agriculture, what output is required to provide the best balance? Had capital and labor complete mobility they could be so applied as to equalize marginal returns all around; then it would be a matter of indifference to any individual whether he was employed in agriculture or in industry, at one point or another. But we do have a high degree of inertia and a considerable amount of monopolistic practice that retard or prevent perfection in the use of our resources to meet our requirements. It seems to me, however, that we ought to be seeking measures that will indicate clearly where and when the adjustments are required so as to obtain the best balance between production and wants, and to improve the equity of distribution among the several factors used in production. The important question is how to maximize national income.

To be more specific, parity for agriculture should be answered not only in terms of income per person engaged in agriculture, but also with reference to how much agricultural production the nation really wants or what agricultural production constitutes a proper balance with the production of other goods. This involves, of course, considerations of efficiency in the use of agricultural resources and manpower. How many farms and how many farmers should we keep on the land, year in and year out, to guarantee a supply of farm products in proper balance with other products? And the same questions, of course, are to be answered with reference to other fields of activity.

M. A. COPELAND

The possible retaliatory implications Mr. Hart notes in the parity concept are especially significant at a time like the present when the stage is set for inflation.

Mr. Stine has suggested that parity should be made to indicate equality of opportunity as between urban and rural communities. This, I take it, is a longer run meaning of 'parity'. I am not sure how income measurements can be made to reveal equality of opportunity as distinguished from equality resulting from taking advantage of opportunity. Something about opportunity, however, would be revealed if fuller attention were given to a comparison of the distributions of incomes by size as between urban and rural communities. I see no reason to assume that we should desire on ethical grounds anything approaching equality between the upper ends of the income scales. On the other hand, there is good reason to hold that a common national minimum of living should prevail as between city and country. A statistical measurement of income might be made to reveal whether parity in this sense has been attained.

It has been noted that the term parity has also a short term or cyclical significance. It would seem better to abandon the term entirely in this connection. What is meant, I take it, is not parity but stability of income.

JULIUS T. WENDZEL

Mr. Grove has performed a real service in exploring certain implications of income parity for agriculture. The general concept of agricultural parity has come to have great weight in the determination of national policy with respect to agriculture. I doubt, however, that many of us fully understand the philosophy, economics, and politics involved. I shall not discuss his paper in detail. I wish merely to say that his treatment leaves the impression that price parity is considered a much more satisfactory basis for agricultural policy than income parity.

Mr. Grove develops a somewhat artificial association of income

parity with 'welfare' on the one hand and of price parity with 'balance' on the other. He apparently feels that the concept of price parity implies primarily a concern for economic stabilization not only of agriculture but of the economy as a whole; whereas income parity implies primarily a concern with the 'fairness' of the farmers' share in national income.

After interpreting income parity as concerned primarily with welfare rather than balance, he considers whether income parity is a sound basis for comparing the relative welfare of farm and non-farm groups. He concludes in general that it is not; that income parity, as defined in the Agricultural Adjustment Act of 1938, is quite unsatisfactory as a means of determining whether people on farms are as well off, on the average, relative to people not on farms now as they were in 1910-14; consequently, that income parity is also unsatisfactory as a guide to agricultural policy.

Early in his paper Mr. Grove was careful to point out that income parity is a recent offshoot of the agricultural parity plant and that it is still secondary to price parity as a basis for agricultural policy. His statements at this point (see Sec. III) are in historical terms with no implication that income parity *should be secondary*. After holding (1) that income parity is primarily a welfare concept, (2) that it is not a sound basis for comparing relative welfare, and (3) that it is not a sound basis for agricultural policy, he again emphasizes that it is definitely secondary to price parity as a basis for agricultural policy. At this point (Sec. VII) the implication is very strong that income parity is not only younger but *inferior* as a basis of agricultural policy.

It is very doubtful that income parity can be so exclusively associated with a concern for fairness or relative welfare as to warrant dismissing it as a basis of agricultural policy simply because the income parity formula is not considered a good measure of relative well-being. It can be admitted that income parity is not a satisfactory measure of relative welfare without holding that it has no value as a basis for agricultural policy. Income parity may still be explored and compared with price parity as a standard for achieving economic balance.

Parity for agriculture has been advocated and supported on grounds of both economic balance and ethics or welfare in the sense that the term is used by Mr. Grove. Both economic and ethical considerations may be applied to the concept of parity for agriculture whether parity is expressed in terms of relative prices or of relative incomes. Parity incomes and parity prices are merely alternative standards of agricultural parity and it is doubtful that the philosophy associated with these respective standards is substantially different. It may be true that there has in recent years been a shift to welfare as a justification for aids to agriculture and that there has also been more consideration of income parity in recent years. It does not follow, however, that the two are causally related and that the push for income parity was due primarily to a concern for welfare. Mr. Grove's earlier observation, that the inclusion of income parity in the 1936 agricultural legislation was prompted by a realization that parity prices multiplied by low output might not maximize farmers' income, bears definite emphasis in this connection.

I do not wish to defend income parity as a basis for agricultural policy. It seems important, however, to question the implied superiority of price parity. If income parity is to be analyzed as a standard of fairness, the equity searchlight must also be focused on price parity. I am sure Mr. Grove would not claim any advantage for price parity in this realm. In short, both income and price parity should be compared with reference to the objectives or considerations of both balance and welfare.

As now calculated, both income and price parity have serious limitations for national policy with respect to agriculture. Both are still too largely tied to an historical base period and a period that is well above the desirable trend of agricultural prices and incomes for many commodities. To serve a major social purpose a concept of agricultural parity, whether in terms of parity prices or parity incomes, would have to be conceived as a socially desirable modification of historical trends. It would have to give more recognition to changing relationships among commodities and regions. It is doubtful that any concept of parity for agriculture as a whole, especially if calculated in terms of a static historical base, has any very significant meaning. A significant classification of economic groups for establishing parities would also have to give definite recognition to the distribution of income by size.

I am doubtful about the feasibility of getting acceptance of a parity concept that also looks to the future and is calculated in terms of desirable ends as seen by society as a whole. If in terms of prices, such a concept would provide a basis for adjusting prices either up or down. If in terms of incomes, it would provide a basis for programs of production and prices that might result in either

higher or lower incomes. It would be designed to establish, and minimize deviations from, socially desirable trends for agricultural activity. Technically, the development of such a formula should be possible. If developed for comprehensive and simultaneous application with corresponding formulas for various significant groups in society, concepts of parity, whether in terms of incomes or prices, might prove a valuable aid in economic adjustment.

REPLY BY THE AUTHOR

The concept of price parity has been given some consideration in my paper because of its importance as an antecedent of income parity. But I made only a cursory appraisal of the validity of price parity, and drew no conclusion as to the relative merits of income parity and price parity as guides to agricultural policy. Nevertheless, Mr. Wendzel's inference that such a conclusion—in favor of price parity—was intended is understandable. It arises from some additions to the original paper inserted at the behest of 'information specialists' in the Bureau of Agricultural Economics. Alarmed at the unfavorable light shed on income parity, they insisted on frequent and conspicuous reference to the dominant role of price parity and the relative unimportance of income parity in current agricultural programs. In the interest of prompt approval of the paper for presentation to the Conference, it seemed wise to make these insertions. The statements made are perfectly true; but they have led to misinterpretation.

I doubt that there is any real disagreement between Mr. Wendzel and myself concerning the relative merits of income and price parity. Neither is very satisfactory as it now stands; but both present possibilities for development. Perhaps the potentialities of income parity are greater. I cannot agree, however, that income parity as it is now defined contains any important implications of economic balance. With the present formula parity income for agriculture could be achieved under conditions of extreme imbalance both within the agricultural economy and as between the farm and nonfarm sectors of the national economy. The present formula must be considered as an attempt to provide an over-all indicator of average comparative welfare, and to establish a standard of relative welfare which as far as the formula itself is concerned may be attained without regard to means. On the other hand, it must be conceded that parity formulas based on income might be devised to provide a standard for the achievement of economic balance, and that the exploration of such possibilities is desirable.

In the concluding paragraph of the paper I indicated the probability that greater reliability and significance could be attained in the comparison of farm and nonfarm incomes if they were made in terms of regional and size distributions of income. Many of the comments have also pointed in this general direction, with some emphasis on the desirability of distinguishing the claims of low-income persons in each group from those of the group as a whole. It may not be out of order to conclude that a general consensus concerning the most fruitful direction for further research on the problem exists.

Part Four

SIGNIFICANCE OF INTERNATIONAL TRANSACTIONS IN NATIONAL INCOME

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