

Computing Mean Expenditures for Selected Demographic Groups Using Consumer Expenditure Interview Survey Microdata



Mean Food at Home Expenditures

- ~99% of Interview Survey respondents report Food at Home expenditures.
 - ▶ “Percent reporting” figures are available in CE pre-published tables (“pre-pubs”)
- Is made up of only two sub-categories of expenditure identified by Universal Classification Codes (UCC)
 - ▶ “790240” – Food and non-alcoholic beverages
 - ▶ “190904” – Food prepared by CU on out-of-town trips

Computing the Sample Mean

- Obtain your dataset, in this case 1 quarter of data.
- Isolate a subset of the desired demographic group(s)
- Sum **FDHOMEPQ** and **FDHOMECQ** to get Total Food at Home expenditures (FDHOME)
- Sum all the values of FDHOME for the selected group
- Divide by the number of observations in the subset... **OR...** the total number of observations in the subset with **reported** FDHOME values

What are PQ and CQ?

Quarter 1 (FMLI141x)

Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	March 2014
PQ	PQ	PQ	INT		
	PQ	PQ	CQ	INT	
		PQ	CQ	CQ	INT

Calculating the mean FOR ALL CU'S in the FMLI dataset



Mean FDHOME – All CU's

■ FMLI 2014 Q1

- ▶ 6483 Consumer Units (CU)
- ▶ 85 CU's with \$0 of FDHOME
- ▶ Sum of FDHOME = \$8,251,702

■ Mean FDHOME expenditures:

- ▶ Mean including all CU's: $\$8,251,702 / 6483 = \text{\textcolor{red}{\$1,272.82}}$
- ▶ Mean excluding non-reporting CU's: $\$8,251,702 / 6398 = \text{\textcolor{blue}{\$1,289.73}}$

Mean FDHOME – 3-person CU's

- FMLI 2014 Q1 – Subset of 3-person CU's
 - ▶ subset by FAM_SIZE = 3
 - ▶ 978 Consumer Units (CU)
 - ▶ 11 CU's with \$0 of FDHOME
 - ▶ Sum of FDHOME = \$1,411,980
- Mean FDHOME expenditures of 3-person CU's:
 - ▶ Mean including all CU's: $\$1,411,980 / 978 = \text{\$1443.74}$
 - ▶ Mean excluding non-reporting CU's: $\$ 1,411,980 / 967 = \text{\$1,460.17}$