PRIVATE FOUNDATIONS, FEDERAL TAX LAW, AND PHILANTHROPIC ACTIVITY: AN IRS PERSPECTIVE

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Private foundations are among the least understood organizations in modern society. Formed from large private wealth accumulations under accommodating tax law treatment, private foundations represent an important segment of the tax-exempt sector. Although the origins of institutionalized philanthropy go back as far as the ancient Chinese, Indian, and Egyptian civilizations, little historical data has been available on its size and impact [7].

In medieval times, the church was the primary coordinator of philanthropic activity and has retained a significant role to the present day. However, with the growing scale of private enterprise in the late eighteenth and nineteenth centuries, the traditional purveyors of philanthropy were joined by a new benefactor whose origins are in private business enterprise. Portions of the vast fortunes accumulated in the U.S. economy were set aside for charitable activities, thus ushering in the age of the modern private foundation. These new philanthropic organizations differed from their predecessors in two ways. First, since their financing came from wealth created in the private business sector, it is not surprising that they were "business-like" in their philanthropic activity, utilizing a management structure similar to the organization of their parent companies [2]. Second, the businessmen and women who ventured into the field of institutionalized philanthropy held one dominant characteristic in common: they were economically successful to a degree that was previously unimagined. The enormous incomes and wealth accumulations of their business enterprises, combined with powerful altruistic motives, resulted in the creation of a core of very large private foundations. This concentration of size among foundations persists to this day.

PRIVATE FOUNDATIONS AND FEDERAL TAXES

In the period 1913-1917, the federal tax law initiated its preferential treatment of philanthropy. With a rising fiscal burden caused by increased involvement in World War I, Congress feared that the adoption of an income tax would be met at the expense of charitable giving. Therefore, Congress enacted law changes which exempted the income of philanthropic organizations from taxation and permitted the deduction of gifts by individual and corporate donors to these organizations [2]. These changes have important ramifications since, with the adoption of income and estate taxes and an allowance for charitable deductions from the bases of each of these taxes, the federal government effectively subsidizes charitable activities relative to other activities for which no deduction is available. Organizations

whose income is exempt from tax and, in certain circumstances, whose donors are allowed deductions, receive tax reductions to conduct their philanthropic activities. Private foundations are among the types of organizations that receive both of these benefits.

Before the Tax Reform Act of 1969, private foundations were not defined in the Internal Revenue Code, and the limitation on what constituted a legitimate tax-exempt activity was unclear. The relationship between donors and foundations was governed by a vague "arms-length test," under which foundations were allowed to engage in activities with related parties as long as both parties acted independently and did not alter the outcome from what would have occurred in an open market transaction [5]. Because of the vagueness of the law, alleged foundation involvement in questionable activities [6,7,13], and political pressures for tax reform, Congress enacted the Tax Reform Act of 1969, which ended the laissez-faire era of private foundations in the U.S.

Under the 1969 Tax Reform Act, private foundations were defined for the first time to mean any domestic or foreign organization (described in section 501(c)(3) other than those mentioned in sections 509(a)(1-4) of the Internal Revenue Code), established and operated exclusively for religious, charitable, educational or similar purposes with the following exceptions [1,4,5]:

- Organizations to which 50% of an individual's income can be deducted. (Generally, this refers to churches, and educational or medical organizations).
- Organizations with broad-base public support that receive at least one-third of their support in small contributions and do not receive more than one-third of their support from investment or unrelated business income.
- Certain organizations established exclusively for the benefit of one or more of the organizations described in "1" and "2" above.
- Organizations which are established and operated exclusively for the testing of public safety.

Since this definition may be unclear to anyone unfamiliar with this portion of the Internal Revenue Code, it is necessary to define private foundations in a non-technical manner. Generally, a private foundation is a private, non-profit organization with a narrow base of financial support whose goal is to maintain or assist social, educational, religious, or other

activities deemed to serve the public good and which is usually controlled by the donor or family members [5]. Foundations can be classified as either nonoperating or operating foundations. Nonoperating foundations, which account for approximately 96 percent of the total, are organizations that carry on charitable activities in an indirect manner by making grants to other organizations or persons that directly carry out these activities. Operating foundations, on the other hand, directly engage in charitable activities.

In addition to defining private foundations, some of the other provisions of the 1969 Tax Reform Act that affect foundations include [5]:

- A required current minimum distribution for charitable purposes.
- Prohibition of self-dealing between foundations and certain related parties.
- Limitation of private business holdings of foundations.
- Prohibition on expenditures for activities not pursuant to the foundation's tax-exempt purposes.
- Imposition of a tax on a foundation's net investment income to cover the U.S. Government's cost of monitoring their activities.

The provisions of the Tax Reform Act of 1969 raised several policy issues concerning the foundation sector and its new relationship with the federal government. The minimum distribution requirement is generally considered the most significant provision since it mandates current distributions for charitable purposes as opposed to the unlimited accumulation of funds. Nonoperating foundations are required to distribute to qualified parties the greater of their adjusted net income (the amount by which gross income exceeds expenses) or their minimum investment return (a fixed percent of noncharitable assets). If the required distribution exceeds the rate of return on assets, a foundation would have to liquidate some assets to meet this requirement. The composition of foundation assets are also affected by this requirement since current returns on investments are now needed.

The relationship between the foundation sector and the federal government can be classified into three general areas: the exemption of foundation income from (most) taxation, the regulations and requirements (largely included in the Tax Reform Act of 1969), and the preferential tax treatment available to donors. Changes in any of these areas have an effect on the foundation sector. The recently passed Economic Recovery Tax Act of 1981 has changes affecting the regulations and requirements and the treatment of donors. First, beginning in 1982, the computation of the private foundation's required minimum distribution is no longer to include adjusted net income. The new requirement is that only an amount equal to the minimum investment return be distributed. This change lowers the required minimum distribution

for those foundations whose adjusted net income exceeds their minimum investment return. Second, marginal tax rates for both individuals and corporations have been reduced. This change effectively increases the donor's cost of a contribution since it reduces the tax benefit which is derived from a contribution. Finally, individuals who do not itemize may now deduct charitable contributions from their income bases. This change reduces the net cost of contributing by non-itemizers since these individuals are now provided with the tax benefit previously available only to those who itemize deductions. Although it is anticipated that these recently enacted changes will have a significant impact on the foundation sector, their actual effects cannot be readily determined but will be the subject of future research in this area.

PRIVATE FOUNDATION STATISTICS

In 1974 there were 64 foundations having assets of \$50 million or more. Even though this group accounted for only 0.2 percent of almost 27,000 foundations, it accounted for 39 percent of total foundation assets (see table 1). All by itself, for example, the Ford Foundation with assets of \$1.8 billion accounted for 7 percent of total foundation assets. The 354 foundations with \$10 million or more in assets accounted for approximately 1 percent of the total number of foundations but 62 percent of total assets. Foundations with assets of \$1 million or more comprised 10 percent of the total number of foundations but 89 percent of total assets. Clearly, considerable asset concentration exists among foundations.

Table 1. -- The Number of Private Foundations and the Amount of Total Assets, by Size of Total Assets, 1974

[All figures are estimates based on samples -money amounts are in millions of dollars]

Size	Number	Percent	[Percent
of	of	of	Tota1	of
total	founda-	total	assets	total
assets	tions	•		
	(1)	(2)	(3)	(4)
Total	26,889	100.0	\$25,514	100.0
Under \$25,000	10,746	40.0	72	.3
\$25,000 under	-			
\$100,000	6,113	22.7	332	1.3
\$100,000 under	-			
\$500,000	5,773	21.5	1,337	5.2
\$500,000 under			. ,	
\$1,000,000	1,540	5.7	1,081	4.2
\$1,000,000 under	•			
\$10,000,000	2,363	8.8	6,879	27.0
\$10,000,000	•		•	
under				
\$50,000,000	290	1.1	5,945	23.3
\$50,000,000 or			-	
more	64	. 2	9,869	38.7
			•	

SOURCE: These data are from [5]. Totals may not add due to rounding.

Data are presented in table 2 to show the relative importance that private foundations and other charitable tax-exempt organizations have in comparison to other measures of economic activity. The measure used in this comparison for private foundations and other charitable tax-exempt organizations is expenditures for exempt purposes, which includes all disbursements for activities that are directly related to the tax-exempt purposes of the organization. Also, for comparative objectives, we have included a measure of governmental "philanthropy" called social welfare expenditures. These data are compiled by the Social Security Administration and include public transfer payments and investment expenditures for schools, hospitals, and other related facilities.

Table 2.—Expenditures for Exempt Purposes by Private Foundations and Other Charitable Tax-Exempt Organizations, Social Welfare Expenditures, and the Gross National Product

[Money amounts are in millions of dollars]

Selected years	Expenditur Purp	es for Exempt oses	Social	Gross			
	Private Foundations	Other Charitable Organizations	Welfare Expenditures	National Product			
***************************************	(1)	(2)	(3)	(4)			
1974 1975 1977	2,409 n.a. 2,692 3,101	n.a. 36,770 29,135 30,380	264,681 311,216 369,289 402,887	1,434,220 1,549,212 1,918,011 2,156,087			
	Amount as a percent of the Gross National Product						
1974 1975 1977	0.17 n.a. 0.14 0.14	n.a. 2.37 1.52 1.41	18.45 20.09 19.25 18.69	100.00 100.00 100.00 100.00			

n.a. - Not available.

SOURCE: Column (1) data are from $\{5\}$, column (2) are unpublished from the IRS, column (3) are derived from [9], and column (4) are from [12].

As can be seen from table 2, particularly for private foundations, but also for other charitable exempt organizations, expenditures for exempt purposes are small in comparison to the gross national product (GNP). Government "philanthropy," as measured by social welfare expenditures, is by far the largest "philanthropic" entity, equal to approximately 19 percent of the GNP. Even within the charitable tax-exempt sector, private foundation expenditures are relatively small, and they are considerably smaller in comparison to the major economic aggregates. Nevertheless, this does not imply that foundations and other charitable tax-exempt organizations are unimportant. The expenditures shown for these organizations are in the billions of dollars despite the considerable amount of activity that is not included in these data because many charitable organizations (e.g., churches) are exempt from filing. Furthermore, private philanthropy may soon be called upon to fill the void created by cutbacks in public funds for social programs.

Since time series analysis of the private foundation data is of significant policy interest, we have compiled the data presently

available in table 3. In the sixteen year interval shown in the table, the number of private foundations has nearly doubled. For the period 1962-1974, the annual growth rate is 5 percent. In the period 1974-78, the annual rate is 2 percent. While it is difficult to draw any conclusions concerning this pattern of growth, it is of interest to note that a recession occurred during the latter period which might have slowed the rate of creation of new foundations and caused the liquidation of existing foundations.

The two measures of total assets (book and market values) both show large gains over the entire 1962-78 period. The book value measure increased by 183 percent while the market value measure increased by 126 percent. The market value asset measure is generally preferable to the book value measure since the latter can be unrealistic, especially in periods of inflation. Furthermore, all of the income and expenditure data are in current (market) values. Except for the 1962 book value amount, the constant dollar asset measures show a considerable degree of stability for these years. The annualized current dollar asset growth rates for both book and market values are all relatively stable, ranging between 5 to 8 percent. In constant dollars, the annualized growth rates show no real patterns. In fact, the market value of total assets has hardly grown at all in the 1962-78 period.

Table 3.--Private Foundations--Number of Organizations, Measures of Total Assets, Total Receipts, and Contributions Paid for Selected Years, 1962-78

[Money amounts are in millions of dollars]

Selected	Number of	Total	assets	Total	Contribu- tions paid		
years	organiza- tions	Book value	Market value	receipts			
	(1)	(2)	(3)	(4)	(5)		
1962 1974 1977 1978	14,865 26,889 27,691 29,659	11,648 25,514 30,328 32,935	16,262 n.a. 34,817 36,735	1,898 3,263 4,446 5,018	1,012 1,953 2,289 2,764		
	Money amounts are in millions of constant (1972) dollars						
1962 1974 1977 1978	14,865 26,889 27,691 29,659	16,496 22,202 21,689 21,949	23,031 n.a. 24,900 24,482	2,688 2,839 3,180 3,344	1,433 1,699 1,637 1,842		
	Annual current dollar growth rates (%) from year of prior study						
1962 1974 1977 1978	n.a. 4.9 1.0 6.9	n.a. 6.5 5.8 8.2	n.a. n.a. 5.1 5.4	n.a. 4.5 10.3 12.1	n.a. 5.5 5.3 18.9		
	Annual constant dollar growth rates (%) from year of prior study						
1962 1974 1977 1978	n.a. 4.9 1.0 6.9	n.a. 2.5 -0.8 1.2	n.a. n.a. 0.5 -1.7	n.a. 0.5 3.8 5.0	n.a. 1.4 -1.2 11.8		

n.a. - Not available.

SOURCE: Data for 1962 are from [14]; data for 1974, 1977, and 1978 are from [5]. Constant dollar estimates were derived with the GNP Implicit Deflators from [12].

Data on total receipts and contributions paid both show large increases over the sixteen year span, with the former increasing by 164 percent and the latter by 173 percent. In constant dollars, total receipts increased only 24 percent and contributions went up by only 29 percent. The annualized growth rates show a modest increase in the earliest period but larger increases in the latter periods.

In general, the trends are not clear; however, some patterns are evident. The total number of private foundations has grown considerably, although the apparent aberration of growth in the 1974-77 period makes any projections difficult. While the constant dollar total asset measures have been relatively stable for the more recent years, the receipts and contributions paid data (both in current and constant dollars) have generally shown more growth.

Flow to stock ratios by size of assets are presented in table 4, in which there are three groupings: receipt to asset ratios, deduction to asset ratios, and distribution to asset ratios [15]. In each of the first two groups of ratios, the denominator is year-end book value of assets, while for the distribution to asset ratios, the denominator is the average market value of assets not used for charitable purposes. This latter measure is employed here because it is actually used as the base in determining the minimum investment return, one of the distribution components.

Concerning the flow to stock ratios in general, the most striking aspect is the presence of a maximum value for each item in the smallest foundation size class of assets. In three cases, contributions received to assets, contributions paid to assets, and qualifying distributions to assets, the flow to stock ratios are at least 69 percent. This pattern of decreasing ratio values with increasing asset size is most pronounced in the deduction to asset ratios. In general, we believe that this phenomenon is caused by liquidations of existing foundations. Since the asset measure used for both the receipt to asset and deduction to asset ratios is year-end book value, a foundation undergoing liquidation would generally have positive values for receipts and deductions and a zero asset value. When the data are grouped by asset size, these organizations are all in the smallest asset size class. The distribution to asset ratios use, as a denominator, the average fair market value of assets not used for charitable purposes. Since even liquidating foundations would likely have a positive average asset value, there is less of a tendency of inflating the flow to stock ratios in the smallest asset size class. This partly explains why these ratios exhibit a somewhat less pronounced pattern of large values in the smallest size class.

In the receipt to asset ratios, the contributions received to asset ratio steadily declines from a high of 69 percent for the smallest asset size class to a low of 2 percent for the largest

Table 4.--Selected Private Foundation Flow/Stock Ratios by Size of Total Assets, 1974

[Flow amount as a percent of stock amount]

		Size of total book value of assets						
Item	Total	Under \$25,000	\$25,000 under \$100,000	\$100,000 under \$500,000	under	\$1,000,000 under \$10,000,000	\$10,000,000 under \$50,000,000	\$50,000,000 or more
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Number of foundations	26,889	10,746	6,113	5,773	1,540	2,363	290	64
Receipt/asset ratios: Contributions received/assets Dividends/stock Total investment income ¹ /assets Net gain/assets	4.8 5.5 6.0 1.2	69.1 11.0 11.7 2.4	17.2 5.5 5.5 0.7	10.2 5.7 5.8 0.8	8.5 5.6 6.2 0.9	6.3 5.7 6.2 1.6	3.5 5.9 6.2 1.0	2.4 5.2 5.8 1.0
Deduction/asset ratios: Contributions paid/assets Wages and benefits/assets Compensation of officers/assets Professional services/assets Taxes/assets Net loss/assets	7.7 0.5 0.2 0.2 0.3 1.8	98.7 4.6 2.3 2.9 1.6	21.0 0.6 0.3 0.5 0.4 1.8	11.6 0.9 0.3 0.3 0.3	9.2 0.6 0.3 0.3 0.4 1.2	8.0 0.7 0.2 0.2 0.4 1.4	8.1 0.5 0.2 0.2 0.3 1.0	5.4 0.2 0.1 0.1 0.2 2.8
Distribution/asset ratios: Minimum investment return/ assets ² Distributable amount/assets ² Qualifying distributions/ assets ²	5.0 5.4 8.8	5.3 8.5 72.2	5.2 6.4 28.1	5.2 6.4 16.7	5.2 5.9 12.1	5.2 5.5 9.0	5.0 5.2 8.2	4.9 5.1 6.9

¹This is the sum of interest, dividends, rents, and royalties.

These are the total market value of assets held for noncharitable purposes.

class. The dividend to stock ratio is 11 percent for the smallest foundations and between 5 and 6 percent for all others. Dividends, interest, rent, and royalties were summed to approximate total investment income. The ratio of this total to assets exhibits a pattern similar to the dividend to stock ratio. For the smallest foundations, the total investment income to asset ratio is 12 percent while it is only 6 percent for all other size classes. Net gain to assets shows a similar pattern at a substantially lower level.

As noted above, the deduction to asset ratios have the most pronounced pattern of a considerably greater value for the smallest foundations. Further, in all but one of the deduction items, the minimum value is in the largest asset size class. The greatest decline across size classes is with the largest deduction item, contributions paid. This ratio declines from a high of 99 percent for the smallest foundations to 5 percent for the largest foundations. Net loss to assets declines from a high of 11 percent for the smallest foundations to 1 percent for the smallest foundations to 1 percent for the largest foundations. All of the other deduction to asset ratios are at substantially lower levels and decline as asset size increases to levels approaching zero for the largest foundations.

Although the maximum value appears in the smallest asset size class for each of the distribution to asset ratios, this is only by a tenth of a percent for the minimum investment return. This ratio is essentially constant at 5 percent for all asset size classes. The distributable amount to asset ratio declines from 9 percent for the smallest foundations to 5 percent for the largest foundations. The qualifying distributions to asset ratio shows the most pronounced decline among the distribution to asset ratios. It declines steadily from 72 percent for the smallest foundations to 7 percent for the largest foundations.

Several phenomena are of interest in these distribution to asset ratios. First, since the minimum investment return is essentially a fixed percentage of assets not used for charitable purposes, it is not surprising that the derived minimum investment return to asset ratio is relatively constant across all asset size Second, because the distributable amount is the greater of the minimum investment return or the adjusted net income, it is logical that the distributable amount to asset ratio exceeds the minimum investment return to asset ratio (by a small amount) in each asset size class. The size of this difference, however, clearly declines with increasing asset size. Since the distributable amount is a mandated distribution, this suggests that the smaller foundations are more inclined to meet the payout requirement by distributing their adjusted net income as opposed to their minimum investment return. For the larger foundations, these two ratios are virtually identical. This implies that these organizations are much more likely to be meeting the payout requirement

distributing their minimum investment return. Finally, the most significant finding in the distribution to asset ratios concerns the pattern of qualifying distributions across asset size classes. Qualifying distributions are direct expenditures for charitable purposes or for the acquisitions of assets to be used for these purposes. The qualifying distribution to asset ratio declines substantially with increasing asset size. The smaller foundations are more often distributing amounts that exceed the mandated requirement than is true of the larger foundations. We suspect that liquidations tend to accentuate this pattern for the smallest asset size class; however, this pattern of decline is consistent across all size classes.

FUTURE RESEARCH PLANNED

Work is presently underway on a full-scale Statistics of Income study of private foundations for 1979 that is scheduled for publication in 1983. This study does not differ substantially from the 1974 SOI study and can thereby be used for the examination of trends between these two periods. The principal difference that exists between these two studies is a shift away from detail on foundation activities toward an increased emphasis on foundation financial variables classified by the size of total assets, receipts, and contributions paid. Also, the 1979 SOI includes data for the first time on nonexempt charitable and splitinterest trusts which are treated as private foundations under the Internal Revenue Code.

Since the SOI studies are expensive endeavors, alternatives are being sought to produce data that is more economical and timely. Two possibilities are being considered.

As a part of its compliance activities, some information on all tax-exempt organizations that are required to file a return is entered into IRS's Master File System. These Master File data, while limited in item content, are an economical alternative in years when a full-scale study is not undertaken. Because all tax-exempt organizations are included in this file, it is possible to study the entire tax-exempt sector.

Another possibility for creating less expensive and more timely tax-exempt organization studies is to use a stratified sampling design similar to that used in the SOI studies but on a substantially reduced basis. A study could be designed to sample the largest organizations at a 100 percent rate and sample the remaining organizations at a very low rate. This study could use a sample size of approximately 1,000 returns, as opposed to the 1979 Private Foundation SOI study which sampled a total of 12,500 returns. Item detail would be comparable to that of a full-scale study but at a considerable reduction in cost. Since the strengths of this approach (the presence of all large foundations and increased item detail) complement the strengths of the Master File approach (an entire population of returns and no additional editing), we are considering options in linking these two "mini" study procedures. Present plans are to repeat the SOI cycle on only an 8 to 10 year basis and to produce one type of "mini" study for any year in which a full-scale study is not done. The results of the "mini" studies will be published in the quarterly Statistics of Income Bulletin. Thus, for years from 1979 on, we will have a database that is both timely and relatively consistent.

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NOTES AND REFERENCES

- NOTE: Additional materials, not directly referenced in this paper, which bear on this effort are [3,8,10-11].
- Commerce Clearing House, The Private Foundation and the Tax Reform Act, 1970, pages 8-138.
- [2] Commission on Private Philanthrophy and Public Needs, Giving in America, 1975, pages 9-40, 53-75, 89-99, and 103-114.
- [3] Council on Foundations, Inc. (Chairman and Staff), "Private Foundations and the 1969 Tax Reform Act," in Research Papers Sponsored by the Commission on Private Philanthrophy and Public Needs, Volume III, Special Behavioral Studies, Foundations, and Corporations, U.S. Department of the Treasury, 1977, pages 1557-1661.
- [4] Internal Revenue Service, "Private Foundations Handbook," Internal Revenue Manual 7752, U.S. Government Printing Office, 1975.
- Internal Revenue Service, Statistics of Income--1974-1978, Private Foundations, Publication 1073, U.S. Government Printing

- Office, 1981, pages vi, 1-24, 39, 93, and 96.
- [6] Lundberg, Ferdinand, The Rich and the Super-Rich, 1968, pages 382-432.
- [7] Nielsen, Waldemar A., The Big Foundations, 1972, pages 3-27, and 365-398.
- [8] Rudney, Gabriel G., "The Scope of the Private Voluntary Charitable Sector," in Research Papers Sponsored by the Commission on Private Philanthrophy and Public Needs, Volume I, History, Trends, and Current Magnitudes, U.S. Department of the Treasury, 1975, pages 135-141.
- [9] Social Security Administration, Social Security Bulletin, Annual Statistical Supplement, 1976, pages 44-45, and 1977-79, pages 53-54.
- [10] Steuerle, Eugene, "Distribution Requirements for Foundations," National Tax Association--Proceedings of the Seventieth Annual Conference, 1977, pages 423-430.
- [11] Sullivan, John P., and Gilmour, Keith,
 "Nonprofit Organizations in America: An
 Examination of Information Return Filings
 with IRS," Internal Revenue Service,
 Statistics Division. (ASA contributed
 paper, 1981).
- [12] U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts of the United States, 1929-1976, Part II, Statistical Tables, 1981.
- [13] U.S. Congress, Hearings Before the Subcommittee on Domestic Finance on "Tax Exempt Foundations and Charitable Trusts," U.S. Government Printing Office, 1973, pages 1-45, and 61-139.
- [14] U.S. Department of the Treasury, "Treasury Department Report on Private Foundations," U.S. Government Printing Office, 1965, and pages 1-54, and 65-108.
- Four tables of basic data from which these ratios were derived are provided in <u>Statistics of Income and Related Administrative Record Research</u>, Internal Revenue Service, 1981, pp. 171-180. An expanded version of this paper is also available from the authors upon request.