On the Use of the ACS to Estimate County Migration Flows by Age

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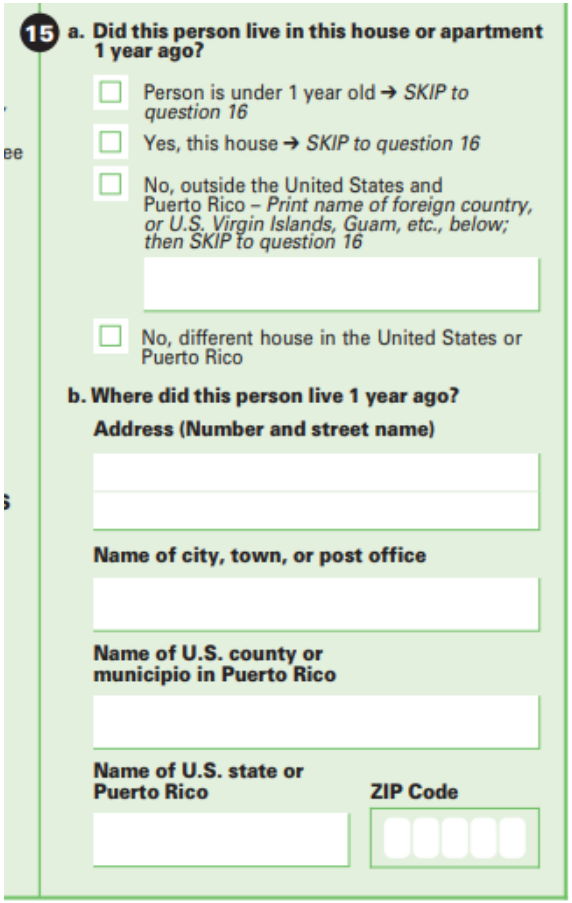
ACS Migration question



15 a. Did this person live in this house or apartment 1 year ago?

- ☐ Person is under 1 year old → *SKIP to question 16*
- ☐ Yes, this house → *SKIP to question 16*
- ☐ No, outside the United States and Puerto Rico – *Print name of foreign country, or U.S. Virgin Islands, Guam, etc., below; then SKIP to question 16*
- ☐ No, different house in the United States or Puerto Rico

b. Where did this person live 1 year ago?

Address (Number and street name)

Name of city, town, or post office

Name of U.S. county or municipio in Puerto Rico

Name of U.S. state or Puerto Rico

ZIP Code

Answers tabulated by:

- Place of <u>current</u> residence
  - Answers: “Where did you move to?”
- Place of <u>previous</u> residence
  - Answers: “ Where did you move from?”

Components of population change

$$Pop_{t+1} = Pop_t + Births - Deaths + NetMigration$$

$$NetMigration = DomesticIn - DomesticOut + InternationalIn - InternationalOut$$

Age specific migration rates

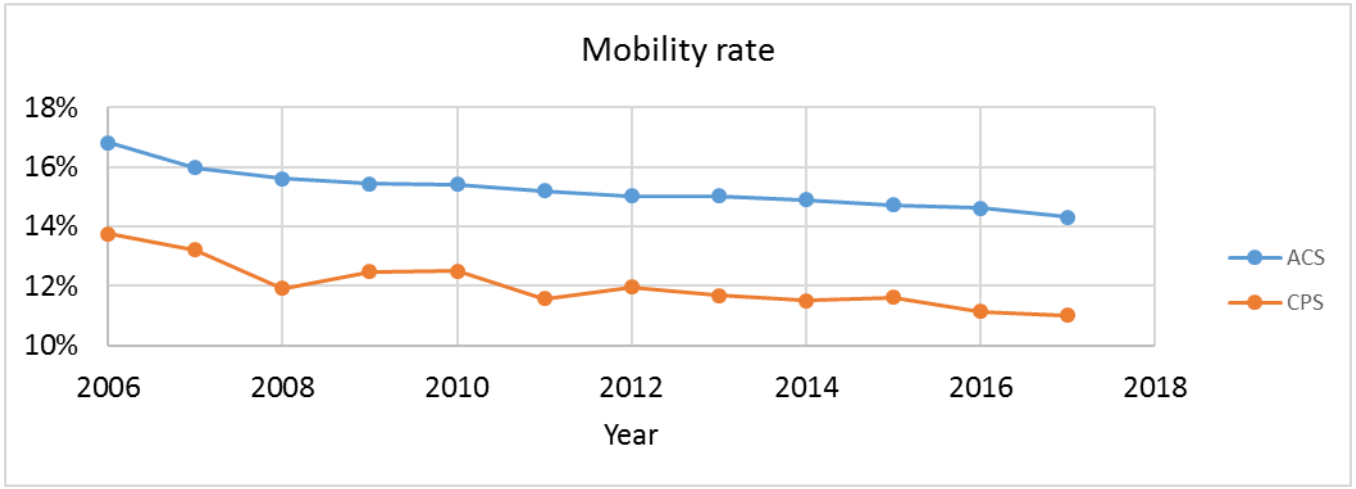
$$DomInRate_{age} = DomesticIn_{age}/Pop_{age}$$

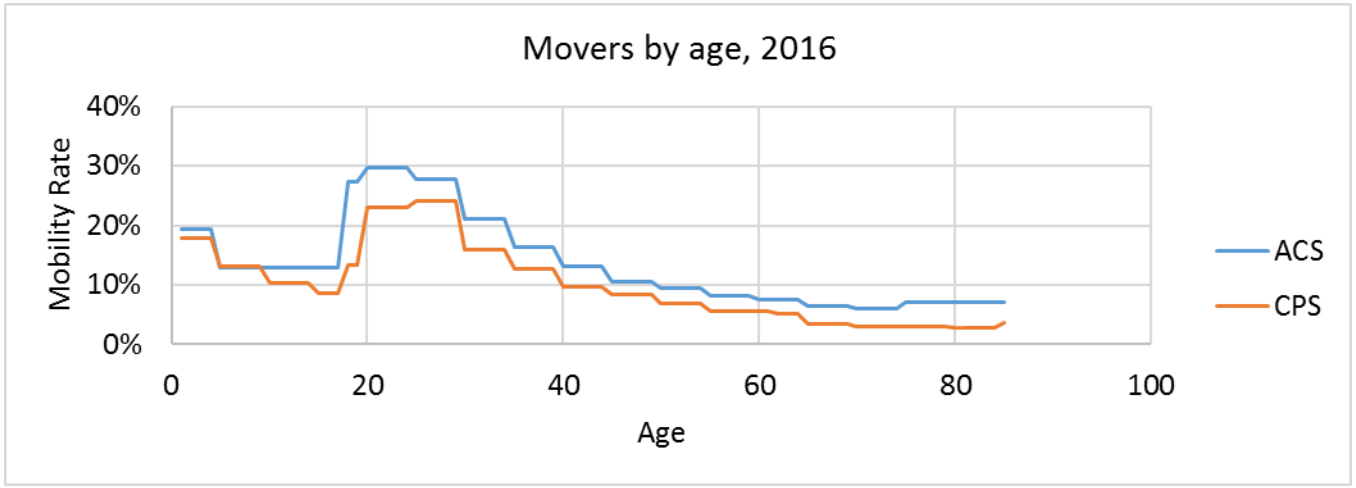
$$DomOutRate_{age} = DomesticOut_{age}/Pop_{age}$$

Review and comparisons

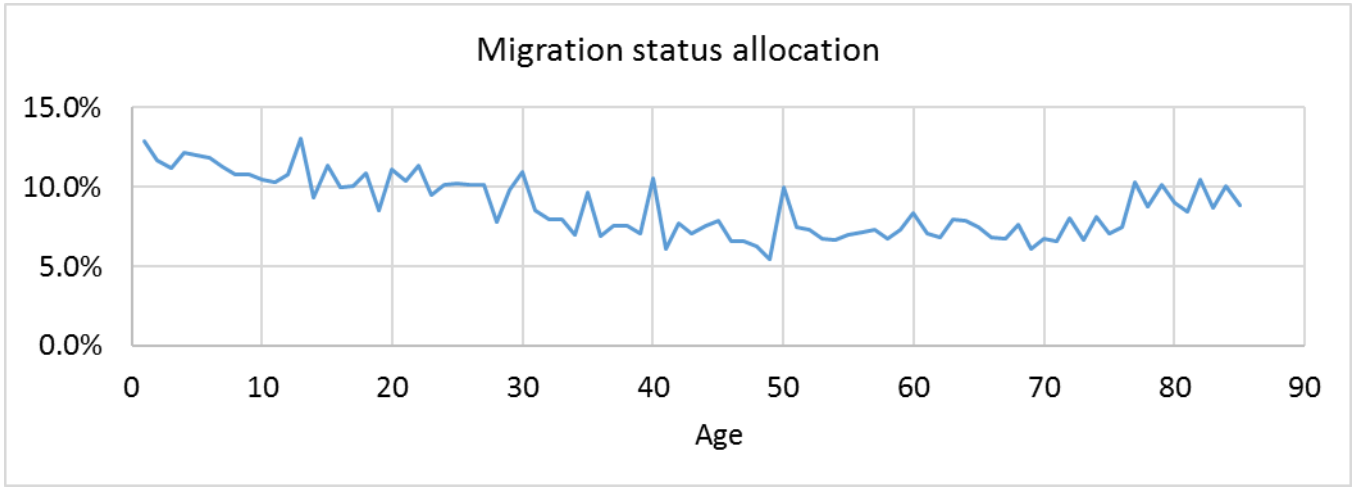
- Compare with CPS and population estimates
- Item allocation
- Margins of Error
- Review of projection results

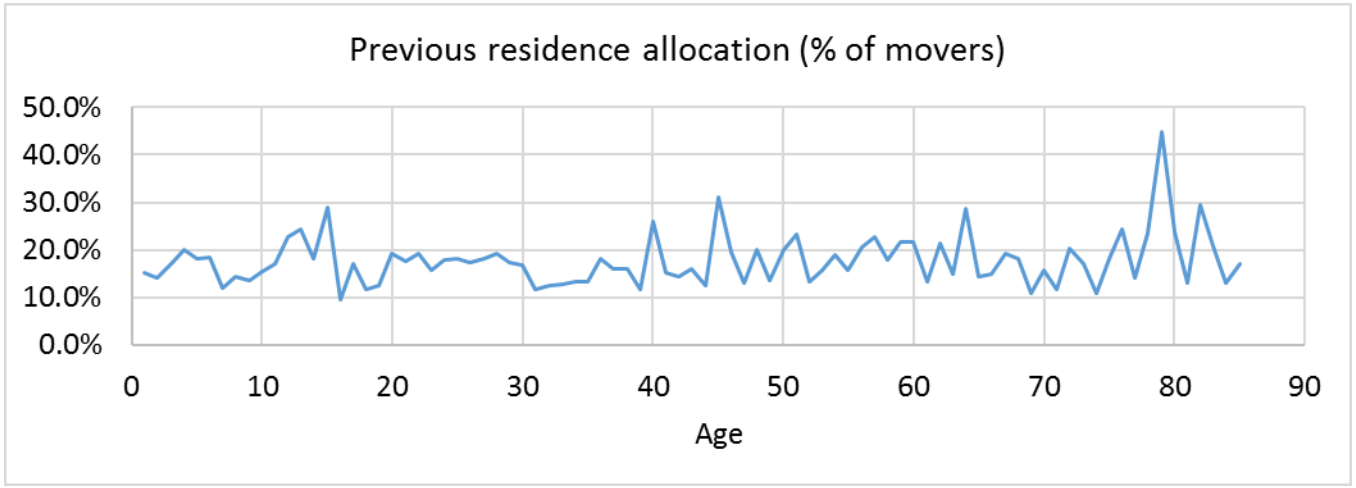
ACS vs CPS


Mobility rate
18%
16%
14%
12%
10%
2006
2008
2010
2012
2014
2016
2018
Year
ACS
CPS

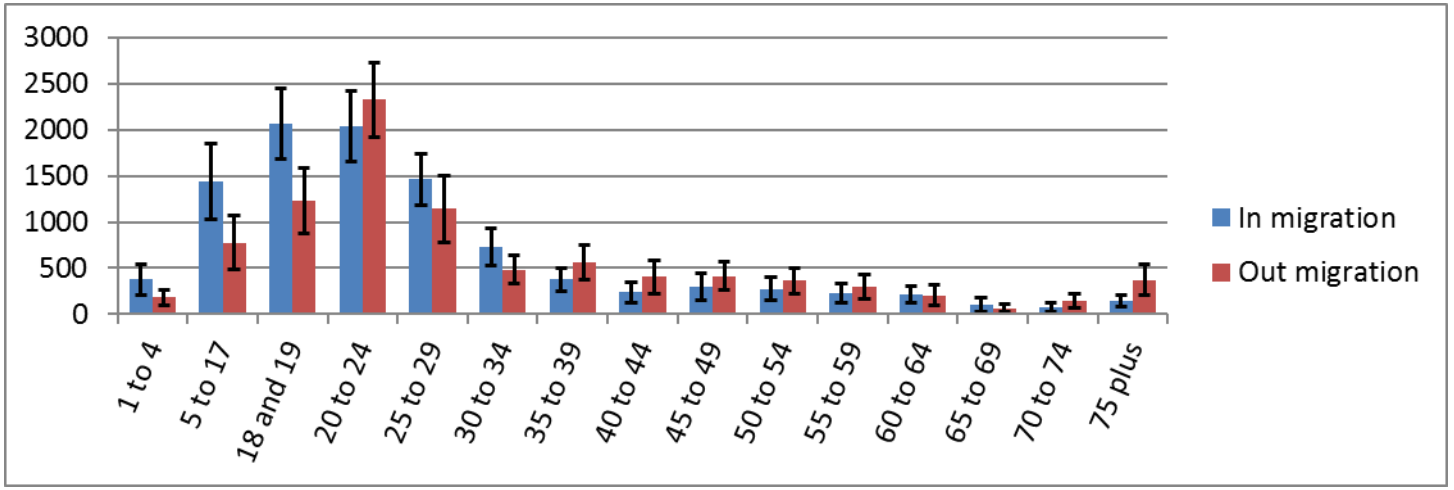

Movers by age, 2016
Mobility Rate
40%
30%
20%
10%
0%
0
20
40
60
80
100
Age
ACS
CPS

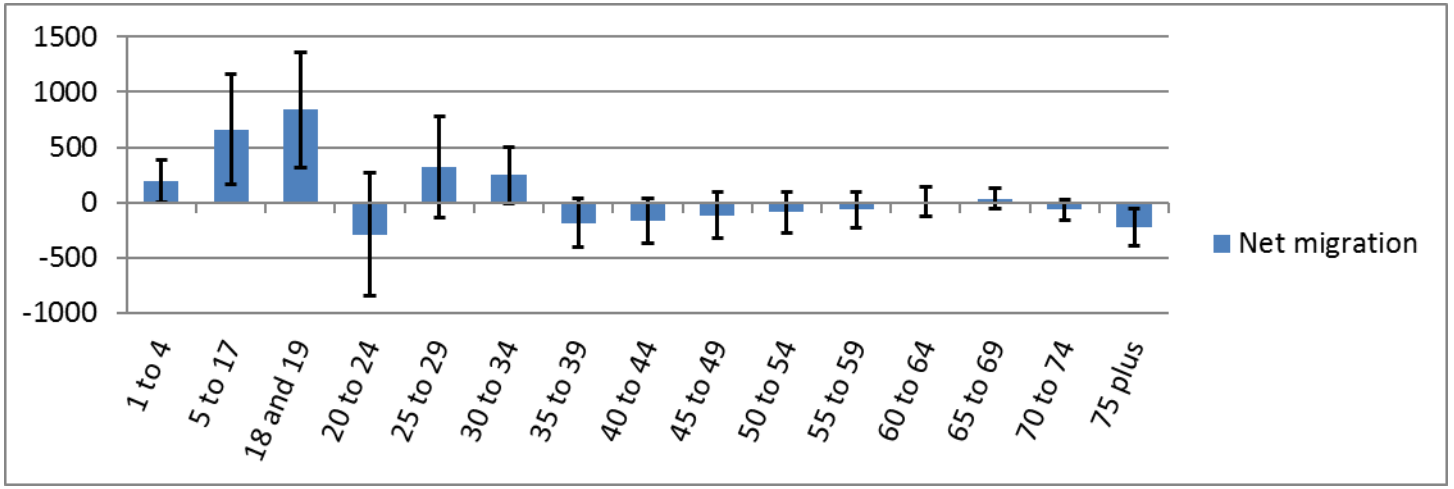
Item allocation by age (NY State)





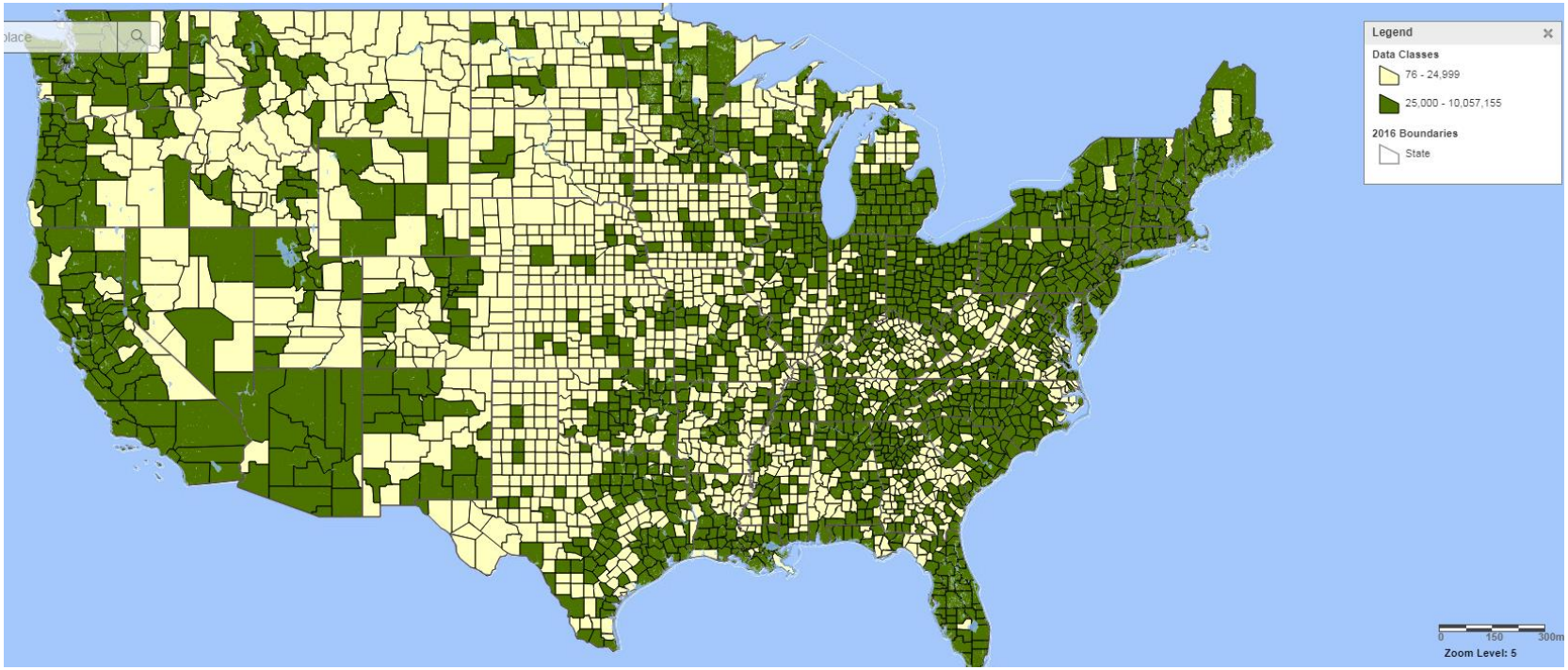
Margins of Error, Broome County



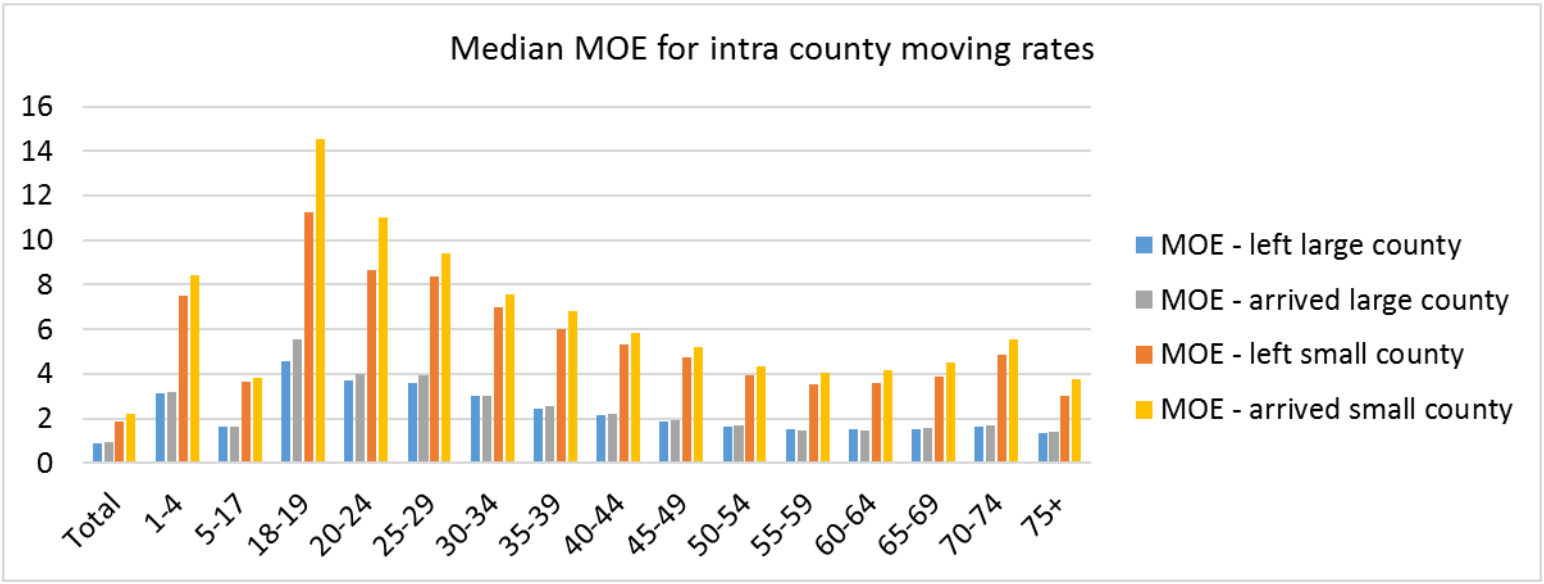


Small and large counties

- 1543 Small counties (<25,000) - yellow
  1597 Large counties (>=25,000) - green

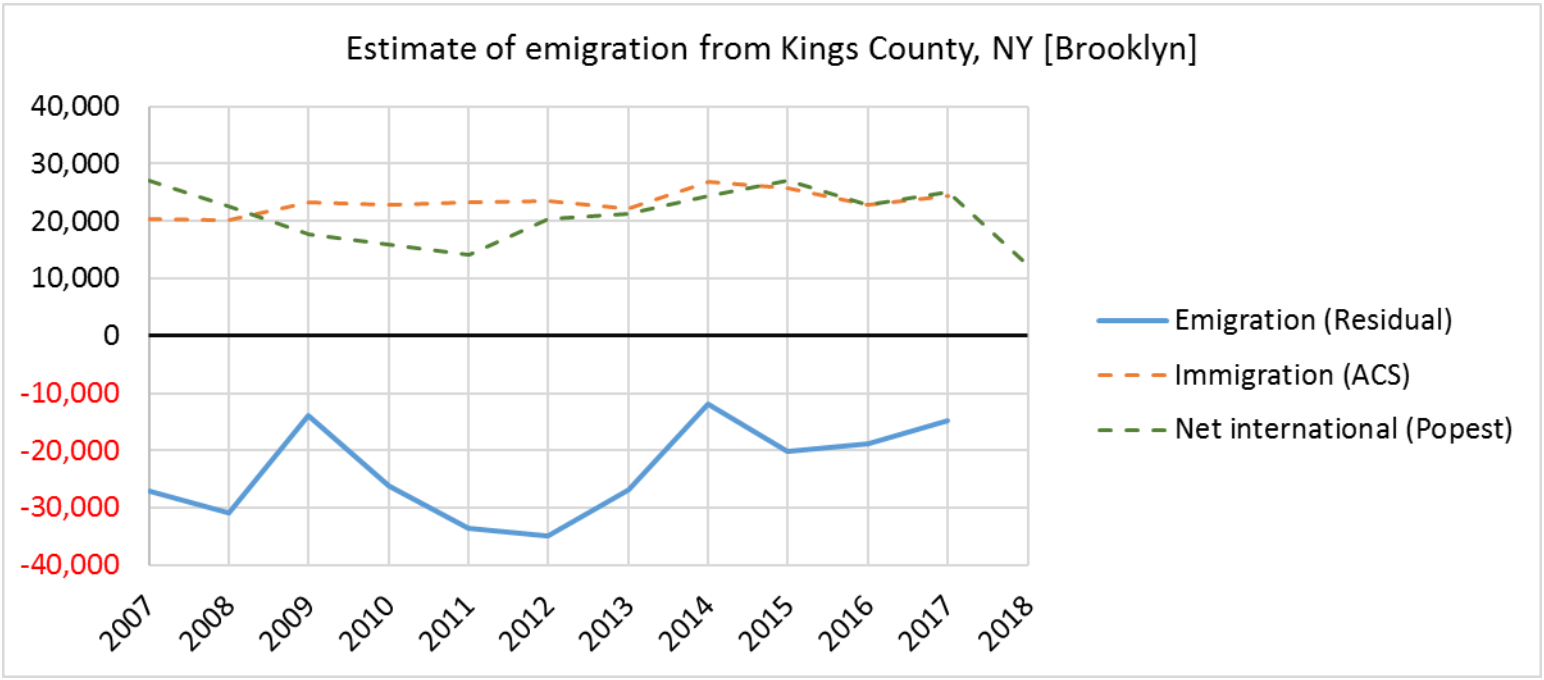


Margins of Error

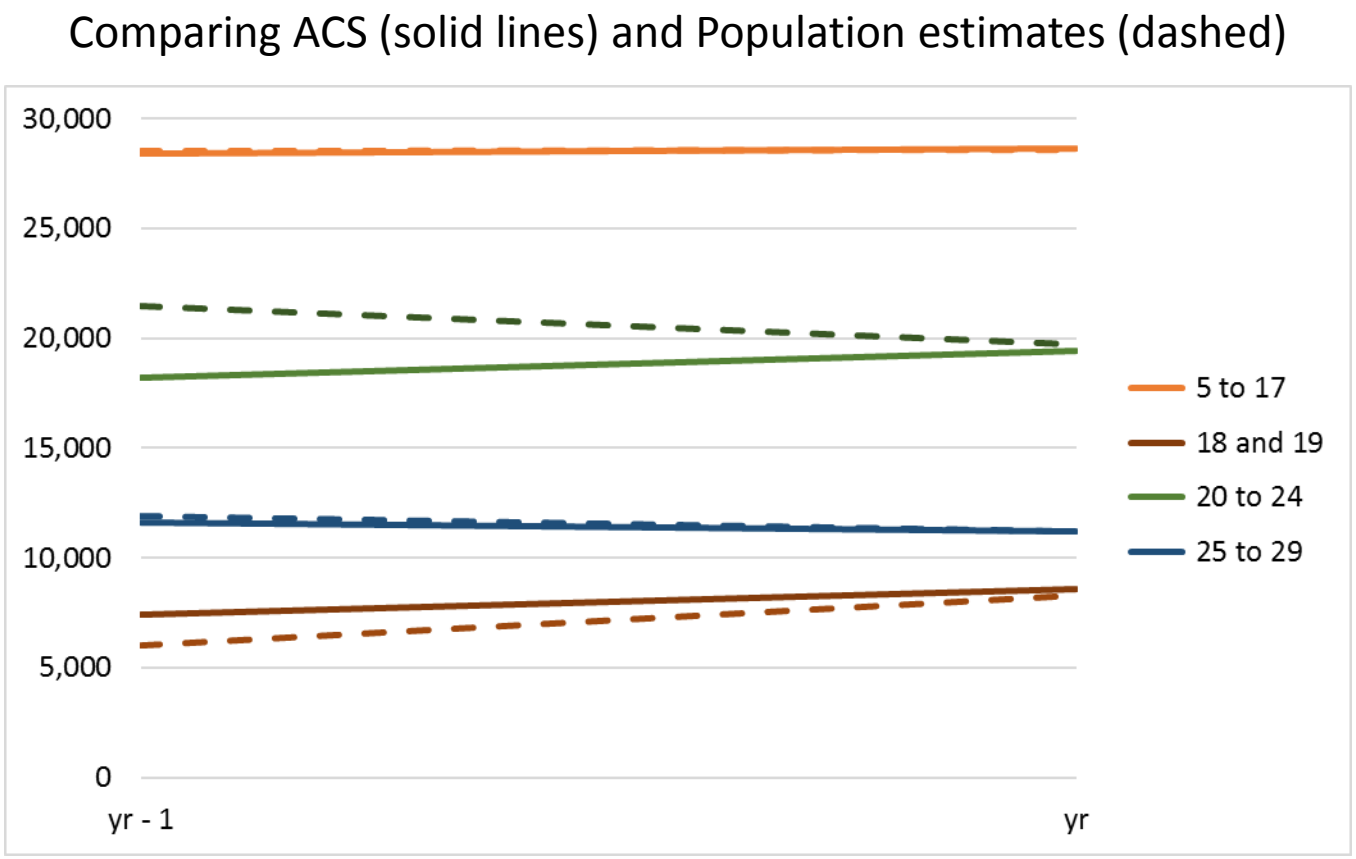


Using ACS to estimate emigration

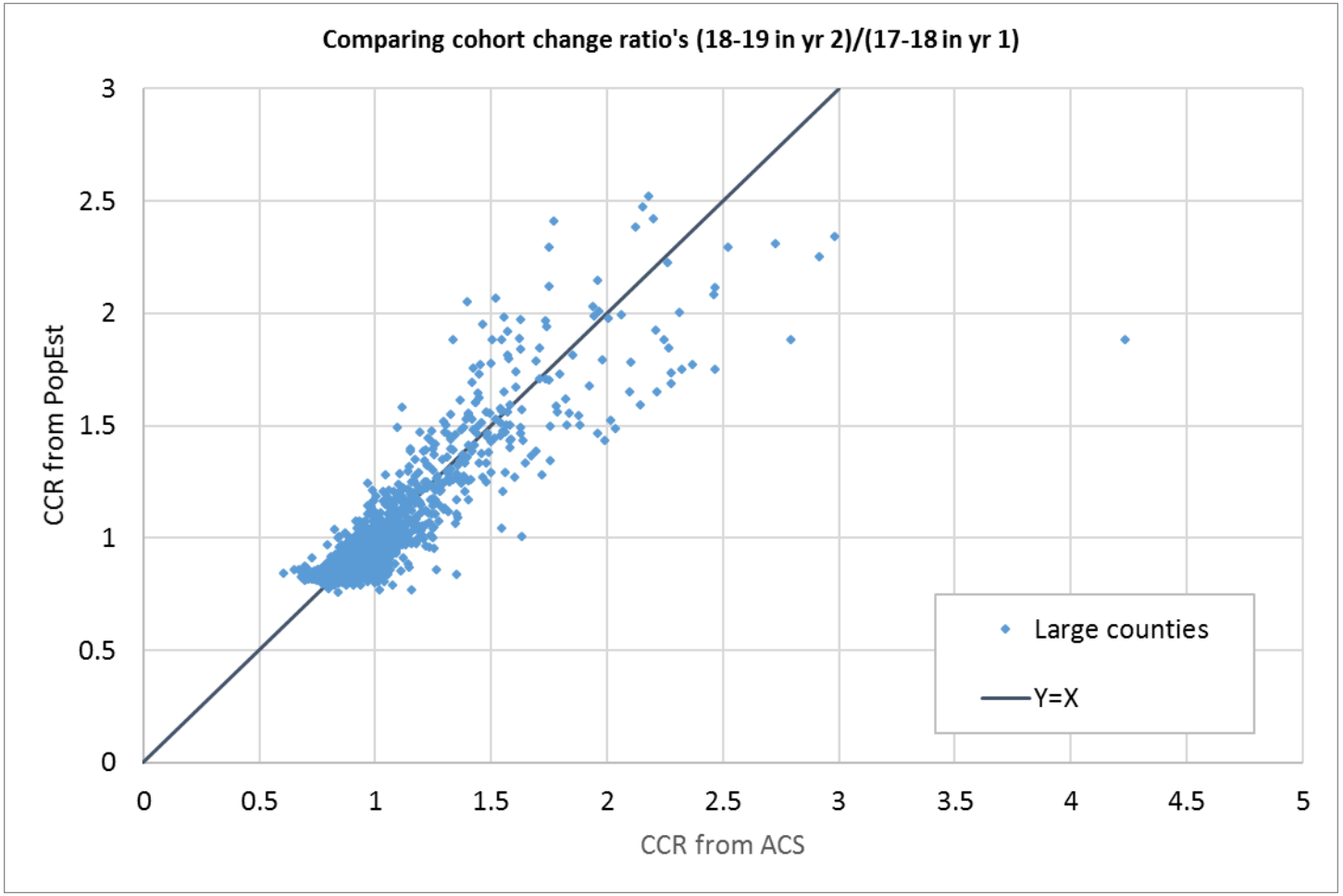
- Residual method:
  ACS Universe of # of persons in area one yr ago = total population one year ago - deaths - emigration



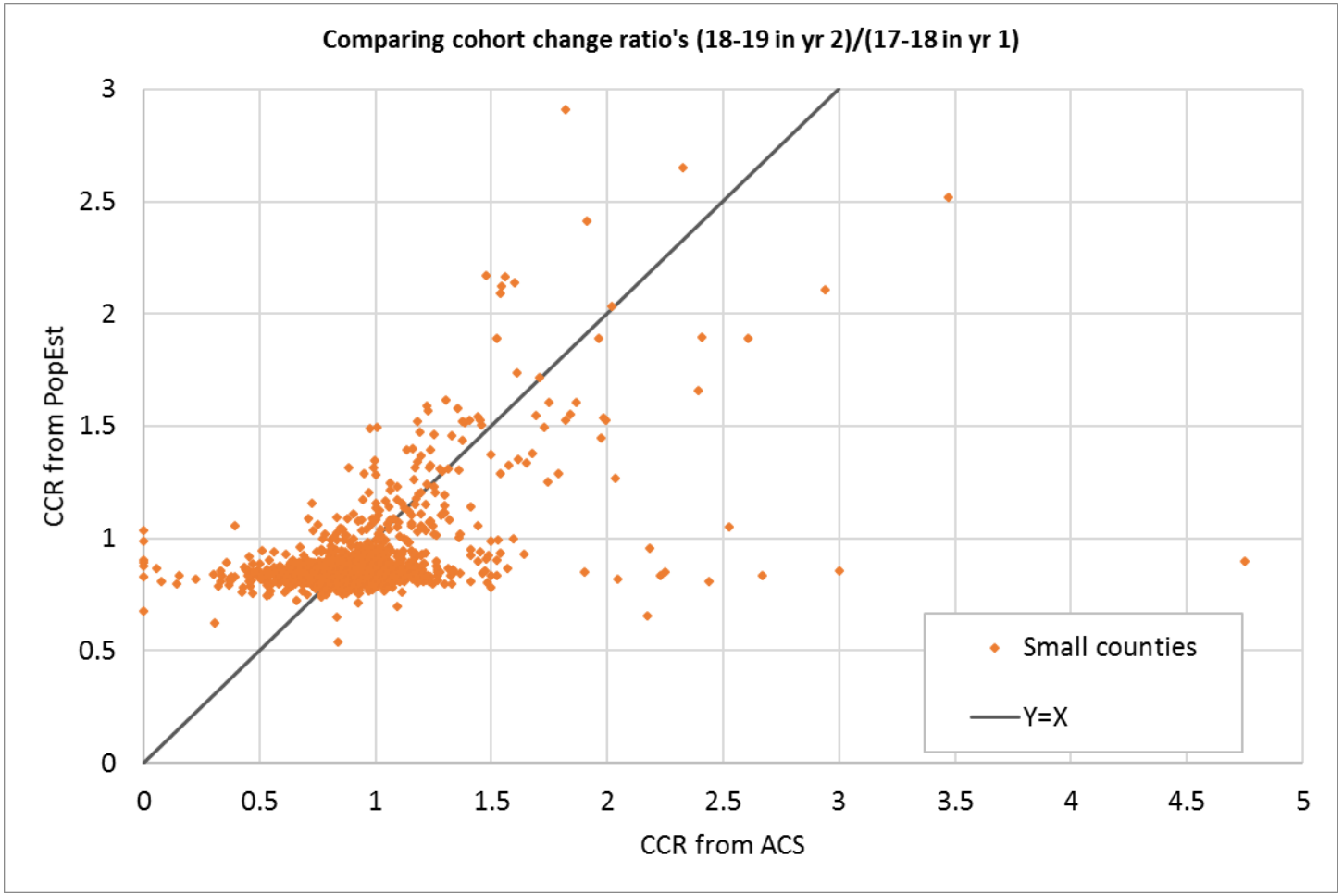
Cohort change, Broome County



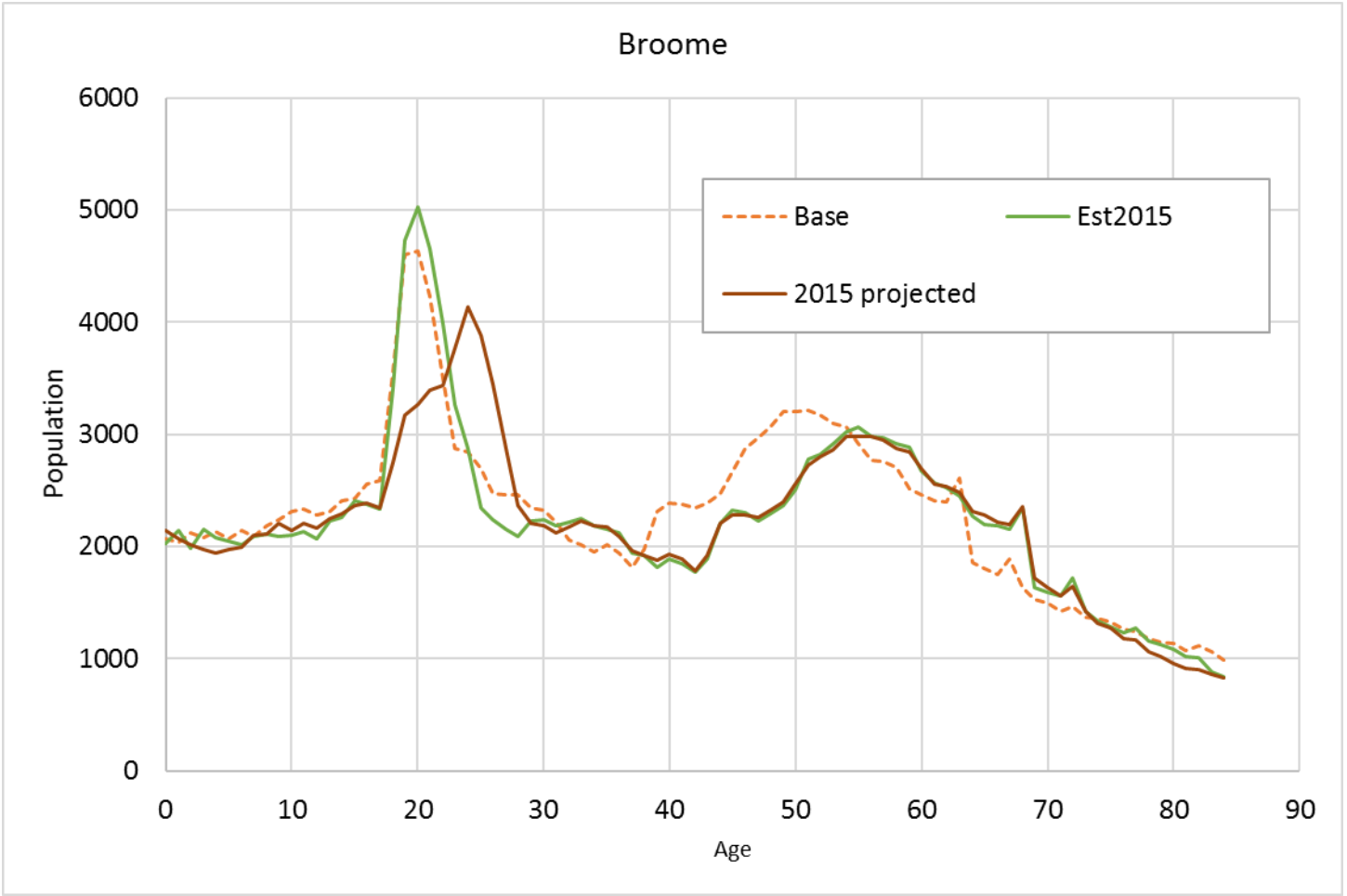
18-19 Cohort change



18-19 Cohort change



Projecting with ACS rates



Conclusions

- Be careful
  - Lots of imputation
  - Review MOE's
  - Review universe of people in area 1 yr ago
  - Compare ACS cohort change with population estimates
  - Not suitable for projecting highly mobile age groups

Questions?

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