Toward Improving the Quality of Labor Force Data from the American Community Survey

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Labor Force Measurements

- **Government uses several means to measure the status of the nation's labor force activity :**
  - **surveys of people (household surveys)**
  - **surveys of employers (establishment surveys)**
  - **administrative records**
- **Broadest measures are from household surveys**
- **Since 1940's: Decennial Census long form/Current Population Survey (CPS)/American Community Survey**
- **ACS measurement methods virtually same as those for Census 2000**

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Employment Status Concepts of Household Surveys

- **Classify working-age (16 years and over) people as:**
    - **Employed (with jobs or businesses)**
    - **Unemployed (on layoff or looking for work)**
    - **Not in Labor Force (everybody else)**
- **Distinctions made within categories:**
    - **Employed category divided into "At Work/With a Job, But Not At Work" categories**
    - **"At Work" category forms "worker" universe for transportation data**
- **Concepts involve multiple criteria**

Estimates

- **CPS: provides monthly measurements for limited geography**
- **Census/ACS: less timely (ACS— annually) but greater geographic coverage**
- **In principle, CPS and Census/ACS estimates should be approximately the same**
- **Not always true historically**

ACS and CPS National-level Employment Comparisons: 2000-2003 (ACS excludes Group Quarters Population)

Employed (millions) :

Year	ACS	CPS	% Difference
2000	130.6	136.9	-4.6%
2001	131.2	136.9	-4.2%
2002	131.7	136.5	-3.5%
2003	132.4	137.7	-3.8%

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ACS and CPS National-level Unemployment Comparisons: 2000-2003 (ACS excludes Group Quarters Population)

Unemployed (millions):

| Year	ACS	CPS	% Difference
2000	7.4	5.7	29.8%
2001	8.6	6.8	26.5%
2002	10.6	8.4	26.2%
2003	11.0	8.8	25.0%

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Decennial Census -- CPS comparisons

- **ACS labor force pedigree: modeled after decennial censuses; uses same questions and concepts as Census 2000**

- **Census has historically underestimated employed people and (since 1990) overestimated unemployed relative to CPS**

- **Census 2000 gaps larger than ever:**
  - Employed: 5 percent below CPS
  - Unemployed: 53 percent above CPS

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Difference in Census and CPS Employed as a Percent of CPS Employed: 1950-2000

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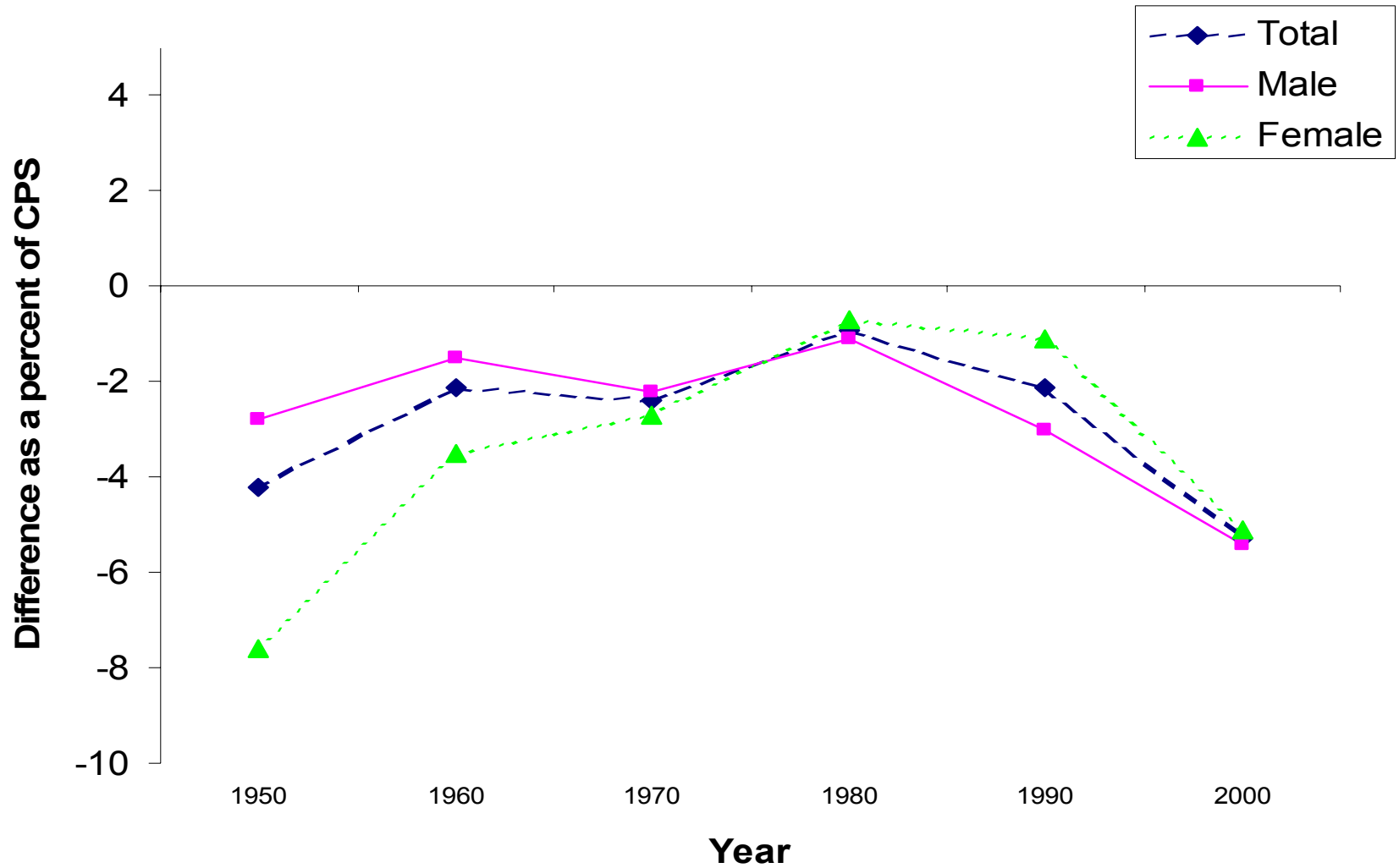
Difference in Census and CPS Unemployed as a Percent of CPS Unemployed: 1950-2000

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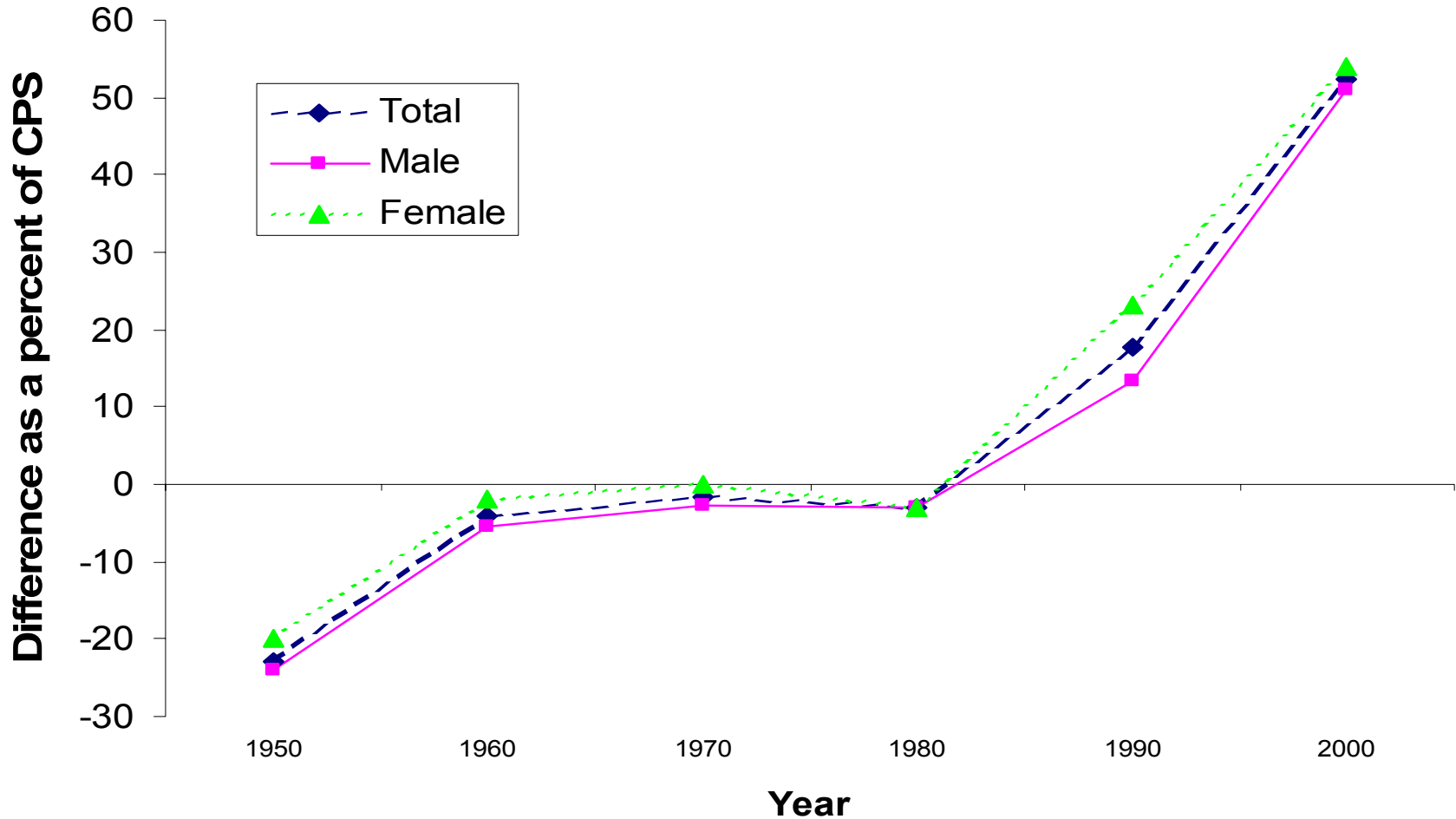
Which is right ?

- **CPS is gold standard for household labor force estimates**
  - **collected continuously for over 50 years**
  - **constant attention to quality**
- **CPS should surpass accuracy of ACS**

Why CPS?

- **Number of questions: much greater in CPS (16 versus 6) – CPS can clarify complicated situations, probe for critical distinctions (for example, active/passive job search)**

- **Collection methods: CPS collected by interviewers via computer-assisted personal interviews; ACS relies heavily on self (respondent)–administered paper questionnaires**

What to do about the gaps

- **Focus was on ways to identify and eliminate sources of bias in the ACS**
  - **Many potential sources**
  - **Control over questions, edits, and imputations only**
- **Census 2000 studies suggested likely presence of flaws in the questions**
- **Census Bureau asked OMB for permission to revise the questions**
- **OMB set up committee of federal-agency stakeholders**

Battery of ACS Labor Force Questions

- **Six questions in current battery**

- **Communication issues: three had problems/three appear to work well**

- **Navigational issues: likely source of missing responses to last five questions in the series**

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Primary Finding

- **Communication problems with the "Work Last Week" Question**

- **Divides working-age population into "workers/non-workers"**

- **Relatively low failure rate can reduce employed category and significantly inflate unemployed category**

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"LAST WEEK, did this person do any work for either pay or profit?"

Failure to communicate meaning of "work" :

- **"for pay or profit" confusing to irregular workers**

- **"any work" confusing to people with regular jobs or businesses**

- **"profit" confusing to people with jobs (as opposed to businesses)**

- **retired people: think question not applicable; or applies only to pre-retirement work**

Recommended Replacement (Q23)

a. **LAST WEEK, did this person work for pay at a job (or business)?**

   [ ] Yes - - SKIP part b.
   [ ] No - - Did not work (or retired)

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b. **LAST WEEK, did this person do ANY work for pay, even for as little as one hour?**

   [ ] Yes
   [ ] No

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Advantages of Recommended Replacement

- **Gives respondent two chances to understand intent**
- **Addresses difficulties of both regular and irregular workers: comes at issue from both directions**
- **Conveys that work includes both jobs and businesses**
- **Acknowledges retired people directly: they can say "no" to "job," "yes" to " any work"**

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Worker Universe

- **Work Last Week question also used to make At work/Not at work distinction**

- **Creates special "worker" universe for transportation data**

- **ACS has slightly higher proportion of employed people who are "at work" than CPS: ACS 97%; CPS 95-96 %**

- **Not sure how revisions to question will affect special "worker" universe – something to consider in evaluations**

"Has this person been looking for work during the last 4 weeks?

- **Used to classify non-workers as unemployed**
- **Communication Problem:**
  - **active search requirement not conveyed**
  - **may lead to misclassification to unemployed category of passive job seekers/discouraged workers**

Recommended Replacement (Q30)

During the LAST 4 WEEKS, has this person been ACTIVELY looking for work?
[ ] Yes
[ ] No

Navigational Issues

- **Respondent must encounter each applicable question in proper order: purpose of skip instructions**

- **Journey-to-work questions break up continuity of labor force questions**

- **Some evidence that they interfere with progression of non-workers to the unemployment/not in labor force questions**

- **Result: need to impute labor force status as unemployed or not in the labor force**

- **Potential solution: improve questionnaire design**

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Next Steps

- **Test new set of questions in the 2006 Content Test**
- **Control will be current set of questions**
- **Primary survey and a follow-up survey**
- **Use primary-survey data to compare non-response rates and frequency distributions**
- **Use follow-up survey to measure response bias and response variance**
- **If new questions are successful, we will ask OMB for authorization to use them in the 2008 ACS.**

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References

- **Census 2000 Evaluation Study B.7, Accuracy of Data as Measured by the CPS-Census 2000 Match, at: http://www.census.gov/pred/www/rpts/B.7%20Final%20Report.pdf**

- **Census 2000 Auxiliary Study B.8, Comparing Employment, Income, and Poverty:Census 2000 and the Current Population Survey, at: http://www.census.gov/hhes/www/laborfor/final2_b8_nov6.pdf**

- **ACS Evaluations: http://www.census.gov/acs/www/AdvMeth/index.htm**

- **ACS homepage: http://www.census.gov/acs/www/**

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