Changes in the "Cost of Living" 1909-1928

Farm Hands' Dollar Nearest to 1913 Value—Families in $5,000 a year Group benefit by Price Declines since 1926. Five Indexes Constructed by National Bureau Cover all Important Groups.

This Chart Shows Indexes of the Prices of those Goods Used Respectively by Five Classes of Consumers

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<tr>
<th>Class</th>
<th>1909</th>
<th>1910</th>
<th>1911</th>
<th>1912</th>
<th>1913</th>
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<th>1922</th>
<th>1923</th>
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<tr>
<td>Farmers</td>
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<td>Farm Laborers</td>
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<td>Urban Employees</td>
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</table>

Average for All: 1.00

In the above table, the average for all classes is based on the weighted index numbers for the five groups, with the weights being the number of families in each group.

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T H E PURCHASING power of the dollar paid out by the farm laborers has come closer to the 1913 value than has that of any other five groups into which the American population has been divided for statistical purposes, according to a preliminary report just presented by Dr. Wilford I. King, of the National Bureau of Economic Research, to the National Bureau's Executive Committee, and approved for publication today in the National Bureau's News-Bulletin.

Next nearest to the 1913 values are, in the following order, the dollars expended respectively by:

- Farmers
- Farm Laborers
- Urban Employees
- $25,000 Class
- $5,000 Class

The Bureau's five classes of consumers are: Farmers, Farm Laborers, Urban Employees, $25,000 Class, and $5,000 Class.
Changes in the “Cost of Living” 1909-1928

(Extended table)

By the Farmers, by Families Spending $6,000 Annually, and by Families Spending $42,000 Annually, the farthest away, are the figures given by the group designated as Urban Employees.

Continuation of Income Investigation

This study was made as part of the continuing investigation of the machinery and distribution of the National Income upon which Dr. King has his associates, under the general direction of Dr. Edwin F. Gay and Dr. Wesley C. Mitchell, Directors of Research of the National Bureau of Economic Research, has been engaged for the past year. The figures presented start with January 1, 1909, and run to and include January 1, 1928.

In response to the demand for one index number representing the retail price level for the country as a whole, Dr. King and his associates have, after investigating the various groups, weights, his five index numbers, producing one index number for all classes of consumers. This index shows that the retail price level rose far less than the wholesale price level during the inflation of 1920 and consequently did not decline as far in 1921.

During the last six years, the averages have moved very slowly, the total increase between 1922 and 1927 being approximately 3.7 per cent.

Test of Report on Price Indexes

The text of Dr. King’s report follows:

Most of the price indexes currently published purport to record the movements of wholesale prices. It is often assumed that such index numbers represent the course of prices and wages in general. In the nature of the fact, this is far from being the case. Different classes of commodities have price fluctuations which are determined by different factors and are more or less affected by the same circumstances and conditions. For example, the fluctuations are probably not closely parallel each other, if the cost index representing the prices of a group of commodities is taken as a basis of comparison, the price of each commodity in a group probably is not exactly the same as the price of all the commodities in the group. Each price series is an independent series.

At first thought, it seems strange that index numbers of prices at wholesale rather than of prices of direct goods should be most commonly published, but for a limited number of persons are immediately interested in wholesale prices while the entire population are directly affected by the prices of consumers’ goods.

Many Difficulties Surround

The greater abundance of information on wholesale prices appears to arise mainly from the fact that it is a simple matter to secure data on commodities at wholesale and hence it has been easy for statisticians to compile index numbers of that type. On the other hand, it is very difficult to obtain satisfactory data covering the field of direct goods, first, because the latter prices are usually quoted in trade journals, and second, because so many important types of consumer’s goods are not standardized.

This lack of standardization is well illustrated by automobiles and by radio receiving sets. Most automobile manufacturers change models every year. Radios are continually being modified. It is, therefore, absolutely impossible to construct a thoroughly dependable index series representing the prices of all automobiles. A reasonably close approximation is the best that can be hoped for.

Why National Bureau Makes Own Indexes

In presenting estimates of the income of the people of the United States, the Directors of the National Bureau of Economic Research have felt it imperatively necessary to determine the money income of the purchasing power in order to make possible year to year comparisons. Such a reduction evidently calls for the use of index numbers.

Since the bulk of the income of individuals is spent for direct goods, it seems obvious that, to make the required correction for changes in the price level, it is necessary to employ index numbers of the prices of such goods. The only published series of this type available are those prepared by the United States Bureau of Labor Statistics and by the National Industrial Conference Board, respectively.

For the period since 1913, the “cost of living” series prepared by the United States Bureau of Labor Statistics has been used in deflating the incomes of urban employees. That series of index numbers has been extended by the National Bureau of Economic Research in order to cover the years 1909 to 1912.

While these index numbers typify the movements in the prices of goods used by the urban working classes, they are not necessarily representative of the budgets of other sections of the population, for since the classes having lower incomes spend a much larger percentage of their income for food and a smaller percentage for miscellaneous purposes and for servants, and since the relative price changes of these two classes of goods are not closely parallel each other, it follows that the price index representing the prices of a wealthy family may differ significantly from that recording the expenditures of a poor family.

Divided Into Five Economic Groups

It is necessary to compute four other index series representing respectively the price changes applicable to the following sections of the population:

1. Agricultural laborers.
2. Factory workers.
3. Families spending $6,000 per year for consumption goods.
4. Families spending $42,000 per year for consumption goods.

In the construction of the index series here reported, there are three main difficulties: (a) the need for good, current information, and household furnishings compiled by the United States Bureau of Labor Statistics have been used whenever applicable, but weights have been assigned in accordance with the importance of these items in the budgets of the classes represented.

Procedure Described in Bureau’s Earlier Work

The system of weighting used is described in Table D, p. 26 of Income in the Various States. For such goods as books, periodicals, automobiles, automobile tires, gas, coal, oil, metal bars, jewelry, musical instruments, college board and tuition, and servants’ wages, the necessary consumer’s data has been compiled and construct original series of indexes. The securing of information concerning the wages of servants has necessitated a task of expectable difficulty. At present, data of this type are being obtained from correspondents in all sections of the country.

The five index series are presented in Table I above and in the Chart on Page 1. Because of the difficulties in securing data which are strictly comparable at different dates, the trends of these indexes must be thought of as approximations only. It is, however, believed that the trends are roughly correct and that the short-time fluctuations are recorded with reasonable accuracy.