

CES Restructuring

CES/QCEW Integration

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CES program restructuring: BLS original proposal

- BLS would take responsibility for all remaining survey operations:
 - State and area series production
 - Remaining sample data collection
- States would retain responsibility for:
 - Monitoring State & local labor market for major developments; provide input to BLS
 - High level pre-publication review of estimates
 - Dissemination and analysis

Reasons for the restructuring proposal

Cost savings - up to an estimated \$15m dollars per year that could be used to:

- Cover budget rescissions without product cuts
- Re-invest in new or improved LMI products

Quality issues - more consistent application of statistical methodology, earlier publication, elimination of National/sum-of-States discrepancies

State response to CES restructuring

- Undermines Federal/State partnership
- Cuts State capacity to provide analysis and interpretation to users
- Eliminates local analyst expertise in estimation
- Loss of State funding and staffing

Alternative strategy negotiated in WIC

- Responsibility for State and area estimation remains in States
- BLS/State workgroup identify procedure to ensure State estimates sum reasonably close to national estimates
- BLS/State workgroup identify ways to reduce program costs:
 - \$3 million in FY 2007 (no output reduction)
 - \$4-5 million in FY 2008-2009

Solving the National/Sum-of-States discrepancy

- CES National and State employment estimates are developed independently and not reconciled for consistency
- This has sometimes resulted in differing employment trends measured by National versus sum-of-the-States estimates
- A disservice to users
- Analogous to Statewide/sub-State consistency

CES National and State Differences

- Differing editing results, atypical, and outlier treatments
- Sum-of-State (SOS) estimates usually understate employment change relative to National estimates
- SOS estimates also generally under estimate employment change relative to QCEW-based universe count

CES National and Sum-of-States Resolution

- BLS will produce monthly “control total” employment estimates for each State
- Control totals are sample-based estimates made using standard CES statistical methods
- Sum of States will *not* be raked to National totals
- BLS research shows consistent application of statistical methods will control differences to a minimal level
- States will review control totals and be able to modify (with BLS approval) for events such as strikes, large business births, or plant closings

Improving CES Cost Efficiency

- Fed/State workgroup worked to identify \$3m in savings in FY07 without output reduction

Workgroup recommended (WIC agreed, BLS approved):

- Centralization of remaining sample data collection at BLS
- Yields net savings of \$2.2m in FY07 and \$3.2m in FY08

Centralized CES Data Collection

- WIC State survey estimated States cost of their collection work to be \$4.5m
- BLS estimates it can perform this work for a cost of \$1.2m, given its current unit costs
- Net annual savings by FY08:
 $\$4.5 - \$1.2 = \$3.2\text{m}$

Centralized CES Data Collection

Two year transition:

- FY07 – State allocations reduced \$3.0m; BLS begins work to assume remaining collection work
- FY08 – State allocations reduced additional \$1.5m; BLS has all data collection responsibility

Additional CES Cost Reduction Options

- Fed/State workgroup continues to try to identify another \$3.8m in cost savings to fulfill WIC agreement

Some of the likely options include:

- Expansion of small domain modeling
- New non-mainframe ACES system
- New benchmark procedures
- Reduction of hours and earnings series

The Collaboration Process

Graham

CES and QCEW Program Integration

- The **CES** produces sample-based estimates of nonfarm employment, hours and earnings in the month following the reference month
- The **QCEW** produces universe employment and total wages counts from UI tax records 6-9 months later than the CES publication dates

Current State of Integration: CES Benchmarking

- Once a year the CES sample-based estimates are benchmarked to the QCEW employment counts, and re-published
- Benchmarking is intended to correct for sampling and non-sampling error in the estimates, by adjusting them to full universe counts of employment

CES/QCEW Differences

- After CES benchmarks to QCEW the two employment series are *conceptually* one in the same, except for small scope differences
- But... *the published series are not equivalent* because of differences in editing, file versions, treatment of industry and geographic code changes
- For National level series month-to-month changes within a year also differ because only March estimates are replaced.
- At State and area levels, all months are replaced

The Basic Proposal

- Replace separate CES and QCEW series with one set of industry employment statistics
- Other series unique to each program continue
- Merged data set would include national, state, metro area, and county level series
- Employment series with sufficient sample publish monthly
- All other employment series publish quarterly (finer levels of industry and geography)

CES and QCEW are Complimentary

Strengths	CES	QCEW
Timeliness	X	
Time series properties	X	
Business births/deaths		X
Industry detail		X
Geographic detail		X

Issues if the CES and QCEW series are integrated

- **Definitional** – scope of employment
- **Methodological** – techniques for merging information from CES and QCEW
- **Operational** – production schedules and procedures

Definitional Issue: Scope of Employment Coverage

	CES	QCEW
Agricultural industries	excludes	includes
Private household	excludes	includes
Non-UI covered	includes	excludes

Methodology Issues

Quarterly benchmarking

- A true integration requires adjustment of sample-based estimates to universe counts as soon as QCEW is available every quarter
- **Benchmark methodology**
- Should all monthly CES estimates be replaced with QCEW employment counts?
- Research indicates non-economic, administrative effects from the quarterly reporting of monthly data in the QCEW
- But...CES has sampling error, QCEW does not
- Other unexplained seasonal pattern differences between quarters also persist

QCEW Monthly Employment Counts

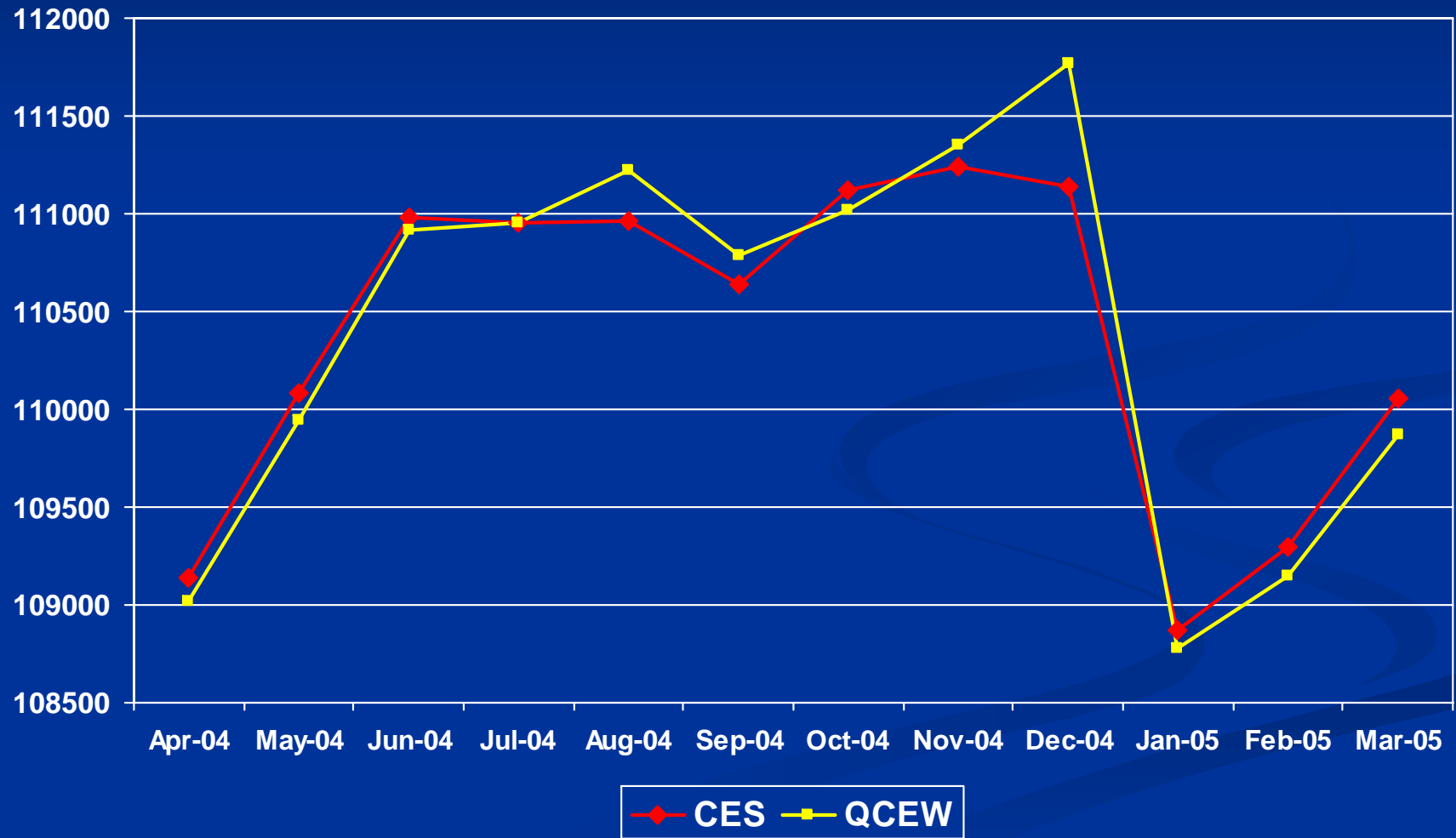
- Counts are subject to administrative effects from the quarterly reporting of monthly data
- More reporting of “equal employment” for within quarter months in QCEW than in CES
- Greater concentration of change in the first month of each quarter for QCEW than in CES

Inter-quarter Seasonal Differences

- Persistent seasonal differences in CES and QCEW across quarters also exist
- QCEW generally shows more employment increase in 3rd and 4th quarters than CES
- Followed by a larger drop than CES in 1st quarter
- Causes not clear despite research

CES vs. QCEW, Total Private

Not Seasonally Adjusted, Apr-04 – Mar-05



Operational Issues

- Merging the publication stream involves integration of:
 - Computer systems
 - Production schedules
 - Edit routines

Integration work to date

- BLS consultation with States and some of its major users; additional consultations upcoming
- Research on alternative benchmark methods including quarterly benchmarking and wedge versus replacement methodology

Additional integration work upcoming

- Additional consultations with users
- States are also encouraged to consult with major users
- Additional methodological research on benchmark methods
- Response analysis survey of CES and QCEW respondents

Additional integration work upcoming

Form Fed/State workgroups to explore:

- Scope and definitions
- Integrated microdata editing
- Macrodata methodology
- Recommendations from States with integrated programs

Next Steps - Becky

Questions?