Assessing the Timeliness of Business Births in BLS Establishment Statistics

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Study Summary

Purpose: This study looked at one possible contributor to the recent observed discrepancy in employment growth between the Current Employment Statistics (CES) or establishment survey and the Current Population Survey (CPS) or household survey. Both CPS and CES sample results are tied to independently derived controls; the CPS uses Census Bureau population estimates to derive current estimates of employment and unemployment while the CES uses universe counts of employment from the BLS Quarterly Census of Employment and Wages (QCEW) program as an annual benchmark for employment data and as a critical input for modeling the birth-death component of monthly estimates.

This study examined the QCEW universe count of employment to determine whether there was an emerging lag in capturing new business births. If the lag in capturing new employers by the QCEW program has lengthened, then it is possible that this could result in an underestimate of employment growth in the CES as the annual benchmark or the birth-death factor or both could be undercounted. (See pages 293-4 of the January 2004 *Employment and Earnings* for an explanation of business birth-death estimation and the report "Employment from the BLS Household and Payroll Surveys: Summary of Recent Trends" (https://www.bls.gov/ces/ces_cps_trends.pdf) for other possible factors affecting the CES and CPS employment growth discrepancy.)

Method: The study examined State Unemployment Insurance (UI) Contribution Operations (Form ETA 581) reports, which identify the number of new UI-liable employers processed each quarter. These reports were used to determine whether the full universe count of employment could be incomplete due to a lag in capturing new employers. Quarterly State ETA 581 data were aggregated to create a national time series of business births and this time series then was seasonally adjusted. The data flow in processing new employers and capturing that information in the BLS QCEW program was evaluated.

Results: This study found that no lag has emerged in the capturing of new UI-liable employers by the QCEW program, indicating that the universe count used for benchmarking CES estimates remains complete.

Sources: ETA 581 data used in this report can be located at http://www.workforcesecurity.doleta.gov/. Under the Advisories section, click on UIS/OWS Information Bulletins.

Study Description and Analysis

Background: The QCEW program, also known as the ES-202 program, obtains information on all employers that have employees covered by the State UI laws, as well as federal workers covered by the Unemployment Compensation for Federal Employees (UCFE) program. Each quarter, the State Workforce Agencies edit and process the data and send the information to BLS in Washington, DC. These data items include the name, address, employment and wages for each quarter, the date of initial UI liability, and other information. The result is a quarterly universe list of UI-covered businesses that serve as the sampling frame for most BLS business statistics surveys. These surveys include the Current Employment Statistics (CES), the Occupational Employment Statistics (OES), the National Compensation Survey (NCS), and others.

QCEW total employment counts also serve as the annual employment benchmark for the CES establishment survey and as the population base in business birth-death estimation. For these purposes, an important quality component of the QCEW universe count is the timely inclusion of new business births in the State UI systems. This study looks at information captured in the Employment and Training Administration's internal unemployment system reporting mechanisms to identify any emerging lags in capturing new business births which could affect CES employment estimates.

ETA 581 Report: The Contribution Operations report (Form ETA 581) provides comprehensive information on each State's UI tax operations and is essential to the Employment and Training Administration's oversight of the UI tax program. ETA 581 data are the basis for determining the adequacy of funding and measuring the effectiveness of States' UI tax operations; these are required Federal functions under the Federal-State UI program. These reports provide information on State agency workloads and measure the timeliness of assigning UI accounts to new employers. The individual State ETA 581 reports for each calendar quarter are submitted electronically to ETA on the 20th day of the second month following the reference quarter (May 20, August 20, November 20, and February 20).

Data from the ETA 581 report are used regularly for three critical purposes: (1) allocation of administrative funding based on State tax workload, (2) performance measurement to ensure the quality of State UI tax program operations, and (3) calculation of State and national economic statistics. This information also can be used to study processing lags in the capture of UI business births.

Capturing New UI-Liable Employers in the State UI System: There are two primary steps in capturing new business births in the State UI system: learning of and determining the UI tax liability of new employers, and capturing information on new UI-liable employers into the State UI computer system.

(1)   Learning of and determining the UI-tax liability of new employers: The data in Table 1 show the number of employers found to be liable during each quarter. BLS calculated seasonally adjusted measures to aid in the analysis of these data. Both the unadjusted and seasonally adjusted series show the business cycle aspects we would expect, with growing

workload during the economic expansion in the late 1990s and reduced levels during and following the recession.
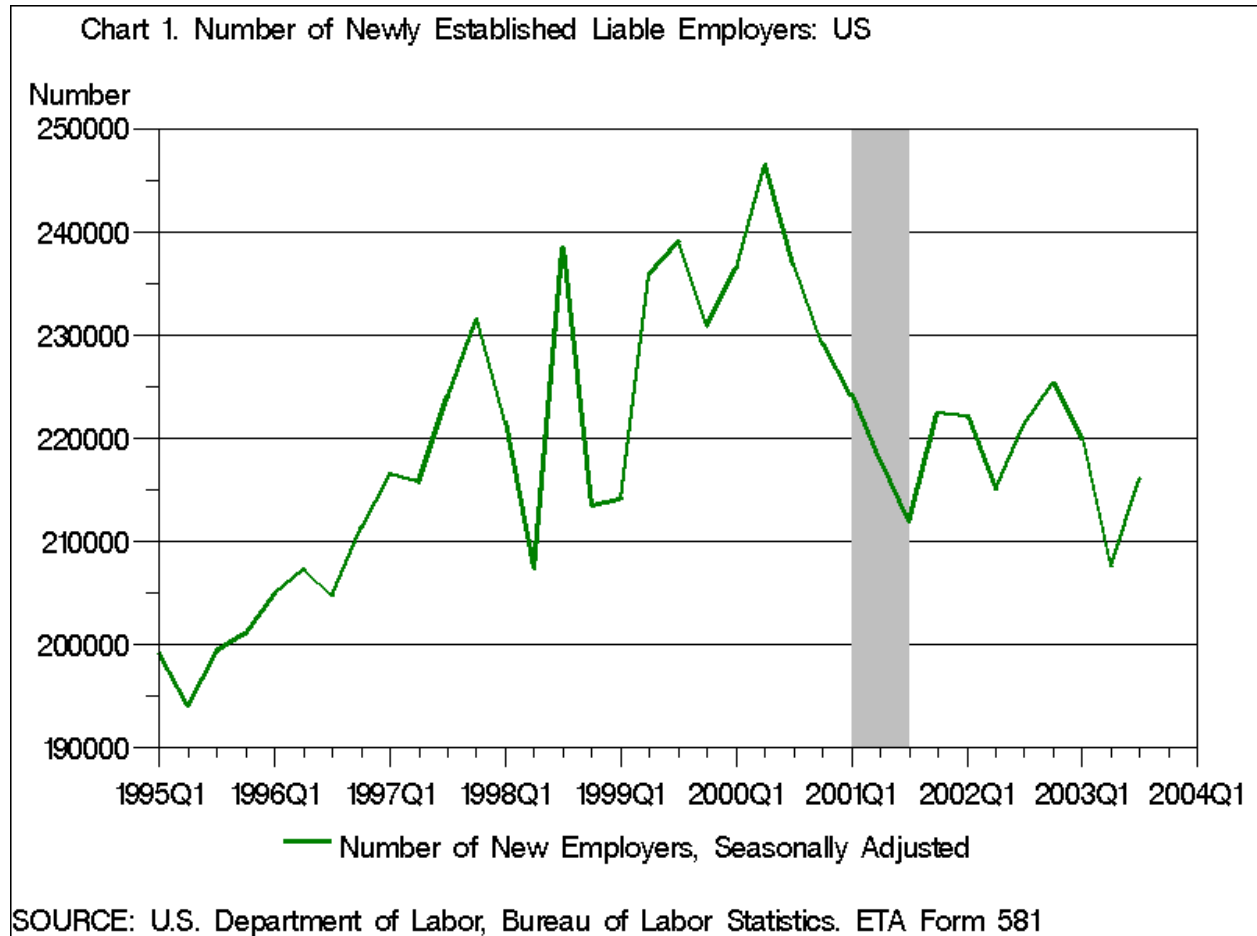
Table 1. Number of Newly Established UI Liable Employers, US Total, 1995-2003

Quarter	Number of Newly Established Liable Employers	
	Original	Seasonally Adjusted
1995Q1	214,275	199,014
1995Q2	210,297	194,078
1995Q3	193,843	199,326
1995Q4	175,168	201,050
1996Q1	219,439	204,923
1996Q2	224,195	207,202
1996Q3	200,228	204,780
1996Q4	184,400	211,279
1997Q1	230,157	216,522
1997Q2	234,233	215,766
1997Q3	220,049	223,945
1997Q4	200,891	231,400
1998Q1	234,574	221,527
1998Q2	226,869	207,424
1998Q3	233,858	238,398
1998Q4	184,419	213,488
1999Q1	227,154	214,202
1999Q2	258,892	235,850
1999Q3	233,636	238,974
1999Q4	198,746	230,879
2000Q1	252,258	236,397
2000Q2	270,102	246,442
2000Q3	230,616	236,757
2000Q4	197,000	229,165
2001Q1	241,185	224,153
2001Q2	237,606	217,776
2001Q3	205,583	211,901
2001Q4	191,340	222,411
2002Q1	240,987	222,118
2002Q2	233,169	215,046
2002Q3	214,102	221,256
2002Q4	194,215	225,273
2003Q1	239,730	219,965
2003Q2	224,216	207,634
2003Q3	208,808	216,015

SOURCE: ETA 581 Report and BLS seasonal adjustment.
NOTE: US totals exclude Puerto Rico and the Virgin Islands.

As seen in Chart 1, the UI system has continued to detect and capture newly established businesses. In the eight quarters after the end of the recession, an average of 218,000 new businesses per quarter were determined to be liable for UI tax purposes.

Chart 1. Number of Newly Established Liable Employers: US

Number of New Employers, Seasonally Adjusted

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics. ETA Form 581

(2) Capturing information on newly UI liable firms into the UI computer systems: Table 2 below displays standard measures of the promptness of processing new employers within the UI system. Charts 2 and 3 depict the efficiency and speed with which the State UI offices capture new UI accounts.

Table 2. Promptness of UI Liability Status
Determination, US Total, 1995-2003

Quarter	Percent Within 90 Days	Percent Within 180 Days
1995Q1	72.2	88.9
1995Q2	79.7	92.7
1995Q3	82.1	94.0
1995Q4	82.5	92.5
1996Q1	78.1	90.0
1996Q2	77.8	88.8
1996Q3	83.1	95.1
1996Q4	78.8	90.7
1997Q1	76.4	87.8
1997Q2	79.1	89.8
1997Q3	79.8	92.1
1997Q4	80.0	89.4
1998Q1	75.5	87.5
1998Q2	79.3	90.1
1998Q3	77.7	90.7
1998Q4	80.2	90.7
1999Q1	75.9	86.7
1999Q2	72.6	80.4
1999Q3	69.5	81.2
1999Q4	81.5	91.1
2000Q1	76.2	85.1
2000Q2	75.5	84.7
2000Q3	80.9	91.7
2000Q4	82.6	91.4
2001Q1	75.3	85.9
2001Q2	79.9	89.3
2001Q3	79.8	91.2
2001Q4	80.2	90.4
2002Q1	80.3	88.2
2002Q2	83.1	90.0
2002Q3	83.0	91.9
2002Q4	84.0	91.2
2003Q1	81.7	88.8
2003Q2	84.2	91.0
2003Q3	84.9	92.8

SOURCE: ETA 581 Report.
NOTE: US totals exclude Puerto Rico and the Virgin Islands.

Chart 2 depicts efficiency measures of capturing new businesses within the UI system. These measures include the total levels, the number processed within 90 days of the end of the quarter of initial liability, and the number processed within 180 days of the end of the quarter of initial liability.

Chart 2. Timeliness of UI Systems Accounting for New Liable Employers: US Total

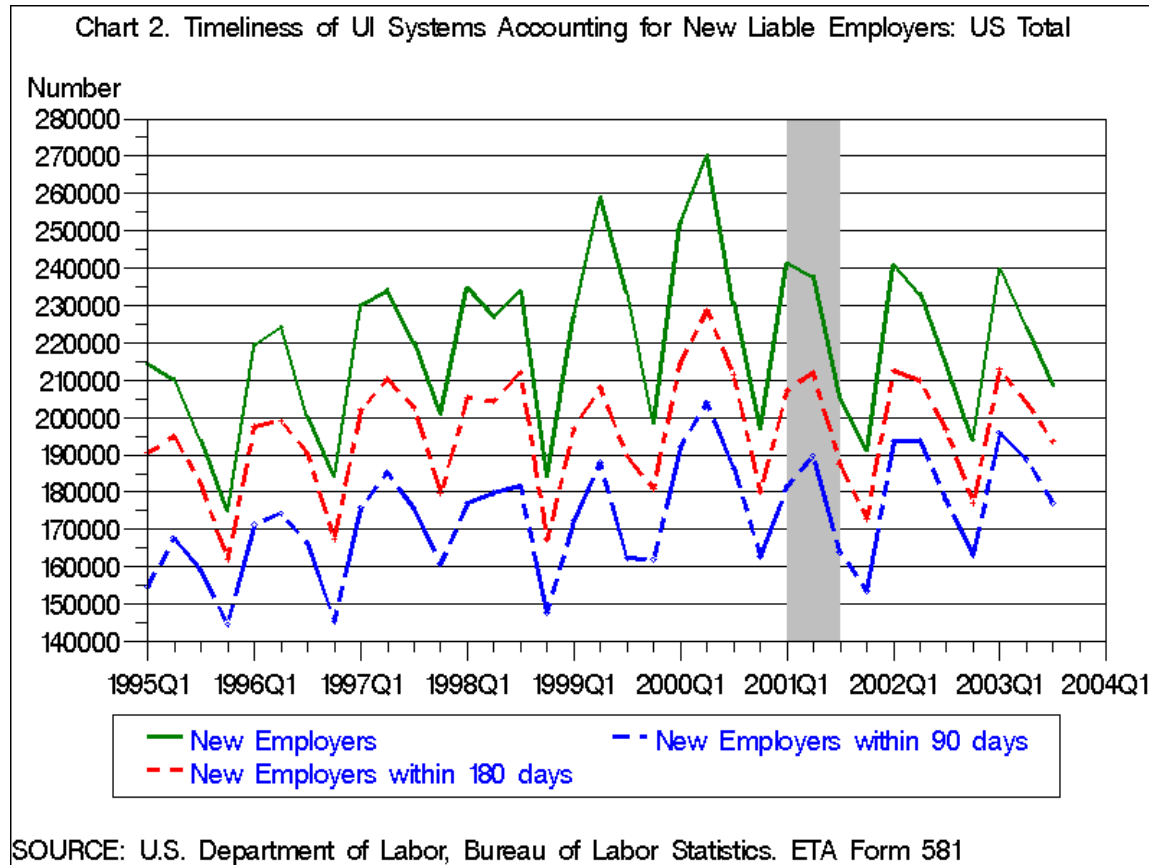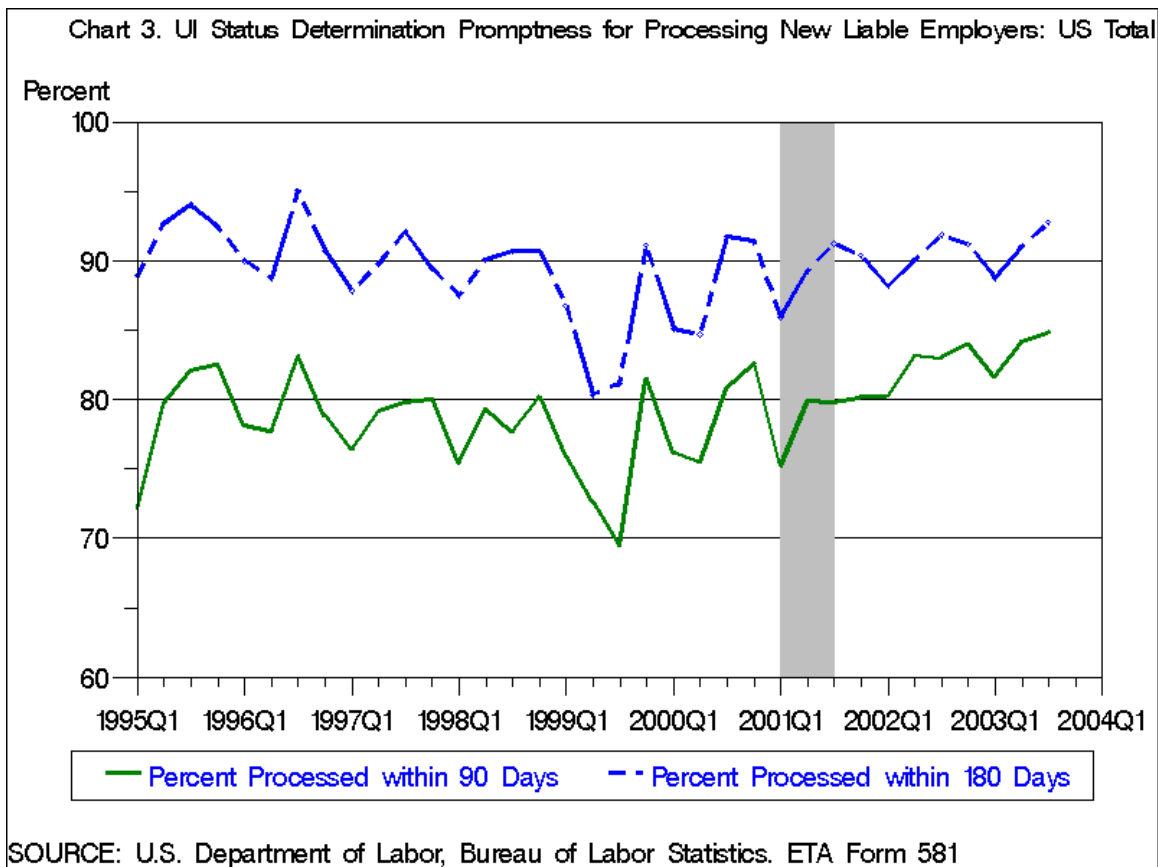SOURCE: U.S. Department of Labor, Bureau of Labor Statistics. ETA Form 581

Chart 2 indicates that the UI computer systems continue to capture and process new employers on a timely basis.

It should be noted that the ETA 581-based count of new UI accounts covers the work done, or number of new UI accounts assigned in a specific quarter, but does not necessarily capture all business formation *during* the reference quarter. This count not only includes new status determinations for truly new employers; it also includes those accounts for employers that had not provided a status determination form to the UI system on a timely basis. While most businesses establish their liability within a short period of their opening and hiring, many do so with a lag of months or quarters. It is primarily this lag in employers' reporting that accounts for the difference between the total number of determinations made in a quarter and the "entered within 90 days" or "entered within 180 days" data shown on Chart 2.

Chart 3 shows the percentage of the total number of new accounts that are processed into the
UI system within either 90 or 180 days. Since 1995, the UI offices have steadily captured just
less than 80 percent of new UI accounts within one quarter and about 90 percent within two
quarters, with these performance levels rising slightly over the past two years. The share of new
accounts processed within 90 days has been above 80 percent in every quarter from the fourth
quarter of 2001 and the third quarter of 2003 (the last data available). The percent of new
employers processed within 90 days of 2003Q3 was 84.9 percent compared to 83.0 percent a
year earlier and the share of new employers processed within 180 days was 92.8 percent versus
91.9 percent. There have been year-over-year increases in both measures in every quarter
starting with the first quarter of 2002, the quarter after the recession ended.

Chart 3. UI Status Determination Promptness for Processing New Liable Employers: US Total

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics. ETA Form 581

BLS Capture of new Business Births: Each quarter, BLS obtains extracts of the current and preceding quarters' data from the state UI files for use in the QCEW program. The timely and comprehensive capture of new UI accounts in the QCEW program is an important feature for many BLS statistical programs including Current Employment Statistics. Table 3 shows that, for the most recent data available, 87.5 percent of the new business births that are included in the BLS files opened within the same quarter that they were liable for UI coverage. This high rate of capture corresponds closely to the ETA 581 data.

Table 3. Liability Dates for New UI Accounts for the US: 2003/3Q

Number of New Accounts	Quarter Containing Initial UI Liability Date									
	2003/3Q		2003/2Q		2003/1Q		Before 2003/1Q		No Liability Date	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
196,861	172,303	87.5%	5,196	2.6%	2,333	1.2%	17,006	8.6%	80	0.0%

SOURCE: Bureau of Labor Statistics, Quarterly Census of Employment and Wages Program.
NOTE: US totals exclude Puerto Rico and the Virgin Islands.

Analysis Summary: This study found no indication of a decline in the UI system's capability to promptly include newly established businesses in their data. Similarly, the study found no indication of a decline in BLS's ability to capture this information in a timely manner in the QCEW program.