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THE SIZE OF THE VOLUNTARY NONPROFIT
SECTOR: CONCEPTS AND MEASURES

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ABSTRACT

This paper will (1) discuss the conceptual foundation for measuring the size of the voluntary nonprofit sector of the economy, (2) present new aggregate measures of the size of the voluntary sector, (3) compare our estimates to existing measures where appropriate, and (4) conclude with suggestions for future data collection and measurement of the voluntary sector.

THE SIZE OF THE VOLUNTARY NONPROFIT SECTOR:

CONCEPTS AND MEASURES

This paper will (1) discuss the conceptual foundation for measuring the size of the voluntary nonprofit sector of the economy, (2) present new aggregate measures of the size of the voluntary sector, (3) compare our estimates to existing measures where appropriate, and (4) conclude with suggestions for future data collection and measurement of the voluntary sector.

I. Concepts

The economy of the United States is comprised primarily of private firms. The historical development of economic theory has, similarly, focused on the private sector. That sector's behavior has been (1) predicted, on the basis of an assumed orientation toward profit maximization, and (2) evaluated, principally on the basis of the efficiency with which it allocates resources.

In recent decades analytic efforts have been directed increasingly to the role of the governmental, public sector. The bulk of this research has examined the implications of the existence of collective-type goods--those that, like national defense, lighthouses at sea, and consumer information, can be enjoyed by a number of people simultaneously (nonrivalry). The theoretical analysis has

pointed up the likelihood that the private for-profit sector will produce suboptimal quantities of collective goods, simply because of the tendency of consumers to act as free riders, who do not offer to pay for collective goods, but instead wait for others to pay. The expected result is that private-sector provision of collective goods will be less than the quantities for which all consumers, in sum, are willing to pay the cost of production.¹

Such a private market failure constitutes a source of allocative inefficiency in the private for-profit sector, and it provides one justification for governmental activity. In addition to responding to resource-allocation problems of the private sector, however, governments have been seen by economists as providers of mechanisms for bringing about a more equitable distribution of income, and for stabilizing the economy and contributing to a variety of other social goals. In the last two decades there has been a notable growth of economic research concentrating on the efficiency and equity of governmental behavior, including the effectiveness of regulatory-agency activity and the separate but related roles of each level of government--federal, state, local.

The expansion of economists' focus--first on the private for-profit sector, then on the public sector--is, and should be, continuing, for economic activity is not limited to these two kinds of organizations. Recently, we have broadened our horizon to encompass the household sector, and now we are coming to understand the decision process by which people choose whether to engage in productive activity in the marketplace or within the household.

Within the market sector, however, economic activity is not limited to for-profit and governmental entities. The reality of goods and services that are provided neither by governmental units, which have the power to tax, nor by private, for-profit firms, which sell goods and services for a price, confronts us with a gap in our theories. A third type of market entity--the nonprofit organization--exists, which depends at least partially on voluntary grants of money and real resources to produce its output. Why do such voluntary-sector organizations exist? What social roles do they perform? What differences and similarities exist between the kinds of goods and services produced in the voluntary sector and those produced in the other economic sectors? If profit maximization is the essential goal on the basis of which private-sector behavior can be predicted, and if political processes can provide a basis for understanding governmental behavior, then what motivational analogue can be applied to the voluntary sector?

All of these interrelated questions call for answers, and while research on voluntary nonprofit organizations is growing, it is doing so from a very small base.² There is now no consensus among economists as to how to model--that is, to describe and predict--the behavior of voluntary "firms." Ill-defined terminology abounds: "voluntary," "nonprofit," "philanthropy," "charity," "donation," and so on. The present paper is by no means an attempt to eliminate these ambiguities and lay out a full conceptual framework for the nonprofit, nongovernmental market sector. Our more modest goal is to present some of the issues and to provide some estimates of the importance of the sector under various definitions.

Output Versus Input-Financing

In coming to understand the sector that we will term "voluntary," it is useful to distinguish between (1) the kinds of outputs being produced or provided, and (2) the method of their finance. Conventionally, this distinction has been obscured. The term "philanthropic," for example, has customarily been used to refer to the nature of the organization's activities--often on behalf of some underprivileged or needy people--and at the same time, to refer to the source and nature of its revenue. In particular, that revenue has been considered in terms of the motivation of the giver (charitable)--that is, whether the giver (donor) received or expected to receive any quid pro quo. The form or precise definition of the quid pro quo has seldom been specified, but the presumption has been that it was not financial, or tangible, although it presumably could be in the form of public esteem, social praise, and other intangible--though perhaps highly valued--forms.³ The extent to which narrow self-interest lies behind the donations of money and time to voluntary organizations is little understood, but there can be no doubt that donors often do benefit significantly through the making of business contacts and the receipt of favorable publicity for good deeds. Having one's name appear on a plaque as the giver of a hospital ward, or having a library, park, or college classroom building named after a donor can be viewed as reflecting philanthropy but it can nonetheless be viewed as the reward (quid pro quo) for a donation--that is, as a purchase. Frequently, donors receive a quite tangible and direct quid pro quo.

They may receive free gifts of various quality that depend on the amount of the donation, and these gifts may indeed be worth the cost for many people, particularly for persons in high marginal income tax brackets. Or they may receive a free magazine, or access to organized meetings with like-minded people, or other information, goods, or services in return for their "gift," "donation," "voluntary contribution," or membership dues.

These examples are intended to make the point that directing attention to the motivation of those who contribute to the financing of an organization's activities is complicated. Moreover, attention to motivation for giving may not be fruitful for answering some of our questions. For example, it is not necessary to understand motivations of donors in order to evaluate the outputs of voluntary organizations and to measure the size of the voluntary sector. On the other hand, while motivations are difficult to determine, they may prove important in the study of methods used by voluntary-sector organizations to raise revenue. David B. Johnson hypothesized that "social pressure" is an important factor in determining the level of contributions to voluntary organizations.⁴ If his hypothesis were confirmed empirically, and if organizations could exert control over the intensity or type of social pressure to contribute, then understanding this motive would prove helpful in comprehending both donor and organization behavior.

No matter how one defines the philanthropic or charitable donations revenue of voluntary organizations, there is reason to expect that these organizations will also receive revenue from other sources such as the ordinary sale of goods and services--for example, a rummage sale of

used clothing and household articles or a sale of Christmas cards--and they may receive aid from governments. Each of these sources of finance may take forms other than cash. Goods, for example, might be given to the organization for subsequent resale; labor, equipment, or other resources might be made available (donated) to the organization; and goods and services might be sold to it at less-than-market prices.⁵ Each of these aids can be provided by private individuals and firms, by other voluntary organizations such as foundations, and by governments, either through direct giving or through special tax privileges to donors and to organizations, lower postage rates, and so forth.

To summarize: From the point of view of the sources of support, an organization may indeed be characterized by the proportions of total support coming, in both monetary and nonmonetary forms, from the following sources:

Total Receipts

I. Money

- A. Private "donations," including foundations
- B. Sale of goods and services
- C. Government grants
- D. Membership fees, dues, and assessments

II. Nonmoney (that is, goods and services)

- A. Private donations, including services at below-market prices.
- B. Governmental aid
 - 1. Tax breaks
 - 2. Free, or below-usual-price, services

The dependence on each form and source of finance can vary substantially among organizations--even among those often thought of as being voluntary. Thus, while voluntary organizations are likely to receive significantly greater proportions of their total revenue in various forms of donations than for-profit organizations receive, voluntary and for-profit organizations alike can be expected to have revenue from the sale of goods and services and, quite likely, from governmental assistance in various forms.⁶ Revenue sources and forms are, indeed, one basis for distinguishing among types of organizations, but since few organizations are dependent exclusively on any single source or form, such distinctions are essentially arbitrary divisions of what is likely to be a continuous spectrum.

We have already suggested another possible basis for understanding the role of voluntary organizations--the nature of their outputs and, specifically, the relative emphasis on the provision of private-type and collective-type goods. The private for-profit sector provides primarily private goods, and the public sector provides collective goods. While there is substantial agreement among economists about the outputs of these two sectors, there has been little analysis of the type or types of output(s) provided by the voluntary sector. In a recent paper, Weisbrod (1972) has theorized that the voluntary sector exists as a response to certain constraints on governmental provision of collective goods--in short, that the voluntary nonprofit sector supplements governmental provision of collective goods, helping to meet the remaining, undersatisfied consumer demand.⁷ In a later paper, Lee and Weisbrod (1974) have

tested, and found evidence of, the similarity of governmental and voluntary-sector outputs in the hospital industry.

Much of the recent literature on the behavior of voluntary-sector organizations has applied to hospitals and educational institutions.⁸ Most of this writing is theoretical but with some efforts at empirical testing. It has concentrated on determining the appropriate objective function of voluntary organizations--something analogous to the assumed profit-maximization objective of private-sector firms. Output maximization, budget maximization and professional-income maximization have all been proposed and note has been taken of foundations' efforts to innovate, but we are as yet far from a consensus on organization goals or on trade-offs among the probably multiple goals.⁹

The role of the entrepreneur in the voluntary sector is another little-understood concept.¹⁰ What is it that motivates entrepreneurs if not conventional monetary and related rewards? Even less well understood is the range of variables customarily referred to as the "industrial organization" of the voluntary sector--what factors determine when new voluntary organizations will enter or leave an "industry," and when existing ones will expand or contract? How do government regulation, taxation, and subsidization affect the voluntary sector as a whole, its division among various industries, and the variety of its outputs and sources of revenue? What are the relationships between the voluntary sector and the public and the private for-profit sectors that cause some goods to be provided in all three sectors and other goods to be provided in only

one or two of the sectors?¹¹ Why do these sector shares change over time? Quantitatively how large are the effects of the voluntary sector on the economy's allocation of resources among alternative uses-- and on the distribution of income?

These questions involve predictions of various elements of voluntary-sector behavior. There are also important normative questions--those relating to what the behavior of the voluntary sector should be. How much voluntary-sector output should there be--from an economic efficiency and a distributional equity point of view? How should the outputs of the voluntary sector be priced? What are the circumstances in which the voluntary sector can be expected to fail to allocate resources efficiently and equitably? While answers to these questions are not now available, it seems clear that little effort has gone into seeking them so far. The economics of the voluntary sector deserves far more attention than it has received.

One obstacle confronting research in this area is the dearth of data about the voluntary sector and its industry components. Yet, while more and better data always contribute to research, the converse is also true--better theoretical research would help to point up the kinds of data that are needed and the uses to which they could be put. It seems desirable, therefore, that work proceed on both fronts: on theoretical conceptualizations of the sector and its roles in the economy, and on the expansion of the data base.

II. The Size of the Voluntary Sector: Some
Alternative Measures

The preceding discussion indicated a number of ways one might characterize any organization--by the type and mix of outputs it provides, and by the mix of its sources of finance. In this section we examine some implications of these alternative ways of describing one economic sector. It will be clear that while such terms as "voluntary" and "philanthropic" may be used to describe a sector of the economy, exact boundaries of the sector will differ depending on the precise definitions that are used.

Of the previous measurements developed, the most thorough and prominent are that of Dickinson (1970) and those presented annually in the American Association of Fund-Raising Counsel's Giving USA. Both sources attempt to measure philanthropy rather than the broader voluntary notion employed in this paper. Both estimates include aggregate data from contributing sources and from recipient institutions. Dickinson's work, for the period 1929 to 1959, includes public-sector philanthropy and gifts to foreign countries. In short, the size of the philanthropic sector has been measured, not by output characteristics, but by the amount of inputs that is financed in a particular way--by philanthropy.

Volunteer Labor Services

Dickinson and Giving USA report measures of philanthropy that are limited to money flows of funds. Such measures omit a vast

amount and array of giving "in-kind"--particularly the donating or giving, at less-than-market price, of labor services. Some data have been collected on the quantity of volunteer labor services forthcoming from households, and attempts have been made to value these services. However, the difficulties of data collection in this area are large. Few organizations keep records on the hours worked by volunteers, the kind of work done, and the social opportunity cost of the donors' time. (This is a data gap that should be closed.) Surveys of individual donors depend upon accurate estimates of donated hours--but in contrast to money donations, which may be tax deductible, the individual has no apparent reason to keep careful records of volunteered labor hours, for they are not tax deductible. In addition to the problems of precision of the data are problems of coverage. Most survey data are limited to in-kind donations of labor at a zero price. Hence, individuals working at wages below their market rate of pay are not, in general, counted. Despite these limitations, we summarize in Table 1 existing data from four studies of the quantity and value of volunteer time donations.

While the estimates in Table 1 vary, it is clear that donations of labor services to the voluntary sector represent a significant source of support, amounting to between 20 percent and 40 percent of the total cash contributions estimated later in this paper (see Table 3, row 3). One source, the BLS Survey (U.S. Department of Labor, 1969) allows, by very rough calculations, the allocation of total hours among the various "industries" or activities. Table 2 shows the quantity of volunteer labor to each subsector in 1965. The method of calculation is described in Appendix A.

Table 1. Aggregate In-Kind Labor Donations--U.S., 1964-1965

Source	Total Hours/Year (in billions)	Total Value 1965 dollars (in billions)	Total Value 1975 dollars ¹ (in billions)
Wolozin (1968) (1964 data)	5.7	\$13.1	\$24.1
Morgan, Sirageldin, and Baerwaldt (1966) (1964 data)	4.6	\$14.1	\$25.9
Sirageldin (1969) (1964 data)	4.6	\$11.2	\$20.6
Department of Labor (1969) (1965 data)	2.6	(a) \$ 8.9 ² (b) \$ 6.5 ²	(a) \$16.4 ² (b) \$12.0 ²

Note: See Appendix A for description of imputations and original authors' methods.

¹Adjusted by Bureau of Labor Statistics index of average hourly earnings in the private nonfarm economy (October 1974).

²(a) and (b): See Appendix A for explanation of the two sets of estimates.

Table 2. Volunteer Time by Subsector, 1965

Subsector	Percentage of Total Hours	Hours Worked (in hundred millions)
Hospital	9.2	2.39
Other health or medical	8.0	2.13
Education	21.6	5.62
Social or welfare	19.8	5.15
Recreational	5.3	1.37
Civic or community	12.7	3.31
Youth activities--Scout	12.6	3.27
Other	7.3	1.90
Other	3.5	.90
	100.0	26.0

From the totals shown in Table 2, we observe that civic, community, and youth activities together receive nearly one-third of volunteer time, while education, social or welfare, and the two health subsectors each receive about one-fifth of the total. One serious shortcoming of the Labor Department survey, however, is its lack of attention to religious activities in the interview process, and hence, the expected underreporting of time volunteered to this subsector. Clearly, from the age and imprecision of the data summarized in Tables 1 and 2, new efforts are required to count and value volunteer time and other in-kind donations, at the aggregate and at the subsector or "industry" levels.

New Estimates of Voluntary-Sector Money Flows

As emphasized in part one of this paper, the estimates of philanthropic, or charitable, giving--both in money and in kind--provide one perspective on the extent of private voluntary activities. When it is recognized, however, that most organizations in the voluntary nonprofit sector have command over resources in excess of those given charitably, broader measures are suggested. Such measures of the importance of voluntary organizations--whatever the source of their finance--would include flows of funds from nonprivate philanthropic sources such as governments, and from the sale of a wide variety of private goods and services, in addition to noncash aid.

Consider the following simple set of revenue accounts for a typical voluntary-sector organization:

Revenue

1. Sales and receipts
 2. Membership dues and assessments
 3. Contributions, gifts, grants
 - a. Private sector
 - b. Public sector
-

4. Total Revenue

The Dickinson and Giving USA measures account primarily for line 3a and the tax-deductible portion of line 2. If one were interested in accounting for voluntary-sector activity in, for example, the hospital industry, a good share of the dollar flows would take the form of the sale of goods and services (line 1). Thus, another measure of the role of the voluntary nonprofit sector in the economy is line 4, while a measure of the private philanthropic component is primarily line 3a. There is, however, some ambiguity, since some of the payments in lines 1 and 2 may represent charitable impulses (motivations) rather than payment for goods and services.

In order to begin to generate our measures of the voluntary sector, we took two samples from Internal Revenue Service records. The first was from the nonprofit organizations given special tax-exempt status by the IRS, and the second was from the universe of private tax-exempt foundations. While both types of organizations are part of the voluntary nonprofit sector of the economy, they play distinctly different roles. The nonprofit, nonfoundation organizations may be seen primarily as firms producing goods and services, while foundations function largely as financial intermediaries whose grants are customarily made to voluntary institutions.¹²

The Size of the Nonprofit Sector

Tax-exempt nonprofit organizations file with the IRS each year a statement of their receipts, expenses, and assets and liabilities (Form 990).¹³ Our sample of these returns, including information for 432 such organizations, is described in Appendix B. Since we knew from independent sources that the universe of such organizations in the United States was about 600,000, we were able to estimate the aggregate revenues of the entire voluntary sector, and some principal component subsectors. The revenue measures appear in Table 3.

Our estimate of the magnitude of the voluntary sector should not be confused with a different notion--that of the contribution of the voluntary sector to the Gross National Product. The estimate we present here is inevitably prone to double counting, since much of the activity of voluntary-sector organizations involves granting funds to other organizations. While foundations are the most striking examples of voluntary-sector financial intermediaries, other organizations that are conduits for funds to member organizations--such as the United Fund--are also included in our estimates. To consider another example, among our health organizations is a Blue Cross-Blue Shield Group that undoubtedly distributes an important share of its revenues to voluntary-sector hospitals, which are included among the exempt organizations. The 990 forms make it impossible to estimate the degree of such double counting since all expenses are allocated to two lines on the form--"expenses attributable to gross income" (that is,

Table 3. Voluntary Nonprofit-Sector Revenue Sources, U.S., 1973

Source of Revenue	Type of Organization				
	Religion (1)	Education (2)	Health (3)	Cultural (45)	All Nonprofit Organizations (5)
(1) Sales and receipts	\$4.6 (60%)	\$86.8 (65%)	\$35.8 (94%)	\$0.7 (46%)	\$121.1 (23%)
(2) Dues and assessments	0.3 (4%)	27.5 (21%)	0.2 (1%)	0.1 (5%)	349.9 (66%)
(3) Contributions, gifts, and grants	2.8 (36%)	18.8 (14%)	2.1 (5%)	0.7 (49%)	59.9 (11%)
(4) Total revenue	7.7 (100%)	133.2 (100%)	38.1 (100%)	1.4 (100%)	530.9 (100%)
(5) Percentage of total revenue for all (nonprofit) organizations	1%	25%	7%	0.3%	100%
(6) Sample size	25	67	32	34	432

Source: Our calculations. Data are estimated national aggregates based on a sample of 432 Form 990 tax returns, blown up for the approximately 600,000 nonprofit organizations.

Note: Dollar amounts in billions. Figures in parentheses are percentages of total for each (column) subsector. Percentages in row 5 will not add across to 100 because the subsectors shown do not constitute all of the voluntary nonprofit sector.

fund-raising) and "disbursements for purposes for which exempt," which includes both value-added activities and transfers to other voluntary-sector organizations. It would be interesting to learn more about these intra-voluntary-sector flows of funds and to develop an estimate of the value-added of the voluntary nonprofit sector.

As indicated in Table 3, applications of the concept of philanthropic revenue, and alternatively, of the broader notion of the voluntary sector, viewed as consisting of organizations that provide certain types of outputs, yield quite different measures of economic activity. From a monetary revenue point of view (disregarding non-monetary sources of revenue such as volunteer services), philanthropy in the form of contributions, gifts, and grants (row 3, column 5) accounts for 11 percent of all revenue of the voluntary nonprofit sector.

It is not possible to disaggregate the IRS data to determine how much of the contributions, gifts, and grants is from governments and how much from private-sector contributions. Such data would be valuable to obtain and would be feasible through modification of the Form 990 tax return. Lacking such data but believing them to be useful for understanding the actual role of private philanthropy, we have set out to make very rough estimates. Table 4 presents these estimates.

Two recent studies provide some basis for very preliminary estimates of the division of contributions, gifts, and grants between government and nongovernment (philanthropic) sources in the education and health sectors, though not in other sectors. One, which is restricted to activities of the federal government, is the Joint Economic Committee study, Federal Subsidy Programs (1974). This study

Table 4. Sources of Contributions, Gifts, and Grants to
Voluntary-Sector Education and Health Institutions

Source	Education	Health
1. All sources, 1973	\$18,820 (100%)	\$2,084 (100%)
2. Government, all levels, 1970	776 (4%)	
2a. Federal, 1972	<u>177 (1%)</u>	<u>453 (22%)</u>
3. Residual: private philanthropy	\$18,044 (96%)	\$1,631 (78%)

Sources: Row 1 -- Table 3.

Row 2 -- Marc Bendick, Jr., Education As a Three-Sector Industry, Ph.D. dissertation in progress, University of Wisconsin-Madison.

Row 3 -- Our calculations using data from U.S. Congress, Joint Economic Committee, (1974), and from Marc Bendick, Jr. See Appendix C for details.

Note: Dollar amounts in millions.

provides estimates of the value of federal subsidy programs of four types: direct cash subsidies, tax subsidies, credit subsidies, and benefit-in-kind subsidies. Our interest here is limited to direct cash subsidies, since this is the only form that would appear as revenue in the exempt-organization tax return. (It would be desirable, however, to know more about the total resources controlled by voluntary nonprofit organizations, which include not merely cash but also noncash items such as the subsidies mentioned above and the volunteer labor services discussed earlier in this paper.)

One difficulty with the Joint Economic Committee data, in addition to their being limited to federal activities, is that they are not disaggregated in a way that allows ready identification of the shares of subsidies going to each of the private, public, and nonprofit sectors. We applied independent estimates of the voluntary-sector share in the education and health industries in order to estimate the value of federal cash subsidies to these two groups of institutions. Our calculations and sources are described more fully in Appendix C. The resulting estimates are presented in Table 4, row 2a.

Table 4 also presents a more comprehensive estimate of government aid, but only for the education sector. This estimate, which includes state and local as well as federal governments, has been made by Marc Bendick, Jr., as part of his Ph.D. dissertation at the University of Wisconsin. (See Appendix C.)

We have barely scratched the surface of the problem of determining the relative importance of governmental and private philanthropic contributions, gifts, and grants to the voluntary nonprofit sector. We hope that we have pointed up the absence of such

data, the desirability of developing them at a disaggregated level that would permit assessment of the governmental and nongovernmental importance in each expenditure subsector, and the desirability of accounting for state and local as well as federal activities.

Returning to Table 3, it may be observed that the sources of revenue vary significantly across the subsectors. For example, cultural and religious activities are relatively more dependent on philanthropic sources--contributions, gifts, and grants--than are the education and health industries. The striking dependence of health organizations on sales and receipts (primarily patient charges) points up the importance of this form of revenue to at least part of the voluntary nonprofit sector, something that has been generally ignored. Each of the four subsectors for which data are presented is relatively independent of membership dues and assessments. This revenue source is much more important to other types of voluntary-sector organizations such as employee organizations, trade associations, recreational and social clubs, fraternal orders, and insurance and pension funds--which are included in the column 5 totals for all nonprofit organizations.

How do our estimates compare to those of Giving USA, the most well-known previous measure of philanthropic activity? As we have discussed, charitable sources of support provide only a portion of the operating revenues for voluntary-sector organizations; hence our measures are broader in this sense (that is, for any voluntary organization our measure would be greater than, or rarely, equal to the Giving USA measure). Furthermore, we include a wider spectrum

of organization types than Giving USA. Even when we examine the measures for the customarily philanthropic sectors, however, the estimates differ. Table 5 presents Giving USA estimates of philanthropic support for 1973 in the subsectors that we have estimated from IRS data.

Comparing Table 5 to Tables 3 and 4, we observe that our estimate of total contributions, gifts, and grants, based on tax returns--\$59.9 billion--is more than double the \$24.5 billion estimated by Giving USA for contributions alone. The subsector comparisons also show wide divergence: Our expanded estimates from the random sample of IRS tax returns show \$2.8 billion of contributions, gifts, and grants to religious organizations, while Giving USA shows over \$10 billion, a figure greater than our total for revenue by this subsector from all sources (\$7.7 billion). While we estimate a much lower level of contribution to religious organizations, we find a much higher level of contribution to educational organizations--\$18.8 billion compared to the Giving USA estimate of \$3.9 billion.¹⁴

Our estimates, in Table 3, show that in terms of revenue, the nonprofit sector is indeed large. It would be inappropriate to compare the revenue estimate of \$531 billion with, say, the Gross National Product (which was \$1.3 trillion in 1973), because some of the revenue is spent on transfer payments that do not enter the national income and product accounts. The revenue total is nonetheless impressively great.

Table 5. Philanthropy in Selected Areas: Giving USA Estimates,
1973

	Religion	Education	Health	Cultural	All Other	Total
Contribu- tions	\$10.1	\$3.9	\$4.0	\$1.2	\$5.3	\$24.5
Percentage of total giving to all areas	41%	16%	16%	5%	22%	100%

Source: American Association of Fund-Raising Counsel, Inc.,
Giving USA, 1974 annual report.

Note: Dollar amounts in billions.

Describing the size of an organization or a sector of the economy by flows of funds, as we have done, is not the only useful means of assessing its size and importance. One might instead consider the stock of assets, or wealth, held by voluntary organizations. We turn now to the balance sheet of the voluntary sector, again using our sample of tax-exempt organizations. These data appear in Table 6.

The overall magnitudes in Table 6 give another indication of the size of the voluntary nonprofit sector, and they show once again that its size justifies a great deal more attention to this sector and its behavior than has heretofore been given.

Our estimate of \$578 billion for the sector's assets may be compared with a previous estimate, by Christensen and Jorgenson (1973, p. 127) of \$1.11 trillion for total "household and institutional tangible assets," and \$2.93 trillion for total private national wealth. Our estimate is for 1973, while theirs are for 1969. The combination of inflation and economic growth between 1969 and 1973 would surely have increased their estimates by 1973--the \$1.11 trillion figure rising to perhaps \$1.4 trillion, and the \$2.93 trillion figure to perhaps \$3.6 trillion. The nonprofit sector thus appears to control some 15 percent of United States private national wealth. It should be noted that a great deal of the assets of nonprofit organizations is in the form of securities such as loans and bonds, rather than in tangible wealth. Nevertheless, the asset figures show, as did the revenue data, that the nonprofit sector is vastly more important in the economy than the attention given to it would suggest.

Table 6. National Aggregate Balance Sheet, All Nonprofit
Organizations, December 1972 or June 30, 1973
(Billions of Dollars)

<u>Assets</u>	
Cash	\$ 82
Accounts receivable net	128
Notes receivable net	5
Inventories	3
Government obligations	49
Investments in nongovernmental bonds, etc.	60
Investments in corporate stocks	99
Other investments	14
Depreciable (depletable) assets less accumulated depreciation (depletion)	55
Land	70
Other assets	<u>13</u>
Total assets	\$ 578
<u>Liabilities</u>	
Accounts payable	\$ 73
Contributions, gifts, grants, etc., payable	32
(a) bonds and notes payable	30
(b) mortgages payable	26
Other liabilities	<u>131</u>
Total liabilities	\$292
<u>Net Worth</u>	
Capital stock or principal fund balance	\$180
Paid in or capital surplus	35
Retained earnings or income fund balance	<u>73</u>
Total net worth	\$288
Total Liabilities and Net Worth	<u>\$580</u>

Source: Our estimates, derived from a sample of 268 Form 990 tax returns, from the total of approximately 600,000 such returns. (While revenue information, Table 3, was obtained for 432 organizations, only 280 included balance sheet information; 11 of these were illegible, leaving a sample of 269.)

Note: Items do not sum to total primarily because of rounding and errors in the reported amounts on the tax returns.

Private Foundations

Internal Revenue Service records also provided us with data on the financial dimensions of the private-foundation subsector of the voluntary nonprofit sector. From a sample of 70 returns out of the approximately 26,000 foundation returns filed for the year 1972 (described in Appendix C) we are able to present estimates of revenue and balance sheet items for all foundations in the United States. Our estimates, which differ in some striking ways from previously published data, are presented in Tables 7 and 8.

Our estimate of total foundation grants is very similar to that of Giving USA, in spite of quite different estimation procedures.¹⁵ Yet our estimate of total assets is one-half of the Giving USA figure, in spite of the fact that we find a larger share of all foundations holding assets valued at \$500,000 or more (Table 7, row 4). This sizable discrepancy suggests that more study of foundation assets is required before we may be confident about the magnitudes of foundation wealth and revenue.¹⁶ If the American Association of Fund Raising Counsel, the publisher of Giving USA, is correct, the estimated payout-to-asset ratio (row 1 divided by row 2 in Table 7) was 7.3 percent, while if our estimates are correct, the ratio is twice as large, 14.4 percent. This possible difference in behavior may be confirmed only with better data, stratified by various sizes of foundations. Disaggregated data of this nature might suggest empirical regularities that could contribute to the understanding of foundation behavior.

Table 7. Receipts, Assets, and Grants, United States Foundations,
1972

	<u>Giving USA</u> ¹	Our Estimate ²
1. Total receipts of contributions, gifts, and grants	\$2.2 billion	\$2.4 billion
2. Total assets	\$30 billion	\$16 billion
3. Percent of all foundations making grants of at least \$50,000	20%	29%
4. Percent of all foundations having assets of at least \$500,000	20%	26%

1. American Association of Fund-Raising Counsel, Inc., Giving USA, 1973 annual report. Sample size = 38.
2. See Appendix D for details. Sample size = 70.

Table 8. Distribution of Foundation Assets, Two Estimates,
1968 and 1972

Assets	Nelson (1968)	Our Estimates ¹ (1972)
Cash	1%	14%
Government obligations	6	4
Corporate stock	75	52
Nongovernment bonds	9	22
Residual	9	4
	100%	100%

Source: See note 16.

1. Our dollar estimates of assets, liabilities, and net worth may be found in Appendix D.

Table 8 compares our estimated patterns of asset holdings with those from Ralph Nelson's 1968 study. Our sample data indicate relatively greater liquidity and lower risk in foundation portfolios. Unfortunately, we are unable to say how much of this may be due to the different characteristics of the foundations behind each estimate, and how much, if any, is due to changed foundation behavior between 1968 and 1972, partly in response to the Tax Reform Act of 1969 and partly in response to the changed conditions of the economy as a whole. (For example, the unemployment rate rose from 3.6 percent in 1968 to 5.6 percent in 1972; worsening conditions might have led to an altering of foundation asset portfolios, particularly in favor of increased liquidity.)

Finally, we present our estimates of the size distribution of foundations, where size is measured by total annual grants (Table 9) and by total assets (Table 10). Both tables indicate the extreme importance of a relatively few organizations. For example, Table 9 shows that 15 percent of the foundations sampled made 87 percent of the total value of all foundation grants, while 51 percent made grants of less than \$10,000 in 1972. From Table 10 we find that the largest 4 percent of the foundations controlled 56 percent of all assets of the foundations examined and the largest 15 percent of the foundations controlled 80 percent of foundation assets; by contrast, more than half of all nonprofit foundations sampled had assets under \$75,000, but they controlled only 2 percent of total foundation assets.

Table 9. Distribution of Total Foundation Grants, 1972

Total Grants, 1972	Number of Foundations Sampled	Percent of Sample	Percent of Total Grants
\$0-9,999	36	41%	1%
10,000-19,999	11	16	2
20,000-49,999	10	14	6
50,000-99,999	4	6	4
100,000-199,999	4	6	9
200,000+	<u>5</u>	<u>7</u>	<u>78</u>
	70	100%	100%

Source: Our estimates. See Appendix D.

Table 10. Distribution of Total Foundation Assets, 1972

Total Assets, 1972	Number of Foundations Sampled	Percent of Sample	Percent of Total Assets
\$0-999	7	10%	*
1,000-4,999	7	10	*
5,000-9,999	5	7	*
10,000-24,999	10	14	*
25,000-49,999	5	7	*
50,000-74,999	2	3	*
75,000-99,999	4	6	1%
100,000-249,999	9	13	3
250,000-499,999	5	7	4
500,000-999,999	5	7	10
1,000,000-1,999,999	8	11	24
2,000,000+	<u>3</u>	<u>4</u>	<u>56</u>
	70	100%	100%

Source: Our estimates. See Appendix D.

* Less than one-half of one percent.

III. Conclusions and Recommendations

We do not pretend to have provided definitive measures of the size and activity of the voluntary nonprofit sector. Our far more modest goals were (1) to identify some alternative concepts of the importance of the voluntary sector, and (2) to estimate the magnitudes of those concepts, drawing upon a previously untapped data source, the IRS tax-exempt-organization returns.

In addition to our general call for increased research at the theoretical level, we make the following recommendations regarding future data collection and empirical research on the nonprofit sector of the economy.

1. Careful research with the 990 and 990-PF (private foundation) tax returns will allow, as this exercise has shown, the implementation of more comprehensive measurement of the total monetary resources controlled by voluntary organizations, disaggregation in varying degrees by the activities of organizations, and study of the types and sizes of voluntary nonprofit organizations.¹⁷

2. However, access to 990 data, at present, is difficult and expensive, and is possible only by viewing copies of the original returns. In the future these data should be made more freely available to researchers, and in machine-readable form.

3. Study of foundation behavior should proceed not only on all foundations, but on foundations by various size classifications. Areas of interest include rates of grant payout, portfolio mix, and factors affecting the quantity of grants made to various voluntary-sector industries.

4. From current Form 990 data it is not possible to distinguish governmental from private support of an organization. Yet for many questions it is important to distinguish government grants from other sources of support. Form 990 should be modified to obtain separate data for governmental--federal, state, local--contributions to nonprofit organizations.

5. Accounting of the value of government support to the voluntary sector is needed, not only accounting of its monetary dimensions (as suggested in number 4 above), but of its nonmoney forms, including tax preferences to donors and organizations and other in-kind grants.

6. We need to find out more about the nature and scope of the activities of those voluntary-sector organizations that are not granted tax-exempt status by the IRS.

7. Measurement of volunteer labor services must be updated and improved (A Survey Research Center study being made for the Commission on Private Philanthropy and Public Needs will be helpful). These data should be disaggregated by type of recipient organization--such as education, health, and religion--on the one hand, and by donor characteristics on the other.

8. More information on the benefits accruing to members of voluntary organizations would help us separate the private-good aspect of membership from the collective-good, charitable-contribution aspect. Such information would aid in the testing of models dealing with the factors determining the magnitude and forms of giving.

9. In order to avoid a problem of double counting we need to know more about the flows of grants among voluntary-nonprofit-sector organizations.

10. More study is needed of the effects of voluntary-sector activity on the distribution of income.

Appendix A. Sources and Adjustments for Tables 1 and 2

Aside from the forthcoming Survey Research Center data collected for the Commission on Private Philanthropy and Public Needs, the existing estimates of aggregate donations of labor services to the voluntary sector are summarized in Table 1. The Wolozin (1968) estimates are based on a 1964 survey of seven organizations which kept records of volunteers, including the Veterans' Administration, Department of Agriculture Extension, Red Cross, League of Women Voters, and Illinois State mental institutions. The concept of voluntarism used was donation of labor services without pay where the activity had a market counterpart. The totals were then extrapolated to the total United States population. Wolozin only reported a total value, but since he also stated that the assumed wage was 75 percent of that used by Morgan, Sirageldin, and Baerwaldt (\$3.07), we were able to compute his estimated hours.

Morgan, Sirageldin, and Baerwaldt, in Productive Americans (1966), used a national sample of 2214 families. While this source does not report a national total, but instead a household average, Wolozin, using the Morgan data, did compute such totals, which we have used here. The Morgan definition of voluntarism is broad, including all contributions of time that served people or organizations, but excluding those to the family or relatives. Sirageldin (1969), apparently using the same data as Morgan, applies a different, lower, average wage rate for donors by adjusting for unemployment experiences and other factors.

The Labor Department survey, Americans Volunteer (1969), was taken during the week of November 7, 1965, with a total of 4000 households participating. For the purposes of this study voluntarism was defined as unpaid work performed by a person over age 14 for or through an organization. Excluded was work performed for a political organization, for another person, as a part of schooling, or to further a hobby. Furthermore, religious voluntarism was not, in the Labor Department's opinion, sufficiently highlighted---thus, activity supporting this subsector may have been underreported. The survey asked about volunteer activity during the survey week, rather than in the past year. Our procedure of multiplying the hour totals by fifty-two to create annual totals is subject to bias if the survey week was not average. The two Labor Department values in Table 1 were computed by applying wage rates used by (a) Morgan, Sirageldin, and Baerwaldt, and (b) Wolozin.

The reported subsector allocations in our Table 2 are adapted from Table 10 of Americans Volunteer. In this source, the data reflect the percent of the sample volunteering for a particular type of organization. Since some volunteers gave to more than one subsector, the Labor Department percentages add to 125 percent. In order to allocate the total hours to each subsector, the distribution was recomputed so as to total to 100 percent, and these shares were used to allocate among the classes the 2.6 billion total hours worked. The assumption implicit in this calculation is that each subsector volunteer, on average, contributes the same quantity of time.

Appendix B. Sample of Exempt-Organization Returns (Form 990)

The Internal Revenue Service, as a matter of public record, makes available certain information from the tax returns of nonprofit organizations. We felt that the IRS list of exempt organizations was the best available approximation of our conception of the voluntary sector; however, it does exclude some organizations that might reasonably be included--for example, Common Cause. The quantitative importance of this omission is not clear.

Since the returns are not generally available for public inspection except by organization name, employees of IRS were instructed to take a sample of returns by several receipt dates during the 1973 filing period; we were assured that this would result in no biases of selection by type, size, or location of organization.

Each organization is asked by IRS to indicate up to three activity codes representing the type of activity in which it is engaged. The activities of each subsector indicated in Table 3 are given in Table B-1 along with the number of returns in our sample. To blow up the sample totals to the subsector estimates, we used figures supplied by the IRS, counting the activity codes indicated by all 600,000 organizations. The ratio of the number of organizations reporting a subsector code to the number in our sample was used to generate the aggregate industry estimates. This procedure tends to overstate the share of total voluntary-sector activity attributable to each subsector, since, on average, each organization will list two activity codes. For example,

a parochial school might list itself as both a religious and an educational institution. Any bias resulting from this problem may or may not effect the relative magnitudes of revenue presented in Table 3.

Table B-1. Activities of Each Subsector

<u>Cultural</u> (34 Returns)	<u>Education</u> (67)	<u>Health</u> (32)	<u>Religion</u> (25)
060 Museum, zoo, planetarium	030 School, college, etc.	150 Hospital	001 Church, synagogue, etc.
061 Library	031 Special school for blind	151 Hospital auxiliary	002 Association of churches
062 Historical site	032 Nursery school	152 Nursing home	003 Religious order
063 Commemorative events	574 Day care center	153 Care and housing for aged	004 Church auxiliary
065 Fair	040 Scholarships	154 Health clinic	005 Mission
088 Community theater group	041 Loans	155 Rural medical facility	006 Missionary activities
089 Singing group	043 Other student aid	157 Cooperative hospital organization	007 Evangelism
090 Cultural performances	033 Faculty group	159 Nurses' register	008 Religious publishing
091 Art exhibit	034 Alumni association	160 Aid to handicapped	029 Other religious
092 Literary activities	035 P.T.A.	161 Scientific research (disease)	
093 Cultural exchanges with other countries	036 Fraternity or sorority	165 Community health planning	
094 Genealogical activities	037 Other student group	166 Mental health care	
119 Other cultural or historical activities	038 School or college athletic association	167 Group medical practice	
	042 Student housing activities	179 Other health	
	044 Student exchange with other countries	163 Health insurance	
	045 Student-operated business	164 Prepaid group health	
	059 Other school-related activities		

Appendix C. Direct Government Grants to Voluntary-Sector
Education and Health Institutions

Data on government subsidy programs are available from a Joint Economic Committee study, (U. S. Congress, Joint Economic Committee, 1974). The data are organized by type of subsidy and area of impact, including, for example, agriculture, medical care, manpower, education, and housing. Within each impact area the subsidies are listed individually and described by their administering agency, objectives, financial form, and direct recipient. While a number of the impact areas appeared inappropriate to our voluntary-sector notion, the areas of education and medical care seemed consistent with our sectoral classification. Within these two areas, we isolated all direct cash subsidies for which nonprofit organizations were listed as among the direct recipients. Lists of these subsidies and their value in 1972 are presented in Table C-1.

Totals of the grants in Table C-1 include distributions to public and for-profit institutions, as well as to nonprofit or voluntary organizations. In order to estimate the voluntary-sector share of these grants we sought other information.

For education we used data from Marc Bendick, Jr., Education as a Three-Sector Industry, (Ph.D. dissertation in progress, University of Wisconsin-Madison). Bendick estimates that nonprofit institutions received 30.4 percent of all money revenues to colleges and universities in 1970. Since the subsidies reported in the Joint Economic Committee study were for higher education, this share of the industry seems

Table C-1. Federal Cash Subsidy Programs That Include Nonprofit
 Educational Organizations as Recipients, 1972
 (Millions of Dollars)

Miscellaneous education and training fellowships	\$235.8
College libraries	11.0
Special services for disadvantaged students in institutions of higher education	15.0
Institutional grants for science	12.0
Sea grant	17.3
Higher education--cooperative education	<u>1.7</u>
Total	\$292.8
Grant to Howard University	\$ 87.9

Federal Cash Subsidy Programs That Include Nonprofit
 Medical Care Institutions as Recipients, 1972
 (Millions of Dollars)

NIH training	\$ 7.4
NIMH training	115.1
Health manpower	265.7
Health professions grants	47.4
Hill Burton	<u>186.8</u>
Total	\$622.4

appropriate. Of the \$293 million of education subsidies in Table C-1, we estimate that 30.4 percent, \$89.1 million, went to voluntary-sector institutions. Adding this total to the federal aid to Howard University, a private institution, total federal grants to the higher education portion of the voluntary education subsector are estimated to be \$177 million.

This estimate, however, is far from satisfactory. It does not include federal government giving to lower levels of education, nor does it include the contributions by state and local governments to voluntary-sector educational institutions at any level of education.

Bendick estimates total government (all levels) cash grants to the voluntary sector for 1970 as follows:

Pre-school	\$139 million
Kindergarten	8
Grades 1-8	209
Grades 9-12	101
College and university	<u>319</u>
	\$776 million

It may be noted that Bendick's estimate of \$319 million of governmental cash aid to colleges and universities is considerably greater than our estimate of \$177 million (Table 4) based on Joint Economic Committee data. The difference, we believe, is partly attributable to the fact that the Joint Economic Committee estimate applies only to the federal government. In any case, it is clear that these are rough estimates; the availability of the desired data is extremely limited.

We also wish to point out that in the education sector (and perhaps in other sectors) focusing on sources of receipts by organizations may be misleading. For example, governmental grants and scholarships that are paid directly to students rather than to schools do not appear on Form 990 tax returns under contributions, gifts, and grants.

The estimate for health that appears in Table 4, in the body of this paper, was made by taking the portion of total medical care grants of \$622.4 million reported in Table C-1 that might be expected to have accrued to voluntary-sector health organizations. To make the estimate, we used the share of total hospital expenditures made by nonprofit hospitals, 72.8 percent, reported in Lee and Weisbrod (1974, p. 34). Our estimate is \$453.1 million ($\$622.4 \text{ million} \times 72.8 \text{ percent}$).

Appendix D. Sample of Private Foundation Returns (Form 990-PF)

IRS returns filed by private foundations are a matter of public record. We sampled 70 returns from the roughly 26,000 returns on file at the Philadelphia IRS office for the calendar year 1972, or the fiscal year beginning in 1972 (these were filed together by IRS). Returns are filed on aperture cards in boxes, alphabetically by state and randomly within each state. A systematic sampling procedure was used, taking the first card from each box and a card from the center of each box. IRS did not use a new box for each state. Only legible returns were accepted. (These data are also available from the Foundation Center Library in New York City, and will be computerized within the next few years, providing increased access to these valuable data.)

The totals reported in this paper were computed by deriving the sample means from the Form 990-PF returns, and multiplying each mean by 26,000 (the approximate number of foundations in the United States in 1972). Our estimates of the aggregate balance sheet totals for all United States private foundations are summarized in Table D-1.

Table D-1. Consolidated Balance Sheet, United States Foundations,
1972

(Billions of Dollars)

<u>Assets</u>	
Cash	\$2.23
Government obligations	.65
Nongovernment bonds	3.67
Corporate stock	<u>8.45</u>
Total assets	\$16.02*
 <u>Liabilities and Net Worth</u>	
Total liabilities	\$.06
Total net worth	<u>15.95</u>
Total liabilities plus net worth	\$16.01

Source: Our estimates. See Appendix D text.

* Some organizations provided data on total assets but did not provide detail on components. Thus, the figure shown for total assets is not equal to the sum of the component types of assets.

Notes

¹On public goods and the free rider problem, see Samuelson (1954) and Olson (1971). The game-theoretic behavior of potential contributors in the "small numbers" case is analyzed by Buchanan (1968, ch. 5).

²The bibliography to this paper includes citations to a number of recent efforts dealing with the voluntary sector. For general conceptual discussion of the relationship between the three sectors, see Weisbrod (1972).

³Boulding (1962) defined a philanthropic gift as a unilateral transfer, given out of a genuine sense of community with the object of donation. Dickinson (1970) defined philanthropy as "giving away money or its equivalent to persons outside the family and to institutions without a definite and immediate quid pro quo for purposes traditionally considered philanthropic."

For further discussion of definitional issues, see the excellent introduction, by Solomon Fabricant, to Dickinson (1970).

On the subject of motivations for giving, see also Hochman and Rodgers (1969, 1971) and Ireland and Johnson (1970), who examine "utility interdependence"--the (psychological) benefits that a donor receives from giving.

⁴Ireland and Johnson (1970).

⁵Long (1974) presents a model of individual choice between time and money contributions, and evaluates the effect of alternative tax regimes upon this choice.

⁶See Vickrey (1973) for a survey of a number of public-sector subsidies to philanthropic institutions and individuals.

⁷Weisbrod (1972) also examines what he terms "private-good substitutes" for collective goods, thereby relating the for-profit sector to the public and voluntary sectors.

⁸On hospital behavior, see Freeman (1973); Lee (1971); Newhouse (1970); and Pauly and Redisch (1973). Levy (1968) has examined educational institutions; and Niskanen (1971) has developed a general model of bureaucratic behavior that is claimed to be applicable to nonprofit firms.

⁹Kenneth Boulding (1962, 1972) has called for research on foundation behavior.

¹⁰The appendix to Olson (1971) raises this question. Frohlich, Oppenheimer, and Young (1971) address the issue of entrepreneurship in the institutional setting of politics. Pauly and Redisch (1973) study the issue in the context of physician control of hospitals.

¹¹This question is posed, but not answered, by Fuchs (1969). He also includes a fourth sector--household. Weisbrod (1972) deals with this question, focusing attention on the effects of changing levels of income in conjunction with consumer preferences for collective-type goods vis-a-vis private-type goods.

¹²In practice, the distinction is blurred, since many nonprofit organizations make grants to other organizations within the voluntary sector (for example, the United Way).

¹³Estimates derived from these tax returns for 1962, a decade earlier than our work, were reported in U. S. Congress, House, Committee on Ways and Means (1965). See especially Tables 10 and 11.

¹⁴The IRS is in the process of computerizing the Form 990 returns. It may be possible before long to obtain data for all filers, making it unnecessary to estimate totals from a sample, as we have done.

¹⁵Our estimation method is described in Appendix D. In contrast to our systematic sampling procedure, the Giving USA total is based on a survey of major foundations. Their method of imputation for small foundations' grants is not specified in their published reports; however, it appears, from the language used, that the AAFRC uses some undescribed rules of thumb and intuition to make its estimates of total foundation activity from the surveys of a relatively small number of large foundations:

A year ago, grants from foundations were estimated for 1972 at \$2.2 billion, an increase of 7.3 percent over 1971. The estimate was based on an AAFRC survey of 31 leading foundations, which reported an increase of 3.6 percent in grant payments for 1972 over 1971 and some knowledge of greatly increased grants to be reported later in the year by one foundation. An additional factor taken into account was the increased payout requirement under the Tax Reform Act of 1969.

At year-end, AAFRC did a second survey to include 24 additional foundations with their 1971 and 1972 grant payments; it was found that when the totals were added to the 31 foundations surveyed earlier, the 55 foundations all together had made grant payments of \$715.6 million, an increase of 14.1 percent over their 1971

grant-payment total of \$627.9 million. This represented \$87.7 million, more than half of the \$150 million added to the 1971 figure for total foundation giving--too large a share, it is felt, to be realistic. Our 1972 estimate has thus been changed to \$2.36 billion, up \$310 million from 1971. These 55 foundations surveyed, then, would account for 30.3 percent of total foundation giving in 1972. (American Association of Fund-Raising Counsel, Inc., Giving USA, 1973 annual report).

¹⁶ A 1968 study by Ralph Nelson estimated the asset holdings of 5454 foundations to be \$25 billion. See Nelson (1968).

¹⁷ The 990-PF returns are presently more accessible through the availability of aperture cards from the IRS and the Foundation Center. Furthermore, the Foundation Center's computer file of private foundation returns will, when complete, make available a wide variety of studies that are now infeasible.

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