

**Text table 5. Average health care expenditures and component shares of health care spending by health insurance status, Consumer Expenditure Interview Survey, 1993**

Item	All consumer units	Insurance status			
		Fully covered	Partially covered	Medicaid	Not covered
Health care expenditures .....	\$1,650	\$2,064	\$1,628	\$544	\$664
Percent distribution:					
Health care as a share of total expenditures .....	5.9	6.8	5.3	3.6	2.9
Health insurance .....	2.8	3.4	2.3	1.9	0.7
Medical services .....	2.1	2.2	2.2	1.0	1.6
Prescription drugs and medical supplies .....	1.0	1.1	0.8	0.7	0.6
Component shares of health care:					
Total health care expenditures .....	100	100	100	100	100
Health insurance .....	48.1	50.6	43.0	51.5	25.4
Medical services .....	34.9	32.7	41.1	27.8	54.6
Prescription drugs and medical supplies .....	17.0	16.7	15.9	20.7	20.0

NOTE: Components may not add to totals due to rounding.

comprised by far the largest portion of the population (64 percent), followed by the uninsured (16 percent), the partially insured (11 percent), and Medicaid families (9 percent). (See text table 4.) On average, fully insured families had the oldest reference person and the smallest family size. The uninsured had the youngest reference person and smaller families than either the partially insured or Medicaid recipients. The partially insured had, on average, the most income earners and the largest families. Families in the Medicaid group included the most number of children and the least number of income earners among all groups. As expected, Medicaid families and families in the uninsured group were in the lower income quintiles while fully and partially insured families were mainly represented in the upper income quintiles.

*Health care spending and component shares of health care.* Health care expenditures are comprised of out-of-pocket expenditures for health insurance, medical services, and prescription drugs and medical supplies. Of the four groups, fully insured families allocated the largest share of total expenditures to health care. The health care budget share for the partially insured group was lower mainly because of a smaller share of total expenditures on health insurance. Health care consumed a relatively small portion of the Medicaid group's budget, due to government subsidization of health services for Medicaid recipients. The uninsured group allocated the smallest budget share for health care. Typically, the younger members of this group may, on average, have been in better health than members of other groups. Also, because of their age, they may have been less risk averse than older families and may have held entry-level jobs that could have limited access to employer sponsored health insurance.

Health care expenditures by each group ranged from about 3 percent for the uninsured to almost 7 percent for the fully insured. Text table 5 shows that fully insured and Medicaid families spent about half of their health care dol-

lars for insurance premium payments. Although this component share was almost the same for both of these groups, health insurance as a share of total expenditures, as well as dollar expenditures for health insurance were substantially higher for fully insured families (3.4 percent and \$1,044 per year) than for families in the Medicaid group (1.9 percent and \$280 per year). Compared to fully insured families, those with partial insurance coverage spent a smaller portion of their health care dollars on insurance payments and a larger portion on medical services. In terms of total expenditures, however, both groups allocated the same fraction of their budget to medical services. Among the four groups, uninsured families devoted the largest share of health care expenditures to medical services and the smallest share to health insurance. As a share of total expenditures, however, the fully insured and the partially insured allocated more of their budgets to medical services than did the uninsured.

When comparing components of health care expenditures across groups, shares for prescription drugs and medical supplies were distributed the most evenly (between 16 and 21 percent), while the ranges across groups for health insurance (26 to 52 percent) and medical services (28 to 55 percent) shares are substantially larger.

#### Comparisons with other data sources

As part of the evaluation of the Consumer Expenditure (CE) Survey results, BLS compares its estimates of aggregate consumer expenditures with independent sources of data. The expenditure comparisons described here use integrated CE survey data unless otherwise noted. The comparisons are made on the basis of aggregate amounts. To facilitate comparison, some adjustments are made to the survey data and the independent sources to account for differences in concept and coverage. The degree of comparability varies by expenditure component, as noted in the tables. Data are not shown when differences in concept are so great that they make the comparison meaningless. Be-

cause most agencies have revised their estimates since publication of data in the last Consumer Expenditure bulletin, readers should avoid comparing these ratios with those in earlier BLS publications. The survey data and several of the independent-source data are subject to both sampling and nonsampling error. The comparisons allow monitoring of the estimates for consistency over time, relative to the other sources.

*Personal Consumption Expenditures in the National Income and Product Accounts.* Historically, the principal source of independent estimates used for comparisons with the Consumer Expenditure Survey has been the Personal Consumption Expenditures (PCE), a component of the National Income and Product Accounts (NIPA).<sup>6</sup>

The PCE estimates represent the market value of goods and services purchased by all persons. The estimates are derived by complex methods that trace the flow of goods and services through the economy. Total expenditures of persons are defined to include expenditures of individuals and nonprofit institutions. Expenditures of nonprofit institutions are not distributed among individual goods. Instead, they are included in specific service categories, primarily medical care, education and research, and religious and welfare activities, categories which are not compared with Consumer Expenditure survey data. The PCE estimates are not directly subject to the quantifiable sampling errors found in household surveys. However, they are subject to errors in the source data and to difficulties in applying complex procedures for allocating these data among the final demand sectors.

The Bureau of Economic Analysis (BEA) conducts comprehensive revisions of the NIPA at approximately 5-year intervals, primarily to update the series with new results from the Census Bureau's quinquennial censuses and other sources used in the accounts. This kind of revision is referred to as benchmarking. Such revisions may also include revisions to selected methods of estimation. PCE estimates based on different benchmarks sometimes differ by large amounts and as a result, revisions to PCE can have a substantial effect on comparisons with Consumer Expenditure survey data. In addition, BEA conducts annual revisions to PCE that affect 3 years of data and may also include changes in estimation methods. Therefore, due to the benchmarking and annual revisions to PCE, the CE-to-PCE ratios in this report should not be compared with previously published ratios.

Text table 6 shows integrated Consumer Expenditure survey estimates for selected expenditure categories for 1990 through 1993. The Consumer Expenditure survey data were adjusted for comparability with PCE data. The Consumer Expenditure-to-PCE ratios indicate that CE survey estimates for major categories of consumption were lower than PCE.

<sup>6</sup> The purpose of the accounts is to measure the economic activity of the entire U.S. economy. The accounts are prepared by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce.

For several categories of expenditure, the relationship between the two series over time has been generally about the same. These include: Food; alcoholic beverages; rent, utilities, fuels, and public services; and entertainment, to name a few.

*Detailed food comparisons.* CE survey estimates for food at home are compared with PCE and two published sources of trade association data, *Supermarket Business* and *Progressive Grocer* magazines. Supermarket Business Inc. annually conducts independent mail and telephone surveys of food manufacturers, packers, wholesalers, and retailers. Focusing on measuring total industry sales, the study reports estimates of the total value of retail food sales, covering all types of food stores. Results from the surveys are reported in *Supermarket Business*, usually in September of each year. Progressive Grocer, Inc. annually conducts an independent study of supermarket sales that focuses on the supermarket performance in relation to other kinds of retail outlets, comparing changes in sales by product and by category. Supermarkets, that is, grocery stores with annual food sales of \$2 million or more, account for about 75 percent of grocery store food sales. Detailed national estimates of the value of food sales in supermarkets, representing 30,750 supermarkets, are reported in *Progressive Grocer* in July of each year.

Text table 7 compares detailed annual estimates of food expenditures per consumer unit from the Consumer Expenditure Diary survey with PCE and the trade association data. In general, the relationship among Consumer Expenditure survey estimates and estimates from the three sources is as expected and is consistent over the period shown. The comparisons show that Diary survey estimates of food-at-home expenditures for 1992 and 1993 were generally lower than PCE, which covers a larger population. Ratios which show that CE is higher than PCE probably reflect differences in estimation methods. Relatively low ratios probably reflect underreporting in the Consumer Expenditure survey.

In contrast, the CE Diary survey estimates are generally higher than those of *Supermarket Business*. Differences between the two survey estimates are most likely due to different methods of data collection and estimation. These differences reflect fundamental differences in the purposes for which the data are collected.

Consumer Expenditure survey estimates are substantially higher than *Progressive Grocer* estimates. This is expected because this trade source only covers supermarkets, as noted above. CE survey estimates for fruits and vegetables, which are close to 10 percent below *Progressive Grocer* estimates, may reflect underreporting in the Diary survey.

*National Health Accounts.* The Health Care Financing Administration (HCFA) of the U.S. Department of Health and Human Services publishes total aggregate health costs of the United States in the National Health Accounts (NHA). Total health care costs include medical care payments from

all sources, public and private. The NHA data cover U.S. citizens living abroad, military personnel, inhabitants of U.S. territories, and parts of the institutional population—a larger population than covered by the Consumer Expenditure Survey. In particular, the NHA is designed to cover the nursing home population, while the Consumer Expenditure Survey is not. To derive the out-of-pocket estimates, HCFA uses data from administrative and industry sources, as well as some Consumer Expenditure Survey data. The NHA estimates used for these comparisons reflect several

revisions in methodology and data sources since the last Consumer Expenditure bulletin comparisons.

The estimates are out-of-pocket expenditures for health care which include expenditures for medical care that are not covered by insurance. Such expenditures may include copayments and deductible amounts that are required by health insurance plans. In the 1990-91 Consumer Expenditure bulletin BLS compared estimates for out-of-pocket health insurance premium payments with estimates derived from NHA data. However, the NHA data needed to con-

**Text Table 6. Comparison of aggregate expenditures for selected expenditure categories: Consumer Expenditure (CE) Survey and Personal Consumption Expenditures (PCE), 1990-93**

Expenditure category	Consumer Expenditure Survey (in billions)				Ratio of CE to PCE			
	1990	1991	1992	1993	1990	1991	1992	1993
Food .....	\$408	\$410	\$420	\$431	0.76	0.75	0.76	0.75
Food at home .....	240	259	264	273	.70	.74	.75	.75
Food away from home <sup>1</sup> .....	168	151	156	158	.87	.76	.76	.74
Alcoholic beverages .....	28	29	30	27	.39	.38	.40	.35
Rent, utilities, and public services <sup>2</sup> .....	297	305	328	336	.99	.96	1.00	.97
Rented dwellings, total .....	171	171	192	191	1.04	.99	1.07	1.02
Utilities, fuels, and public services .....	183	195	198	211	.96	.96	.93	.93
Telephone .....	57	61	62	66	1.07	1.06	.97	.97
Household operations <sup>3</sup> .....	21	22	24	23	.85	.92	.88	.84
Household furnishings and equipment .....	148	159	160	164	.68	.71	.68	.66
Household textiles .....	10	10	9	10	.45	.45	.39	.41
Furniture .....	30	29	32	32	.82	.78	.82	.75
Floor coverings .....	9	11	7	9	.76	.99	.59	.71
Major appliances .....	16	15	16	17	.62	.57	.56	.53
Small appliances, miscellaneous household equipment <sup>4</sup> .....	83	94	95	97	.68	.74	.72	.70
Apparel and services .....	160	171	172	168	.81	.85	.80	.75
Transportation .....	378	387	399	418	.81	.88	.84	.81
Vehicle purchases <sup>5</sup> .....	182	187	194	208	.99	1.12	1.05	1.00
Gasoline and motor oil .....	102	97	97	98	.95	.97	.94	.94
Other vehicle expenses <sup>6</sup> .....	67	74	80	82	.53	.58	.56	.53
Public transportation .....	27	28	28	30	.59	.63	.60	.61
Entertainment .....	129	136	141	155	.61	.62	.61	.62
Fees and admissions .....	36	37	38	41	.77	.76	.72	.74
Televisions, radios, sound equipment .....	44	46	49	59	.63	.61	.61	.66
Pets, toys, and playground equipment .....	27	26	27	29	.70	.67	.67	.68
Other entertainment supplies, equipment .....	44	54	53	51	.40	.48	.46	.42
Personal care products and services .....	35	39	39	38	.59	.64	.61	.58
Reading .....	19	20	21	22	.46	.48	.45	.45
Tobacco products and smoking supplies .....	27	27	27	27	.61	.60	.54	.53
Miscellaneous <sup>7</sup> .....	33	31	34	33	.32	.29	.30	.27

<sup>1</sup> Excludes school lunches and meals as pay.

<sup>2</sup> Includes rent for tenant-occupied dwelling units and lodging away from home and at school. Rent in the CE is contract rent, which includes utilities for some renters. The CE covers direct costs of utilities and fuels by homeowners and renters. In PCE, data are for space rent, which excludes charges for utilities. PCE data cover total expenditures for utilities and fuels even if paid by landlords.

<sup>3</sup> Excludes amounts for baby-sitting, daycare centers, and care of invalids or the elderly.

<sup>4</sup> Various subcategories are combined to approximate equivalent content.

<sup>5</sup> The PCE estimates are derived using estimates of dealer margin (a concept which cannot be matched to CE) and wholesale value of net transactions between persons and government, foreigners, and non-dealer businesses. CE data on vehicle purchases and trade-ins were combined to approximate total value of new vehicle purchases. CE data on used vehicle purchases, trade-ins, sales and losses were combined to approximate the value of net

transactions of used vehicles.

<sup>6</sup> The estimates include vehicle rentals, maintenance and repairs, and other vehicle charges. The estimates exclude aircraft rentals, vehicle licenses, vehicle inspection, and vehicle registration.

<sup>7</sup> CE estimates exclude expenditures for other properties.

NOTE: Sums may not equal totals due to rounding. Expenditure estimates for home ownership, insurance, capital improvements, health care, finance charges, education, and cash contributions are excluded from the comparisons.

SOURCE: The PCE data that are used in the comparisons are from unpublished detailed tabulations of the National Income and Product Accounts of the U.S. Department of Commerce, Bureau of Economic Analysis as of July 1994. For more information on PCE see U.S. Department of Commerce, Economics and Statistics Administration, Bureau of Economic Analysis, *National Income and Product Accounts of the United States: Volume 2, 1959-88 (1992) and Survey of Current Business*, July 1994.

Text table 7. Comparison of annual aggregate expenditures for food: Consumer Expenditure (CE) Diary Survey, Personal Consumption Expenditures (PCE), and trade association data, 1992-93

Food category	CE Diary survey (in billions)		Ratio of CE to PCE		Ratio of CE to <i>Supermarket Business</i>		Ratio of CE to <i>Progressive Grocer</i>	
	1992	1993	1992	1993	1992	1993	1992	1993
Food at home, total .....	\$260.2	\$268.4	0.74	0.74	1.10	1.11	1.20	1.20
Cereals and cereal products .....	14.1	16.0	.64	.73	1.02	1.12	1.16	1.22
Bakery products .....	27.0	27.3	.68	.65	1.08	1.05	1.23	1.20
Beef, pork, other meat, poultry .....	58.4	61.7	.81	.86	1.08	1.13	1.11	1.15
Fish and seafood .....	7.7	8.7	1.23	1.45	1.20	1.37	2.80	3.23
Eggs .....	2.8	3.0	1.08	1.28	2.07	2.11	1.50	1.51
Fresh milk and cream .....	13.4	12.8	1.21	1.09	1.80	1.72	1.49	1.42
Other dairy products .....	16.8	16.7	.78	.75	1.40	1.36	1.20	1.17
Fresh fruits and vegetables .....	25.4	26.9	.90	.95	.70	.72	.89	.91
Processed fruits and vegetables .....	16.5	17.4	.62	.59	1.11	1.11	1.43	1.45
Sugar and other sweets .....	10.2	11.3	.37	.39	1.35	1.48	2.18	2.26
Fats and oils .....	7.2	7.8	.78	.81	1.13	1.21	1.36	1.52
Nonalcoholic beverages .....	21.3	22.4	.51	.55	.98	1.03	1.14	1.14
Miscellaneous prepared foods .....	38.5	36.5	.83	.75	1.30	1.19	1.16	1.05

NOTE: Sums may not equal totals due to rounding.

SOURCE: PCE estimates are shown in U.S. Department of Commerce, Bureau of Economic Analysis, "National Income and Product Accounts," *Survey of Current Business*, July 1994. Detailed PCE estimates used in the com-

parisons are from unpublished annual PCE data. Supermarket Business, Inc., "Consumer Expenditure Study," *Supermarket Business*, FM Business Publications, Inc., September issues, 1993-94. Progressive Grocer Company, "The [year] Supermarket Sales Manual," *Progressive Grocer*, Maclean Hunter Media Inc., July issues, 1993-94.

Text table 8. Comparison of aggregate expenditures for health care: Consumer Expenditure (CE) Survey and National Health Accounts, 1990-93

Expenditure categories	CE survey (in billions)				Ratio of CE to National Health Accounts			
	1990	1991	1992	1993	1990	1991	1992	1993
Health care, total <sup>1</sup> .....	\$85	\$86	\$90	\$95	0.73	0.71	0.70	0.71
Medical commodities, total .....	33	34	38	40	.68	.66	.71	.73
Drugs and supplies .....	26	27	30	30	.64	.61	.66	.69
Medical equipment .....	6	7	7	10	.94	1.00	1.00	.99
Medical services, total .....	52	52	52	55	.77	.75	.69	.69
Professional services .....	46	44	44	48	.78	.72	.67	.67
Hospital care .....	7	9	8	8	.66	.91	.87	.83

<sup>1</sup> Excludes health insurance premiums, nursing home care, and medical equipment repairs.

NOTE: Sums may not equal totals due to rounding. CE Survey categories have been grouped as needed to match NHA.

SOURCE: NHA data used to obtain the ratios are from the U.S. Department of Health and Human Services, Health Care Financing Administration, "National Health Expenditures, 1993," *Health Care Financing Review*, Volume 16, Number 1, Fall 1994.