Appendix J

Estimates by OTA and JCT of Federal Tax Credits Attributable to Pharmaceuticals

This appendix describes how the Office of Technology Assessment and the congressional Joint Committee on Taxation (JCT) identified pharmaceutical firms in the Internal Revenue Service's (IRS) 1987 corporate Statistics of Income (SOI) database and used these samples to estimate Federal tax credits claimed by the drug industry in that year.

The SOI database consists of most elements from corporate tax returns. The sample is stratified by the size of firms so that 100 percent of the corporations in the United States with the greatest assets (approximately $50 million or more) are included. The bulk of companies are randomly selected for inclusion in each year's sample with a probability inversely proportional to their size as determined by several measures. The SOI database classifies each corporation according to a Principal Activity Classification (PAC) coding scheme that reflects the activity from which the firm derives the greatest proportion of total receipts (essentially gross income). Although similar in format to the U.S. Census Bureau's Standard Industrial Classification Codes (SIC), PAC and SIC codes are not equivalent. Each firm indicates on its tax return the PAC code it believes best describes its activities. However, to ensure consistency over time for some analyses that the IRS and other government agencies conduct with the database, the IRS changes the PAC grouping for some firms (297). PAC code 2830 is described as "drugs."

In an effort to refine this industrial grouping so that OTA's analysis of tax credits would reflect only those parent firms and subsidiaries exclusively (or almost exclusively) involved in pharmaceutical R&D or production,[1] the JCT investigated each firm in PAC 2830 of the 1987 SOI sample with assets $50 million or more. Of 99 such firms, the JCT concluded from its research that 12 of them were not primarily drug companies[2] and should be dropped from the JCT/OTA analysis. The JCT did not investigate and eliminate nonpharmaceutical firms with assets of less than $50 million because these companies combined account for only 3 percent of total assets in PAC 2830 and less than 2 percent of the taxes paid by this industry group in 1987[3] (492). Because the bulk of corporations whose sales are diversified beyond pharmaceuticals have tax-filing subsidiaries that *do* fall into PAC 2830 and whose business is almost exclusively in pharmaceuticals, OTA also concluded that relatively little pharmaceutical business or tax payments fall ***outside*** of PAC code 2830 (297). Hence, OTA believes its analysis accurately and comprehensively captures the tax activity of the pharmaceutical industry in 1987.

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[1] So called "generic manufacturers" of pharmaceuticals with relatively small research budgets are included in the analysis.

[2] According to the JCT, most of these companies did relatively little work in pharmaceuticals. These companies included manufacturers of medical devices, cosmetics, other chemical products, and nonpharmaceutical applications of biotechnology (297). OTA was unable to investigate the nature of these firms itself because confidentiality of tax return data precludes OTA from knowing the identity of firms included in the SOI database or the other information from the SOI database at the level of an individual firm.

[3] Because of the large number of such firms, an investigation of each one would require a commitment of resources beyond its value to the analysis.