KIWI
A Stata add-on package to explore BLS CE PUMD

Walt Lake

The Pew Charitable Trusts
Financial Security and Mobility Project

wlake@pewtrusts.org

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Motivation for project

- Research question: How has American household consumption changed over time given shifts in family structures?
- Best way to answer: Use BLS Consumer Expenditure Survey public use micro data to explore aggregate and household level changes since 1980.

Seemed like a simple enough task...
The CE dataset comes with a warning:

*The CE PUMD is a large, complex dataset that requires an extensive time commitment by users to study the documentations to learn how to use the data appropriately. In addition to the time needed to learn how to use the files, users must also have a good working knowledge of an advanced statistical software package, such as SAS, SPSS, or STATA, to manipulate the files.*” BLS (2013)
Some examples of difficulties when using as a time series.
- Inconsistent variable format across time periods.
- Coding for some variables differs when looking across time (e.g. Race in 1996 versus Race in 2004).
- Key variables are missing completely for some years (e.g. FINCBTAX 2004-2005).
- Similar issue exists with file names, multiple iterations every few years.
Easier Access

Enhance access to CE survey data by creating a tool for potential researchers

- Create a graphical interface for a less intimidating user experience
- Create a "Point & Click" environment
- Sandbox the user experience
- Create a platform that will allow users of all skill levels to access the data
Introducing Kiwi

Kiwi, a STATA package for exploring BLS CE Survey Micro data

- Aggregates data
- Creates and displays weighted means
- Calendar or collection year
- Adjust for inflation using CPI-U
- Allows for grouping data by up to two categories
- Displays a rudimentary plot of the data
Kiwi Demo

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The author maybe contacted at wlake@pewtrusts.org

Dedicated to my loving family Den-Den & Kiwi Benitez

800-STAT-PC  http://www.stata.com
979-696-4600  stata@stata.com
979-696-4601  (fax)
Kiwi Demo

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Background

This is designed to give the

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Walt Lake  (FESM)
Kiwi Demo
Kiwi Demo

The image shows a screenshot of the Kiwi generate tool, which is used to generate population or sample means for the BLS CE (Consumer Expenditure) survey. The tool offers options for variable selection, date selection, and other settings.

- **Variable selection**:
  - Checkboxes for different expenditure variables (e.g., Total_expenditures).
- **Date selection**:
  - Start year and end year input fields.
- **Calendar or Collection year**:
  - Options for Calendar Year or Collection Year.
- **Inflation adjustment**:
  - Options for Constant dollars and Base year (1996).
- **Grouping variable 1** and **Grouping variable 2**:
  - Options for Quintiles of income before tax.
Kiwi Demo
Kiwi Demo

Kiwi generate - Generate population or sample means for the BLS CE

Variable selection
- Total_expenditures
- Total_expenditures
- Total_expenditures
- Total_expenditures

Date selection
- Start year:
- End year:

Calendar or Collection year
- Calendar Year
- Collection Year

Grouping variable 1
- Quintiles_of_income_before_tax

Grouping variable 2
- Quintiles_of_income_before_tax

Name output files
- File ID

Inflation adjustment
- Constant dollars
- Base year
  - 1996

OK  Cancel  Submit
Kiwi Demo

Kiwi generate - Generate population or sample means for the BLS CE

Variable selection
- Total_expenditures
- Total_expenditures
- Total_expenditures
- Total_expenditures

Date selection
- Start year:
- End year:

Calendar or Collection year
- Calendar Year
- Collection Year

Grouping variable 1
- Quintiles_of_income_before_tax

Grouping variable 2
- Quintiles_of_income_before_tax

Inflation adjustment
- Constant dollars
- Base year
- 1996

Name output files
- File ID

Background

Kiwi Demo
Kiwi Demo
Kiwi Demo

Kiwi generate - Generate population or sample means for the BLS CE

Variable selection
- Clothing_Apparel_and_sen
- Total_expenditures
- Total_expenditures
- Total_expenditures

Date selection
- Start year:
- End year:

Calendar or Collection year
- Calendar Year
- Collection Year

Inflation adjustment
- Constant dollars
- Base year: 1996

Grouping variable 1
- Quintiles_of_income_before_tax
- Quintiles_of_income_before_taxes
- Age_of_reference_person
- Composition_of_consumer_unit
- Housing_tenure
- Race_of_reference_person
- Income_before_taxes
- Size_of_consumer_unit
- Population_size_of_area_of_residence
- Number_of_earners_in_consumer_unit
- Region_of_residence
- Occupation_of_reference_person

Name output files
- File ID

[Options: OK, Cancel, Submit]
Next Steps for Kiwi

- Solve raw data importation
  - Stored locally
  - API or Remote download
- Expand CPI coverage
- Replicate process for the other files types (Diary MTAB ITAB EXPEN)
- Add in integrated means to replicate published tables
- Recode into a python based standalone application
Questions and comments
Walt Lake
wlake@pewtrusts.org