into an index with base equal to the average cost of the budget in the 20 cities. The results are tabulated below.

TABLE 30.—*Cost of a standard budget for a family of 4, selected sample of cities, 1946*

[Index numbers]

Atlanta	101. 0	Minneapolis	104. 3
Baltimore	105. 0	New York	105. 8
Boston	106. 7	Philadelphia	100. 6
Chicago	104. 8	Pittsburgh	103. 6
Cincinnati	100. 5	Portland	103. 3
Cleveland	101. 8	St. Louis	106. 0
Detroit	105. 6	San Francisco	107. 1
Houston	95. 0	Scranton	98. 5
Kansas City	97. 7	Seattle	109. 3
Los Angeles	103. 8	Washington, D.C	112. 0

NOTE.—Base is average of cost of budget in all cities.

To this base was added the Consumer Price Index as reported by the BLS for each city and year. The new index shows price change adjusted for differences in price level in the individual cities.

H. NONWHITE POPULATION

Percentage of population which is nonwhite was taken directly from the "Country and City Data Book, 1956" (Bureau of the Census), table 3. The data refer to the year 1950 and were collected in connection with the regular decennial census.

III. PRELIMINARY ANALYSIS

The data described above were used in an attempt to gain understanding of the variables and mechanisms important in price and wage making in the services industries. The results are probably more suggestive than definitive for various reasons mentioned below.

All data in a cross-section should represent simultaneous observations of all variables in all elements of the sample. In the data used here, the observations are considered to be annual averages. But some of the variables are averages of 12 observations; some of 6; some of 4 observations, not all of which refer to the same date in all cities; some, in the case of unskilled wages, are only one observation per year. In years of rapidly changing conditions, the month in which the "representative" observation falls might make important difference in results, especially when all the cities are not surveyed the same month.[24a]

Errors of observation are probably quite high in much of the data used. While the BLS does publish average price data drawn from their price observations for the Consumer Price Index, it must be remembered that main concern of the BLS is with measuring changes in price. If it becomes necessary to alter the sample of establishments surveyed, it makes little difference in the index-making process if, other things equal, the average price differs between the two establishments. As long as successive monthly changes have been the same, the new outlet can be linked smoothly into the index. The average price data may however show an abrupt change.

Combining the labor-market index into an annual average suppresses much of its sensitivity. If it were feasible to collect the rest of the data on a quarterly basis, use of a quarterly labor market condition indicator would be better. Other difficulties include the small number of service occupations for which data were available, as well as the limited number of cities and years included.

Nevertheless preliminary results of what has been found to date are summarized briefly here. Negative results as well as more encourging ones are indicated.

[24a] It is conceivable that something like the following could be true: assume that two cities in fact have the same average wage rate and that in both cities the wage-rate increases in uniform, 2-cent-per-month increments. Now, if the first city were surveyed in January and the second city in December, the second city would show a wage 24 cents higher than the first. Taking simple first difference would not solve the problem because the given city is not always surveyed in the same month each year by BLS. Sometimes the "annual" first difference might span an interval of less than a year, sometimes more.