

# Consumer Expenditure Survey Comparisons with National Health Expenditures and the Current Population Survey

**National Health Expenditures.** The Centers for Medicare and Medicaid Services (CMS) of the U.S. Department of Health and Human Services publish annual data on total aggregate health care expenditures of the United States, referred to as National Health Expenditures (NHE). Total health care expenditures include expenditures for health care by all sources in the United States economy, including public and private sources. NHE 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 NHE is designed to cover the nursing home population, whereas the Consumer Expenditure Survey is not.

Bureau of Labor Statistics staff compared estimates of out-of-pocket personal health care expenditures from NHE with those from the Consumer Expenditure Survey. Out-of-pocket expenditures for health care include expenditures for medical care that are not covered by personal health insurance or other sources of payment. Such expenditures can include copayments and deductible amounts required by health insurance plans. To derive its out-of-pocket estimates, CMS uses data from administrative and industry sources, as well as Consumer Expenditure Survey data.

Text table 7 shows Consumer Expenditure Survey estimates of aggregate expenditures for health care (excluding health insurance, nonprescription vitamins, nursing home care, and repair and rental of medical equipment) and ratios to NHE estimates of out-of-pocket health care expenditures (excluding nursing home care). As reported in the Consumer Expenditure Survey, aggregate medical care expenditures, excluding those expenditure items reported above, were \$124.5 billion in 2003, or 62 percent of the NHE estimate of \$199.6 billion (excluding nursing home care expenditures). Of the Consumer Expenditure Survey total, \$60.3 billion was spent on medical commodities and \$64.2 billion on medical services. These amounts were 65 percent and 60 percent of the NHE estimates, respectively. Data show variations in the Consumer Expenditure Survey-to-NHE ratios over the 2000-2003 period for both medical commodities and medical services. Fluctuations can reflect volatility in spending on personal health care, due to changes in health insurance coverages. In addition, the comparison of health care

expenditures may reflect underreporting in the Consumer Expenditure Survey.

**Current Population Survey.** The U.S. Census Bureau collects income data in the Supplement to the Current Population Survey (CPS). The CPS is a household interview survey of approximately 60,000 households. Using data collected for calendar years 2001 through 2003, comparisons are made with Consumer Expenditure Survey estimates of total consumer unit income before taxes and by source of income. CPS estimates of aggregate income by source of income are derived from Census Bureau estimates of mean income of persons and the number of persons with the specified income.

There are several differences between the Consumer Expenditure Survey and the CPS in the concepts and methods of measuring income. The CPS collects data in March for the previous calendar year. By comparison, the Consumer Expenditure Survey estimates of income are obtained in the second and fifth interviews of the consumer unit. These estimates refer to the prior 12 months and, due to the rotating panel design of the survey, interviews may occur at any time during the year. Based on demographic characteristics, the Census Bureau imputes CPS income data that are missing (due to nonresponse to income questions). In contrast, income data that are missing in the Consumer Expenditure Survey, due to nonresponse, are not imputed as part of the Consumer Expenditure Survey estimation procedure; instead, Consumer Expenditure Survey income estimates are based on complete income reporters only. However, beginning in 2004, the Consumer Expenditure Survey began using imputed income information. Neither procedure accounts for underreporting.

Beginning in 2001, the interview portion of the Consumer Expenditure Survey included information collected from respondents using income ranges or brackets in addition to discrete income amounts, as provided prior to that time. Respondents who were unable or unwilling to provide a specific dollar amount were often willing to estimate a range for their income. Bracketed income data provide more reliable income estimates, because the bracketed data increases the percentage of households providing income data. Twenty-five percent of the respondents in the Consumer Expenditure

Survey Interview Survey were classified as incomplete reporters in 2000. By 2003, the percentage of incomplete income reporters had decreased to 16 percent. Correspondingly, the ratio of Consumer Expenditure Survey to CPS money income before taxes increased from 79 percent in 2000, to 88 percent in 2003.

In addition to the differences between the Consumer Expenditure Survey and the CPS described above, beginning in 1993, computer-assisted personal interviews (CAPI) were used to collect the CPS income data. By comparison, the Consumer Expenditure Survey began using CAPI to collect its data in 2003. Prior to then, Consumer Expenditure Survey data were collected by traditional paper and pencil interview.

Text table 8 shows that the Consumer Expenditure Survey estimates of total income before taxes are 81 to 88 percent of CPS for the 2001-to-2003 period. This reflects comparable

levels of estimates from the two surveys for the two largest sources of income—wages and salaries (largest source) and Social Security and Railroad Retirement Income. Also, some of the smaller sources of income were generally comparable between the two surveys: public assistance and Supplemental Security Income, and alimony, child support, and other regular financial support. Some differences in estimates are expected, because of methodology differences between the two surveys described above and because the CPS is designed specifically to collect income data, whereas the Consumer Expenditure Survey is designed primarily to collect expenditure data. In addition, the CPS population is slightly greater than that of the Consumer Expenditure Survey. Also, some of the variation in the ratios reflects the difficulty of obtaining income information via household survey that is experienced by both the Consumer Expenditure Survey and CPS.

Text table 7. Comparison of aggregate expenditures for health care: Consumer Expenditure Survey and National Health Expenditures program, 2000-2003

Expenditure categories	Aggregate consumer expenditures Consumer Expenditure Survey (in billions)				Ratio of Consumer Expenditure Survey to National Health Expenditures <sup>1</sup>			
	2000	2001	2002	2003	2000	2001	2002	2003
Health care, total <sup>2</sup> .....	\$109.5	\$114.6	\$125.2	\$124.5	0.66	0.66	0.67	0.62
Medical commodities, total .....	51.0	55.0	60.6	60.3	.67	.68	.70	.65
Drugs and supplies .....	42.8	47.2	52.2	51.8	.63	.66	.68	.62
Medical equipment .....	8.2	7.8	8.4	8.5	.92	.88	.94	.94
Medical services, total .....	58.5	59.6	64.6	64.2	.65	.64	.65	.60
Professional services .....	50.1	49.9	54.7	56.2	.65	.62	.64	.62
Physicians services .....	14.7	14.6	16.5	16.6	.39	.37	.40	.37
Dental services .....	24.1	24.3	25.4	26.2	.89	.86	.82	.80
Other professional services .....	11.2	11.0	12.7	13.4	.97	.89	.98	1.01
Hospital care .....	8.4	9.7	9.9	8.0	.66	.72	.67	.49

<sup>1</sup>National Health Expenditures data are out-of-pocket expenditures.

<sup>2</sup>Excludes health insurance premiums, nonprescription vitamins, nursing home care, rental of medical equipment, and repair of medical equipment.

NOTE: Sums may not equal totals, due to rounding. Consumer

Expenditure Survey categories have been grouped, as needed, to match those used in the National Health Expenditures program.

SOURCE: The National Health Expenditures data used to obtain the ratios are from the U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services. Data are available online at [www.cms.hhs.gov](http://www.cms.hhs.gov).

Text table 8. Comparison of money income before taxes: Consumer Expenditure Survey and Current Population Survey (CPS), 2001-2003

Income categories	Aggregate money income before taxes <sup>1</sup> Consumer Expenditure Survey (in billions)			Ratio of Consumer Expenditure Survey to CPS		
	2001	2002	2003	2001	2002	2003
Money income before taxes <sup>2</sup> .....	\$5,217	\$5,515	\$5,870	0.81	0.85	0.88
Wage and salary income .....	4,320	4,469	4,753	.85	.88	.92
Self-employment income .....	246	251	247	.75	.78	.69
Social Security and railroad retirement income .....	354	375	382	.93	.96	.93
Unemployment, workers compensation, and veterans benefits .....	19	26	31	.26	.29	.34
Public assistance and Supplemental Security Income .....	35	32	27	1.08	1.00	.76
Pensions and annuities .....	194	212	264	.72	.74	.87
Interest, dividends, rents, royalties, estates and trusts .....	105	104	127	.31	.38	.41
Alimony, child support, and other regular financial support .....	35	46	40	.80	1.06	.90

<sup>1</sup>Consumer Expenditure Survey data are for complete reporters of income.

<sup>2</sup>Excludes the value of food stamps, meals as pay, rent as pay, and other income from the Consumer Expenditure Survey and educational assistance and other income from the CPS.

NOTE: Sums may not equal totals due to rounding. CPS

categories have been grouped, as needed, to match those in the Consumer Expenditure Survey.

SOURCE: CPS data for 2001-2003 are from the U.S. Census Bureau Annual Demographic Survey, March Supplement, available on the internet at [www.census.gov/cps/ads/adsmain.htm](http://www.census.gov/cps/ads/adsmain.htm).