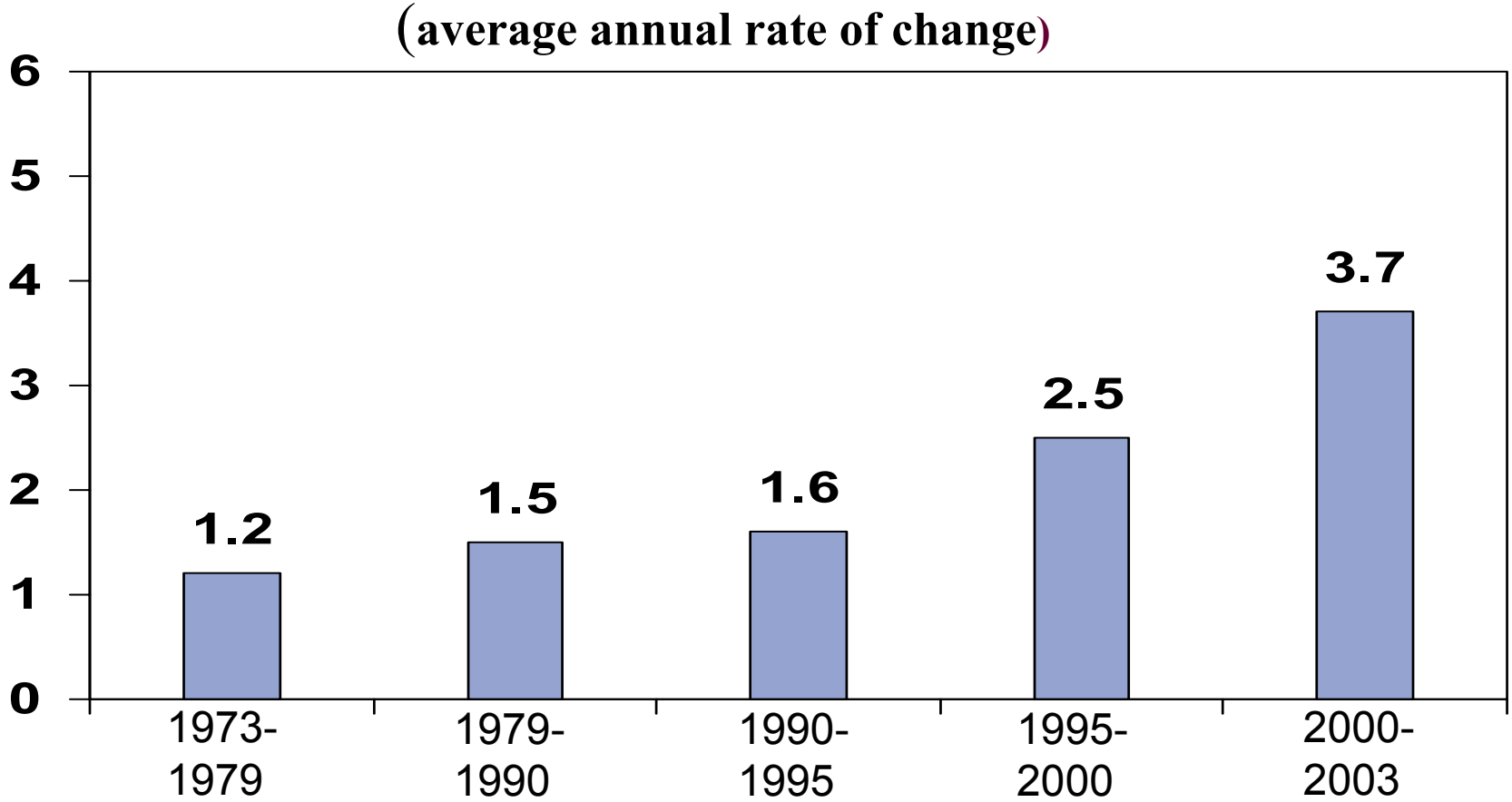
Issues in Productivity Measurement

U.S. Department of Labor
Bureau of Labor Statistics

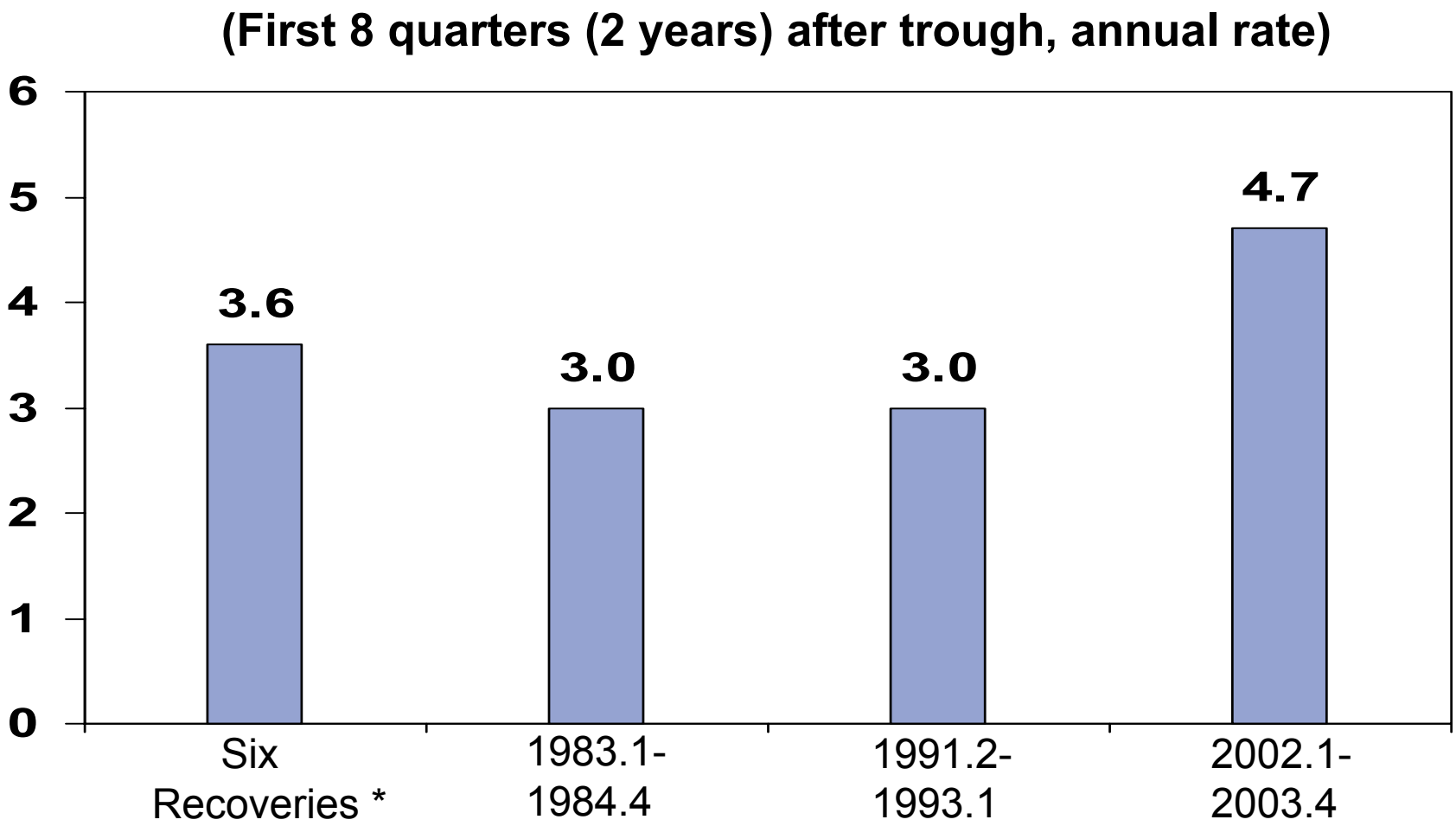
AEI Conference on the Advantages of
High Productivity Growth
February 25, 2004

1. Change in Labor Productivity for Nonfarm Business



Source: Bureau of Labor Statistics
February 25, 2004

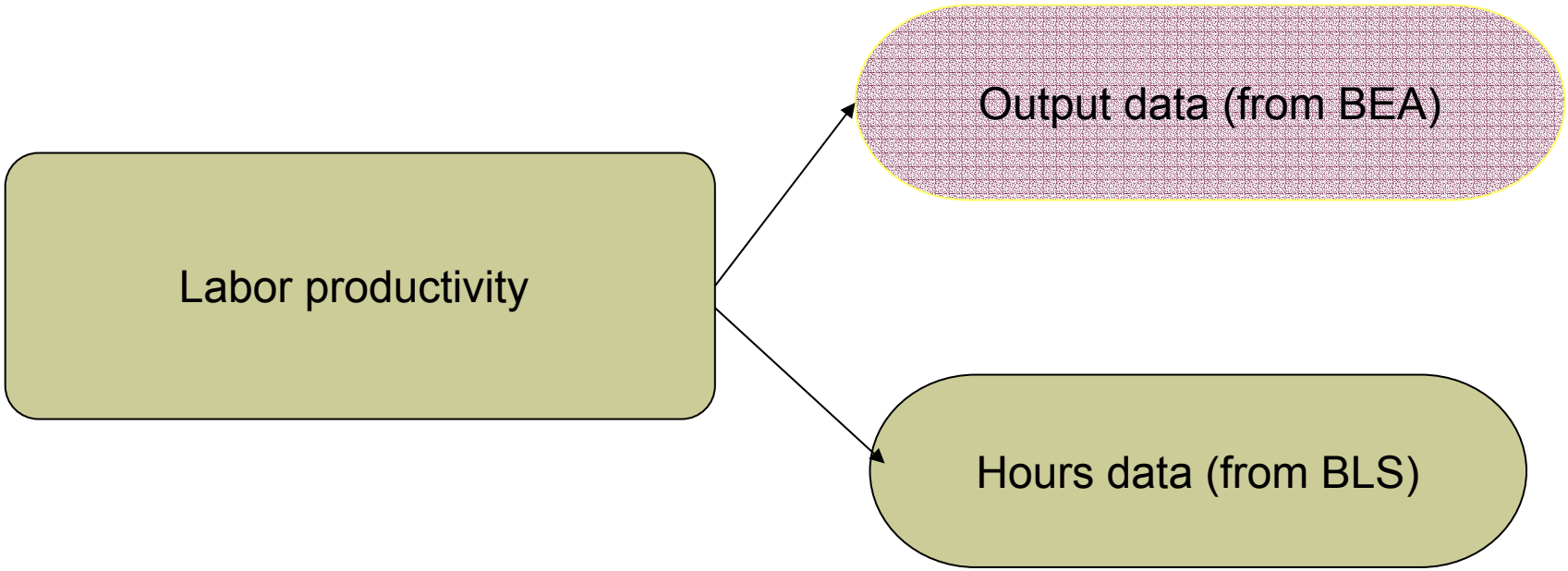
2. Change in Labor Productivity for Nonfarm Business



* *Average for 6 recoveries (1948-1977)*

Source: Bureau of Labor Statistics
February 25, 2004

3. Labor Productivity for Nonfarm Business



4. Hours for Productivity Measurement

- Total Hours:
  - Total Employment x Average Hours Worked
- Data Primarily From:
  - BLS Payroll Survey (Current Employment Statistics)
  - BLS Household Survey (Current Population Survey)
  - Employment Cost Index (ECI) program

5. Employment and Hours Data

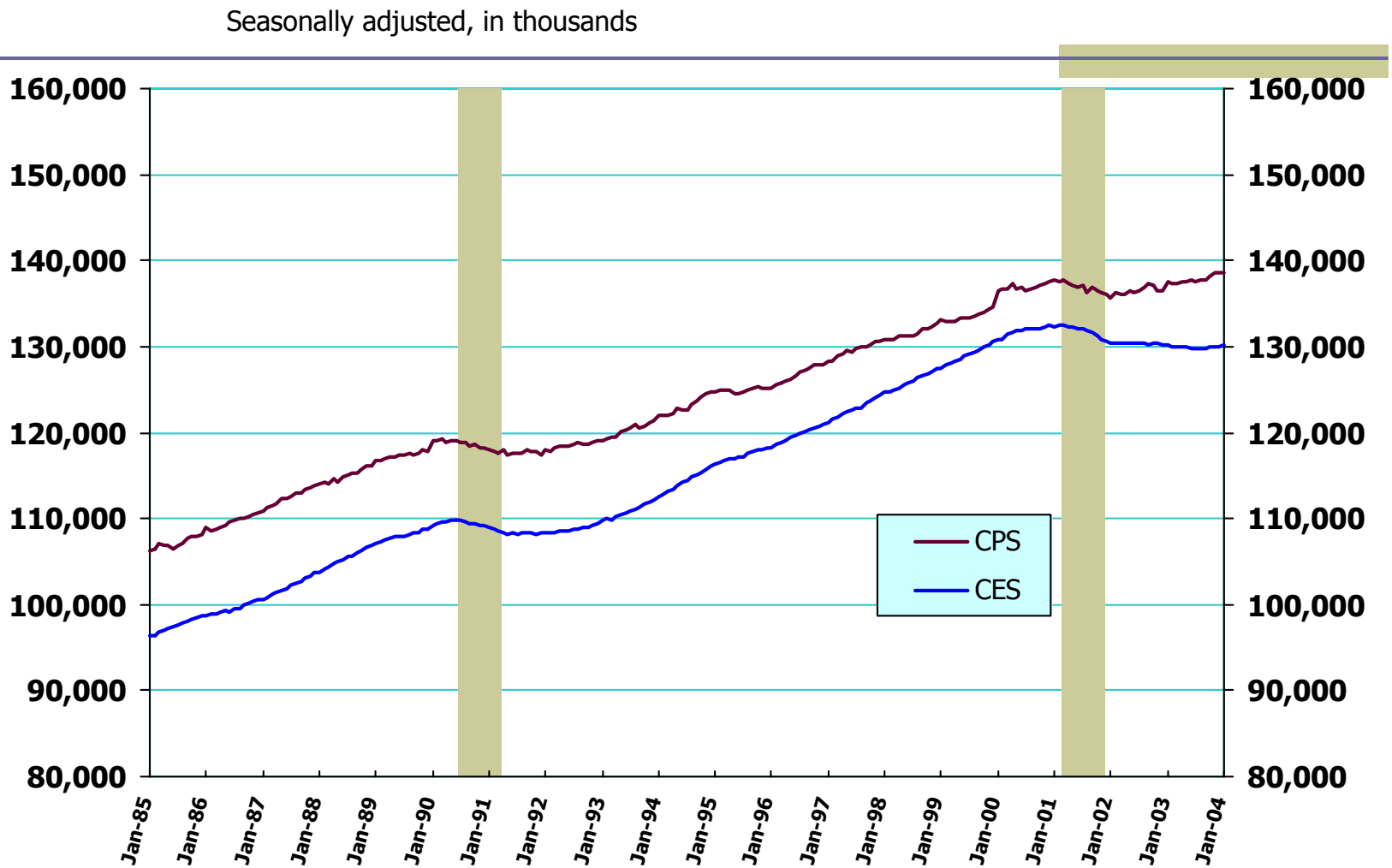
- Employment:
  - Private Wage and Salary Employees (from Payroll Survey)
  - Self Employment (from Household Survey)

- Average Hours:
  - Wage and salary employees: hours paid data for production and nonsupervisory workers are from the Payroll Survey
  - Hours of nonproduction employees are assumed to move the same as those of production employees
  - BLS plans to incorporate estimates for nonproduction employees based on relative trends from the Household Survey, beginning in August 2004
  - Self-employed workers: hours worked data are from the Household Survey

6. Questions Have Been Raised About Hours Measurements

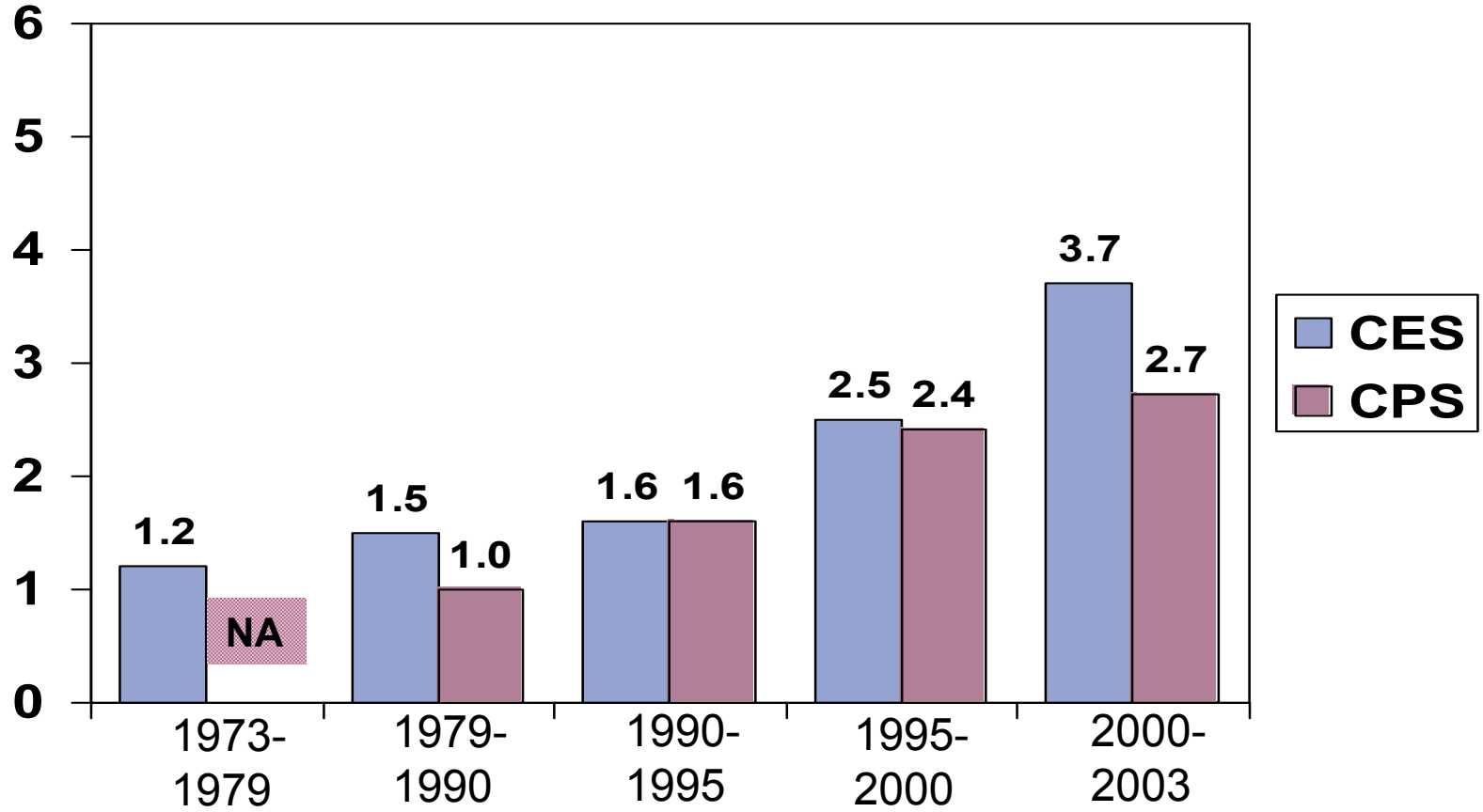
- Nonproduction employees
- Hours worked vs. hours paid
- “Off-book” hours
- Household vs. Payroll Survey employment discrepancy

7. Employment from the Current Population Survey (CPS) and Current Employment Statistics (CES) Survey, 1985-2004



Source: Bureau of Labor Statistics.
February 25, 2004
Notes: Shaded areas denote recessions. CPS data for January 2000, 2003, and 2004 affected by changes in population controls.

8. Comparison of Changes in Labor Productivity for Nonfarm Business Based on Household and Establishment Surveys



NA = Not Available

Source: Bureau of Labor Statistics
CPS approximation developed for research purposes
February 25, 2004

9. Nonfarm Productivity Measures are Primarily Based on Payroll Survey Data

- The merits of the payroll survey for measuring employment and average hours include:
  - Bigger Sample
  - More reliable industry identification
  - Timely annual benchmarking to universe data
  - Business establishments are likely to be more precise in reporting hours than households

10. Questions Have Been Raised about the Impact of Offshoring on Productivity Measures

- Conceptual Measurement Impact:
  - Hours are total hours worked by U.S. workers
  - Exports from the U.S. are included in output, but imports to the U.S. are not
  - Thus, conceptually, replacing goods and services produced in the U.S. with those imported from overseas ("offshoring") does not lead to measurement problems
- Possible Economic Impact:
  - The effect of offshoring on productivity will depend on the relative productivity of activities offshored compared to those retained or created domestically
  - Preliminary analysis of available data suggest this effect on productivity is likely to be modest, but more information is needed

11. Conclusions

- BLS' part of today's discussion has focused primarily on issues regarding hours measurement in the BLS productivity statistics

- BLS research shows that productivity trends are not significantly affected by problems in the measurement of hours