The 2013 National Establishment Time-Series (NETS) Database© is the only historical database of its kind that provides time-series information on establishment sales growth performance, job creation and destruction, changes in primary markets, mobility patterns, and historical D&B ratings, to name a few. The annual time-series of information for over 54.7 million U.S. establishments from January 1990 to January 2013 and the detailed 8-digit SIC classification system (over 18,500 industries) allows us to "drill down" to specific sectors of interest at much greater detail than even the 6-digit federal NAICSs. We used this capacity to define the Publicly Listed Database in a way that allows us to look at the role of public firms in the U.S. economy.

In order to create this comprehensive time-series Database of all establishments ever part of publicly listed firms, we

Between 1989 and 2012, the number of establishments in one of the three levels of high technology expanded faster than the economy as a whole, 211% vs. 150%. However, high technology job growth slightly lagged that of the nation (+27% vs. 31%). Most of high technology’s rapid job growth came pre-2001 (+37% vs. U.S.
growth of 32%) when the number of hi-tech establishments more than doubled from 1989. Of course, the post-2001 U.S. economy stagnated through 2012 with a 1% decline in total employment (even with 53% more establishments). High technology establishments contributed to that decline with 7% fewer jobs, even with 46% more establishments. High-tech job creation mirrored that of many sectors where small startups and expansions were simply swamped by loss of jobs in larger firms.

The NETS High Technology Database—because it is establishment-based—allows the researcher to parse the various contributions to growth to different activities within the firm. It allows us to see how the mix of high technology establishments has change over time; which are growing and which are not. This Database also lets one explore the role of merger and acquisition and its relationship to changes in primary market focus. For instance, active high technology establishments in 2013 had merger/acquisition rates very similar to the private sector as a whole (3.4% vs. 3.2%); but 27% of high-tech employment was impacted while only 21% of total employment was affected by merger/acquisition activity. Concomitantly, approximately 7% of all active establishments in 2013 changed their primary market (SIC3) over time, while high-tech establishments appeared to be much more nimble with a nearly double 13% rate of change in primary markets.

Of course, these average changes across the high technology sectors vary widely. For instance, in 2013 40% of active Depository Institutions hi-tech establishments (53% of jobs) were involved in mergers. Similarly, 52% of active Railroad Transportation hi-tech establishments (93% of their jobs) and 36% of active Insurance Carriers hi-tech establishments (52% of jobs) were also involved in mergers.

Another question that begs for in-depth analysis is the observation that, if a hi-tech establishment’s primary market changes dramatically (at the SIC3 level), the likelihood of a merger or acquisition goes from 2.2% to 11.4%! Those active in 2013, with no change in their primary market, who were involved in mergers and acquisition still impacted nearly 21% of jobs in that category; but hi-tech establishments that had both a change in primary market and were involved in a merger/acquisition accounted for 39% of jobs in their categories.

If understanding high technology sectors is your goal, please take a look at the companion BLS_HiTechNAICSs2002.xlsx analysis that summarizes 2013 NETS High Technology Database by CBSA and SIC8 for all three BLS Levels; or contact us at the email address below.

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1 An “establishment” in the NETS Database is a unique primary market (SIC8) at a unique location. Unlike the federal definition (a firm’s unique location), for multi-establishment firms, there may be more than one establishment at a location.