

**Private Voluntary Organizations Engaged in International Assistance, 1939-2004**

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## Abstract

### Private Voluntary Organizations Engaged in International Assistance, 1939-2004

U.S.-based private and voluntary organizations (PVOs) play an important role in international assistance. To assess this role, we constructed a new data set that covers over 1600 secular and religious PVOs that registered with the U.S. federal government between 1939 and 2004. In the post-WWII period, major revenue patterns are the rise of Evangelical PVOs, decline of Jewish PVOs, and rapid growth of secular PVOs from the mid 1980s to mid 1990s. We analyze the determinants of changes in PVO size, gauged by real revenue. We focus on the interplay between public revenue (from the federal government, international organizations, and other governments) and private revenue. Specifically, we investigate whether funds from the federal government and other public entities serve as a magnet for subsequent private support.

Since World War II, private and voluntary organizations (PVOs)<sup>1</sup> have played a major role in U.S. international relief and development. In recent years, an estimated 41% of U.S. overseas development funds are channeled through PVOs, whereas in Japan only 2% and in the United Kingdom 12% of development funds are estimated to flow through non-profits (USAID [2002]). However, the nature of the role played by U.S.-based PVOs has gone through various phases.

During World War II, U.S.-based PVOs were predominantly secular and oriented toward ethnically-based relief efforts. Then, from the end of the war through the 1970s, religious PVOs became relatively more important (when gauged by revenue and expenditure). A great expansion of secular PVOs took place from the mid 1980s to the mid 1990s, resulting once again in a paramount position for secular organizations. However, since 2002, religious PVOs have expanded dramatically, resulting in a roughly equal division of revenue between secular and religious organizations in 2004.

There have also been dramatic changes over time within the religious PVOs. Early on, Jewish and Catholic organizations were dominant. Later, the focus shifted to Evangelical and Faith-Founded Christian PVOs, with Jewish organizations experiencing a sharp decline.

We have constructed a panel data set on revenue and expenditure from 1939 to 2004 for U.S.-based PVOs that registered with the federal government and are engaged in international relief and development. The paper begins by describing the data and characterizing the main trends for religious and secular PVOs since 1939. We then use the data to analyze the determinants of changes in PVO size, gauged by real revenue. We are particularly interested in the interplay between public revenue (from the federal government, international organizations, and other governments) and private revenue. Specifically, we investigate whether funds from public entities serve as a magnet for subsequent private support.

## I. Framework for the Analysis

Our universe consists of PVOs registered with the U.S. Agency for International Development (USAID) and predecessor government agencies—the President’s Committee on War Relief Agencies (1939-42), the War Relief Control Board (1942-46), the Committee on Voluntary Foreign Aid (1946-51),

and the Foreign Operations Administration/International Cooperation Administration (1953-61). Recent data on registered agencies are available from USAID. However, the assembly of longer-term information—especially before the 1980s—was challenging. Sources of data, aside from reports of the government agencies, include PVO annual reports, U.S. State Department documents, and Internal Revenue Service documents.<sup>2</sup> We assembled data for 1939 to 2004, excluding a few budget years for which USAID reports were not prepared: 1975-77, 1979, and 1982.

The standard USAID statements break down PVO revenue into three broad categories: federal, international organizations and other governments, and private. For our full sample of 11,400 PVO-year observations, the breakdown for total revenue is 16.7% federal, 3.8% international organization and other governments, and 79.5% private. When the information is available, federal receipts are distinguished by grants, contracts, freight, food, and property. Dollar values for in-kind programs, such as freight, surplus food, and excess property, are based on market values estimated by USAID and other governmental agencies. Revenue from international organizations and other governments is a composite of funding from international organizations, such as the United Nations, along with receipts from state & local governments and foreign governments. Henceforth, we refer to this category as international-organization revenue. Private revenue divides among in-kind donations, cash donations, and other revenue.

On the expenditure side, we have the division of program outlay between foreign and U.S. operations. Two other spending categories are administration and fundraising. Table 1, based on the system used in recent USAID reports, shows the categories of revenue and expenditure in which the data have been compiled. Earlier years have less disaggregation by category.

We have information on 1638 US-based PVOs that registered with the U.S. federal government sometime between 1939 and 2004.<sup>3</sup> The label “U.S.-based” means that an agency received 501(c)(3) tax-exempt charitable status with the U.S. Internal Revenue Service (IRS). The organization might have been founded in another country; for example, Save the Children Federation originated in England. However, the PVO must have a U.S. office. We classify each PVO by date of founding. When this date could not be

ascertained, we classified by the legal ruling year, which tends to be a few years after establishment. In a small number of cases, we were unable to designate a founding year.

We created a classification scheme with 16 categories of PVOs—secular, 14 forms of religious, and unclassified. Table 2 shows the classification list. After extensive research—using PVO annual reports, InterAction membership data, and other sources—we assigned all but 28 PVOs to one of the 15 classified categories. The 28 unclassified organizations constitute a negligible part of total PVO revenue and expenditure. We classified each agency by type at founding and in 2004 (or at the agency’s final year of existence). These designations give some basis for tracking changes over time in the nature of each organization. Overall, we identified 61 cases of changed classification. Often these changes involve a gradual transition; hence, we do not isolate the particular year of change. Among the 61 changes, 47 constitute shifts from religious to secular, 13 among religion types, and 1 from secular to religious.<sup>4</sup>

The largest PVOs to change classification were World Vision (Evangelical to Faith-Founded Christian, 2004 real revenue of \$388 million), Food for the Poor (Catholic to Faith-Founded Christian, \$338 million), Christian Children’s Fund (Mainline Protestant to Secular, \$85 million), and Mercy Corps International (Ecumenical Christian to Secular, \$74 million).<sup>5</sup> Note that these revenue numbers are substantially less than total dollar revenue, mostly because of division by the consumer price index to calculate real values (with the 2004 CPI on a 1983-84 base equaling 1.0). As explained later, the numbers are also multiplied by the fraction of total program outlay going to foreign destinations.

To classify registered PVOs, we used information from PVO annual reports, InterAction documents, and publications from other umbrella organizations and independent “watch-dog” groups. However, many of these organizations rely on self-reporting by the PVOs. For example, InterAction—the largest umbrella organization for U.S.-based PVOs working in international relief and development—does not verify information submitted by member PVOs. Three websites—Guidestar, Charity Navigator, and Ministry Watch—check information submitted to them and have a rating scheme for PVOs. In addition, most PVOs have their own website. We also used the annual membership directories of the National

Council of Churches of Christ, USA. When information could not be obtained from these sources, we relied on written histories of PVOs, as well as personal communications.

Table 2 shows seven types of Christian PVOs: Mainline Protestant, Roman Catholic (henceforth abbreviated as Catholic), Orthodox, Evangelical, Faith-Founded Christian (sometimes shortened to Faith-Founded), Ecumenical Christian (sometimes abbreviated as Ecumenical), and Other Christian. For Protestant religions, we followed much of the Steensland, et al. (2000) classification scheme. The Steensland scheme provides a useful framework because it distinguishes denominational organizations from newer nondenominational types. We made a few departures from the Steensland Protestant typology. First, we classified Black Protestant with Mainline Protestant. Second, we coded the Unitarian Universal Association as Mainline Protestant, following Shibley (1996) and Ammerman (2005). Third, we classified the Vineyard Church as Evangelical, although some of its congregations would be considered Pentecostal.

We do not use the entire Steensland classification because it is based on GSS religion categories (NORC [2006]). To study private voluntary organizations, we have to distinguish finer categories within Protestant Christianity. For example, Steensland has no “Ecumenical” category. In addition, Steensland’s classification of all nondenominational Protestants as Evangelical elides the theological differences between nondenominational Protestants and Evangelicals. Further, our Faith-Founded Christian category captures a recent change in the religion scene; namely the rise of agencies that are neither Evangelical nor denominational, yet adhere to broad Christian values. Our approach relies on sources within the field of international relief and development to create categories that reflect the faith statements of the agencies.

With regard to Catholic PVOs, we used the Catholic Network of Volunteer Service and the U.S. Catholic Conference of Bishops, The Official Catholic Directory. Catholic Relief Services is the only Catholic PVO in our sample that received part of its funding directly from the U.S. Catholic Conference of Bishops through an annual national collection in the parishes.

Coding Faith-Founded Christian organizations was complicated. We define “faith-founded” as an organization based on religious principles or values but with no formal affiliation with an organized religion. For organizations that identified their religious values as drawn from a particular organized

religion, we classified the agency by the type of organized religion; for example, Mainline Protestant. For Christian organizations that held that their religious values came from no particular organized religion, we identified them as Faith-Founded Christian. Christian agencies based on at least two specific Christian religions or denominations are classified as Ecumenical Christian. PVOs classified as “Inter-Faith” are formed by at least two distinct major religious or spiritual traditions, not all Christian.

Evangelical PVOs are characterized by their doctrine, which emphasizes evangelicalism. As a group, they accept basic tenets—the inerrancy of the Bible and its authority as the sole source of God’s word, the deity of Jesus as Christ and personal salvation through him, the sharing of the conversion experience with others, and pre- or post-millennium beliefs (Shibley [1996, p 10], Hunter [1983, pp. 32, 35], Quebedeaux [1978, p. 7]). Evangelical PVOs can be humanitarian agencies of denominations (e.g. Adventist Development and Relief Agency), agencies of parachurches (e.g. International Association of Missions of the Vineyard Churches), or independent faith-founded evangelical agencies (e.g. World Vision in its initial structure). In classifying evangelical PVOs, we referred to membership directories of the Association of Evangelical Relief and Development Organizations (AERDO), the National Association of Evangelicals (NAE), the Evangelical Fellowship of Mission Agencies, the InterVarsity website for missions ([www.urbana.org](http://www.urbana.org)), the World Evangelical Alliance, and the Evangelism and Missions Information Service’s Mission Handbook: U.S. and Canadian Christian Ministries.

To enter our sample, a PVO must register with the relevant federal agency, USAID since the early 1960s.<sup>6</sup> Since a key criterion for registration is orientation toward international relief and development, there is some correspondence between the sample universe and our research focus. However, PVOs differ in the extent of their activities geared toward international programs. Most purely domestic PVOs do not register with USAID—and are, therefore, not in the sample—but some registered PVOs have international activities that comprise only a small part of their programs. For example, international program expenditure of the American National Red Cross is less than 1% of total program outlay in many years.

To gauge the extent of international orientation of each PVO, we use data on international and domestic program expenditure. At present, we have these data for 1946-1952 and 1967-2004 (excluding

the years of missing reports: 1975-77, 1979, and 1982). We calculated the international fraction of activity (international program outlay divided by total program outlay) for each PVO and year with available data. We estimated international fractions for years of missing data by interpolating or extrapolating the data for each individual PVO. We then adjusted each dollar item—for example, total revenue—by multiplying by the international fraction. This procedure gives estimates of the internationally oriented part of each dollar item, such as total revenue. Thereby, we can include in our data set on a consistent basis PVOs with very different degrees of international orientation. We divide each dollar item by the consumer price index or CPI (with a base of 1983-84 = 1.0) to measure real values.

In many cases, existing PVOs merged to form a larger organization. The data set includes the dates of these mergers—we believe that our research has been extensive enough to compile a nearly complete list of mergers. Typically, the merged PVO is assigned the same code number as the organization that dominated beforehand in terms of revenue and expenditure. Usually, the name of the combined entity is the same as that of this dominant part. Splits or spin-offs of PVOs are much less common than mergers.<sup>7</sup>

## II. Overview of the Data

Figures 1-5 display important features of the data. We consider first a breakdown of total PVOs by secular, religious, and unclassified. Then we assess the breakdown of religious PVOs (14 types) in terms of the 8 groups that comprise most of the activity by numbers and dollars: Mainline Protestant, Catholic, Orthodox, Faith-Founded Christian, Ecumenical Christian, Evangelical, Jewish, and Muslim.

Figure 1 shows numbers of PVOs from 1939 to 2004. The total number rose early in World War II from 240 in 1939 to 387 in 1940 and 424 in 1941. Then the number plunged during the war because of the government's efforts to eliminate duplicate programs.<sup>8</sup> This consolidation reduced the number of PVOs to 103 in 1946 and 60 in 1948. Subsequently, the number rose in most years, reaching 510 in 2004. Growth was especially rapid from 1986 to 1993, when the number increased from 178 to 417.

The number of religious PVOs was 45 in 1939 (19% of the total), 71 in 1940 (18%), and 62 in 1941 (15%). The religious number fell during World War II but at a slower rate than for secular PVOs.

Hence, the religious fraction increased—the 32 in 1946 and 22 in 1948 were 31% and 37%, respectively, of the total. Through the early 1960s, the relative number of religious PVOs continued to grow—the 29 religious PVOs in 1962 comprised 52% of the total. Then the pattern reversed, with the number of secular PVOs rising faster—in 1983, the 44 religious PVOs were 26% of the total. After a recovery to 34% in 1988, the proportion of religious PVOs declined to 25% in 1994. Since then, the number of religious PVOs has grown faster than the secular number. In 2004, the 170 religious PVOs were 33% of the total.

Figure 2 shows the breakdown of religious PVOs into 8 main types.<sup>9</sup> In 1940, the composition was 38% Catholic, 25% Jewish, 15% Mainline Protestant, 7% Evangelical, and 6% Faith-Founded. During the war, the main change was the decline in the Catholic share. In 1946, the distribution was 38% Jewish, 19% Mainline Protestant, 16% Evangelical, 12% Faith-Founded, and 3% Catholic (with the single Catholic PVO being the predecessor to Catholic Relief Services). In the post-World War II period, the most striking changes were the rise in Evangelical and Faith-Founded Christian numbers and the relative decline in Jewish numbers. In 2004, the breakdown was 45% Evangelical, 13% Faith-Founded, 11% Mainline Protestant, 9% Catholic, 7% Ecumenical, 5% Jewish, 2% Muslim, and 1% Orthodox.

Changes in numbers of registered PVOs involve large flows into and out of registered status. Although the largest number registered in a single year was 510 (for 2004), the total number of PVOs registered at least once between 1939 and 2004 was 1638. In order to register, a PVO must first be founded and then decide to register (and be accepted). We know founding dates only for PVOs that registered at least once between 1939 and 2004. The distribution of these founding dates appears in the second column of Table 3. Note that 239 PVOs have founding dates prior to the start of our sample, 1939. The large number of foundings, 442, between 1939 and 1941 reflects relief efforts related to World War II.

Column 3 shows numbers of newly registered PVOs. The number 240 for 1939 is the full stock of PVOs registered at that date. The large number of new registrants, 308, for 1940-41 again reflects World War II.

Table 4 deals with outflows of PVOs. Column 2 shows for each period the number of PVOs in their final year of registration. However, PVOs not registered in 2004, but registered in at least one prior year, may eventually return to the sample. This movement out and back into registered status applied

through 2004 to 253 of the 1638 PVOs in our sample. One finding in column 2 is the large number of PVOs, 434, that were in their final year of registration during the World War II period, 1939-42. Especially following the bulge of new registrants early in the war (1939-41 in Table 3), the federal government forced many smaller PVOs to exit—especially from 1940 to 1942 in Table 4.

One channel through which smaller PVOs disappeared was mergers, amounting usually to takeovers by larger PVOs. Table 4, column 3 shows the number of PVOs that vanished due to mergers. The timing corresponds to that in column 2—for example, if a PVO ceased to exist because of a merger in 1943, then that PVO's last report will be for 1942. Hence, the merger applies in Table 4 to 1942.

Overall, the identified mergers constituted 11% of overall PVO exit; that is, 11% of the number of PVOs in their final year of registration, as shown in column 2 of Table 4. Merger activity, encouraged by the federal government, was particularly strong during World War II—with 89 PVOs vanishing between 1941 and 1943 because of mergers. 42 of these were into a single PVO, American Relief for Poland.

Figure 3 shows the evolution of total real revenue for all PVOs and for secular versus religious. During World War II, the pattern of real revenue for all PVOs differed from that for numbers of PVOs because—after 1941—rising real revenue was concentrated among a sharply diminishing number of organizations. For all PVOs, real revenue (in 1983-84 dollars) increased from \$162 million in 1940 to \$1.4 billion in 1945, fell to \$1.1 billion in 1946 and a low point of \$263 million in 1952, then advanced to \$6.8 billion in 2004. The average growth rate over 65 years (1939-2004) was 5.8% per year.

For religious PVOs, real revenue rose from \$30 million in 1940 (18% of the total) to \$321 million in 1945 (22%), then peaked at \$534 million in 1946 (47%). Subsequently, revenue of religious PVOs fell at a slower rate than secular, so the low point of religious revenue of \$207 million in 1952 represented 79% of the total. Thereafter, religious and secular revenue both tended to rise, but religious revenue typically grew at a slower rate. Therefore, the religious share of total revenue fell to 38% in 1995. Subsequently, this share recovered to 47% in 2004. (Since religious PVOs in 2004 were only 33% by number, the size in terms of revenue of the typical religious PVO was larger than that of the typical secular PVO.)

Figure 4 describes the real revenue of eight major types of religious PVOs. The fraction for Jewish organizations was a remarkable 72% in 1940 (although Jewish PVOs were then only 25% by number). In 1946, the revenue shares were 64% Jewish, 16% Catholic, 7% Ecumenical Christian, 5% Evangelical, 4% Mainline Protestant, and 3% Faith-Founded Christian. The most striking changes thereafter were the decline in the Jewish share and the rises in the Evangelical and Faith-Founded shares. In 2004, the percentages of total revenue were 41% Evangelical, 28% Faith-Founded, 13% Catholic, 7% Jewish, 6% Ecumenical, 4% Mainline Protestant, and 1% Muslim.<sup>10</sup> All other religions accounted for less than 1%.

Federal funding for PVOs became significant only in 1950. For all PVOs, the shares of federal funding in total revenue averaged 23% from 1950 to 1954, 58% from 1955 to 1966, 39% from 1967 to 1986, 31% from 1987 to 1995, and 27% from 1996 to 2004. Thus, the high point for the federal share was during the Eisenhower-Kennedy-Johnson years (1955-1966) and has since declined sharply.

Figure 5 shows the evolution of the federal share of total revenue for all PVOs and for secular versus religious. For a few years in the 1950s, federal support favored religious PVOs, in the sense that their share of revenue from federal sources was greater than that for secular PVOs. However, from 1955 to 1966, the federal shares for secular and religious PVOs became similar, with both averaging 58%. The federal share for religious PVOs fell sharply in 1967 and, thereby, became much smaller than that for secular PVOs. From 1967 to 1985, the federal share averaged 54% for secular PVOs, compared to 30% for religious. The federal share for secular PVOs fell starting in the mid 1980s, and the share for religious PVOs continued to decline. Thus, from 1986 to 1995, the shares averaged 37% for secular and 25% for religious, and from 1996 to 2004, the shares averaged 35% for secular and only 15% for religious.

Another way to look at federal support is to consider the number of PVOs that received zero federal dollars. From 1953 to 2004, 36% of PVO-year observations with positive total revenue showed zero federal support (3425 out of 9393). The overall percentage breaks down into 33% for secular PVOs versus 44% for religious. In 2004, 40% of all PVOs with positive total revenue reported zero federal dollars (206 out of 509). The breakdown was 33% for secular and 55% for religious.

Among religious PVOs, the shares of federal funding in total revenue varied a great deal over time and by type of religion. Catholic usually had the largest share coming from federal sources, averaging 71% from 1955 to 1988 and 49% from 1989 to 2004. This funding is dominated by Catholic Relief Services, which effectively functions as a part of the federal government—it maintained an average federal-funding share of 69% from 1955 to 2004.<sup>11</sup>

Ecumenical Christian averaged 67% of its revenue from federal sources from 1955 to 1967 but only 18% from 1968 to 2004. Mainline Protestant was also high early on in its federal share—averaging 53% from 1955 to 1965—but then fell to 19% from 1966 to 2004. Evangelical averaged 33% from 1955 to 1967 but only 12% from 1968 to 2004. Faith-Founded Christian averaged only 4% from 1955 to 1977 but then rose to 23% from 1978 to 2004 (including a 35% average for World Vision). The federal share for Jewish PVOs averaged only 7% from 1955 to 2004. In 2004, there was a broad range in shares of revenue coming from federal sources: 51% for Catholic, 31% for Muslim, 20% for Faith-Founded, 9% for Mainline Protestant, 9% for Ecumenical, 7% for Evangelical, and less than 1% for Jewish.

### III. Empirical Analysis of PVO Revenue

We explore a number of issues concerning the rise and fall of individual PVOs, gauged by levels of real revenue. The main issues we address are:

How does the size of a PVO, measured by total real revenue, influence whether this size subsequently increases or decreases? That is, we consider whether small PVOs—if they survive—tend to increase their real revenue over time. Analogously, we assess whether diminishing returns to scale cause large PVOs to contract. We also consider whether a PVO's age matters independently of size (total real revenue) for predicting future growth.

Do federal receipts work as a kind of certification that works toward increasing future private real revenue? Is federal revenue itself temporary, so that a higher ratio of federal to total revenue predicts decreases in future real federal revenue? We assess these issues by seeing whether a higher ratio of federal to total revenue tends to raise or lower subsequent growth of various categories of real revenue: total,

private, federal, and international-organization. We consider, analogously, whether a higher ratio of revenue from international organizations to total revenue tends to raise or lower subsequent growth of the various categories of real revenue.

Finally, we assess how a PVO's secular or religious status relates to growth of the categories of real revenue. This analysis uses regressions to supplement our previous informal discussion of revenue growth for various types of PVOs.

Table 5 presents panel regressions to assess the determinants of changes in real revenue for individual PVOs. Table 6 shows means and standard deviations for the variables used in the regressions.

The first part of Table 5 considers total real revenue—the dependent variable is the change in a PVO's total real revenue from year  $t-1$  to year  $t$ , expressed as a ratio to the average of total real revenue for the two years. The remaining parts break down total revenue into its three components: real private revenue, real federal revenue, and real revenue from international organizations. In each case, the dependent variable is the change in the component of real revenue divided by the average of total real revenue. Given the forms of these specifications, the dependent variable in part I is the sum of the three components considered in parts II-IV.

A. Fixed-Effects Estimates. Columns 1 and 2 of Table 5 use fixed-effects panel regressions, where each PVO has an individual constant term (fixed effect). Thus, this estimation relies on time-series variations within PVOs. These systems cannot include explanatory variables that remain constant over time for an individual PVO—because the effects of these variables are absorbed by the fixed effects. Thus, for example, we cannot include the date of founding of a PVO or characteristics such as secular versus religious or type of religious organization.<sup>12</sup>

The regression systems include dummy variables for each year. Since the data start in 1939 and the regressions use two lags of revenue, the samples in parts I and II of Table 5 are for 1941-2004. To enter the sample, a PVO-year observation has to be preceded by data on revenue for the previous two years; that is, we require three consecutive years of information. Hence, the missing PVO reports—for 1975-77,

1979, 1982—eliminate observations for 1975-84. The samples for federal and international-organization revenue in parts III and IV start in 1949 because these revenue components were zero until 1947.

Since the dependent variables in Table 5 involve current and lagged real revenue, the estimation of effects from variables based on lags of total real revenue can involve simultaneity bias. To minimize these problems, the coefficients were estimated by instrumental-variables methods, using second lags of variables as instruments. Specifically, the variables treated as endogenous are the first lags of the log of total real revenue and its square and the first lags of the ratios of federal and international-organization revenue to total revenue. Two-year lags of these four variables were used as instruments.

Consider in Table 5 the estimated effects of the lagged log of total real revenue. In column 1, this variable enters non-linearly—as the log and its square. For the change in total real revenue in part I, the estimated coefficients are individually (and jointly) statistically significant: the coefficient on the log is  $-0.73$  (s.e. =  $0.10$ ) and that on the square is  $0.020$  ( $0.004$ ). This pattern implies a convergence relation in which higher scale (total real revenue) predicts lower growth when real revenue is small. However, the positive coefficient on the square term attenuates this effect as total revenue rises. The estimated marginal effect of an increase in the log of total real revenue equals the first coefficient plus twice the second coefficient multiplied by the log of total real revenue. This value is  $-0.62$  for the smallest PVO in the sample,  $-0.17$  at the sample mean (where the log of total real revenue is  $14.2$ ), and  $+0.09$  for the largest PVO in the sample. The estimated marginal effect is negative for nearly all PVOs in the sample, and we lack firm statistical evidence that the marginal effect actually turns positive (indicating a divergence pattern) for the largest PVOs. The marginal effect at the sample mean,  $-0.17$ , is virtually the same as that estimated in column 2 of the table, where the square term is omitted.

A marginal impact of  $-0.17$  means that an increase in PVO real revenue by 10% tends to lower the growth rate of revenue for the next year by about 1.7 percentage points. Part II, column 2 of Table 5 shows that most of this reduced growth (1.5 of the 1.7 percentage points) shows up in reduced private real revenue. Much less of the reduced growth applies in parts III and IV to federal and international-

organization revenue. (These categories constitute only 18% and 4%, respectively, of total revenue on average, as shown in Table 6.)

One important issue is whether federal revenue promotes or retards private and total revenue. The results in part I, column 1 of Table 5 indicate a negative but statistically insignificant effect from the lag of the federal revenue share on the growth rate of total real revenue. However, part II shows a significantly positive effect on private revenue—an extra \$1 of federal revenue (for given total revenue) raises next year's private revenue by an estimated 31 cents. The negative coefficient in part III means that the extra \$1 of federal revenue tends itself to be temporary. Federal revenue tends to decline by 40 cents the next year. The combination of the added 31 cents of private revenue and reduced 40 cents of federal revenue (plus an estimated 2 cent fall in international-organization revenue) corresponds to the negative effect on total revenue of 11 cents in part I. Thus, the main results are that added federal receipts can operate as a magnet for attracting private funds but that federal revenue tends itself to be temporary.

We can similarly analyze the effects from added international-organization revenue. Part II, column 1 of Table 5 shows that the estimated effect of the international-organization revenue share on private revenue is positive—a rise in international-organization revenue by \$1 (for given total revenue) raises private revenue by 34 cents. This coefficient is statistically insignificantly different from zero and also insignificantly different from the coefficient for the federal revenue share. (The p-value for the equality of coefficients on the two share variables is 0.91.) Federal revenue declines significantly in response to greater international-organization revenue—a rise in international-organization revenue by \$1 lowers next year's federal revenue by 19 cents. As with federal receipts, the added international-organization revenue tends to be temporary—this revenue falls by 43 cents the next year. The combination of added private revenue of 34 cents, reduced federal revenue of 19 cents, and reduced international-organization revenue by 43 cents corresponds to the fall in total revenue by 28 cents in part I. Thus, the main findings are that international-organization revenue, like federal revenue, serves as a magnet for private funds. However, international-organization revenue seems to deter federal funding. As with federal revenue, international-organization support tends to be temporary.

B. Random-Effects Estimates. The random-effects specifications in Table 5, column 3 allow for the inclusion of explanatory variables that remain constant over time for an individual PVO. The main shortcoming is that the coefficients of the revenue variables considered before are unlikely to be estimated consistently. For example, the fixed-effects specifications in columns 1 and 2 included the log of total real revenue (lagged). A PVO with a high level of real total revenue is likely to have other, unobserved characteristics that led to high growth of revenue in the past. These other characteristics—if they persist—predict, other things equal, high revenue growth in future years. The fixed effects absorb this influence, but the random effects do not. Therefore, the estimated coefficient of the lagged log of total real revenue in part I, column 3 tends to pick up unmeasured characteristics that favor high revenue growth. In other words, the estimated coefficient on the lagged log of real revenue is likely to be biased upward in the random-effects specification. This bias probably explains why the estimated coefficient is insignificantly different from zero (rather than significantly negative, as in part I, column 2).

Despite these problems, there is some information in the coefficient on the years-of-existence variable—an explanatory variable included in the random-effects specification in Table 5, column 3.<sup>13</sup> (This variable cannot be included in the fixed-effects systems because, with the inclusion of separate time dummy variables, the years-in-existence variable is collinear with the other explanatory variables contained in the system.) The estimated coefficients for the years-in-existence variable are significantly negative in column 3 of parts I, II and IV. For example, in part I, an extra year in existence tends to lower the growth rate of total real revenue by 0.24 percentage points. (Note from Table 6 that the sample mean for the years-in-existence variable for the applicable sample is 24.1 years, with a standard deviation of 17.4 years.) This estimated effect from PVO age is conceptually distinct from the negative effect of a higher level of total real revenue on subsequent growth, as estimated in part I, columns 1 and 2. In other words, older PVOs tend to have smaller real revenue growth, independently of their level of revenue.

The random-effects systems also include as explanatory variables interaction terms between PVO type and time intervals (1940s, 1950s, ..., 2000s). The PVO types distinguished here are secular, eight major categories of religious (Catholic, Mainline Protestant, Faith-Founded Christian, Ecumenical

Christian, Evangelical, Jewish, Muslim, and Orthodox), and a group of other minority religions. These variables could not be included in the fixed-effect systems because of collinearity with the variables already contained in the systems (including the time dummy variables). Table 6 shows the sample averages for the PVO types. For the 7460 PVO-observations included from 1941 to 2004, 67.5% are secular and 32.5% are religious. Among the religious types, the percentages out of the overall PVO-observations are 11.6% Evangelical, 4.9% Jewish, 4.3% Mainline Protestant, 3.7% Catholic, 3.4% Faith-Founded Christian, 2.3% Ecumenical Christian, 0.9% Orthodox, 0.5% Muslim, and 1.1% for the group of minority religions (other Christian, Hindu, Buddhist, Jain, Inter-Faith, and other religions).

The main results from PVO type are consistent with the less formal discussion of trends from part II. In the 1940s and 1950s, religious PVOs except for Catholic and the minority group in the 1950s tended to grow faster in terms of total real revenue than secular PVOs. Evangelical PVOs tended to grow at a relatively fast pace in the 1970s and 1990s, as did Faith-Founded Christian PVOs in the 1990s. Jewish PVOs tended to grow at a relatively slow pace in the 1980s. The minority group of PVOs tended to grow at a slow rate in the 1970s and 2000s.

#### IV. Observations on Some Dramatic Trends in Religious PVOs

A key empirical pattern among religious PVOs (Figure 4) is the dramatic growth of real revenue for Evangelical PVOs, especially since the mid 1980s. The Faith-Founded Christian group also increases sharply over this period, whereas Jewish organizations show substantial decline.

A. The Rise of Evangelical PVOs. Although General Social Survey (GSS) data begin in 1972, information for assessing Evangelicals starts in 1984. Evangelicals appear mainly in the group designated “Protestant” and, to a minor extent, in “other” categories. The fraction of the overall population in the GSS Protestant group declined from 0.64 in 1984 to 0.53 in 2002.

Within the Protestant group, it is difficult to use the GSS data to gauge the extent of Evangelicals from the available numbers on adherence to specific denominations. However, the GSS does report the extent to which respondents regard the Bible as the literal word of God—a key belief of Evangelicals.

Within the Protestant group, the fraction of respondents expressing this view of the Bible fell from 0.49 in 1984 and 0.47 in 1985 to 0.45 in 2000 and 0.41 in 2002. This pattern suggests stable, or falling, belief in literal interpretation of the Bible; not increasing belief. Thus, the GSS data do not suggest that the share of Evangelicals in the U.S. population rose strongly since the mid 1980s—the period where real revenue of Evangelical PVOs soared (Figure 4).

Part of the growth in Evangelical PVOs, compared especially to Mainline Protestant, may reflect differences in organizational structures. In terms of fundraising, denominational PVOs are not permitted to solicit funds from congregations. Instead, relief and development offices of denominations raise funds from local congregations and contribute a portion of these funds to the denomination's humanitarian agencies. Thus, the hierarchical structure of mainline Protestant denominations defines the nature of fundraising and the designation of funds (Vallet, 1995, 93-95). Several studies of congregational giving attribute the decline in denominational tithing to congregants viewing the required apportionment as a tax rather than a ministry (Olson and Caddell, 1993) and resenting denominational control over funding priorities (Hoge, et al, 1996; Dykstra and Hudnut-Beumler, 1992).

Traditional Evangelical PVOs—such as Mennonite Central Committee, Brethren Service Commission, World Relief, and Adventist Development and Relief Agency—are similar to Mainline Protestant PVOs in denominational structure. In contrast, recently formed Evangelical PVOs—such as Feed the Children, MAP International, World Concern Development Organization, and World Vision (which we classified as shifting later from Evangelical to Faith-Founded Christian)—are independent organizations with relations with parachurches.<sup>14</sup> This structure cuts across denominational loyalties and allows for fund-raising from a broad base of adherents (Quebedeaux 1978, 110-111; Stafford, 1997, 22-23). These new organizational forms may have been a technological innovation that facilitated PVO fund-raising. Hence, this change may help to explain the growth of revenue for Evangelical PVOs and some Faith-Founded Christian PVOs, compared to revenue of PVOs affiliated with the traditional faiths (Mainline Protestant, Catholic, Ecumenical Christian, and Jewish).

B. The Decline of Jewish PVOs. Real revenue of Jewish PVOs declined especially in relative terms since the mid 1970s. The GSS numbers indicate reasonable stability in the Jewish share of the U.S. population—around 2%—from 1984 to 2002. Thus, changes in numbers of U.S. Jews are unlikely to explain the changes in Jewish PVO revenue.

Figure 4 suggests that some variations in Jewish PVO revenue reflect conditions of Jewish refugees and the state of Israel. During and after World War II, giving for refugees and the new Israeli state were critical. Later, there were peaks in Jewish PVO revenue associated with the Six-Day War (revenue jumped from \$92 million in 1966 to \$786 million in 1967), the Yom Kippur War (revenue rose from \$601 million in 1972 to \$1.12 billion in 1973), and the Gulf War (revenue increased from \$475 million in 1990 to \$717 million in 1991). After each crisis, real revenue of Jewish PVOs fell.

The longer-term decline in revenue of Jewish PVOs also relates to changes in the type of giving by U.S. Jews. The United Jewish Communities reported for 2004 that, among American Jews engaged in philanthropy, 62% donated more to non-Jewish causes than to Jewish ones (Chronicle of Philanthropy, 2004). Attributing the decline in Jewish philanthropy to assimilation and its impact on Jewish identity is too simplistic (Gal and Gottschalk [2001]). However, the political and philanthropic choices of a younger generation of Jews are a relevant issue (Tobin [2001]). As the Israeli state became economically developed, donations from American Jewry waned. Although the 1991 Gulf War and the beginning of peace negotiations with the Palestinians (Madrid Conference in 1991) spurred a spike in private giving, contributions fell off subsequently. Moreover, in response to the changed international scene, Jewish federations allocated a smaller percentage of funds to overseas activities.

Another shift in Jewish charitable giving is from established federations to a more individualistic style of donating. (Jewish Funders Network has a membership of over 850 donors with combined assets of \$30 billion.) Rimor and Tobin (1990) found a pattern of “generalized giving” among Jews that explains their giving to non-Jewish causes. Linking all three forces—the maturity of the state of Israel, the shift to individualistic donating, and generalized giving—Rimor and Tobin (1990) and Tobin (2001, pp. 5-6) find

that private charitable giving by U.S. Jews has not declined but has shifted away from federations and become more spread out among Jewish and non-Jewish causes.

## V. Conclusions

This paper describes and uses a new data set on revenue and expenditure of U.S. based private voluntary organizations (PVOs) engaged in international relief and development. The universe consists of 1638 PVOs registered with the federal government from 1939 to 2004. We classified the PVOs into secular versus religious and into 14 types of religious organizations.

Secular PVOs dominated in overall revenue during World War II, but religious PVOs became relatively larger from the end of the war through the 1970s. The great expansion of secular PVO funding from the mid 1980s to the mid 1990s put the secular PVOs again into a commanding position. However, the sharp expansion of religious PVO revenue since 2002 resulted in a roughly equal division of total revenue between secular and religious organizations in 2004. Since secular PVOs accounted for two-thirds of the total number in 2004, the average religious PVO was about twice as large as the typical secular PVO in terms of total revenue.

Just after World War II, the dominant religious PVOs in terms of total revenue were Jewish, followed by Catholic, Ecumenical Christian, and Mainline Protestant. Catholic PVOs became the dominant religious organizations from the mid 1950s through the mid 1960s, but the Jewish organizations were again the largest in the years influenced by middle-east tensions (1967 to 1991). Subsequently, the Jewish share diminished. Evangelicals took over the largest share of religious PVO revenue in the mid 1990s, and Faith-Founded Christian PVOs rose to the second position (overtaking Jewish and Catholic) by the end of the 1990s.

We plan further analysis with these data, starting with our analysis of the determinants of changes in PVO size (gauged by the internationally oriented portion of total real revenue). We found support for the idea that federal and international-organization funds serve as a magnet or certifying device that leads

subsequently to higher growth of private real revenue. We are now examining determinants of PVOs exiting or entering registered status.

Our next project will use the data to analyze relations between PVOs and the US federal government. This analysis complements our work on state religions and regime change (Barro and McCleary [2005]). One hypothesis we will explore is to what extent PVOs which depend substantially on federal funding tend to follow the U.S. government's policy direction. By contrast, PVOs that maintain financial independence can serve as pressure groups on the government to alter U.S. foreign policy focus. Because of the nature of our PVO dataset, which includes both income and expenditures for each PVO over several decades, in our future research we will be able to measure reliance on federal funds over time and show variations in PVOs based on this reliance. We are particularly interested in the contrasting tendencies to accept support from the federal government. We will study how the differential dependence on federal support relates to how PVO programs dovetail with U.S. foreign policy objectives. By accepting federal funding, agencies increase their awareness of development policy and federal foreign policy objectives. We will evaluate how federal assistance influences PVO operations. We will also assess how PVOs respond to international crises, including natural disasters, civil wars, and other conflicts.

To make further progress in parts of the analysis, we have to extend the data set in terms of its breakdown on the expenditure side. As far as the data permit, we will classify PVO program expenditure by type of activity and geographical location.

## Endnotes

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<sup>1</sup> The term “private and voluntary organization” or “PVO” refers to a non-profit (tax-exempt status) organization that provides charitable social services, such as humanitarian assistance. The term was coined in the early 1970s by John Yulinski, director of the Private and Voluntary Agencies Office of the U.S. Agency for International Development (USAID). Probably because of this origin, the term is usually applied to non-profit organizations engaged in international relief and development. For example, USAID describes PVOs as “voluntary agencies engaged in overseas relief and development.” In its reporting, USAID treats universities as a separate form of non-profit organization. The term PVO is also used by InterAction, which is the largest association of U.S.-based international relief and development organizations. InterAction’s membership, which overlaps to a large extent with USAID’s PVO registry, includes more than 160 PVOs. Although NGO (non-government agency) and INGO (international NGO) are now widely used, we prefer the term PVO to NGO, which can be construed to include for-profit companies.

<sup>2</sup>Principal sources included USAID Voluntary Agencies reports (VolAgs) and data contained in the U.S. National Archives and the Bureau of Population, Refugees, and Migration. InterAction annual membership directories contain financial data reported by PVOs. We used the archives of the American Council of Voluntary Agencies for Foreign Service (ACVAFS), kept at the Rutgers University Special Collections Department. Private individuals generously provided copies of documents from Private Agencies in International Development (PAID), ACVAFS, and InterAction. Financial data were also obtained from the Evangelical Council for Financial Accountability (ECFA), PVO annual reports, and IRS Form 990 tax-exemption filings. Recent information is available online for most PVOs at [www.guidestar.org](http://www.guidestar.org) and on organizational websites.

<sup>3</sup> The current PVO registry had its beginnings in 1946. Subsequent legislative changes were made to the conditions of registration. See Advisory Committee on Voluntary Foreign Aid, A Look to the Future. (Washington, D.C.: United States Agency for International Development, April 1974) and [www.usaid.gov](http://www.usaid.gov), PVO Registration. Prior to 1966, agencies registered with predecessors of USAID, beginning with the President’s Committee on War Relief Agencies (March 1941- July 1942), followed by the President’s War Relief Control Board.

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<sup>4</sup>The last is The Conservation Foundation, set up in England to preserve ancient yew trees. Many of these trees were on Anglican owned land, and this fact likely motivated the foundation to switch from secular to Ecumenical Christian.

<sup>5</sup> In assessing changes in type, we compared a PVO's faith statement and mandate at founding with that currently or at termination. One reason for a shift in type is internationalization of an organization's structure. For World Vision and Christian Children's Fund, the shifts began when they reorganized to internationalize their structures. For World Vision, this shift began in the late 1970s. For Christian Children's Fund, it occurred in the late 1960s. Food for the Poor's change occurred rapidly when the organization encountered ethical difficulties in 2000, later breaking off formal relations with the Catholic Church.

<sup>6</sup> The American National Red Cross is the sole exception to this rule. We included this PVO in our sample, based on its own reporting, even before its registration with USAID in the mid 1980s. We made this exception because the Red Cross is so large in terms of overall revenue and expenditure. However, in terms of international programs, the Red Cross is not one of the larger PVOs in most years.

<sup>7</sup> We have identified only one split for cases in which both PVOs are in our registered sample. In 1986, International Institute for Development divided into Enterprise Development International and Transformation International Enterprise Opportunity International.

<sup>8</sup> The Neutrality Act of 1939 prohibited certain types of economic relations with countries designated as "belligerent" by the President. As a consequence, all PVOs (except for the American National Red Cross, which had its own charter with Congress) were required to register with the Department of State if they were engaged in relief efforts in the belligerent countries. In 1942, by executive order, the President's War Relief Board was set up to coordinate overseas shipments of relief supplies by PVOs. Registration with the War Relief Board became mandatory for PVOs seeking to operate overseas and to assist refugees. The combination of the Neutrality Act and the War Relief Board gave the U.S. government great power over PVOs. Thus, the government could readily achieve its objective when it wished to reduce the number of PVOs (to eliminate duplication of effort).

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<sup>9</sup> For smaller groups not shown (other Christian, Hindu, Buddhist, Jain, Inter-Faith, and others), the number was 2 or fewer until 1992 but then rose to 10 in 2004.

<sup>10</sup> The Muslim share of religious PVO revenue reached 2% in 2000 but subsequently declined.

<sup>11</sup> In 2004, Catholic Relief Services received the most federal money in absolute terms among the PVOs in our sample—\$205 million (in 1983-84 dollars and adjusted for PVO international orientation of programs). Next were CARE (\$166 million, 52% of revenue), World Vision (\$118 million, 30% of revenue), Academy for International Development (\$73 million, 72% of revenue), and Save the Children Federation (\$70 million, 52% of revenue).

<sup>12</sup> We could include these classifications if we made use of changes in classification that occurred over time. Although we identified 61 of these changes, we lack accurate information about the timing of the changes. In the present analysis, each PVO receives a single label for classification—secular or type of religious. The label is the one corresponding to 2004 or the final year of a PVO's existence.

<sup>13</sup> Years of existence equals the current year minus the founding year. However, in the random-effects estimation, the founding year is truncated at 1938—rather than allowing this date to extend arbitrarily far back in time. To put it another way, the dependence of revenue growth on years in existence is not plausibly linear in the number of years. We could incorporate a more complicated functional form than a simple truncation, but the main results would not differ from those reported in Table 5, column 3.

<sup>14</sup> A parachurch is defined by J.A. Youngren (1981: 39-40) as a “not-for-profit, organized Christian ministry to spiritual, mental and physical needs, working outside denominational control.” For a broader discussion of the term, see Wesley K. Willmer and J. David Schmidt, with Martyn Smith (1998, 12-28). However, for our purposes, this definition is too broad. We refer to a parachurch as an independent, nondenominational church.

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<b>Table 1 Scheme for Data Set on PVO Revenue and Expenditure</b>	
<b>REVENUE</b>	
<b>Federal Government</b>	
	USAID Freight
	PL480 Freight
	PL480 Food
	USAID Grants
	USAID Contracts
	Other U.S. Government Grants
	Other U.S. Government Contracts
	U.S. Government surplus property
<b>International Organizations &amp; Other Government</b>	
<b>Private</b>	
	In-Kind Contributions
	Private Cash Contributions
	Other Private Revenue
<b>EXPENDITURE</b>	
	International Programs
	Domestic Programs
	Administrative Outlays
	Fundraising Expenses

<b>Table 2 Classifications of PVOs</b>	
<b>Code number</b>	<b>Category</b>
1	Mainline Protestant
2	Roman Catholic
3	Orthodox
4	Faith-Founded Christian
5	Ecumenical Christian
6	Other Christian
7	Evangelical
8	Jewish
9	Muslim
10	Hindu
11	Buddhist
12	Jain
13	Inter-Faith
14	Other Religion
15	Secular
16	Unclassified

<b>Table 3</b>		
<b>Time Pattern for Founding and New Registering of PVOs</b>		
<b>Time period</b>	<b>Number founded*</b>	<b>Number newly registered</b>
Before 1900	81	--
1900-1938	158	--
1939	218	240**
1940	132	178
1941	92	130
1942-1949	76	81
1950-1959	71	28
1960-1969	103	50
1970-1979	152	87
1980-1989	232	188
1990-1999	233	443
2000-2004	28	213
Unknown founding year	62	--
Totals	1638	1638

\*Numbers founded apply only to our universe of PVOs registered at some point between 1939 and 2004.

\*\*Number for 1939 equals the number of all PVOs registered at that date.

<b>Table 4</b>		
<b>Timing of Final Registration Year and Losses from Mergers</b>		
<b>Time period</b>	<b>Number in final registration year*</b>	<b>Number lost from mergers</b>
1939	30	12
1940	93	3
1941	138	12
1942	173	64
1943	43	13
1944	15	0
1945-1949	66	3
1950-1959	27	2
1960-1969	33	4
1970-1979	31	1
1980-1989	80	3
1990-1999	260	4
2000-2004	139	6
Totals	1128	127

\*Determined as of report for 2004, for which the number registered was 510.

<b>Table 5 Regressions for Changes in Real Revenue</b>			
	(1)	(2)	(3)
<b>Variable</b>	<b>PVO fixed effects</b>		<b>PVO random effects</b>
<b>Part I: Total Real Revenue</b>			
log(real revenue), lag	-0.730** (0.102)	-0.170** (0.015)	-0.0035 (0.0055)
log(real revenue) squared, lag	0.0199** (0.0035)	--	--
federal share of revenue, lag	-0.110 (0.089)	-0.047 (0.089)	-0.066 (0.050)
intl. org. share of revenue, lag	-0.280 (0.202)	-0.217 (0.203)	-0.015 (0.110)
years in existence (since 1938)	--	--	-0.00241** (0.00066)
number of observations	7536	7536	7460
number of PVOs	1003	1003	986
<b>Part II: Real Private Revenue</b>			
log(real revenue), lag	-0.606** (0.107)	-0.149** (0.013)	-0.0035 (0.0051)
log(real revenue) squared, lag	0.0162** (0.0031)	--	--
federal share of revenue, lag	0.310** (0.080)	0.361** (0.079)	0.072 (0.046)
intl. org. share of revenue, lag	0.339 (0.181)	0.382* (0.181)	0.116 (0.101)
years in existence (since 1938)	--	--	-0.00182** (0.00061)
number of observations	7536	7536	7460
number of PVOs	1003	1003	986
<b>Part III: Real Federal Revenue</b>			
log(real revenue), lag	-0.088* (0.041)	-0.0255** (0.0064)	-0.0001 (0.0020)
log(real revenue) squared, lag	0.0022 (0.0014)	--	--
federal share of revenue, lag	-0.402** (0.035)	-0.397** (0.035)	-0.114** (0.016)
intl. org. share of revenue, lag	-0.191* (0.077)	-0.185* (0.077)	0.009 (0.036)
years in existence (since 1938)	--	--	-0.00042 (0.00022)
number of observations	6790	6790	6718
number of PVOs	753	753	739

<b>Part IV: Real International Organization Revenue</b>			
	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>
<b>Variable</b>	<b>PVO fixed effects</b>		<b>PVO random effects</b>
log(real revenue), lag	-0.067** (0.020)	-0.0044 (0.0031)	0.0003 (0.0007)
log(real revenue) squared, lag	0.00221** (0.00067)	--	--
federal share of revenue, lag	-0.020 (0.017)	-0.015 (0.017)	0.0052 (0.0060)
intl. org. share of revenue, lag	-0.428** (0.038)	-0.421** (0.038)	-0.048** (0.014)
years since founding (since 1938)	--	--	-0.00023** (0.00008)
number of observations	6790	6790	6718
number of PVOs	753	753	739

\*Significant at 5% level.

\*\*Significant at 1% level.

#### **Notes to Table 5**

Each dependent variable is the change in a category of real revenue from year t-1 to year t, divided by the average level of total real revenue for the two years. In part I, the change refers to total real revenue, in part II to private real revenue, in part III to federal real revenue, and in part IV to real revenue from international organizations. The sample in parts I and II is 1941 to 2004, excluding 1975-84 because of missing PVO reports. Also excluded were PVO-observations for which the PVO could not be classified as religious or secular. The sample in parts III and IV begins in 1949 (because federal and international-organization revenues were zero before 1947). Year dummies included throughout.

The fixed-effect specifications in columns 1 and 2 include individual constant terms for each PVO. Column 3 uses a random-effects specification for the PVOs. The random-effects systems include as explanatory variables the years since founding of the PVO (with 1938 treated as the earliest possible year of founding). Also included are interaction terms between nine PVO religion categories (Mainline Protestant, Catholic, Orthodox, Faith-Founded Christian, Ecumenical, Evangelical, Jewish, Muslim, and a group of minority religions) and decade intervals (from the 1940s to the 2000s).

Estimation is by instrumental variables, treating as endogenous the first lags of the log of real revenue and its square and the first lags of the share variables for revenue from the federal government and international organizations. The instrument list includes second lags of each of these variables. The square terms for the log of real revenue are excluded for the fixed-effects estimation in column (2) and the random-effects estimation in column (3). (The squared terms are never statistically significant if added to the random-effects systems.)

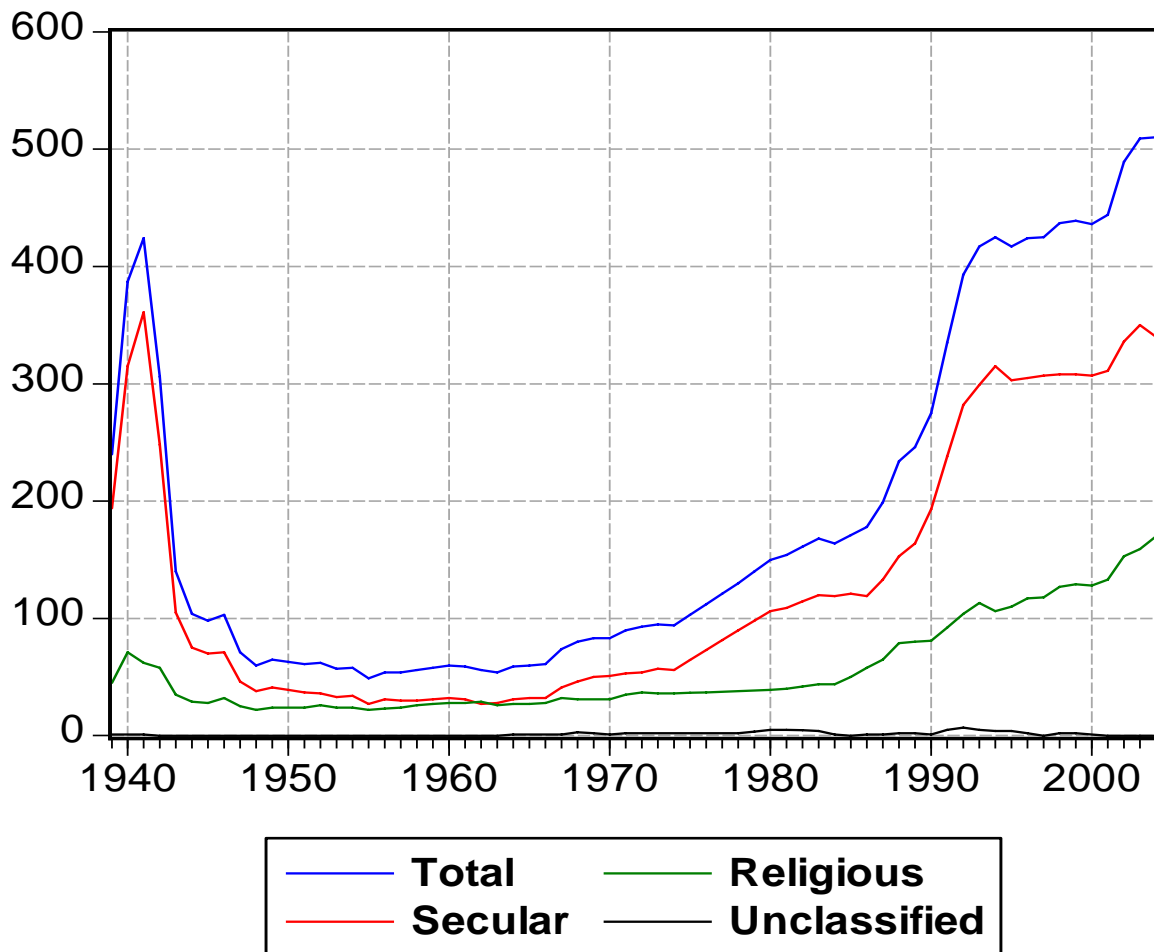
<b>Table 6 Means and Standard Deviations of Variables</b>				
<b>Sample period</b>	<b>1941-2004*</b>		<b>1949-2004**</b>	
<b>Variable</b>	<b>mean</b>	<b>s.d.</b>	<b>mean</b>	<b>s.d.</b>
	<b>N=7536</b>		<b>N=6790</b>	
Growth of total real revenue	-0.027	0.62	0.018	0.56
Growth of real private revenue	-0.039	0.56	0.005	0.48
Growth of real federal revenue	--	--	0.010	0.22
Growth of real intl. org. revenue	--	--	0.003	0.10
Total real revenue (millions)	20.2	83.2	21.1	82.8
log(total real revenue)	14.2	2.4	14.4	2.2
Federal share of revenue	0.18	0.27	0.20	0.27
Intl. Org. share of revenue	0.04	0.12	0.04	0.12
	<b>N=7460†</b>		<b>N=6718†</b>	
Years since founding	24.1	17.4	26.3	17.0
Religious	0.325	--	0.336	--
Mainline Protestant	0.043	--	0.044	--
Catholic	0.037	--	0.038	--
Orthodox	0.009	--	0.008	--
Faith-Founded Christian	0.034	--	0.036	--
Ecumenical Christian	0.023	--	0.024	--
Evangelical	0.116	--	0.125	--
Jewish	0.049	--	0.045	--
Muslim	0.005	--	0.006	--
Minority religions	0.011	--	0.011	--
Secular	0.675	--	0.664	--

Note: Years with missing data excluded in various samples.

\*1940-2003 for revenue and revenue shares. This sample corresponds to the fixed-effects estimation in parts I and II of Table 5.

\*\*1948-2003 for revenue and revenue shares. This sample corresponds to the fixed-effects estimation in parts III and IV of Table 5.

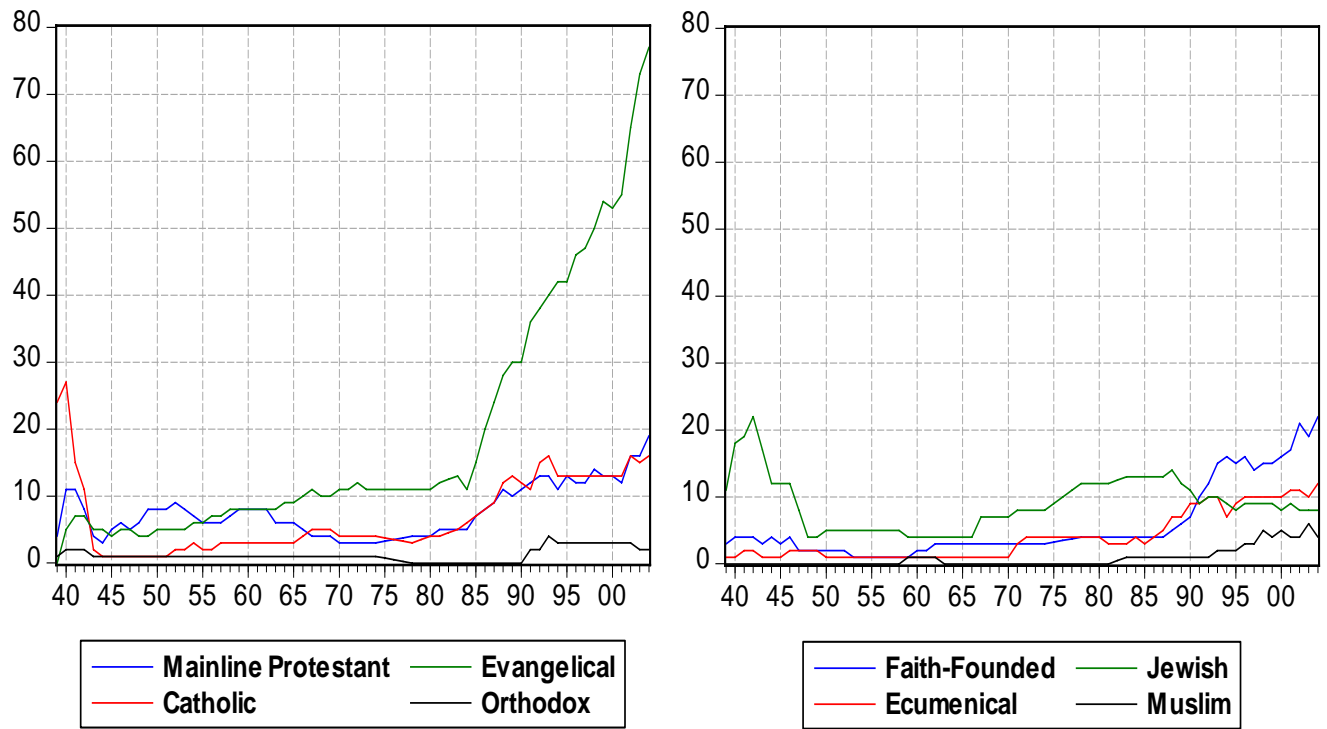
†Smaller number of observations, compared to above, reflects missing data on PVO date of founding.



**Figure 1**

**Numbers of PVOs, 1939-2004**

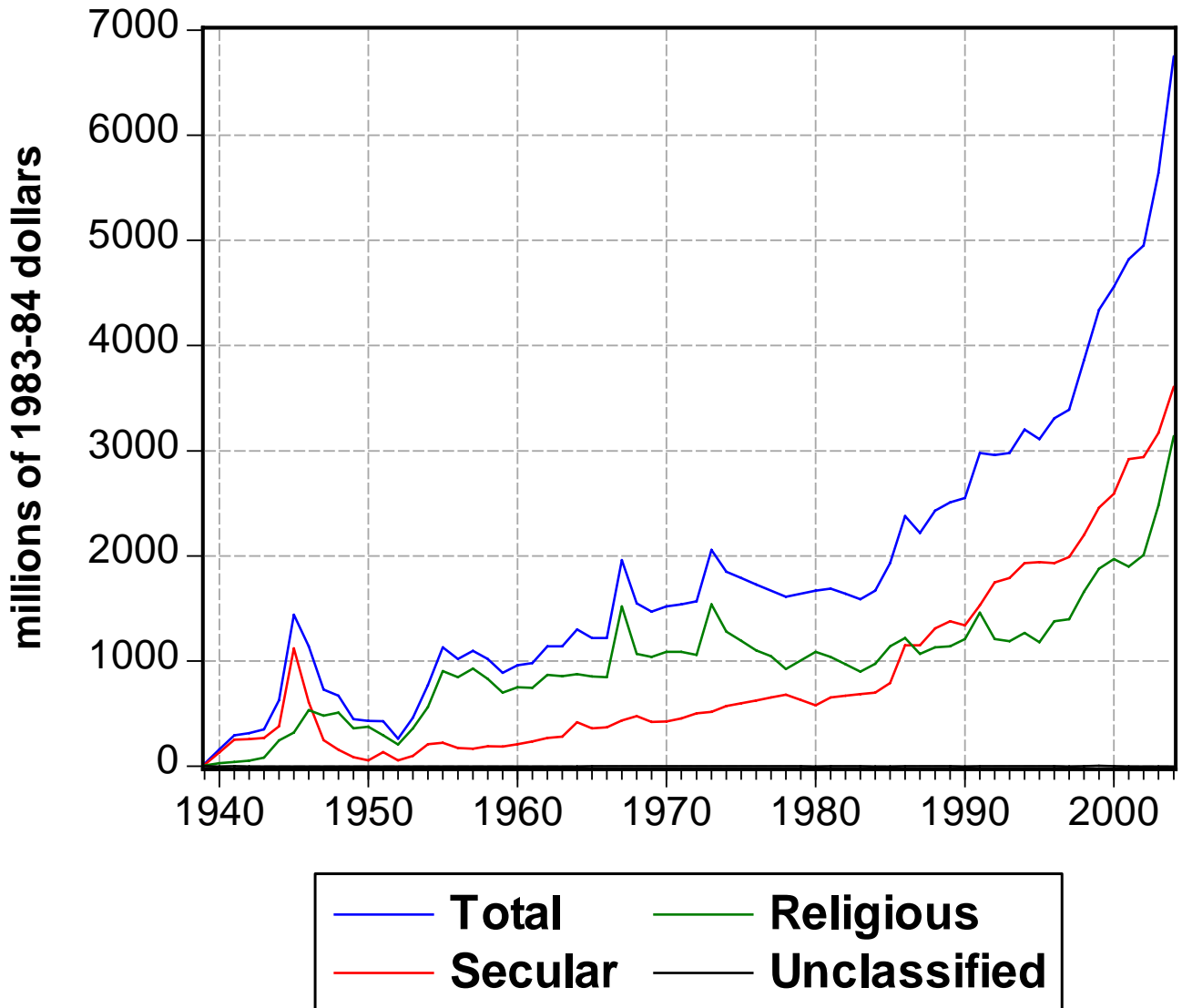
Note: Data interpolated for missing years: 1975-77, 1979, 1982.



**Figure 2**

**Numbers of Religious PVOs, 1939-2004**

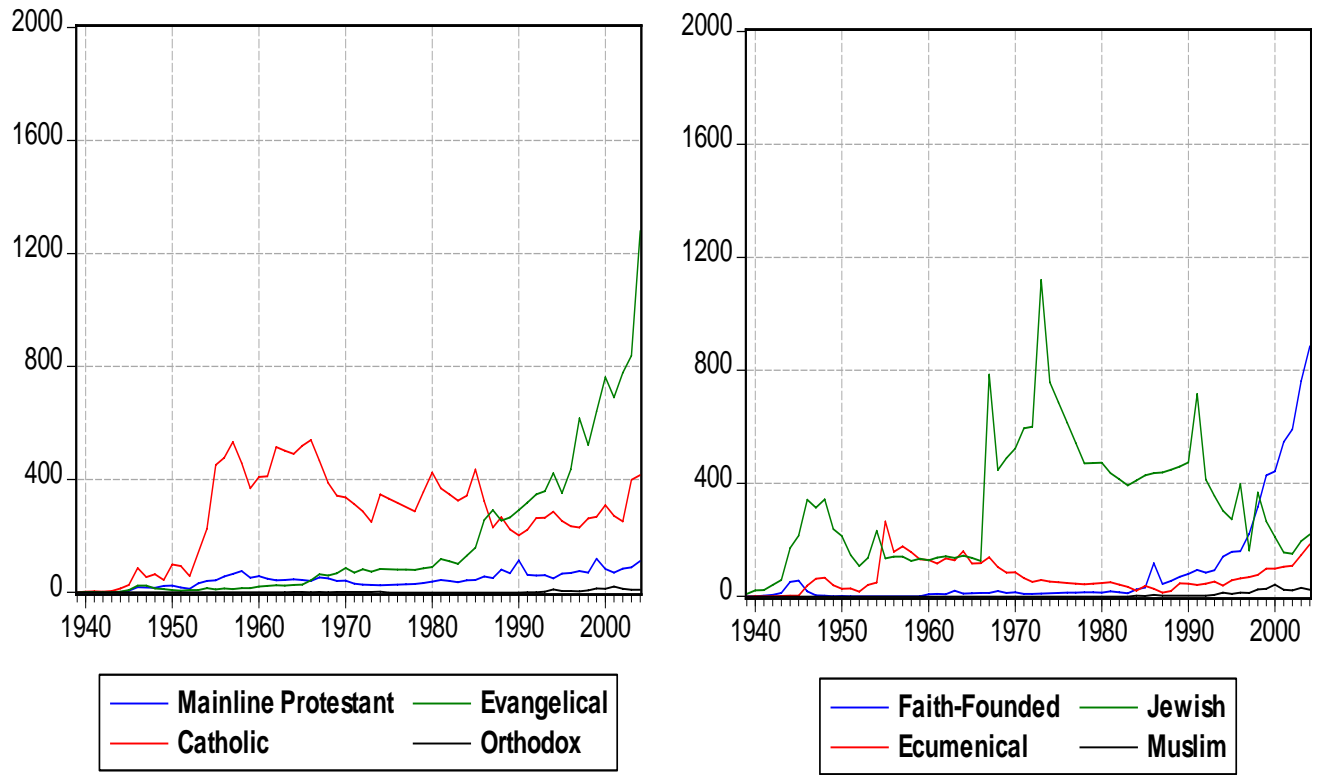
Note: Data interpolated for missing years: 1975-77, 1979, 1982.



**Figure 3**

**Real Revenue of PVOs, 1939-2004**

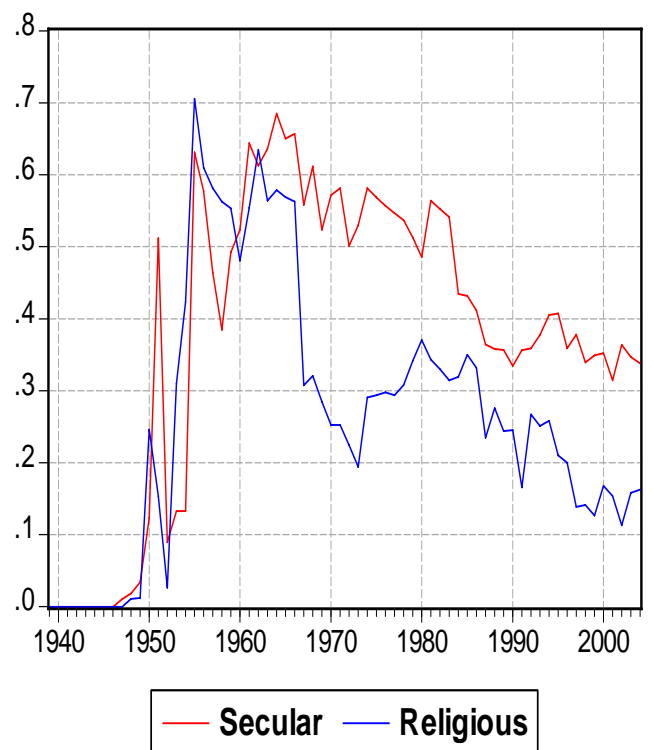
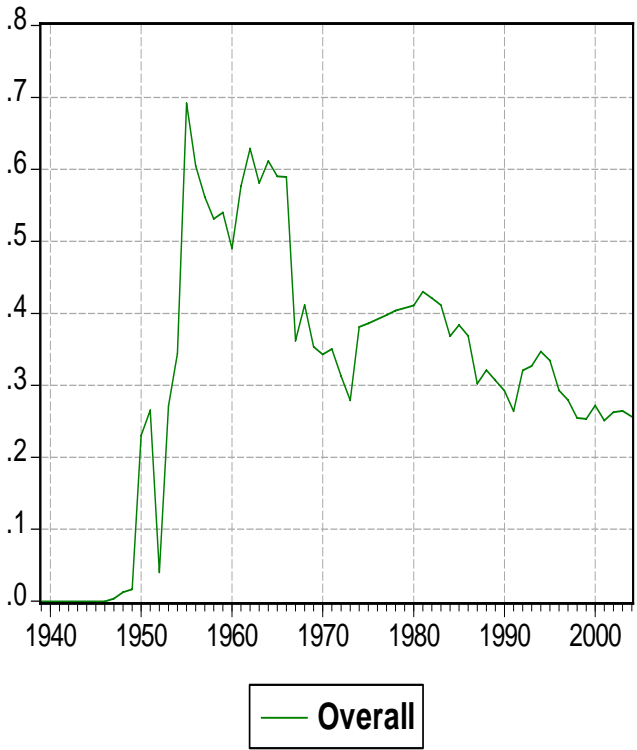
Notes: Revenue is the dollar amount divided by the consumer price index and multiplied by the international fraction for programs. Data interpolated for missing years: 1975-77, 1979, 1982. Unclassified numbers are too small to be visualized.



**Figure 4**

**Real Revenue of Religious PVOs, 1939-2004**

Note: See notes to Figure 3.



**Figure 5**  
**Federal Share of PVO Revenue, 1939-2004**

Note: Data interpolated for missing years: 1975-77, 1979, 1982.