

1989-1993 Gross Flow Update Project Addendum

The 1989-1993 Gross Job Flows were calculated with an algorithm that is essentially that described in the technical appendix in Davis, Haltiwanger, and Schuh (1996). This document lists a few of the programming changes made, notably in the quarterly flows, to accommodate changes in Census' data collection process during this ASM panel.

1. BLS Adds:
There is a large jump in the number of observations in the gs files in 1990. Starting this year, Census used classification information from BLS to update blank SIC classification in the Standard Statistical Establishment List (SSEL) master file. This caused a large one-time increase in the number of plants in the sample. This group of plants should not be considered 'births' in the traditional sense. A flag was used to separate out these cases.
2. 92 Annual Survey of Manufacturers (ASM):
There is no easy way to identify the ASM plants in this Census. We developed an algorithm that we believe successfully approximates and ASM flag.
3. There was no Administrative Record flag on the 92 Census of Manufacturers (CM) file. Other information was used to isolate and remove these records.
4. For the first time, starting in 1993 many plants' sample weights were deliberately changed within the sample period.
 - The set of 1989-1992 births (that is, ALL PREVIOUS YEARS' births for the panel) were sampled in 1993. Only 50% of the Single Units (SU) previous years' "births" were selected and their weights were increased.
 - Plants with 250 or more employees in the 1992 CM were converted to certainty cases and their weights were adjusted to 1.00.
 - We used the weights for each year as given
5. The Bureau assigned 1993's births (as opposed to previous years' births which were already mentioned above) higher weights than usual to help compensate for the births that are missed each year; particularly during the last year of an ASM panel such as 1993.
6. A difficult feature of the 89-93 panel is that there is an unusually large number of plants whose employment does not change between quarters within a given year. Similarly, there are a much higher percentage of plants in this panel who's core data has been imputed. The combination of these factors produced spuriously high first quarter job flows. To adjust for these problems we flagged all plants who's data is imputed or who's employment remained flat in a given year. Once flagged, these plants' data were retimed in a procedure similar to that used for the 1st quarter births and deaths (see technical appendix of Davis, Haltiwanger, and Schuh (1996)). This procedure produced job flows that yielded net employment growth rates that matched reasonably well with the BLS 790 based growth rates.

