

Gross Domestic Product by Industry before 1998: Output and Employment Estimates Based on the North American Industry Classification System

Last November, BEA released new estimates of gross domestic product (GDP) by industry for 1947-86 that are based on the 1997 North American Industry Classification System (NAICS).¹ These historical industry estimates filled a major remaining gap among economic time series and are a significant improvement over the previously-published estimates, which were based on the Standard Industrial Classification (SIC) system. Nominal and real value added estimates were provided for 65 detailed industries for 1977-86 and for 22 industry groups for 1947-76. These estimates supplemented the NAICS-based GDP by Industry estimates for 1987-97 that were released in November 2004.²

Shortly after the release of the historical industry value added estimates, industry analysts requested estimates of employment by NAICS industry that are consistent with the industry output measures. Last January, BEA decided to prepare estimates of full-time and part-time employment for 1947-97 at the same level of industry detail as the value added estimates. These employment estimates are intended as interim measures until the Bureau of Labor Statistics (BLS) is able to provide its own historical NAICS employment series.³ The BEA estimates are scheduled to be released this summer and will be provided on the BEA web site. Later this year, BEA will release State-level NAICS-based employment estimates back to 1990 based on the BLS data.

The historical NAICS employment estimates, like the gross output estimates back to 1987 and the value added estimates back to 1947, are being prepared using extrapolation procedures that rely on converting SIC-based employment estimates to NAICS. The conversions are based on a detailed SIC-NAICS employment concordance for 1997 that is extrapolated back (“backcast”) to earlier years by matching detailed SIC-based employment estimates, often at the four-digit SIC level. These backcast concordances thus allow for changes over time in the shares used to convert estimates from SIC to NAICS. The historical employment estimates will be consistent with the BLS estimates that are available back to 1990.

¹ Robert E. Yuskavage and Mahnaz Fahim-Nader, “Gross Domestic Product by Industry for 1947-86: New Estimates Based on the North American Industry Classification System,” Survey of Current Business 85 (December 2005): 70-84.

² Robert E. Yuskavage and Yvon H. Pho, “Gross Domestic Product by Industry for 1987-2000,” Survey of Current Business 84 (November 2004): 39-41.

³ BLS has released detailed NAICS-based employment estimates for States and counties going back to 1990.