Comparison of Estimates from the Consumer Expenditure Survey with 2002 Benchmark Personal Consumption Expenditures from the National Income and Product Accounts

Bill Passero

Senior Economist
Division of Consumer Expenditure Surveys
2010 American Council on Consumer
Interests Annual Conference
April 15, 2010



Data comparisons: Why needed?

- Such comparisons provide:
 - ► A sense of degree and direction of possible survey errors, rather than an exact measure of bias
 - ► Specific estimates from other sources are not necessarily the "truth"
- Data comparisons are employed to:
 - Assess the cumulative effects of non-sampling errors on quality of CE data
 - Develop methodological studies to improve quality



Issues in Comparing CE and PCE

- Populations
- In PCE but out of scope for CE
- In CE but out of scope for PCE
- Partly out of scope for CE
 - ► Non-profit institutions serving households
 - ► Employer payments
- Components operationally defined differently



Basics

- CE
 - ► Household Surveys
 - Periodicity
 - Annual
 - Quarterly
 - Monthly
 - Weekly
 - Expenditures
 - Value of goods and services purchased by consumers
 - Social Security contributions

- PCE
 - Establishment Surveys
 - Periodicity
 - Benchmark (detailed)
 - Annual
 - Quarterly
 - Monthly
 - Expenditures
 - Value of goods and services purchased by the personal sector



In PCE Out of Scope for CE

Population

- ► Employees of U.S. businesses working abroad and U.S. government and military personnel stationed abroad
- Military living on-base in the U.S.
- ► All persons in institutions and the homeless for whom expenditures are made
- ► Non-profit institutions serving households
- Expenditures
 - ► Value of home production for own consumption on farms
 - Standard clothing issued to military
 - Services furnished without payment by financial intermediaries except life insurance carriers



Further Differences

- Intra-sector household transactions, such as for used cars or used clothing are in scope for CE and out of scope for PCE
- PCE items partly out of scope for CE and partly defined differently
 - ► Health Care Expenditures
 - ► Religious and Welfare
- Defined differently
 - ► Education expenditures
 - ► Life insurance and pension plans
 - Owner-occupied housing expenditures (publication)



Update of 2006 BLS Study

- Total Expenditures
- Comparables
 - ▶ To compare CE and PCE data, CE items are grouped into PCE detailed categories
 - ► In many instances, there is no perfect match between the CE and PCE items assigned to an aggregate category
 - ► In some cases, adjustments were made to published CE categories for greater comparability



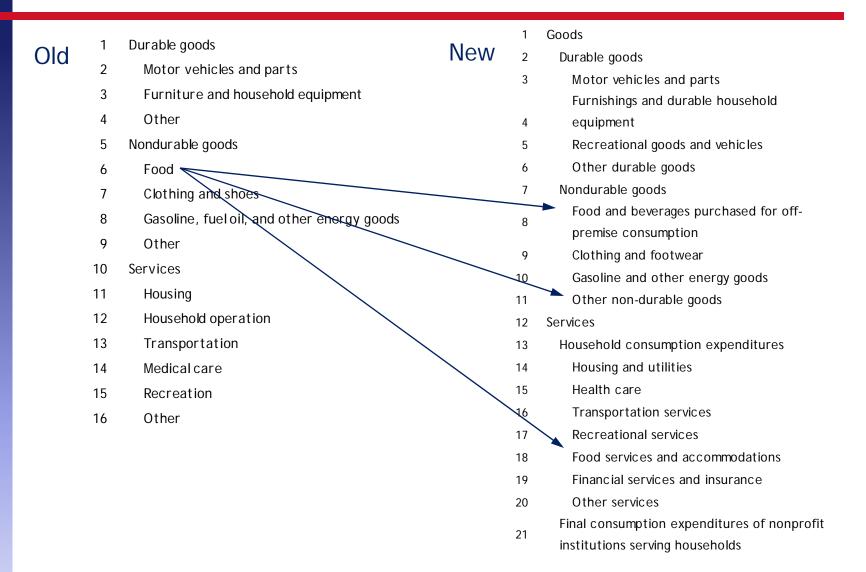
Reclassification of PCE categories in 2002 benchmark releases

Old	1 F	Personal consumption expenditures	New	1 F	Personal consumption expenditures
Olu	2	Food and tobacco	INCVV	2	Household consumption expenditures
	3	Clothing, accessories, and jewelry		3	Food and beverages purchased for off-
	4	Personal care		J	premise consumption
	5	Housing		4	Clothing and footwear
	6	Household operation		5	Housing and utilities
	7	Medical care			Furnishings, household equipment and
	8	Personal business		6	routine household maintenance
	9	Transportation		7	Health
	10	Recreation		8	Transportation
	11	Education and research		9	Communication
	12	Religious and welface activities		10	Recreation
	13	Foreign travel and other, net		11	Education
				12	Food services and accommodations
			\	13	Financial services and insurance
				14	Other goods and services
			1	15	Net foreign travel and expenditures
				13	abroad by U.S. residents

Final consumption expenditures of NPISH

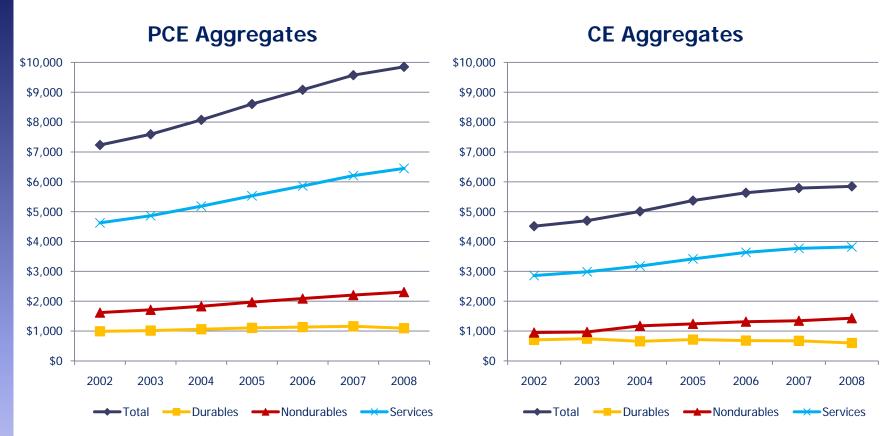


Reclassification of PCE categories in 2002 benchmark releases – cont.



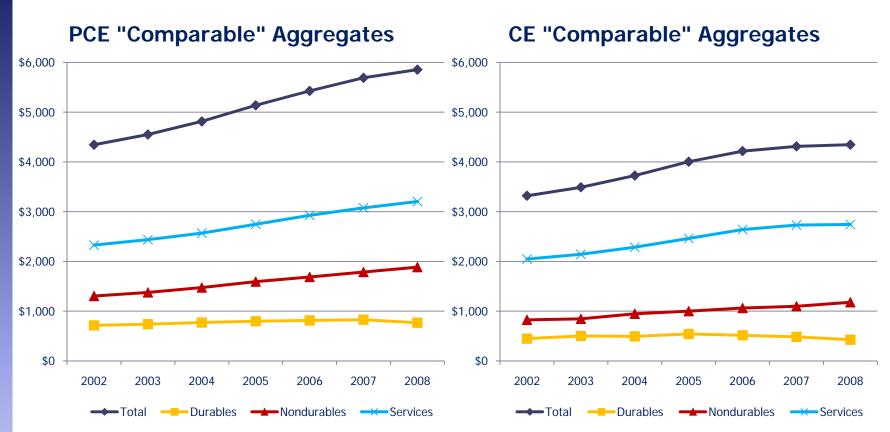


Aggregate expenditures for all item categories, PCE and CE, 2002-2008





Aggregate expenditures for all "comparable" item categories, PCE and CE, 2002-2008





Ratio of CE aggregates to PCE aggregates for all categories and "comparable" categories, 2002-2007

	1997 B Total	2002 B Total	1997 B Comp	2002 B Comp
2002				
Total consumption expenditures	0.61	0.62	0.83	0.76
Durable goods	0.75	0.71	0.75	0.63
Nondurable goods	0.58	0.59	0.65	0.63
Services	0.59	0.62	1.02	0.88
2003				
Total consumption expenditures	0.60	0.62	0.83	0.77
Durable goods	0.78	0.73	0.79	0.68
Nondurable goods	0.56	0.57	0.63	0.61
Services	0.59	0.61	1.01	0.88
2004				
Total consumption expenditures	0.60	0.62	0.83	0.77
Durable goods	0.74	0.62	0.69	0.64
Nondurable goods	0.59	0.64	0.66	0.64
Services	0.58	0.61	1.01	0.89



Ratio of CE aggregates to PCE aggregates for all categories and "comparable" categories, 2002-2007 - cont.

	1997 B Total	2002 B Total	1997 B Comp	2002 B Comp
2005				
Total consumption expenditures	0.61	0.62	0.83	0.78
Durable goods	0.76	0.65	0.75	0.68
Nondurable goods	0.58	0.63	0.65	0.63
Services	0.59	0.62	1.02	0.90
2006				
Total consumption expenditures	0.60	0.62	0.83	0.78
Durable goods	0.72	0.60	0.73	0.63
Nondurable goods	0.58	0.63	0.65	0.63
Services	0.59	0.62	1.03	0.90
2007				
Total consumption expenditures	0.59	0.60	0.83	0.76
Durable goods	0.68	0.58	0.69	0.58
Nondurable goods	0.56	0.61	0.63	0.61
Services	0.59	0.61	1.04	0.89



Ratio of CE aggregates to PCE aggregates for "comparable" 1997 benchmark categories, 2002-2007

		2002 B Comp
	1997 B Comp	(1997 Cats.)
2002		
Total consumption expenditures	0.83	0.82
Durable goods	0.75	0.67
Nondurable goods	0.65	0.66
Services	1.02	0.98
2003		
Total consumption expenditures	0.83	0.81
Durable goods	0.79	0.69
Nondurable goods	0.63	0.64
Services	1.01	0.98
2004		
Total consumption expenditures	0.83	0.82
Durable goods	0.69	0.60
Nondurable goods	0.66	0.67
Services	1.01	0.98



Ratio of CE aggregates to PCE aggregates for "comparable" 1997 benchmark categories, 2002-2007- cont.

	1997 B Comp	2002 B Comp (1997 Cats.)
2005		(LDD) Carety
Total consumption expenditures	0.83	0.81
Durable goods	0.75	0.65
Nondurable goods	0.65	0.66
Services	1.02	0.98
2006		
Total consumption expenditures	0.83	0.82
Durable goods	0.73	0.64
Nondurable goods	0.65	0.66
Services	1.03	0.99
2007		
Total consumption expenditures	0.83	0.80
Durable goods	0.69	0.60
Nondurable goods	0.63	0.64
Services	1.04	0.98



Future CE/PCE Comparisons

- Further research into construction of CE categories comparable to detailed PCE table categories
- Incorporation of new UCC items into CE-PCE concordance
- 2007 benchmark PCE data not likely before 2012



Contact Information

Bill Passero

Senior Economist
Division of Consumer Expenditure Surveys

www.bls.gov/cex 202-691-5126 Passero.Bill@bls.gov

