

Consumer Expenditure Survey compared with Personal Consumption Expenditures

The U.S. Bureau of Labor Statistics (BLS) Consumer Expenditure Survey (CE) routinely compares its expenditure estimates with outside sources to assess the integrity and reliability of CE data. The Personal Consumption Expenditures (PCE) component of the National Income and Product Accounts produced by the Bureau of Economic Analysis (BEA) is the principal independent source of comparable aggregate spending data. While the two sources obtain their estimates in dissimilar ways and serve distinct purposes, they both ultimately measure expenditures made by consumers, and thus serve as a valuable check on each other's data at any given point in time. It is to be expected that differences in survey methodology, definitions, and scope would lead to different expenditure estimates. Indeed, CE values are generally less than the corresponding PCE estimates, often by a wide margin. If, however, the ratio of CE-to-PCE estimates is relatively stable, it reflects favorably on survey consistency over a period of time. Frequent data comparisons have been made between the CE and PCE since the early 1980s, when the CE became an ongoing survey. Initially CE-to-PCE ratios were believed to be stable, but recent studies by BLS economists showed that ratios decreased from 1992 to 2002. An article in a 2006 CE report⁶ determined the CE/PCE ratio of all comparable goods (among durables, nondurables, and services) was 0.88 in 1992 and 0.86 in 1997. By 2002, the CE/PCE ratio had fallen to 0.83. This divergence could be attributable to any number of factors in either or both sources, and more research is needed to determine the causes. The purpose of this article is to look at the latest CE-to-PCE ratios using the most recent data available and determine if the trend is continuing. It appears that the downward trend is abating; the CE ratio for all comparable goods leveled off at 0.83 for all years from 2002 to 2005.

Survey Comparability

The CE and PCE have the same goal—to measure personal consumption expenditures—but accomplish this objective in very different ways. The CE is a household survey, while the PCE is derived from sources that focus on industries. The CE gathers data from consumer units that represent the civilian, non-institutional population of the United States, while the PCE covers all persons resident in the United States, as well as non-profit institutions. As such, there are

widespread differences in definitions and scope, so it is to be expected that total estimates may differ. Some expenditure categories are defined differently by the CE and PCE. The CE collects out-of-pocket expenditures, such as for education or contributions to retirement plans, whereas the PCE estimates these expenditures using data from institutional sources, such as the operating expenses of private educational institutions or the administrative expenses of pension plan managers. Differences in scope between the CE and PCE include, for example, that the PCE captures expenditures made by third parties for the consumer unit, such as employer-paid health benefits, while the CE only collects those expenditures made directly by the consumer unit. Additionally, the CE collects spending on used vehicles, whereas the PCE excludes purchases of used vehicles. New methodology developed by BLS researchers has isolated comparable categories between the surveys. Minor dissimilarities may still exist amongst comparable items, but these differences do not to have a significant impact on the estimates.

Detailed Results

Text table 3 displays aggregate CE and PCE estimates and CE-to-PCE ratios for all major PCE categories for 2002 through 2005, the most recent years for which published data are available. The PCE values are annual updates based on 2002 benchmark estimates. Text table 4 shows the specific categories for which the CE and PCE have been determined conceptually comparable. As mentioned previously, the CE/PCE ratio for total comparable durables, nondurables and services has been steady at 0.83 for the last 4 years (2002–2005).

Durables

Durables include the very broad categories of motor vehicles and parts; furniture and household equipment; and other durable goods. Each of the three major categories is comprised of many smaller groups, as shown in text table 3. The comparable items as listed in text table 4 are: new autos; furniture, including mattresses and bedsprings; kitchen and other household appliances; video and audio goods, including musical instruments and computer goods; and wheel goods (including bicycles and motorcycles), sports (also includes guns) and photographic equipment, boats, and pleasure aircraft. From 2002 to 2005, the CE/PCE ratio for total comparable durables is 0.75, 0.75, 0.68, and 0.71 respectively.

⁶ *Consumer Expenditure Survey, 2002–2003*, Report 990. U.S. Department of Labor, U.S. Bureau of Labor Statistics, March 2006.

Durables is a category for which the ratios are generally higher, as auto purchases are typically higher in the CE. New autos, a category for which the CE traditionally reports higher values than the PCE, with ratios well above 1, has shown volatility in its ratio recently. The ratio for new autos was 1.10 in 2002, 1.23 in 2003, then fell to 0.94 in 2004, but rose to 1.06 in 2005. An explanation for this variability may be that only about 3.5–4 percent of CE survey respondents list new car purchases each year. This low response rate, coupled with the CE's random sample may account for recent fluctuations in this category. The combination of low percent reporting and a large expenditure, in a particular category, means that small changes in the percent reporting that expenditure can cause fluctuations. As for other durables, wheel goods saw decreasing ratios, dropping from 0.72 in 2002 to 0.52 in 2005. Ratios for the three remaining comparable groups rose slightly over the same period.

Nondurables

Nondurables is comprised of four major categories: food; clothing and shoes; gasoline, fuel oil, and other energy goods; and other nondurables. The comparable items within these broad categories are: food purchased for off-premise consumption; alcoholic beverages purchased for off-premise consumption; purchased meals and beverages; alcoholic beverages in purchased meals; shoes; women's and children's clothing and accessories except shoes (also includes clothing for infants); men's and boys' clothing and accessories except shoes; gasoline, fuel oil, and other energy goods; tobacco products; and toilet articles and preparations. The CE/PCE ratio for total nondurable goods oscillated slightly from 2002 to 2005: it was 0.63 in 2002, 0.61 in 2003, 0.64 in 2004, and 0.62 in 2005. Ratios for alcoholic beverages in purchased meals, as well as for tobacco, both increased slightly over the four year period. The ratio for alcoholic beverages in purchased meals rose steadily every year, beginning at 0.40 and ending at 0.51. The ratio for alcoholic beverages purchased for off-premise consumption fell by 7 percentage points over the same period. The tobacco products CE-to-PCE ratio actually dropped in 2003, but in 2005 it was 0.41, just a trace higher than it was in 2002. The remaining comparable categories exhibited slight fluctuations with no major changes.

Services

Services make up a large part of total expenditures and include eight major categories: housing and household

operations; transportation; medical care; recreation; personal care; personal business; education and research; and religious and welfare activities. Due to conceptual differences between CE and PCE, most of these categories are not comparable. Housing, household operations, and transportation contain comparable items, all of which are listed in table 2. The CE/PCE ratio for total comparable services rose slightly; it was 1.03 in 2002, 1.04 in 2003 and 2004, and increased to 1.05 in 2005. Two sub-categories had CE-to-PCE ratios above 1—owner-occupied dwellings and other household operations (i.e., moving and storage, household insurance, rug and furniture cleaning, electrical repair, reupholstery and furniture, postage, household operation services not elsewhere classified). The owner occupied nonfarm dwelling ratio did not change significantly; other household operations increased slightly every year. The telephone and telegraph ratio increased more than any other services item, rising from .83 in 2002 to .90 in 2005, with increases every year. Additionally, the rent and utilities ratio rose by 4 percentage points over the period. The ratio for other lodging decreased from 0.68 in 2002 to 0.60 in 2005. The transportation ratio fell as well, dropping 6 percentage points over the 4-year period. The cleaning, storage, and repair of clothing and shoes ratio decreased 4 percentage points. None of the remaining comparable categories changed appreciably over the period.

Summary

The CE and PCE both measure consumer expenditures; but even when accounting for comparability, discrepancies in survey methodology, scope, and concepts lead to unequal CE-to-PCE ratios. There has been a decreasing trend in ratios since the 1990s, but recent data show that this trend may have run its course. The CE/PCE ratio for total comparable items has been steady at 0.83 from 2002-2005. Ratios for comparable durable goods have decreased slightly, while services ratios have increased and nondurable goods have remained mostly unchanged. Questions on discrepancies between the CE and PCE remain even with the steady ratios of recent years. BLS staff continue to examine the issue of CE and PCE comparability. For further discussion of differences in coverage and methodology between the CE and PCE, see the Monthly Labor Review article "The CE and the PCE: a Comparison" in the September 2006 issue.⁷

⁷Garner, Thesia I., George Janini, William Passero, Laura Paszkiewicz, Mark Vendemia – "The CE and the PCE: a Comparison," *Monthly Labor Review*, Vol. 129 No. 9, pp 20-46, September 2006.

Text Table 3. Comparison of 2002-2005 Aggregate Consumer Expenditures vs. Personal Consumption Expenditures based on 2002 PCE benchmark (\$ millions)

PCE categories	2002			2003			2004			2005		
	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio
	PCE	CE		PCE	CE		PCE	CE		PCE	CE	
Total durables, nondurables, and services	7,350,721	4,457,246	0.61	7,703,634	4,637,379	0.60	8,211,504	4,933,388	0.60	8,742,350	5,271,179	0.60
Durable goods	923,940	693,653	.75	942,663	731,483	.78	986,260	725,419	.74	1,033,072	779,874	.75
Motor vehicles and parts	429,264	436,625	1.02	431,709	471,579	1.09	437,940	441,508	1.01	448,218	468,669	1.05
New autos ¹	101,703	111,924	1.10	97,175	119,911	1.23	97,653	91,625	.94	103,661	109,714	1.06
Net purchases of used autos	60,355	112,513	1.86	54,848	84,314	1.54	54,924	82,256	1.50	58,539	84,960	1.45
Other motor vehicles	216,911	195,506	.90	227,648	251,005	1.10	231,010	250,221	1.08	227,292	255,471	1.12
Trucks, new and net used	204,602	183,394	.90	214,168	231,479	1.08	216,294	232,218	1.07	211,075	231,771	1.10
Recreational vehicles	12,309	12,112	.98	13,480	19,526	1.45	14,716	18,003	1.22	16,217	23,700	1.46
Tires, tubes, accessories and other parts	50,295	16,682	.33	52,038	16,349	.31	54,353	17,406	.32	58,726	18,524	.32
Furniture and household equipment	323,095	180,432	.56	331,507	185,954	.56	356,499	200,756	.56	377,195	227,115	.60
Furniture, including mattresses and bedsprings ¹	68,913	46,171	.67	70,187	47,692	.68	75,461	49,807	.66	79,040	56,021	.71
Kitchen and other household appliances ¹	31,987	33,666	1.05	32,786	35,140	1.07	34,866	38,946	1.12	37,216	40,853	1.10
China, glassware, tableware, and utensils	32,346	8,660	.27	33,124	7,511	.23	34,946	9,579	.27	36,493	9,421	.26
Video and audio goods, including musical instruments and computer goods ¹	120,010	51,134	.43	123,096	51,639	.42	133,400	53,306	.40	141,186	63,568	.45
Video and audio goods incl. musical instruments ¹	75,413	33,617	.45	76,477	33,788	.44	81,790	35,422	.43	85,782	43,060	.50
Computers, peripherals, and software ¹	44,597	17,517	.39	46,619	17,851	.38	51,610	17,864	.35	55,404	20,508	.37
Other durable house furnishings (i.e. floor coverings, lamps, blinds, writing equipment, hand tools, and supplies)	69,839	40,801	.58	72,314	43,972	.61	77,826	49,118	.63	83,260	57,252	.69
Other durable goods	171,581	76,596	.45	179,447	73,950	.41	191,821	83,155	.43	207,659	84,090	.40
Ophthalmic products and orthopedic appliances	21,895	8,122	.37	22,360	8,147	.36	23,359	8,132	.35	24,974	8,231	.33
Wheel goods, including bicycles and motorcycles, sports and photographic equipment, boats and pleasure aircraft ¹	61,399	43,976	.72	65,578	37,461	.57	71,402	45,985	.64	81,538	42,248	.52
Jewelry and watches	51,228	11,577	.23	52,835	15,837	.30	56,470	15,725	.28	58,913	19,285	.33
Books and maps	37,059	12,921	.35	38,674	12,505	.32	40,590	13,313	.33	42,234	14,326	.34
Nondurable goods	2,079,633	1,212,863	.58	2,190,197	1,231,571	.56	2,345,180	1,378,620	.59	2,539,295	1,455,393	.57
Food	1,001,902	659,973	.66	1,045,969	679,381	.65	1,114,782	746,620	.67	1,201,390	763,496	.64
Food purchased for off-premise consumption ¹	612,237	389,640	.64	636,018	407,852	.64	677,906	444,202	.66	733,995	432,243	.59
Alcoholic beverages purchased for off-premise ¹	75,283	25,497	.34	78,491	27,642	.35	86,172	32,306	.37	96,459	25,901	.27
Purchased meals and beverages ¹	379,461	267,770	.71	399,018	268,497	.67	425,484	299,575	.70	455,088	328,110	.72
Alcoholic beverages in purchased meals ¹	40,728	16,487	.40	42,790	17,386	.41	44,874	20,986	.47	47,680	24,080	.51
Food supplied to civilians	9,052	2,563	.28	9,557	3,032	.32	10,033	2,843	.28	10,520	3,193	.30
Food supplied to military	676	0	.00	907	0	.00	865	0	.00	1,298	0	.00
Food produced and consumed on farms	476	0	.00	469	0	.00	495	0	.00	489	0	.00
Clothing and shoes	303,501	170,775	.56	310,922	160,942	.52	325,137	183,306	.56	341,809	189,542	.55
Shoes ¹	49,526	34,960	.71	50,333	33,823	.67	51,943	38,138	.73	54,245	37,536	.69
Women's and children's clothing and accessories except shoes ¹	149,993	87,889	.59	153,689	82,418	.54	161,438	94,829	.59	170,221	98,009	.58
Men's and boys' clothing and accessories except shoes ¹	92,874	45,769	.49	95,256	42,800	.45	99,742	47,147	.47	104,850	51,561	.49
Standard clothing issued to military personnel	358	0	.00	546	0	.00	343	0	.00	350	0	.00
Sewing good for males and females	6,467	1,486	.23	6,649	1,188	.18	7,073	2,422	.34	7,359	1,629	.22
Luggage for males and females	4,283	671	.16	4,449	713	.16	4,598	771	.17	4,784	807	.17

Text Table 3. Comparison of 2002-2005 Aggregate Consumer Expenditures vs. Personal Consumption Expenditures based on 2002 PCE benchmark (\$ millions)—Continued

PCE categories	2002			2003			2004			2005		
	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio
	PCE	CE		PCE	CE		PCE	CE		PCE	CE	
Gasoline, fuel oil, and other energy goods ¹	178,768	148,800	.83	209,607	166,716	.80	248,792	200,124	.80	302,138	253,297	.84
Other nondurable goods.....	595,462	233,315	.39	623,699	224,532	.36	656,469	248,569	.38	693,598	242,095	.35
Tobacco products ¹	89,156	35,668	.40	88,033	33,255	.38	87,523	33,270	.38	90,036	37,163	.41
Toilet articles and preparations ¹	54,401	31,144	.57	55,971	31,292	.56	58,230	37,011	.64	61,667	32,332	.52
Semi durable house furnishings.....	37,805	16,258	.43	39,011	14,168	.36	41,157	20,368	.49	43,475	17,203	.40
Cleaning and polishing preparations and miscellaneous household supplies.....	66,262	46,275	.70	68,983	45,707	.66	72,928	51,105	.70	77,700	53,445	.69
Drug preparations and sundries.....	213,118	57,980	.27	233,643	57,666	.25	251,338	60,373	.24	265,724	65,151	.25
Nondurable toys and sport supplies.....	59,231	16,107	.27	60,642	14,214	.23	63,505	14,053	.22	67,233	13,168	.20
Stationery and writing supplies.....	18,333	14,609	.80	18,431	15,056	.82	18,820	18,832	1.00	19,619	17,470	.89
Net foreign remittances.....	4,035	0	.00	4,784	0	.00	5,044	0	.00	5,024	0	.00
Magazines, newspapers, and sheet music.....	35,111	9,108	.26	36,292	8,480	.23	39,596	8,696	.22	43,751	7,736	.18
Flowers, seeds, and potted plants.....	18,010	6,166	.34	17,909	4,694	.26	18,329	4,862	.27	19,738	5,388	.27
Services.....	4,347,148	2,550,730	.59	4,570,774	2,674,325	.59	4,880,064	2,829,349	.58	5,169,983	3,035,912	.59
Housing and Household operations ¹	1,530,788	1,647,839	1.08	1,591,191	1,743,165	1.10	1,686,073	1,830,483	1.09	1,787,064	1,965,864	1.10
Owner occupied nonfarm dwellings ¹	809,035	1,014,126	1.25	846,353	1,079,220	1.28	910,117	1,135,957	1.25	963,343	1,215,065	1.26
Rent and utilities, excluding telephone ¹	455,358	424,634	.93	470,397	451,468	.96	486,176	466,250	.96	520,946	507,667	.97
Tenant occupied nonfarm dwellings ¹	247,773	240,872	.97	245,288	250,031	1.02	248,881	255,095	1.02	256,999	273,639	1.06
Electricity ¹	111,748	109,987	.98	115,596	118,577	1.03	121,066	123,772	1.02	134,242	135,543	1.01
Gas ¹	40,734	36,967	.91	51,689	45,221	.87	55,487	49,305	.89	65,525	55,562	.85
Water and other sanitary services ¹	55,103	36,808	.67	57,824	37,639	.65	60,742	38,078	.63	64,180	42,923	.67
Rental value of farm dwellings ¹	11,678	0	.00	12,206	0	.00	12,013	0	.00	13,812	0	.00
Other lodging ¹	54,627	37,333	.68	57,961	33,992	.59	64,151	39,027	.61	69,913	41,720	.60
Telephone and telegraph ¹	128,752	107,258	.83	129,721	110,246	.85	132,932	115,144	.87	135,955	122,946	.90
Domestic service ¹	16,732	8,958	.54	18,474	10,743	.58	19,592	10,332	.53	19,894	10,813	.54
Other household operations (moving and storage, insurance, furniture cleaning, electrical repair, postage, household operation services not elsewhere classified) ¹	54,606	55,530	1.02	56,079	57,496	1.03	60,192	63,771	1.06	63,201	67,653	1.07
Transportation ¹	288,430	252,818	.88	297,308	244,558	.82	307,781	262,908	.85	320,429	263,838	.82
Repair, greasing, washing, parking storage, and leasing ¹	185,951	107,196	.58	186,818	93,441	.50	189,498	96,869	.51	195,560	101,565	.52
Bridge, tunnel, ferry tolls ¹	5,270	1,624	.31	5,510	1,928	.35	5,734	2,232	.39	6,006	2,218	.37
Insurance ¹	45,842	100,168	2.19	49,233	104,428	2.12	53,695	112,139	2.09	58,141	107,187	1.84
Mass transit systems ¹	9,000	7,266	.81	9,519	7,036	.74	10,166	6,990	.69	10,826	7,977	.74
Taxicab ¹	3,336	2,833	.85	3,500	2,485	.71	3,648	3,372	.92	3,886	2,862	.74
Railway ¹	573	1,804	3.15	563	1,854	3.29	568	2,074	3.65	578	2,278	3.94
Bus ¹	2,353	1,287	.55	2,322	1,033	.44	2,254	1,087	.48	2,175	1,420	.65
Airline ¹	28,319	27,306	.96	31,216	29,135	.93	33,070	32,087	.97	33,834	33,422	.99
Other including water passenger, passenger transportation arrangement, limousine service, other local transportation ¹	7,786	3,334	.43	8,627	3,218	.37	9,149	6,058	.66	9,424	4,908	.52
Medical care.....	1,206,198	197,331	.16	1,300,531	212,917	.16	1,395,745	230,901	.17	1,493,411	239,348	.16
Physicians.....	277,204	16,539	.06	300,550	16,569	.06	322,204	17,044	.05	342,431	18,057	.05
Dentists.....	72,162	25,447	.35	74,601	26,214	.35	80,163	27,978	.35	85,492	29,848	.35
Other professional services.....	188,238	13,164	.07	201,788	13,961	.07	217,151	15,613	.07	232,045	17,456	.08
Hospitals.....	475,061	9,875	.02	509,268	8,006	.02	541,182	10,607	.02	579,782	11,083	.02
Nursing homes.....	96,960	1,397	.01	101,496	3,784	.04	104,620	4,806	.05	111,496	3,213	.03
Health insurance.....												
Medical care and hospitalization health insurance.....	80,138	130,909	1.63	95,015	144,383	1.52	111,209	154,854	1.39	121,633	159,691	1.31
Income loss insurance.....	1,999	0	.00	2,167	0	.00	2,353	0	.00	2,572	0	.00
Workers' compensation.....	14,436	0	.00	15,646	0	.00	16,863	0	.00	17,962	0	.00
Recreation.....	299,055	151,663	.51	317,705	161,789	.51	341,552	170,882	.50	360,632	194,587	.54
Admissions to all events ¹	34,777	21,888	.63	36,032	21,312	.59	37,392	22,390	.60	38,324	25,566	.67
Motion picture theater, theatre, opera, and entertainment.....	21,276	16,129	.76	21,773	15,688	.72	22,248	16,336	.73	22,468	18,300	.81

Text Table 3. Comparison of 2002-2005 Aggregate Consumer Expenditures vs. Personal Consumption Expenditures based on 2002 PCE benchmark (\$ millions)—Continued

PCE categories	2002			2003			2004			2005		
	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio
	PCE	CE		PCE	CE		PCE	CE		PCE	CE	
Spectator sports	13,501	5,759	.43	14,259	5,624	.39	15,144	6,054	.40	15,856	7,266	.46
Radio and television repair ¹	4,089	360	.09	4,109	401	.10	4,601	459	.10	4,754	446	.09
Clubs and fraternal organizations	21,117	12,098	.57	22,209	10,966	.49	22,271	11,417	.51	23,453	14,645	.62
Commercial participant amusements ...	83,725	21,032	.25	91,205	19,575	.21	100,713	21,548	.21	107,307	23,160	.22
Pari-mutual net receipts	5,312	5,491	1.03	5,235	5,000	.95	5,644	8,250	1.46	6,180	9,448	1.53
Other including pets and pet services, veterinarians, cable TV, film developing, lotteries, video rental, commercial amusements not elsewhere classified	150,035	90,794	.61	158,914	104,535	.66	170,932	106,818	.62	180,613	121,323	.67
Personal care	94,590	43,015	.45	99,459	43,415	.44	108,898	44,400	.41	114,607	45,819	.40
Cleaning, storage, and repair of clothing and shoes ¹	15,797	13,501	.85	15,169	12,570	.83	15,743	12,317	.78	15,763	12,786	.81
Barbershops, beauty parlors, and health clubs	42,330	27,893	.66	44,432	29,549	.67	48,409	30,709	.63	50,515	31,401	.62
Other including watch, clock, and jewelry repair, miscellaneous personal services	36,463	1,621	.04	39,858	1,296	.03	44,746	1,373	.03	48,329	1,632	.03
Personal business	546,990	40,022	.07	559,662	32,063	.06	612,448	37,097	.06	647,862	38,282	.06
Brokerage charges and investment counseling	76,516	0	.00	77,373	0	.00	88,630	0	.00	90,461	0	.00
Bank service charges, trust services, and safe deposit box rental	75,929	3,652	.05	81,807	2,980	.04	89,294	2,829	.03	99,856	3,091	.03
Services furnished by financial intermediaries except life insurance carriers	186,482	0	.00	180,921	0	.00	197,435	0	.00	203,709	0	.00
Expense of handling life insurance and pension plans	84,869	0	.00	85,869	0	.00	98,724	0	.00	106,932	0	.00
Legal services	71,249	14,910	.21	78,127	12,469	.16	81,988	14,826	.18	85,579	14,637	.17
Funeral and burial expenses	14,780	10,534	.71	15,885	8,165	.51	15,570	9,217	.59	15,990	9,321	.58
Other personal business including union expenses, professional association expenses, employment agency expenses, money orders, classified ads, tax return services, personal business services not elsewhere classified	37,165	10,926	.29	39,680	8,449	.21	42,808	10,224	.24	45,335	11,232	.25
Education and research	190,179	93,658	.49	203,096	97,770	.48	213,567	110,890	.52	226,497	121,967	.54
Higher education	103,147	52,716	.51	112,566	59,115	.53	119,573	68,629	.57	126,844	70,956	.56
Nursery, elementary, and secondary schools	38,421	38,080	.99	40,473	36,191	.89	42,472	39,107	.92	44,763	47,127	1.05
Elementary and secondary schools	28,323	14,455	.51	29,844	14,409	.48	31,404	16,605	.53	33,218	20,720	.62
Nursery schools	10,098	23,625	2.34	10,629	21,782	2.05	11,068	22,502	2.03	11,545	26,407	2.29
Other education and research	48,611	2,862	.06	50,057	2,464	.05	51,523	3,154	.06	54,890	3,885	.07
Commercial and vocational schools	33,319	0	.00	34,552	0	.00	35,580	0	.00	38,124	0	.00
Foundations and nonprofit research	15,292	0	.00	15,505	0	.00	15,943	0	.00	16,766	0	.00
Religious and welfare activities	200,090	124,384	.62	207,142	138,648	.67	218,958	141,789	.65	224,473	166,207	.74
All contributions including religion (CE) .....	...	110,900	...	...	126,569	...	...	129,440	...	...	154,864	...
Political organizations	3,626	...	...	962	...	...	4,674	...	...	812	...	...
Museums and libraries	8,501	...	...	8,980	...	...	9,070	...	...	9,432	...	...
Foundations to religion and welfare	11,838	...	...	12,218	...	...	12,693	...	...	13,141	...	...
Social welfare	30,280	7,107	.23	32,151	6,926	.22	33,789	7,350	.22	35,297	8,244	.23
Child care .....	...	...	...	...	...	...	...	...	...	...	...	...
Social welfare including membership organizations, job training, residential care, individual and family services, social services not elsewhere classified, and civic-social-fraternal associations	94,897	6,377	.07	100,967	5,153	.05	103,774	4,999	.05	108,404	3,099	.03
Religion	50,948	0	.00	51,864	0	.00	54,957	0	.00	57,387	0	.00
Net foreign travel	-9,172	0	.00	-5,320	0	.00	-4,958	0	.00	-4,993	0	.00

¹ Indicates comparable CE and PCE items.

Text Table 4. Summary Comparison of Aggregate Consumer Expenditures vs. Personal Consumption Expenditures for 2002-2005 (\$ millions)
 Restricted to Most Comparable Based on Concepts and Comprehensiveness

PCE categories	2002			2003			2004			2005		
	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio	Aggregates		CE/ PCE ratio
	PCE	CE		PCE	CE		PCE	CE		PCE	CE	
Total Durables, Nondurables, and Services (Comparable).....	3,980,320	3,306,901	0.83	4,141,837	3,427,180	0.83	4,405,576	3,655,812	0.83	4,725,354	3,901,136	0.83
All items (including those not comparable).....	7,350,721	4,457,246	.61	7,703,634	4,637,379	.60	8,211,504	4,933,388	.60	8,742,350	5,271,179	.60
Ratio of most comparable to all items ..	54	.74		.54	.74		.54	.74		.54	.74	
Durable Goods												
Total comparable	384,012	286,871	.75	388,822	291,843	.75	412,782	279,669	.68	442,641	312,404	.71
All durables (including those not comparable).....	923,940	693,653	.75	942,663	731,483	.78	986,260	725,419	.74	1,033,072	779,874	.75
Ratio of most comparable to all durables .....	.42	.41		.41	.40		.42	.39		.43	.40	
New autos.....	101,703	111,924	1.10	97,175	119,911	1.23	97,653	91,625	.94	103,661	109,714	1.06
Furniture, including mattresses and bedsprings	68,913	46,171	.67	70,187	47,692	.68	75,461	49,807	.66	79,040	56,021	.71
Kitchen and other household appliances.....	31,987	33,666	1.05	32,786	35,140	1.07	34,866	38,946	1.12	37,216	40,853	1.10
Video and audio good, including musical instruments, and computer goods	120,010	51,134	.43	123,096	51,639	.42	133,400	53,306	.40	141,186	63,568	.45
Wheel goods (including bicycles and motorcycles), sports (also includes guns) and photographic equipment, boats and pleasure aircraft	61,399	43,976	.72	65,578	37,461	.57	71,402	45,985	.64	81,538	42,248	.52
Nondurable Goods												
Total comparable	1,722,427	1,083,624	.63	1,809,206	1,111,681	.61	1,942,104	1,247,588	.64	2,116,379	1,320,232	.62
All nondurables (including those not comparable).....	2,079,633	1,212,863	.58	2,190,197	1,231,571	.56	2,345,180	1,378,620	.59	2,539,295	1,455,393	.57
Ratio of most comparable to all nondurables .....	.83	.89		.83	.90		.83	.90		.83	.91	
Food purchased for off-premise consumption	612,237	389,640	.64	636,018	407,852	.64	677,906	444,202	.66	733,995	432,243	.59
Alcoholic beverages purchased for off-premise consumption.....	75,283	25,497	.34	78,491	27,642	.35	86,172	32,306	.37	96,459	25,901	.27
Purchased meals and beverages	379,461	267,770	.71	399,018	268,497	.67	425,484	299,575	.70	455,088	328,110	.72
Alcoholic beverages in purchased meals	40,728	16,487	.40	42,790	17,386	.41	44,874	20,986	.47	47,680	24,080	.51
Shoes	49,526	34,960	.71	50,333	33,823	.67	51,943	38,138	.73	54,245	37,536	.69
Women's and children's clothing and accessories except shoes (also includes clothing for infants)	149,993	87,889	.59	153,689	82,418	.54	161,438	94,829	.59	170,221	98,009	.58
Men's and boys' clothing and accessories except shoes.....	92,874	45,769	.49	95,256	42,800	.45	99,742	47,147	.47	104,850	51,561	.49
Gasoline, fuel oil, and other energy goods	178,768	148,800	.83	209,607	166,716	.80	248,792	200,124	.80	302,138	253,297	.84
Tobacco products	89,156	35,668	.40	88,033	33,255	.38	87,523	33,270	.38	90,036	37,163	.41
Toilet articles and preparations.....	54,401	31,144	.57	55,971	31,292	.56	58,230	37,011	.64	61,667	32,332	.52
Services.....												
Total comparable	1,873,881	1,936,406	1.03	1,943,809	2,023,656	1.04	2,050,690	2,128,555	1.04	2,166,334	2,268,500	1.05
All services (including those not comparable).....	4,347,148	2,550,730	.59	4,570,774	2,674,325	.59	4,880,064	2,829,349	.58	5,169,983	3,035,912	.59
Ratio of most comparable to all services.....	.43	.76		.43	.76		.42	.75		.42	.75	
Owner occupied nonfarm dwellings.....	809,035	1,014,126	1.25	846,353	1,079,220	1.28	910,117	1,135,957	1.25	963,343	1,215,065	1.26
Rent and utilities, excluding telephone	455,358	424,634	.93	470,397	451,467	.96	486,176	466,250	.96	520,946	507,667	.97
Rental value of farm dwellings.....	11,678	0	.00	12,206	0	.00	12,013	0	.00	13,812	0	.00
Other lodging	54,627	37,333	.68	57,961	33,992	.59	64,151	39,027	.61	69,913	41,720	.60
Telephone and telegraph	128,752	107,258	.83	129,721	110,246	.85	132,932	115,144	.87	135,955	122,946	.90
Domestic service	16,732	8,958	.54	18,474	10,743	.58	19,592	10,332	.53	19,894	10,813	.54
Other household operations (i.e., moving and storage, household insurance, rug and furniture cleaning, electrical repair, reupholstery and furniture, postage, household operation services not elsewhere classified) ..	54,606	55,530	1.02	56,079	57,496	1.03	60,192	63,771	1.06	63,201	67,653	1.07
Transportation.....	288,430	252,818	.88	297,308	246,209	.83	307,781	262,908	.85	320,429	263,838	.82
Admissions to all events	34,777	21,888	.63	36,032	21,312	.59	37,392	22,390	.60	38,324	25,566	.67
Radio and television repair	4,089	360	.09	4,109	401	.10	4,601	459	.10	4,754	446	.09
Cleaning, storage, and repair of clothing and shoes.....	15,797	13,501	.85	15,169	12,570	.83	15,743	12,317	.78	15,763	12,786	.81