Restating Earnings in Common-Year Terms
Background

- Multiple PUMS to increase sample
- Need to adjust for inflation
- Census CPI-U in 5-year files
  - ADJHSG
  - ADJINC
- Does one size fit all?
Presentation Focus

- Earnings
  - SEMP – self-employment
  - WAGP - wages
  - PERNP total earnings
- PUMS adjustment
  - Intra-year
  - Inflation ➔ Our focus
Possible Restatement Factors

- CPI-U
- Wage index
  - Average hourly earnings
  - BLS series CEU0500000008
- Internal ACS derivations
  - All earnings
  - Full-time, year-round earnings
Why Internal Index?

- Application
  - Compute at top level
  - Apply to subpopulations
- Internal better
  - Combining multiple PUMS
  - Making comparable
Cumulative Change from 2010
Education Mix - FTYR

Distribution of FTYR Earners by Education


0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

- Doctorate + Professional
- Master's Degree
- Baccalaureate Degree
- Associate Degree
- Some College, No Degree
- High School or Equiv.
- Less Than High School
Education Mix – All Earners

Distribution of All Earners by Education

- Doctorate + Professional
- Master’s Degree
- Baccalaureate Degree
- Associate Degree
- Some College, No Degree
- High School or Equiv.
- Less Than High School
Reweighted Change to 2010
Cumulative Change from 2010

The graph shows the cumulative change of various indicators from 2010. The indicators include CPI-U, Wage Index, ACS FTYR rw, and ACS All Earners rw. The years 2005 to 2015 are displayed on the x-axis, while the percentage change is shown on the y-axis.
Construct ACS Index

- Centered at 2010
- Basis for restatement
- Separate for
  - FTYR
  - All Earners

<table>
<thead>
<tr>
<th>Year</th>
<th>FTYR Index</th>
<th>FTYR to 2015</th>
<th>All Earn Index</th>
<th>All Earn to 2015</th>
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5-Year PUMS Impact

Impact on 5-year PUMS – Variance from Constructed Index

-10% -8% -6% -4% -2% 0% 2% 4%

-11-15 -10-14 -09-13 -08-12 -07-11 -06-10 -05-09

- Wage All Earn
- Wage FTYR
- CPI All Earners
- CPI FTYR
Application

- Update/add “index” each year
- Restate to *current* year
  - Constructed index to last ACS year
  - Some inflation measure since
    - Wage index
    - CPI
Dave Gibson
DaveG@vocecon.com
312.781.9125