United States General Accounting Office

GAO

Briefing Report to the Chairman, Special Committee on Aging, U.S. Senate

May 1992

PHARMACEUTICAL INDUSTRY

Tax Benefits of Operating in Puerto Rico

GAO/GGD-92-72BR

GAO United States
General Accounting Office
Washington, D.C. 20548

General Government Division

B-248098.1

May 4, 1992

The Honorable David Pryor
Chairman, Special Committee on Aging
United States Senate

Dear Mr. Chairman:

This briefing report responds to your November 14, 1991, request for detailed information about the pharmaceutical industry's tax benefits obtained from operating in Puerto Rico in the 1980s. We are continuing our work on your request to review other major tax benefits used by the pharmaceutical industry.

BACKGROUND

Section 936 of the Internal Revenue Code provides a tax credit equal to the federal tax liability on certain income earned in Puerto Rico and certain U.S. possessions. The credit is equivalent to exempting completely from federal taxes the income of qualifying U.S. corporations in Puerto Rico. The Department of the Treasury will lose $15 billion in tax revenues during the 1993 through 1997 period due to section 936, according to the Congressional Budget Office. When Congress enacted section 936 in 1976, it sought to help Puerto Rico obtain employment-producing investments.

Various industries, including the pharmaceutical industry, have taken advantage of section 936 by manufacturing products in Puerto Rico. U.S. corporations have been able to combine the federal tax credit with local tax benefits granted by the government of Puerto Rico to pay low income taxes.

In the early 1980s, Congress and Treasury were concerned about the incentives created by the section 936 tax credit to transfer income to Puerto Rico. Treasury has described how corporations at that time could shelter from federal tax substantial amounts of U.S. income obtained from intangible assets, such as drug patents.[1] A pharmaceutical company would develop a drug in its U.S. research facilities and transfer the drug patent to its wholly owned subsidiary operating in Puerto Rico. The subsidiary would produce the patented drug and claim the income obtained from the drug sales as tax-free income. Treasury would take the opposite position that the income obtained from drug sales had to be allocated to the U.S. parent corporation and subject to federal taxation. This issue resulted in lengthy litigation.[2]

Congress made substantial changes to section 936 in 1982 to "lessen the abuse caused by taxpayers claiming tax-free income generated by intangibles developed outside of Puerto Rico."[3] The Tax Equity and Fiscal Responsibility Act of 1982 established that, in general, intangible income of section 936 corporations would be taxable to U.S. shareholders. However, the act gave section 936 corporations the right to claim income attributable to intangible assets under two options. Thus, since 1982, section 936 corporations have been able to elect one of the two options and thereby, continue to shelter from federal tax a portion of their income from intangible assets.

Treasury was also concerned in the early 1980s that, despite section 936, the employment levels in Puerto Rico had been flat and the average tax revenue lost per job was higher than the average employee compensation paid by section 936 corporations. Therefore, in 1984 Treasury proposed to replace the section 936 tax credit with a wage credit tied to the federal minimum wage. It argued that a wage credit would provide a more direct and cost-effective incentive to create jobs in Puerto Rico and U.S. possessions.

Although Congress did not adopt Treasury's wage credit proposal, it did further tighten section 936 in 1986. Its reasoning was

---

[1]Intangible assets do not have physical substance but do have economic value because they confer rights on their holders. The owner of a drug patent granted by the U.S. government has the right to prevent others from making or selling the drug for a period of 17 years.

[2]See, for example, the U.S. Tax Court cases Eli Lilly and Co. v. Comr., 84 T.C. 996 (1985) and G.D. Searle & Co. v. Comr., 88 T.C. 252 (1987).

[3]General Explanation of the Revenue Provisions of the Tax Equity and Fiscal Responsibility Act of 1982, Joint Committee on Taxation (Dec. 1982).

that the 1982 changes reduced the total section 936 tax credits by less than originally anticipated.[4] Recently, the Congressional Budget Office reported that replacing the section 936 tax credit with a wage tax credit would raise $2.2 billion during the 1993 through 1997 period.[5]

A study prepared for the Puerto Rico, U.S.A. Foundation stated that the repeal of section 936 would cause the Puerto Rican economy to experience extreme dislocation.[6] We noticed that the combined federal and local tax incentives have resulted in a manufacturing sector that provided 63 percent of Puerto Rico's total net income in 1990 although it accounted for only 17 percent of total jobs. Unemployment in Puerto Rico remained above 10 percent during the 1980s, and the estimated net out-migration was 280,000 from 1980 to 1988, almost 9 percent of the 1980 population.[7]

RESULTS

Throughout the 1980s the pharmaceutical industry received a relatively large share of the tax benefits from section 936 compared to the number of jobs directly created and the amount of employee compensation the industry provided. Industry representatives state that other employment-related information, such as the number of jobs created in companies servicing pharmaceutical corporations, needs to be considered in evaluating the benefits of section 936. We found that individual pharmaceutical companies differed markedly from each other in the level of taxes they saved by operating in Puerto Rico, and that 17 of the 21 most prescribed drugs in the United States in 1990 were authorized for manufacture in Puerto Rico.

---

[4] General Explanation of the Tax Reform Act of 1986, Joint Committee on Taxation (May 1987).

[5] Reducing the Deficit: Spending and Revenue Options, Congressional Budget Office (Feb. 1992).

[6] Section 936 and the Puerto Rican Economy: An Analysis of the Effects of a Repeal of Section 936 Under Puerto Rico's Present Commonwealth Status, Price Waterhouse (May 1991).

[7] Puerto Rico: Update of Selected Information Contained in a 1981 GAO Report (GAO/HRD-89-104FS, Aug. 1989).

Tax Benefits Reported in Tax Returns

The pharmaceutical industry received about half the total tax benefits from section 936 and provided between 15 and 18 percent of the jobs of all section 936 corporations in Puerto Rico.[8] These results hold in 1981--previous to the 1982 act--and in the 3 years after 1982 for which aggregate tax return data were available--1983, 1985, and 1987. In 1987, this meant the industry received $1.3 billion of the $2.3 billion in total section 936 tax benefits and employed about 18,000 of 100,916 workers (see table I.1).

Treasury estimated the above tax benefits by subtracting from the section 936 tax credits reported in the corporations' tax returns other tax benefits--such as accelerated depreciation, investment tax credits and foreign tax credits--which the companies might have claimed if they had elected not to receive the section 936 credit.

Tax benefits received per employee by the pharmaceutical industry were three to four times greater than those received by the industry with the next greatest amount of benefits--electrical and electronic equipment--and five to seven times greater than those received by all other industries. In 1987, this meant tax benefits per employee were $70,788 in the pharmaceutical industry, $16,450 in the electrical and electronic equipment industry, and $10,593 in other industries (see table I.2).

Tax benefits as a percentage of employee compensation also varied widely among industries. For example, the section 936 tax benefits of pharmaceutical corporations in 1987 were 267 percent of the compensation paid to pharmaceutical employees. The ratio of section 936 tax benefits to employee compensation in the electrical and electronic equipment industry was 98 percent; in other industries the ratio was 68 percent. This means that for each dollar of employee compensation, pharmaceutical companies received $2.67 in tax benefits, electrical and electronic equipment companies received 98 cents in tax benefits and companies in other industries received 68 cents in tax benefits.

Representatives of the pharmaceutical industry have asserted that employment-related numbers like these are not the only ones that

[8]We report data on (1) Treasury's estimates of section 936 tax benefits obtained from tax returns and (2) our estimates of tax savings from Puerto Rico operations obtained from corporate financial statements. The difference between tax benefits and tax savings is explained in detail in appendix III.

need to be considered. They have cited the importance of examining the number of (1) high-paying, skilled jobs that have been provided to college graduates, (2) Puerto Ricans occupying managerial positions, and (3) indirect jobs created in other companies, such as pill box providers and landscapers, that service pharmaceutical corporations. Analyzing statistics like these was beyond the scope of our work.

Tax Savings Reported in Financial Statements

Estimated total tax savings obtained from Puerto Rico operations for 26 pharmaceutical corporations was about $10.1 billion. This figure is in 1990 dollars adjusted for inflation for the 11-year period 1980 through 1990. It is based on information the 26 companies reported in their financial statements or, in some cases, provided us directly. These tax savings translated into about $24.7 billion--valued in 1990 dollars--in tax-exempt earnings from Puerto Rico operations (see table I.5). Estimated tax savings, even after adjusting for inflation, increased in every year except 1984, 1987 and 1988. The decreases in tax savings in 1987 and 1988 were possibly due to the decline in the maximum statutory corporate income tax rate from 46 percent in 1986 to 34 percent in 1988.

We found wide differences in estimated tax savings from Puerto Rico operations among the 26 pharmaceutical corporations. For instance, 1 company saved more than $1 billion; another saved $987 million; 9 other companies saved more than $500 million but less than $1 billion; and the other 15 companies saved less than $500 million (see table I.6).

Similarly, we found wide differences in estimated tax savings per employee and estimated tax savings as a percentage of employee compensation. In the group of 17 drug corporations for which we matched employees and tax savings, the tax savings per employee ranged from $0 to about $156,000 in 1989. Two companies had tax savings per employee greater than $100,000; seven companies had tax savings per employee lower than $100,000 and higher than $50,000; and the other 8 companies had tax savings lower than $50,000 (see table I.4).

Estimated tax savings as a percentage of employee compensation ranged from 636 percent to 0 percent in the group of 17 corporations for which we matched employees and tax savings. In 1989 one company had $6.36 in tax savings per dollar of employee compensation; another company received more than $4 in tax savings per dollar of employee compensation; another 3 companies received more than $3 but less than $4; and the other 12 companies received less than $3 (see table I.4).

Pharmaceutical companies also showed wide variation in the ratio of estimated tax savings to income before taxes. For the 24 companies that reported positive earnings, tax savings ranged from 0 percent to 19.4 percent of income before taxes (see (table I.7). Six corporations had tax savings from Puerto Rico operations greater than 10 percent of corporate income before taxes.

The estimates of tax savings from Puerto Rico operations, which are based on corporate financial statements, could differ from actual tax benefits provided by section 936 due to computation, timing, and other differences between financial statement and tax return data. We describe these reasons in appendix III. We believe that, regardless of whether tax return or financial statement data are used, our finding that pharmaceutical companies differ substantially from each other in their tax consequences from operating in Puerto Rico would hold true.

We recognized that if actual tax return figures were used, company-by-company analyses might reveal a different picture. Therefore, we tried to be conservative in estimating the companies' tax savings from operating in Puerto Rico. For instance, in the case of a company that reported tax savings as being principally from Puerto Rico, we presented only half of the tax savings shown in the financial statements. We also used the ratio of U.S. sales to total sales technique explained in appendix III to further reduce the estimated amount of tax savings obtained from Puerto Rico operations for certain corporations specified in appendix II.

We also compared our estimates of tax savings obtained from financial statements with actual tax return data for 1 year to determine if the tax savings were lower than actual section 936 tax credits. We found that the total tax savings from Puerto Rico operations based on our financial statement analysis was less than two-thirds of the total section 936 tax credits reported in tax returns. To avoid disclosing tax data, we do not present in this report company-by-company measures that show to what extent tax savings derived from financial statements might or might not be similar to section 936 tax credits.

Most-Prescribed Drugs Approved for Production in Puerto Rico

In our study, we also found that 17 of the 21 most prescribed drugs in the United States in 1990 were authorized for Puerto Rican manufacture (see table I.8). Seven pharmaceutical corporations were authorized to manufacture in Puerto Rico 2 or more of the 35 most prescribed U.S. drugs. More detailed information about the products is provided in appendix I.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives included obtaining comparative information for the period 1980 through 1990 on (1) the aggregate tax benefits pharmaceutical corporations received from operating in Puerto Rico related to the number of employees they hired and the wages they paid and (2) the estimated tax savings and earnings exempt from federal taxes that individual pharmaceutical corporations obtained from operating in Puerto Rico. The third objective was to obtain information on the major drugs that pharmaceutical corporations were authorized to produce in Puerto Rico. Our work was not intended to be a full policy analysis of section 936.

To address the first objective--dealing with aggregate tax benefits--we obtained statistical information compiled by the Internal Revenue Service (IRS) and Treasury. Using this information, we determined ratios of tax benefits per employee and tax benefits to total compensation paid in Puerto Rico.

To estimate tax savings and tax-exempt income, we collected, analyzed, and aggregated company-specific data. For this work, we used primarily financial statement data of 26 pharmaceutical corporations that were publicly available and, thus, allowed us to do the sort of company-by-company analysis requested.

We also asked each of 14 pharmaceutical companies whose financial statements aggregated tax savings from Puerto Rico with other tax savings to review a table we prepared for that company. Each table showed the numbers taken from the company's financial statement footnotes which we believed included a figure for tax savings from operating in Puerto Rico. We asked that each company provide us with its estimate of tax savings from Puerto Rico operations. Eight companies, listed in appendix II, provided such estimates.

Our approach did not allow us to isolate the <u>section 936 tax benefits</u> companies received by using the credit specifically. Rather, it enabled us to estimate the <u>tax savings from Puerto Rico operations</u> companies received by using the section 936 tax credit and other tax provisions related to operating in Puerto Rico. We obtained inflation-adjusted tax savings and tax-exempt income using the implicit price deflator for U.S. gross domestic product.

Financial statement figures are not necessarily equal to the numbers on tax returns and may differ substantially from them because they can be governed by different practices or based on different time periods. Also, companies may differ from each other in how they present their financial statement information. If actual tax return figures were used, company-by-company analyses might reveal a different picture.

Other analysts have used financial statements to describe the impact of Puerto Rico operations on corporate tax savings. We believe that, regardless of whether tax return or financial statement data are used, it would still be true that pharmaceutical companies can differ substantially from each other in their tax consequences from operating in Puerto Rico over time.

The tax savings derived were not amounts that necessarily would have been paid in the absence of a section 936 tax credit. If companies did not have section 936 tax credits to use, they might have been able to take advantage of other tax provisions, such as the foreign tax credit, that would have reduced the amounts of taxes they would have otherwise paid.

For our last objective--determining the major drugs that pharmaceutical corporations were authorized to produce in Puerto Rico--we obtained a 1990 list of highly-prescribed drugs that the Food and Drug Administration had approved for manufacture in Puerto Rico. We then categorized by company those drugs with the largest number of prescriptions.

In doing our work, we interviewed Treasury and IRS officials responsible for analyzing tax returns of section 936 corporations, and we reviewed aggregate and individual tax data of section 936 corporations. In addition, we analyzed Treasury reports and professional articles on section 936 as well as Securities and Exchange Commission rules and generally accepted accounting principles followed in preparing and presenting financial statements.

We also considered the views of accounting professionals and pharmaceutical industry representatives. We met with Price Waterhouse officials and members of the Tax Subcommittee of the Pharmaceutical Manufacturer's Association to obtain their views on the characteristics of tax data reported by pharmaceutical companies in financial statements and the tax benefits of section 936. We also received a Price Waterhouse report that describes the issues involved in measuring section 936 tax benefits from financial statement data.[9] Their views have been incorporated into the preparation of this report.

We did our work in Washington, D.C., between November 1991 and April 1992 in accordance with generally accepted government auditing standards. Appendix III discusses our objectives, scope, and methodology in greater detail.

We discussed the contents of this report with a senior Treasury official knowledgeable of section 936 issues. He agreed with the analysis and information provided, and his views have been incorporated into the preparation of this report where appropriate.

- - - - -

As agreed with the Committee, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the Secretary of the Treasury, the Commissioner of the Internal Revenue Service, the Director of the Office of Management and Budget, and other interested parties. We will also make copies available to others upon request.

The major contributors to this report are listed in appendix IV. If you have any questions, please contact me at (202) 275-6407.

Sincerely yours,

Jennie S. Stathis

Jennie S. Stathis
Director, Tax Policy and
Administration Issues

[9]Financial Accounting for Section 936 Tax Credits, Price Waterhouse (March 1992).

C O N T E N T S

ABBREVIATION

IRS Internal Revenue Service

INFORMATION RELATED TO THE PHARMACEUTICAL INDUSTRY IN PUERTO RICO

Table I.1: The Pharmaceutical Industry Received About Half of the Tax Benefits Provided by Section 936 but Employed Less than 20 Percent of the Workers in 1981, 1983, 1985, and 1987

	1981	1983	1985	1987
Total tax benefits received (in millions)				
Nominal dollars	$1,430	$1,496	$2,150	$2,311
Inflation-adjusted 1990 dollars	$2,046	$1,938	$2,572	$2,609
Percentage of tax benefits				
Pharmaceutical industry	49%	49%	45%	56%
Electrical and electronic equipment industry	25%	24%	19%	16%
Other industries	26%	27%	36%	28%
Total number of employees	72,543	75,642	97,726	100,916
Percentage of employees				
Pharmaceutical industry	15%	15%	15%	18%
Electrical and electronic equipment industry	25%	29%	26%	23%
Other industries	60%	56%	59%	59%

Note: Financial data have been adjusted for inflation using the implicit price deflator for U.S. gross domestic product.

Sources: 1981--The Operation and Effect of the Possessions Corporation System of Taxation: Fifth Report, Department of the Treasury (July 1985); 1983--"U.S. Possessions Corporation Returns, 1983," Statistics of Income Bulletin, Department of the Treasury (Spring 1988); 1985--"U.S. Possessions Corporations, 1985," Compendium of Studies of International Income and Taxes, 1984-1985, Department of the Treasury (1991); 1987--"U.S. Possessions Corporation Returns, 1987," Statistics of Income Bulletin, Department of the Treasury (Summer 1991) and unpublished IRS data.

TAX BENEFITS AND NUMBER OF EMPLOYEES OF SECTION 936 CORPORATIONS

When Congress enacted section 936 in 1976, it sought to help Puerto Rico obtain employment-producing investments. By using income tax, employment, and payroll data available for the 1980s, we compared the distribution of tax benefits to the distribution of jobs and compensation provided by section 936 corporations in Puerto Rico in 1981, 1983, 1985, and 1987.

As shown in table I.1, the pharmaceutical industry received almost 50 percent of the total tax benefits provided by section 936 in 1981, 1983, and 1985. The percentage increased to 56 percent in 1987, or $1.3 billion of the $2.3 billion in total section 936 tax benefits. The percentage of employees in the pharmaceutical industry stayed constant at 15 percent in 1981, 1983, and 1985 and increased to 18 percent in 1987. In 1987, the 18 percent translated into approximately 18,000 jobs out of the 100,916 jobs provided by all section 936 beneficiaries.

The share of tax benefits of the second largest section 936 beneficiary--the electrical and electronic equipment industry--decreased from 25 percent in 1981 to 16 percent in 1987. The percentage of jobs provided by this industry first increased, from 25 percent in 1981 to 29 percent in 1983, and then decreased to 23 percent in 1987.

Representatives of the pharmaceutical industry have asserted that employment-related numbers like these and the ones that appear on table I.2 are not the only ones that need to be considered. They also cited the importance of examining the number of (1) high-paying, highly skilled jobs provided to college graduates, (2) managerial positions occupied by Puerto Ricans, and (3) jobs created in companies that service pharmaceutical corporations, such as pill box providers and landscapers. Analyzing statistics like these was beyond the scope of our work.

Table I.2: Tax Benefits per Employee and as a Percentage of Employee Compensation in the Pharmaceutical Industry Were Much Higher Than in Other Industries

	1981	1983	1985	1987
Tax benefits per employee				
Nominal dollars				
Pharmaceutical industry	$62,078	$65,318	$68,660	$70,788
Electrical and electronic equipment industry	$19,930	$16,242	$16,174	$16,450
Other industries	$8,584	$9,618	$13,093	$10,593
Inflation-adjusted 1990 dollars				
Pharmaceutical industry	$88,810	$84,609	$82,129	$79,896
Electrical and electronic equipment industry	$28,512	$21,039	$19,347	$18,567
Other industries	$12,280	$12,459	$15,661	$11,956
Tax benefits as a percentage of employee compensation				
Pharmaceutical industry	346%	298%	285%	267%
Electrical and electronic equipment industry	152%	103%	101%	98%
Other industries	71%	76%	90%	68%

Note: Financial data have been adjusted for inflation using the implicit price deflator for U.S. gross domestic product.

Sources: 1981--The Operation and Effect of the Possessions Corporation System of Taxation: Fifth Report, Department of the Treasury (July 1985); 1983--"U.S. Possessions Corporation Returns, 1983," Statistics of Income Bulletin, Department of the Treasury (Spring 1988); 1985--"U.S. Possessions Corporations, 1985," Compendium of Studies of International Income and Taxes, 1984-1985, Department of the Treasury (1991); 1987--"U.S. Possessions Corporation Returns, 1987," Statistics of Income Bulletin, Department of the Treasury (Summer 1991) and unpublished IRS data.

TAX BENEFITS AND EMPLOYEE COMPENSATION OF SECTION 936 CORPORATIONS

As shown in table I.2, tax benefits received per employee by the pharmaceutical industry were three to four times greater than those received by the industry with the next greatest amount of benefits--electrical and electronic equipment--and five to seven times greater than those received by all other industries. In 1987, this meant tax benefits per employee were $70,788 in the pharmaceutical industry, $16,450 in the electrical and electronic equipment industry, and $10,593 in other industries.

Tax benefits as a percentage of employee compensation also varied widely among industries. For example, in 1987 the pharmaceutical industry received on average $2.67 in tax benefits for every dollar of employee compensation, which was down from the amounts shown in earlier years. The electrical and electronic equipment industry received 98 cents in tax benefits, and other industries received 68 cents in tax benefits for every dollar they paid their employees in 1987. Employee compensation includes an estimate of fringe benefits which is about 25 percent of wages.

Inflation-adjusted tax benefits per employee decreased in the pharmaceutical industry from $88,810 in 1981 to $79,896 in 1987, in 1990 dollars. In the electrical and electronic equipment industry, inflation-adjusted tax benefits per worker decreased from $28,512 in 1981 to $18,567 in 1987. Benefits per employee in other industries decreased from $12,280 in 1981 to $11,956 in 1987.

Table I.3: Pharmaceutical Corporations Included in This Report

Corporations with a Puerto Rico operation	Year started operations
Abbott Laboratories	1968
Allergan, Inc.	1976
American Cyanamid Company	1974
American Home Products Corporation	1984
A. H. Robins Company, Incorporated	1974
Baxter International Inc.	1968
Becton, Dickinson and Company	1958
Bolar Pharmaceutical Co., Inc.	1985
Bristol-Myers Squibb Company	1971
Carter-Wallace, Inc.	1972
Eastman Kodak Company (Sterling Drug)	1973
Eli Lilly and Company	1966
Forest Laboratories, Inc.	1966
Johnson & Johnson	1961
Merck & Co., Inc.	1972
Monsanto Company (G. D. Searle & Co.)	1959
Mylan Laboratories Inc.	1987
Pfizer Inc.	1973
Rhone-Poulenc Rorer Inc.	1984
Schering-Plough Corporation	1972
SmithKline Beecham plc	1970
Squibb Corporation	1970
Syntex Corporation	1975
The Upjohn Company	1973
Warner-Lambert Company	1963
Zenith Laboratories, Inc.	1984

Sources: Corporate annual reports; The Drug and Pharmaceutical Industry in Puerto Rico, Economic Development Administration of the government of Puerto Rico (June 1982, Sept. 1986, and Sept. 1990); Profile of Performance: The Drug and Pharmaceutical Industry in Puerto Rico, Economic Development Administration of the government of Puerto Rico (Jan. 1985); and Caribbean Business Book of Lists 1990 (Puerto Rico: Casiano Communications, Inc., 1990) for year Becton, Dickinson started operations.

PHARMACEUTICAL CORPORATIONS INCLUDED IN THIS REPORT

Table I.3 shows the 26 pharmaceutical corporations that we studied for this report. We describe how we selected these 26 companies in appendix III. Most of the companies we studied were engaged in operations in Puerto Rico for many years. All but five were operating in Puerto Rico from 1976 or before.

The majority of the companies we included in our analysis had establishments in Puerto Rico in one of the following industries (U.S. standard industrial codes in parenthesis):

(1) Medicinal chemical and botanical products (code 2833). This industry includes establishments primarily engaged in manufacturing bulk medicinal chemicals and their derivatives, and processing bulk botanical drugs and herbs.
(2) Pharmaceutical preparations (code 2834). This industry includes establishments primarily involved in fabricating pharmaceutical preparations in forms for final consumption, such as tablets, capsules and suspensions.
(3) Diagnostic substances (code 2835). This industry includes establishments mainly involved in manufacturing substances used in diagnosing or monitoring the state of health by measuring components of body fluids or tissues.
(4) Biological products, except diagnostic substances (code 2836). This industry includes establishments involved in producing bacterial and viral vaccines, serums, plasmas, and other blood derivatives.

The pharmaceutical operations of some diversified companies in table I.3 accounted for only a small percentage of total sales. For example, Monsanto's pharmaceutical sales in 1990 were 16 percent of net sales. Another company we included in our analysis--Baxter--asserted that it was not part of the pharmaceutical industry because, although it produced some drug products, its main product line was medical devices. As of May 1990, other companies with manufacturing plants in the drug and pharmaceutical industry in Puerto Rico included Allied Signal; B.O.C. Holding Corp.; Boehringer Mannheim GMBH; The Boots Co. plc; Darby Drug Co.; Du Pont (E.I.) de Nemours & Co., Inc.; F. Hoffman-La Roche & Co. Ltd.; Flow Cytrometry Std. Corp.; Hanson Industries North America; Imperial Chemical Industries plc; J.M. Family Enterprises, Inc.; Lyphomed, Inc.; Nestle S.A.; Proctor & Gamble Co.; Rotho Pharmaceutical; Sandoz LTD; and Stiefel Laboratories, Inc.[1]

---

[1]The Drug and Pharmaceutical Industry in Puerto Rico, Economic Development Administration of the government of Puerto Rico (Sept. 1990).

Table I.4: Estimated Tax Savings per Employee and Estimated Tax Savings as a Percentage of Compensation Varied Widely Within the Pharmaceutical Industry in 1989

Company	Employees	Estimated tax savings per employee	Estimated tax savings as a percentage of compensation
Pfizer	500	$156,400	636
Merck	953	110,493	450
American Home Products	1,000	80,600	328
Kodak (Sterling)	350	77,143	314
Bristol-Myers Squibb	1,440	74,097	302
Upjohn	775	58,452	238
Eli Lilly	950	57,368	234
SmithKline Beecham	991	56,206	229
Johnson & Johnson	2,900	50,690	207
Schering-Plough	1,200	48,417	197
Monsanto (Searle)	500	40,600	165
Abbott	2,200	33,636	137
Rhone-Poulenc Rorer	295	27,797	113
Warner-Lambert	1,524	25,984	106
American Cyanamid	1,121	23,372	95
Baxter	5,912	10,521	43
Syntex	333	0	0

Note: See appendix II for relevant corporate-specific tax data.

Sources: GAO calculations based on information in corporate financial data. Number of employees comes from Caribbean Business-to-Business Guide '91 (Puerto Rico: Casiano Communications, Inc., 1991); average compensation figures come from Drug and Pharmaceutical Industry in Puerto Rico, Economic Development Administration of the government of Puerto Rico (Sept. 1990). Employee compensation was estimated using average hourly earnings in the pharmaceutical industry as of March 1990, and includes fringe benefits equal to about 26 percent of wages.

EMPLOYEES, ESTIMATED TAX SAVINGS, AND EMPLOYEE COMPENSATION IN SELECTED PHARMACEUTICAL CORPORATIONS FOR 1989

Based on 1989 and 1990 employment figures, tax savings per employee and tax savings as a percentage of compensation varied substantially within the drug industry. For instance, 1989 estimated tax savings per employee ranged from $0 to $156,400 in a group of 17 corporations for which we were able to match employees and estimated tax savings (see table I.4). Figures for 1990 showed a similar pattern but were not reported because they were based on less reliable data than the 1989 figures. The 1989 estimates were based on December 1989 employment figures and average wages in the pharmaceutical and drug industry as of March 1990.

Tax savings as a percentage of employee compensation ranged from 0 percent to 636 percent in the group of 17 corporations for which we matched employees and tax savings. In 1989 one company received $6.36 in tax savings per dollar of employee compensation; another received $4.50; three companies received more than $3 but less than $3.30; and the other 12 companies received less than $2.40. The estimate of employee compensation includes fringe benefits equal to about 26 percent of wages.

Because company-by-company employment information was not readily available for Puerto Rico over time, we were not able to do a long-term or comprehensive analysis relating the number of a company's employees in Puerto Rico to its estimated tax savings from operating in Puerto Rico. The figures shown in table I.4 were calculated from estimated tax savings derived from financial statement data (see appendix III) and employment figures we collected from a directory of Puerto Rico businesses.[2] We computed 1989 and 1990 estimated tax savings per employee for the 17 corporations included in our universe and listed in the directory. We divided the estimated tax savings per employee by average compensation figures per employee to arrive at estimated tax savings as a percentage of compensation.

[2] Caribbean Business-to-Business Guide '91 (Puerto Rico: Casiano Communications, Inc., 1991).

Table I.5: Estimated Tax Savings and Estimated Tax-Exempt Income From Puerto Rico Operations of 26 Pharmaceutical Corporations Increased in the 1980s (Dollars in millions)

Year	Estimated total tax savings	Estimated total tax savings, 1990 dollars	Estimated total tax-exempt income	Estimated total tax-exempt income, 1990 dollars
1980	$460	$723	$999	$1,572
1981	526	752	1,144	1,636
1982	567	764	1,233	1,661
1983	597	772	1,297	1,679
1984	616	764	1,339	1,661
1985	828	990	1,800	2,153
1986	1,007	1,173	2,189	2,551
1987	952	1,075	2,379	2,686
1988	836	908	2,458	2,672
1989	1,017	1,059	2,986	3,111
1990	1,119	1,119	3,284	3,284
Total	$8,524	$10,102	$21,109	$24,667

Note 1: Totals may not add up due to rounding.

Note 2: Financial data have been adjusted for inflation using the implicit price deflator for U.S. gross domestic product.

Source: GAO calculations based on corporate financial data.

ESTIMATED TAX-EXEMPT INCOME AND ESTIMATED TAX SAVINGS FROM PUERTO RICO OPERATIONS, 1980-1990

As shown in table I.5, the amount of estimated income exempt from taxes for the entire 11-year period totaled about $24.7 billion in inflation-adjusted dollars. Estimated tax savings were about $10.1 billion in inflation-adjusted dollars.

These figures are total tax-exempt income and tax savings summed over all 26 companies in inflation-adjusted dollars for the years 1980 through 1990. We used the implicit price deflator for gross domestic product to convert prior year dollars into constant 1990 dollars. The inflation-adjusted savings and tax-exempt income are larger than the nominal amounts because they reflect an inflation that averaged about 5.7 percent per year during the 1980s. The inflation rate was computed using the gross domestic product deflator.

In general, the 26 pharmaceutical companies' tax-exempt income and tax savings from operations in Puerto Rico increased from 1980 through 1990. Inflation-adjusted tax-exempt income increased from $1.6 billion in 1980 to about $3.3 billion in 1990, and inflation-adjusted tax savings increased from $.7 billion in 1980 to about $1.1 billion in 1990. Total estimated tax savings increased in inflation-adjusted dollars at an average annual rate of 5.5 percent over the 11-year period.

The change in tax savings over time did not exactly parallel the change in tax-exempt income. More specifically, the tax savings amount dipped in 1987 and again in 1988, whether adjusted for inflation or not, and tax-exempt income barely decreased from 1987 to 1988. This difference might be explained by the decline in statutory corporate income tax rates from a maximum rate of 46 percent to 40 percent for 1987 and to 34 percent for 1988. Lower tax rates would not have necessarily changed the amount of tax-exempt income, but they definitely would have reduced the amount of taxes saved on that income.

The $952 million nominal amount for tax savings in 1987 differs from the $1.3 billion for section 936 tax benefits in 1987 as reported by Treasury (56 percent of the $2.3 billion in table I.1). We believe this difference exists in part because (1) IRS used actual tax return information, which, for reasons described in appendix III, can differ substantially from financial statement data; (2) our estimates are the result of conservative assumptions we made using only 26 companies' financial statements; and (3) we could not exclude nonpharmaceutical subsidiaries.

Table I.6: Estimated Tax Savings and Estimated Tax-Exempt Income From Puerto Rico Operations Varied Among Corporations
(Inflation-Adjusted 1990 Dollars in Millions)

Corporation	Estimated total tax savings, 1980-1990	Average annual tax savings	Estimated total exempt income, 1980-1990	Average annual exempt income
Johnson & Johnson	$1,117	$102	$2,778	$253
SmithKline Beecham	987	90	2,301	209
Abbott	860	78	2,075	189
Pfizer	759	69	1,864	170
Upjohn	750	68	1,776	161
Merck	749	68	1,890	172
Baxter	685	62	1,648	150
Schering-Plough	655	60	1,581	144
Eli Lilly	650	59	1,583	144
Bristol-Myers Squibb	627	57	1,591	145
Squibb	514	57	1,212	135
American Home Products	450	75	1,194	199
Warner-Lambert	337	31	828	75
Monsanto (Searle)	293	27	678	62
American Cyanamid	225	21	554	50
Kodak (Sterling)	141	16	362	40
Becton, Dickinson	111	10	266	24
A. H. Robins	54	7	120	15
Carter-Wallace	50	5	120	11
Rhone-Poulenc Rorer	39	8	106	21
Allergan	24	12	72	36
Forest Laboratories	15	1	37	3
Mylan Laboratories	5	1	14	4
Bolar Pharmaceuticals	4	0.7	11	2
Zenith Laboratories	2	0.4	4	1
Syntex	0	0	0	0

Note: See appendix II for relevant information about individual companies.

Source: GAO calculations based on corporate financial data.

ESTIMATED TAX-EXEMPT INCOME AND ESTIMATED TAX SAVINGS FROM PUERTO RICO OPERATIONS BY INDIVIDUAL CORPORATIONS, 1980-1990

We found wide differences in the estimated tax savings from Puerto Rico operations reported by 26 pharmaceutical corporations. For instance, 1 company saved more than $1 billion; another saved $987 million; 9 other companies saved more than $500 million but less than $1 billion; and the other 15 companies saved less than $500 million (see table I.6). The company that reported zero tax savings from Puerto Rico operations asserted that its net operating loss carryforwards exceeded section 936 tax benefits. We obtained these estimates from information derived from financial statements of 26 pharmaceutical companies for the 11-year period 1980 through 1990. These tax savings have been adjusted for inflation to the year 1990 and have the limitations we describe in appendix III.

In general, the pattern of total tax-exempt income is similar to the tax savings pattern described above. The company that reported tax savings greater than $1 billion obtained the largest tax-exempt income--$2.8 billion. The tax-free earnings of another two companies were greater than $2 billion; the total tax-free earnings of another 9 companies were greater than $1 billion but less than $2 billion; and the other 14 companies had less than $1 billion in tax-exempt earnings.

The average annual exempt income and the average annual tax savings also varied substantially from company to company. We computed the averages by dividing a company's income and savings amounts by the number of years the company had been operating in Puerto Rico since 1979.

Table I.7: Estimated Tax Savings Obtained From Puerto Rico Operations Compared to Income Before Taxes Varied Widely (Inflation-Adjusted 1990 Dollars in Millions)

Company	Estimated total tax savings, 1980-1990	Total income before taxes, 1980-1990	Savings as a percentage of income before taxes
Baxter	$685	$3,530	19.4%
Upjohn	750	4,592	16.3
Squibb	514	3,229	15.9
Allergan	24	184	13.0
Schering-Plough	655	5,134	12.8
Rhone-Poulenc Rorer	39	368	10.6
SmithKline Beecham	987	10,202	9.7
Johnson & Johnson	1,117	12,714	8.8
Abbott Laboratories	860	9,861	8.7
Carter-Wallace	50	586	8.5
Pfizer	759	10,516	7.2
Forest Laboratories	15	210	7.1
American Cyanamid	225	3,542	6.4
Warner-Lambert	337	5,537	6.1
Bechton, Dickinson	111	1,928	5.8
Eli Lilly	650	11,456	5.7
Monsanto (Searle)	293	5,216	5.6
American Home Products	450	9,220	4.9
Bristol-Myers Squibb	627	12,848	4.9
Merck	749	15,527	4.8
Bolar	4	91	4.4
Mylan Laboratories	5	140	3.6
Kodak (Sterling)	141	6,644	2.1
Syntex	0	2,904	0.0
A. H. Robins	54	(1,797)	NA
Zenith Laboratories	2	(30)	NA

Note: See appendix II for relevant information about specific corporations.

Source: GAO calculations based on corporate financial data.

ESTIMATED TAX SAVINGS OBTAINED FROM PUERTO RICO OPERATIONS COMPARED TO INCOME BEFORE TAXES

As table I.7 shows, over the 1980 through 1990 period, for pharmaceutical companies with operations in Puerto Rico, estimated tax savings as a percentage of income before taxes varied widely, from 0 percent to about 19 percent.

This means that companies' effective tax rates for the period were reduced from 0 to 19 percentage points. Tax savings from Puerto Rico operations were more than 10 percent of corporate income before taxes for 6 of the 26 pharmaceutical corporations. Two companies had losses during the period and therefore did not enter into our calculations.

Table I.8: Major Prescription Drugs Approved for Production in Puerto Rico

Pharmaceutical corporation	Drug	Rank
American Home Products	Premarin	4
Boots	Synthroid	8
Bristol-Myers Squibb	Capoten	13
Ciba-Geigy	Lopressor	19
Eli Lilly	Ceclor	7
Eli Lilly	Darvocet-N 100	27
Eli Lilly	Prozac	16
ICI Pharmaceuticals	Tenormin	11
Johnson & Johnson	Tylenol w/codeine	25
Johnson & Johnson	Ortho-Novum 7/7/7 28	18
Marion Merrell Dow	Cardizem	12
Marion Merrell Dow	Seldane	10
Merck	Vasotec	9
Merck	Mevacor	32
Monsanto (Searle)	Calan SR	17
Pfizer	Procardia	35
Pfizer	Procardia XL	33
Schering-Plough	Theo-Dur	26
SmithKline Beecham	Tagamet	15
SmithKline Beecham	Dyazide	6
Syntex	Naprosyn	14
Upjohn	Halcion	30
Upjohn	Micronase	28
Upjohn	Provera	34
Upjohn	Xanax	5
Warner-Lambert	Dilantin	21

Source: Food and Drug Administration.

MAJOR PRESCRIPTION DRUGS APPROVED FOR PRODUCTION IN PUERTO RICO

As shown in table I.8, various companies were involved with the most-prescribed drugs in the United States that were approved by the Food and Drug Administration for production in Puerto Rico. Four of the companies--Boots, Ciba-Geigy, ICI Pharmaceuticals, and Marion Merrell Dow--were not included in our study because either the company was not on the lists we checked, Puerto Rico-specific information was not available through the Securities and Exchange Commission or Puerto Rico operations had not yet begun as of 1990.

We obtained our information on most-prescribed drugs and on approvals for manufacture in Puerto Rico from the Food and Drug Administration. The agency provided us with a list of the 200 most-prescribed drugs in the United States in 1990, counting new and refilled prescriptions. It also pinpointed 73 of these drugs that it had approved for production in Puerto Rico.

We should point out that just because a particular drug was approved for manufacture in Puerto Rico does not necessarily mean that it actually was manufactured in Puerto Rico. Representatives of the pharmaceutical industry told us that particular drugs often are approved for production in different plants.

Seven pharmaceutical companies were authorized to manufacture in Puerto Rico 2 or more of the 35 most prescribed drugs in the United States in 1990. As shown in table I.8, 26 of the 35 drugs were authorized for Puerto Rican manufacture. More specifically, 17 of the top 21 had this approval. Some of the uses of the drugs in table I.8 are shown next.

Premarin, according to its producer American Home Products, was in 1990 the leading estrogen replacement therapy in the United States for the treatment of menopausal symptoms and osteoporosis.

Synthroid, produced by Boots, is indicated for the treatment of conditions associated with thyroid glands, such as primary atrophy, absence of thyroid glands and thyroid cancer.

Capoten is Bristol-Myers Squibb's trademark under which it sells the antihypertensive captopril. Sales of captopril increased 19 percent in 1990 to $1.5 billion, and it was Bristol-Myers Squibb's largest selling product.

Lopressor, produced by Ciba-Geigy, is indicated for the treatment of hypertension and the long-term treatment of angina pectoris.

Ceclor is one of Eli Lilly's products for the treatment of bacterial infections. Darvocet-N 100--used for the relief of mild-to-moderate pain--and the antidepressant Prozac are part of Eli Lilly's central nervous system products.

Tenormin, produced by ICI Pharmaceuticals, is indicated in the treatment of hypertension and the long-term treatment of patients with angina pectoris.

Ortho Novum 7/7/7 28 is an oral contraceptive produced by Johnson & Johnson. Tylenol with codeine, also produced by Johnson & Johnson, is indicated for the relief of mild-to-moderately-severe pain.

Cardizem, produced by Marion Merrell Dow, is indicated in the treatment of angina pectoris due to coronary artery spasm. Seldane, also produced by Marion, is indicated for the relief of symptoms associated with seasonal allergies, such as sneezing and lacrimation.

Vasotec and Mevacor are in the group of Merck's antihypertensive and cardiovascular products.

Calan SR is part of Monsanto's pharmaceutical products for the treatment of hypertension. Calan's net sales in 1990 increased 28 percent to $467 million.

Procardia and Procardia XL are part of Pfizer's cardiovascular products. Their combined sales in 1990 were $727 million, an increase of 58 percent over 1989.

Theo-dur is a sustained-action anti-asthma product of Schering-Plough. Sales were more than $100 million in 1989, but decreased in 1990 due to competition from generic products.

Tagamet, indicated in treatment of active duodenal ulcers, represented approximately 26 percent of SmithKline Beecham's pharmaceutical sales in 1990. U.S. sales of Tagamet were $606 million in 1990, an increase of 6 percent. Dyazide, also produced by SmithKline Beecham, is a diuretic which may also be used for the treatment of hypertension. Sales of Dyazide increased 18 percent in 1990, primarily reflecting increased volume following the withdrawal of competing generic products from the U.S. market in 1989 and early 1990 after inquiries by the U.S. Food and Drug Administration and Congress.

Naprosyn, produced by Syntex, is indicated for the treatment of arthritic diseases. According to Syntex, Naprosyn was the top selling prescription nonsteroidal anti-inflammatory drug in the United States in 1990.

Xanax and Halcion are Upjohn's two major drugs for the treatment of central nervous system disorders. Xanax is used for symptomatic relief of anxiety with and without depression. Halcion is a hypnotic drug for the treatment of insomnia.

Micronase is Upjohn's major oral antidiabetes product. Provera, also produced by Upjohn, is indicated for the treatment of abnormal uterine bleeding.

Dilantin is an anticonvulsant produced by Warner-Lambert.

The top three drugs in number of prescriptions--Amoxil, produced by SmithKline Beecham; Lanoxin, produced by Burroughs Wellcome; and Zantac, produced by Glaxo--were not authorized for production in Puerto Rico. Others that did not have the approval were Augmentin (SmithKline Beecham), Proventil (Schering-Plough), Lasix (Hoechst-Roussel), Voltarin (Ciba-Geigy), Ventolin (Glaxo), and Cipro (Miles Pharmaceuticals).

NOTES ON CORPORATIONS' FINANCIAL DATA

We obtained the tax savings from Puerto Rico operations for A.H. Robins; American Home Products (1988-1990); Bolar; Bristol-Myers (1989-1990); Carter-Wallace; Eastman Kodak (Sterling) (1980-1985); Eli Lilly; Johnson & Johnson; Merck; Monsanto (G.D. Searle); Rhone-Poulenc Rorer; Schering-Plough; Squibb; Upjohn; Warner-Lambert; and Zenith from an explicit item in the tax footnote in the companies' financial statements labeled something like "tax exemption for Puerto Rico operations."

Abbott (1984-1990); American Home Products (1985-1987); Bristol-Myers; Eastman Kodak (Sterling) (1988-1990); Monsanto (1985); Pfizer; and Syntex provided us with explicit tax savings from Puerto Rico operations which were not available in their financial statements.

Although Baxter said that it was not a pharmaceutical company and should not be included in our analysis, it also supplied us with estimated tax savings, marked confidential, for 5 of the 11 years we analyzed. We used our own estimates, calculated as described below, because we did not have written permission to publish Baxter's confidential data and it gave us data for only 5 years.

For Allergan; American Cyanamid (1980-1986); Baxter; Becton, Dickinson; Forest Laboratories; and SmithKline we used the ratio of U.S. sales to worldwide sales as described in appendix III to estimate tax savings. We used this ratio because the financial statement tax footnote combined tax consequences from Puerto Rico with those from Ireland or from unidentified sources.

For American Cyanamid (1987-1990), we adjusted the sales ratio technique described in appendix III and also based our estimates on earlier year tax savings estimates. We did this because the company changed the relevant description in its tax footnote, and not changing our approach would have resulted in numbers that would have been inconsistent with the company's earlier experience.

A. H. Robins was acquired by American Home Products in 1989.

Allergan became independent of SmithKline Beckman in 1989.

American Home Products started operations in Puerto Rico in 1984.

Becton, Dickinson reported a larger 1987 tax consequence from foreign and Puerto Rican income than we used because we conservatively used the then-existing 40-percent statutory tax rate rather than a 43-percent rate that appeared in the financial statements.

Bolar began Puerto Rico operations in 1985.

Bristol-Myers Squibb includes only Bristol-Myers from 1980 through 1988 and after that reflects Squibb's 1989 merger with a subsidiary of Bristol-Myers.

Fiscal years for Carter-Wallace, Forest Laboratories, and Mylan Laboratories ended on March 31 of the year after the one we show.

Eastman Kodak acquired Sterling in 1988, and Monsanto acquired Searle in 1985. Data before the year of acquisition apply to the subsidiary only, and the later data cover the combined entity. Sterling's 1986 and 1987 numbers were unavailable in legible form from the Securities and Exchange Commission.

Because Mylan Laboratories reported tax credits as resulting principally from Puerto Rico operations, we conservatively used 50 percent of the tax credits as the tax savings from Puerto Rico operations. Mylan began Puerto Rico operations in 1987.

Rhone-Poulenc Rorer resulted from the merger of Rhone-Poulenc and Rorer in 1990. Rorer's numbers alone are shown before 1990.

Our information on SmithKline Beecham, incorporated in England, includes data for SmithKline (1980) or SmithKline Beckman with the Allergan component for 1980 through 1988. Data afterwards reflect SmithKline Beckman's merger with Beecham and its dissociation from Allergan. To estimate SmithKline's tax savings from Puerto Rico operations we used the sales ratio technique described in appendix III. For 1989 and 1990 we also used earlier ratios because we did not have more current ones available.

Syntex Corporation is incorporated in Panama. Syntex told us that the U.S. net operating loss carryforwards reflected in its 1990 annual report exceeded the section 936 tax benefits it claimed, and thus, its financial statements for the period 1980 through 1990 reflected no saving in U.S. federal tax related to section 936 operations in Puerto Rico.

Zenith Laboratories began Puerto Rico operations in 1984.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives included determining for 1980 through 1990

-- the tax benefits pharmaceutical corporations obtained from operating in Puerto Rico compared to the number of employees they hired and the wages they paid in Puerto Rico,

-- the estimated tax savings that individual pharmaceutical corporations obtained from operating in Puerto Rico, and

-- the estimated amount of income they obtained from operating in Puerto Rico that was exempt from federal taxes.

Another objective was to determine the major drugs that pharmaceutical corporations were authorized to produce in Puerto Rico.

To address the first objective--relating tax benefits to employment statistics--we obtained statistical information compiled by IRS and Treasury. To estimate the section 936 tax benefits, Treasury subtracted from the actual section 936 tax credits claimed by the companies other tax benefits--such as accelerated depreciation, investment tax credits and foreign tax credits--which the corporations might have claimed if they had not received the section 936 credit. Using these data provided by Treasury and IRS, we determined ratios of tax benefits per employee and tax benefits to total compensation paid in Puerto Rico. We did this for all section 936 pharmaceutical companies and all section 936 manufacturing companies in 1981, 1983, 1985, and 1987, years for which federal unemployment data were available. More recent data were not available.

To address the next two objectives--estimating tax savings and tax-exempt income--we collected, analyzed, and aggregated company-specific data mostly from public sources. For this work, we used primarily financial statement data of 26 pharmaceutical corporations that were publicly available and, thus, allowed us to do the sort of company-by-company analysis requested.

We also asked each of 14 pharmaceutical companies whose financial statements aggregated tax savings from Puerto Rico operations with other tax savings to review a table we prepared for that company. Each table showed the numbers taken from the company's financial statement footnotes which we believed included a figure for tax savings from operating in Puerto Rico. We asked that each company provide us with its estimate of tax savings from Puerto Rico operations. Eight companies, listed in appendix II, provided such estimates.

Our approach did not allow us to isolate the tax benefits companies received by using the credit specifically. Rather, it enabled us to estimate the tax savings companies claimed on their financial statements by using the tax credit and other tax provisions related to operating in Puerto Rico. We obtained inflation-adjusted tax savings using the implicit price deflator for U.S. gross domestic product.

Financial statement figures may differ substantially from the numbers on tax returns because they can be governed by different practices or based on different time periods. For instance, a corporation may use what is known as "the profit split method" for calculating income for financial statement purposes and a different method for calculating income for tax purposes. As another example, any information acquired after a financial statement is published but before a tax return is filed will be used in preparing the tax return even though a financial statement is not reissued. In addition, companies may differ from each other in how they present their financial statement information--for instance, isolating various amounts related to operating in Puerto Rico to different degrees--and the same company may follow different practices in different years. Other differences between financial statement amounts and actual tax benefits may arise from (1) the way companies estimate future IRS audit adjustments or present past ones, (2) the fact that specific corporations are subject to the alternative minimum tax, and (3) other factors.

Thus, if actual tax return figures were used, company-by-company analyses might reveal a different picture. Therefore, we tried to be conservative in estimating company-specific amounts from financial statement data. For the 1 year we checked, we found that the total tax savings from Puerto Rico operations based on our financial statement analysis was substantially lower than the total section 936 credits reported in tax returns. We also did company-by-company comparisons but do not report the results because of concerns that doing so might disclose confidential tax information.

Other analysts have used financial statements to describe the impact of Puerto Rico operations on corporate tax savings.[1] We believe that regardless of whether tax return or financial

---

[1] A Successful Puerto Rican Statehood Initiative Will Result in Higher Corporate Tax Rates for Many Companies, Washington Analysis Corporation (Aug. 1990), and The Operation and Effect of the Possessions Corporations System of Taxation, Department of the Treasury (1980).

statement data are used, the basic idea would hold true that companies can differ substantially from each other in their tax consequences from operating in Puerto Rico over time.

To work with the financial statements, we first identified pharmaceutical firms with manufacturing operations in Puerto Rico. We did this generally by examining two sources: (1) a list of corporations that could be producing pharmaceuticals in Puerto Rico as of September 1990, as published by the Economic Development Administration of the government of Puerto Rico; and (2) a December 1991 list of establishments approved by the U.S. Food and Drug Administration to manufacture specific drugs in Puerto Rico and the Virgin Islands.

We selected those companies that appeared on both lists and for which we could obtain usable financial statements from the Securities and Exchange Commission for the time the companies operated in Puerto Rico during 1980 through 1990. We also selected the only company--Becton, Dickinson--that was in the list of top 24 Puerto Rican pharmaceutical companies in terms of employees[2] that we had not already selected, and that had the sort of usable financial statements we needed.

Our final list of 26 pharmaceutical corporations included only those companies with financial statements that provided detailed enough information to allow us to estimate the tax savings the companies obtained from operating in Puerto Rico. The 26 corporations included companies whose section 936 tax credits, when totaled, accounted for a large majority of the total section 936 tax credits provided to all pharmaceutical corporations in the 1 year checked. The 26 companies also accounted for a large majority of the drug products approved by the Food and Drug Administration for manufacture in Puerto Rico. Companies not covered in our analysis included those that were not publicly owned and thus did not file statements with the Securities and Exchange Commission and those with Puerto Rico operations that were an immaterial and therefore unidentifiable part of total operations.

To estimate each company's tax savings from operating in Puerto Rico, we examined the company's financial statement footnote that explained its income taxes. This footnote had a section in which the company reconciled its actual tax expense with what its tax expense would have been if the statutory tax rate had been applied to income before taxes and nothing else had to be considered.

---

[2]Caribbean Business Book of Lists 1990, (Puerto Rico: Casiano Communications, Inc., 1990).

One of the reconciling items for the companies we were examining was an item labeled something like "tax exemption for Puerto Rico operations." To estimate company tax savings for the 1980 through 1990 period, we added up the company's exemption amounts for all the years that the company had a Puerto Rico operation. We did this on a nominal basis and also adjusted it for inflation. If a particular financial statement number was based on a Puerto Rico exemption as well as another exemption--for example, one for Ireland--we estimated the Puerto Rico part by using the ratio of the company's U.S. sales to worldwide sales. Our assumption was that the output produced in Puerto Rico was generally sold in the United States and the output produced under other exemptions was sold elsewhere. Although we know that this assumption is not universally true, it was based on information we obtained from the Economic Development Administration of Puerto Rico that pharmaceuticals produced in Puerto Rico are generally shipped to the United States. Because of the relative imprecision underlying this assumption, we asked the companies for whom we would be using the sales ratio technique to provide us with tax savings estimates of their own. The companies that provided their own estimates are listed in appendix II.

The resulting amount of tax savings we determined for each company was not intended to represent the section 936 tax credit taken. Rather, as alluded to above, the amount could also show the effects of taxes paid in Puerto Rico and reflect differences in how financial statements and tax returns are put together. Further, the tax savings derived are not amounts that necessarily would have been paid in the absence of a section 936 tax credit. If companies did not have section 936 tax credits to use, they might have been able to take advantage of other tax provisions, such as the foreign tax credit, that also would have reduced the amounts of taxes they would have otherwise paid.

Once we obtained a company's tax savings from Puerto Rico operations, we were able to address our third objective and compute the tax-exempt income obtained from operating in Puerto Rico. We did this computation by dividing the tax savings we arrived at earlier by the statutory tax rate--for example, by 34 percent in the United States after 1987.

For 1989 and 1990, we matched the tax savings data we had estimated for specific companies to publicly available information on the number of their employees in Puerto Rico and an estimated amount of compensation they paid them. We were thus able to obtain company-specific ratios of estimated tax savings per employee and estimated tax savings to total compensation paid in Puerto Rico.

For our fourth objective--determining the major drugs that pharmaceutical corporations were authorized to produce in Puerto Rico--we obtained from the Food and Drug Administration a list of the 200 most-prescribed drugs the agency had approved for manufacture in Puerto Rico. We then categorized by company the 25 most-prescribed drugs authorized for production in Puerto Rico.

In doing our work, we interviewed Treasury and IRS officials responsible for analyzing tax returns of section 936 corporations, and we reviewed aggregate and individual tax data of section 936 corporations. In addition, we analyzed Treasury reports and professional articles on section 936 as well as Securities and Exchange Commission rules and generally accepted accounting principles followed in preparing and presenting financial statements.

We also considered the views of accounting professionals and pharmaceutical industry representatives. We met with Price Waterhouse officials and members of the Tax Subcommittee of the Pharmaceutical Manufacturer's Association to obtain their views on the characteristics of tax data reported by pharmaceutical companies in financial statements and the tax benefits of section 936. We also received a Price Waterhouse report that describes the issues involved in measuring section 936 tax benefits from financial statement data.[3] Their views have been incorporated into the preparation of this report.

[3] Financial Accounting for Section 936 Tax Credits, Price Waterhouse (March 1992).

APPENDIX IV

MAJOR CONTRIBUTORS TO THIS BRIEFING REPORT

GENERAL GOVERNMENT DIVISION, WASHINGTON, D.C.

Jose R. Oyola, Assistant Director
Lawrence M. Korb, Evaluator-in-Charge
Kevin E. Daly, Senior Economist
Sharon T. Paris, Evaluator

(268543)

Ordering Information

The first copy of each GAO report is free. Additional copies are $2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20877

Orders may also be placed by calling (202) 275-6241.

United States
General Accounting Office
Washington, D.C. 20548