

of the Census of Retail Distribution, supplemented by the best guess we can make as to sales of bootleg liquor, we estimate the entire business of retailers of commodities at \$56,000,000,000. This omits the business of hotel restaurants and of laundries, both of which are counted in the Census grand total, but which we prefer to treat as service enterprises; it adds \$2,000,000,000 retail transactions known or inferred to have been left out of the Census. In order to get a figure comparable with the total reached by our procedure, it is necessary to make allowances for (1) retail sales of producers' and construction goods; (2) sales of goods acquired from customers, chiefly automobile trade-ins; and (3) billings for storage, repairs, and other services. The resultant is a figure for retail sales of consumers' goods about \$1,100,000,000 below our corresponding estimate.* This discrepancy, though large in itself, is less than 2.5 per cent of the total. Moreover, much of it could probably be accounted for if we had adequate data for distributors' stocks at the beginning and at the end of 1929; for it is highly probable that these stocks increased considerably in 1929.

All the twelve commodity groups recorded in Table 2 show growth at each stage of the twenty-year period, excepting only a moderate loss in "Coal and Wood" and a slight loss in the miscellaneous group between 1923 and 1929. For some groups, to be sure, the growth has been painfully small; and for others, abnormally large. Yet the fact remains that fluctuations in these inclusive groups are less extreme than might have been expected. Two tentative deductions seem to be permissible: (1) short-term shifts in consumer demand are most likely to affect related industries within the same group (for instance, the shift from musical instruments to radios); (2) major trends in consumer demand gain momentum both more slowly and more steadily than most people imagine. This second deduction carries with it the comforting corollary that it should be possible to observe major trends in time to take advantage of them—or, at worst, to escape being buried in the debris which they leave in their wake.

The most obvious use of Table 2 is to correct certain rather absurd estimates which have become current, notably for expenditures by individuals on food, clothing, automobiles, and house furnishings, all of which have been commonly overstated.

*See the appendix for a fuller discussion of these adjustments.

A further explanation should be given here of the apparent discrepancy between our over-all figure for individual expenditures on transportation (chiefly purchases of automobiles, automobile accessories, gasoline and oil), amounting to \$5,151,000,000, and the Census of Distribution figure for sales by retail stores in the automotive group, totalling \$9,547,000,000. The latter figure includes (1) retail sales of cars and supplies for business purposes which we place (somewhat arbitrarily, it must be granted) at \$2,250,000,000; (2) trade-ins, about \$1,250,000,000, and (3) billings of repair and storage services, which we treat separately from commodity sales, some \$900,000,000. Deducting these three items from the Census total leaves a comparable figure very close to our estimate. It seems safe to say, then, that the money spent by individual consumers in 1929 for automobiles and supplies was only one-fourth their expenditures for foods and beverages, one-half their expenditures for clothing, and slightly above their expenditures for household furnishings plus musical instruments and radios—in other words, a much less reckless outlay than has frequently been pictured.

However, we can form a clearer notion of the relations among the commodity groups by turning to Table 3 which shows per capita expenditures for each of the commodity groups in each of the four years.

Outstanding is the marked stability (in pre-war dollars) of "Foods and Beverages." To a slight extent this stability is ascribable to a slowing-up in the rate of growth of expenditures for alcoholic drinks. To a much greater extent it represents simply the universal tendency to spend increases in income, once it rises above the minimum comfort level, on other objects than food. The first and best verified of Engel's Laws of Consumption, you will recall, states in effect that a decreasing percentage of increasing income is devoted to food.

In pre-war years nearly half of consumers' purchases of commodities went into their stomachs; in post-war years, about 40 per cent. A puzzling question is why the "Foods and Beverages" expenditure per capita should have moved up so sharply from \$89 in 1923 to \$99 in 1929. The largest gain in this period came in meats and was apparently due to higher prices rather than increased consumption. The growing custom of eating in restaurants and doing less home cooking is no doubt partly responsible for this sizable increase.

TABLE 3
PER CAPITA RETAIL VALUES OF CONSUMERS' GOODS

Total Retail Values	1909 \$172.24	In Pre-War Dollars*			In Current Dollars	
		1914 \$190.58	1923- \$230.26	1929 \$241.03	1923 \$383.62	1929 \$401.55
Foods and Beverages	84.49	93.95	89.38	99.26	148.90	165.36
Cigars, Cigarettes and Tobacco	5.88	6.24	7.01	7.70	11.67	12.82
Clothing	38.92	38.73	55.56	51.48	92.56	85.77
Transportation	5.33	8.87	23.52	25.53	39.19	42.53
Furniture and House Furnishings	11.83	12.24	18.92	20.47	31.52	34.11
Musical Instruments and Radio	1.55	1.64	3.13	4.56	5.22	7.60
Coal and Wood	7.24	8.08	8.39	6.25	13.97	10.41
Hardware, Tools and Paints	1.62	1.68	2.52	2.71	4.20	4.52
Jewelry and Silverware	2.66	2.45	3.10	2.86	5.16	4.77
Drugs and Toilet Goods	2.79	3.12	4.71	5.53	7.85	9.22
Books, Periodicals and Stationery	6.02	6.70	7.04	8.33	11.72	13.88
All Others	6.90	6.88	7.01	6.34	11.67	10.56

A portion of the larger increase in total retail expenditures went into clothing; and another substantial proportion into furniture and other household furnishings. A much greater proportion, of course, flowed into the automotive market. However, I venture to call your especial attention to the fact that our national passion for automobiling was not indulged at the expense of the clothing and furniture industries, as has been carelessly alleged. On the contrary, we can scarcely avoid the conclusion that American consumers were easily able to handle their automobile expenditures in the years 1923 and 1929 without stinting their purchases of other commodities.

The same set of estimates is presented in a different perspective in Table 4. Expenditures on the twelve commodity groups are here expressed in percentages of King's figures for realized incomes of individuals in the United States. These percentages offer striking evidence of the extraordinarily high level of prosperity reached in 1923 and 1929. Never before in the world's history, we may safely assert, has any large body of people been able to eat substantially all they wanted and yet spend only a little more than one-fifth of their combined incomes on food and drink? Expenditures on transportation, heavy as they were, took only 5 per cent to 6 per cent of individual incomes—surely a rather slender foundation for the moralizings on this form of alleged extravagance by some of our magazine writers.

*100 is here taken as the price index of both the pre-war years and 166.6 as the price index of both the post-war years. These indexes are sufficiently accurate for rough measurements.

TABLE 4
PERCENTAGES OF RETAIL SELLING VALUES TO TOTAL
REALIZED INCOMES OF INDIVIDUALS
(Based on Table 2)

Total Realized Incomes*	1909 29,605. (Millions of Dollars)	1914 35,657.	1923 74,337.	1929 94,000.
Per Cent of Total Retail Selling Values to Total Realized Incomes	53.58%	52.92%	57.53%	51.74%
Foods and Beverages	25.83%	26.09%	22.33%	21.30%
Cigars, Cigarettes and Tobacco	1.80%	1.73%	1.75%	1.65%
Clothing	11.90%	10.75%	13.88%	11.05%
Transportation	1.63%	2.46%	5.88%	5.48%
Furniture and House Furnishings	3.62%	3.40%	4.73%	4.40%
Musical Instruments and Radio	4.7%	4.6%	7.8%	9.8%
Coal and Wood	2.22%	2.24%	2.10%	1.34%
Hardware, Tools and Paints	5.0%	4.7%	6.3%	5.8%
Jewelry and Silverware	3.1%	6.8%	7.7%	6.1%
Drugs and Toilet Goods	3.85%	3.7%	1.18%	1.19%
Books, Periodicals and Stationery	1.84%	1.86%	1.76%	1.79%
All Others	2.11%	1.91%	1.75%	1.36%
	53.58%	52.92%	57.54%	51.74%

*Comparable with 36 per cent of British income spent on food and drink in the years 1924-27, based on estimates by A. E. Feavearyear in the *Economic Journal*, March, 1931; with 44 per cent of German income spent on food, drink and tobacco in 1913, based on estimates by Ernst Wagemann in "Economic Rhythms" published in the U. S. in 1930; with 46 per cent of the average Leningrad worker's budget required for food, as claimed by Soviet authorities and published in an article by Alzada Constock in *Current History*, January, 1930; and with allowances in American wage earners' budgets prepared by the National Industrial Conference Board of 43 per cent for food in pre-war years and 33 per cent in post-war years.

*As estimated by King ("The National Income and Its Purchasing Power") for 1909, 1914 and 1923. The figure for 1929 is based on first rough approximations by King, Ingalls, and Sales Management.