

The Distribution of Giving in Six Surveys

Mark Wilhelm*
Department of Economics
Indiana University Purdue University Indianapolis
Indianapolis, Indiana 46202

November 2002

*Gratitude is expressed to the Indiana University Research Fund for financial support and to Elliott Miller for excellent research assistance. Thanks also go to Kris Hammill, Keith Hume, Jim Morgan, Bill

Roberts, Karen Roberts and Tom Smith for patiently answering numerous questions about the data, and to seminar participants at IUPUI and Rich Steinberg for helpful comments. The conclusions expressed herein, as well as any remaining errors, are my own. Mark Wilhelm can be reached at mowilhel@iupui.edu.

The Distribution of Giving in Six Surveys

Abstract

Despite widespread interest in philanthropy across social science disciplines and among policy-makers and practitioners it was not until the late 1980s that data on individual giving began to be regularly collected. Since that time several different surveys have been fielded, but these have produced very different measurements of the percentage of households making gifts and the amounts of those gifts. This paper examines six major household surveys of giving and attempts to trace these differences in measurement to underlying differences in survey methodology. This is done by examining the prevalence of missing data and using relative distribution methods to find exactly where in the distribution of giving these surveys differ. There are four main results. First, many of the differences in giving measured across the surveys are swamped by missing data concerns. Second, surveys that cue respondent recall based on the methods used to donate, rather than using cues based on areas of charitable activity, find a higher incidence of giving. However, the evidence suggests that the additional donors detected using method cues make small gifts, on average. Third, surveys that use interviewers who are experienced in obtaining other kinds of dollar information from respondents (e.g., reports of their earnings, income, wealth, etc.) measure larger amounts of giving, as long as area cues are used. Finally, it is very difficult to measure giving at the top of the distribution without a high income oversample. Only one of the surveys without such an oversample produced giving data at the ninetieth percentile similar to that obtained in the only survey with a high income oversample. These results should be helpful to analysts trying to decide which dataset is best-suited to address particular questions.

The Distribution of Giving in Six Surveys

1. Introduction

There is broad interdisciplinary interest in voluntary giving to charitable purposes. Much of this research is devoted to the fundamentally intriguing question about why people voluntarily contribute to the well-being of others. Because these contributions play important roles in communities, other work focuses on how they respond to government tax and expenditure policy. Indeed, the government is typically interested in the encouragement of private philanthropic activity, as evidenced by the long-standing tax deductibility of charitable contributions and the recently proposed Charity Aid, Recovery, and Empowerment Act. New releases of philanthropy statistics routinely receive substantial media attention.¹

Despite this interest, our understanding of charitable giving has been limited by the paucity of datasets that describe giving at the household level. Although an extensive household survey, the *National Study of Philanthropy* (NSP) was fielded in 1974, it was not until the late 1980s that the biennial series of cross-sections *Giving and Volunteering in the United States* (GVUS) was begun. Since then several other household-level surveys containing giving data have become available: the 1996 *General Social Survey* (GSS), the 1997 *Canadian National Survey of Giving, Volunteering*

¹Some of the classic papers in anthropology are collected in Komter (1996). For an entry into the sociological literature see Berking (1999) or Lee, Piliavin, and Call (1999). See Vesterlund (2001) for an overview of economic research on the motivations to give. Clotfelter (1997) reviews the research on how government policy affects giving. Media attention in the United States focuses on the annual release of *Giving USA* (AAFRC Trust for Philanthropy 2002) which estimates aggregate giving, and Independent Sector's biennial household survey *Giving and Volunteering in the United States*. Other special surveys conducted by Independent Sector are routinely cited in the media and by policy-makers.

and Participating (CSGVP), the 2000 *Giving and Volunteering in California* (GVC), and the *Philanthropy Panel Study* (PS), a section in the 2001 wave of the *Panel Study of Income Dynamics* (PSID).

These projects have used very different survey instruments and field procedures and, not surprisingly, have produced different answers to straightforward questions about the incidence of giving (i.e., the percentage of households making voluntary donations) and amounts given by donors. What is surprising is that the answers are very different. For example, the measured incidence of giving is 68.5 percent in the 1996 GVUS (Hodgkinson and Weitzman 1996), but 89.9 percent in the GVC (O'Neill and Roberts 2000). Among households that contribute, the average amount given differs tremendously as well; for instance, the 1996 GVUS reports \$1,017 compared to \$1,247 in the GVC.² The 1997 CSGVP conditional average is \$272 (Canadian dollars) and the GSS conditional average is \$1,485.³

In this paper I attempt to trace these differences to underlying differences in survey methodology. Three features distinguish this study from previous approaches to the issue. First, it examines the prevalence of missing data, a particularly important problem in giving surveys because giving is not a highly salient event for many respondents. I find that different questionnaires and field procedures used in these surveys have produced different patterns of missing data. A further

² Employing different field procedures and a different market research organization, the 2001 GVUS reports a higher incidence of giving (89 percent) and a higher conditional average (\$1,620); see <http://www.independentsector.org/programs/research/GV01main.html>. The 2001 data were not available for use in the present study, but, clearly, an examination of them is of interest.

³ These are based on my calculations using reported findings from the Canadian Centre for Philanthropy (<http://www.givingandvolunteering.ca/factsheets.asp?fn=view&id=8252>) and, for the GSS, from Schervish and Havens (1998).

complication is that the different field procedures have also produced a wide variety of response rates. Second, instead of focusing on average giving, the present study uses relative distribution methods to find exactly where in the distribution of giving these surveys differ. Finally, by including six of the major household-level surveys on giving, the paper's results can help analysts decide which of the available datasets may be best suited for their research.

Four themes emerge from the results. First, many of the differences in giving measured across the surveys are swamped by missing data. Second, surveys that cue respondent recall based on the methods they used to donate ("input" cues), rather than cue based on areas of charitable activity to which respondents may have donated ("output" cues), find a higher incidence of giving. However, the evidence suggests that the additional donors detected using method cues make small gifts, on average. Third, surveys that use interviewers who are experienced in obtaining other kinds of dollar information from respondents (e.g., reports of their earnings, income, wealth, etc.) measure larger amounts of giving. Nevertheless, even with interviewers so trained, a survey seems to face a trade-off between designing an instrument to measure giving at the bottom of the distribution (by using input cues) and giving at the top (by using output cues). Finally, it is very difficult to measure giving at the top of the distribution without a high income oversample. Only one of the surveys without such an oversample (the PS) produced giving data at the top of distribution similar to that obtained with the high income oversample in the NSP. Even so, the NSP measures larger giving at the very highest percentiles.

The rest of the paper appears as follows. In the next section I review the previous literature on the quality of giving data. Section 3 introduces the methodology to be used and Section 4 describes the six surveys to be studied. Results are presented in Section 5 and Section 6 concludes.



2. Previous Literature

There has been only one study attempting to compare the results from different surveys of giving. Schervish and Havens (1998) evaluated the 1996 GVUS by comparing it to the 1996 GSS and the 1995 *Survey of Consumer Finances* (SCF). They concluded that, while the percentage of respondents that donate is similar in the GVUS and GSS (around 70 percent), the average amount contributed per household is much lower in the GVUS (\$696) than in the other two surveys (around \$1,000). The authors conjectured that this is because the GVUS misses the contributions of households which give large amounts. This conjecture has yet to be investigated, for instance by examining whether the sample medians in the surveys differ (if they did it would suggest that more is going on than simply inaccuracy at the top of the distribution) or whether the shapes of the giving distributions differ just at the top.

While not comparing the results from the surveys themselves, Rooney, Steinberg and Schervish (2001) have conducted an interesting comparison of the surveys' questionnaires by fielding them simultaneously using a single survey organization. They found that smaller contributions were reported when using the GVUS/GSS questionnaire, which prompts respondents on the bases of the areas of charitable activity to which they may have donated, than when using a questionnaire similar to that used by the GVC and CSGVP, in which respondents are prompted by the methods they may have used to donate (e.g., in response to a mailing, through payroll deductions, etc.) before asking about area. Even smaller amounts were reported by respondents who received a questionnaire similar to that used by the PS.

Finally, there have been two validation studies which, though methodologically distinct from the

present study, have produced results that are important to keep in mind. Havens and Schervish (2001) found that weekly measurements of giving reported in a diary study of 38 GVUS respondents were substantially different from their responses provided to the GVUS survey, although these differences cancel out in the sample average. The latter finding suggests that measurement error at the respondent level does not necessarily inhibit a survey's ability to produce useful aggregate statistics on giving. Stronger evidence that giving reported on surveys can be accurate comes from Thiessen's (1968) finding that respondents' reports of giving in a survey are highly correlated to the charitable deductions they claimed on their income tax returns. However, the correlation was higher for low- and middle-income respondents (0.88 and 0.80, respectively) than for high-income respondents (0.45), suggesting that giving by high-income people may be especially difficult to measure in a survey.

3. Methods

The paper carries out its analysis in three stages with each successive stage introducing stronger assumptions about missing data. The first stage makes no assumptions about the two types of missing data—survey non-response and item non-response, and calculates sharp lower and upper bounds for the incidence of giving. The second stage assumes that survey non-response is (completely) missing at random, and therefore ignorable. It calculates lower and upper bounds to the median gift based only on item non-response. The third stage adds a further assumption that missing giving item responses are zero and extensively studies the resulting lower bound distributions. The rest of this section describes these analyses in more detail.

3.1 Sharp Bounds on the Incidence of Giving

Analysts usually make different assumptions about how missing data should be handled. These assumptions cannot be checked, and, therefore, reasonable analysts may disagree over their validity. However, all analysts can agree on the sharp bounds on the value of a statistic from a particular sample (see Manki 1995 for a detailed discussion of sharp bounds). To illustrate, consider the proportion of households in a sample that contribute something to charitable organizations. The sharp lower bound to this proportion is found by treating all of the non-responding households as if they had not given, and the sharp upper bound is found by treating them all as if they had given, i.e.:

$$\begin{aligned} P_{LB} &= P_R P_G \\ P_{UB} &= P_R P_G + (1 - P_R) \end{aligned} \tag{1}$$

where P_G is the proportion of responding households that give and P_R is the proportion of sampled households that agree to participate in the survey and provide data in response to the question about giving. Thus, both survey non-response and item non-response lower P_R and widen the interval between P_{LB} and P_{UB} . Any percentile or quantile can be bounded in this way, although some statistics (e.g., the mean) cannot.

Although simple in principle, calculating P_{LB} and P_{UB} in the present study encounters two complications. First, four of the studies used probability-weighted sampling. Unless the survey response rates are equal across each subsample within which the probability of selection was equal, an exact calculation of P_{LB} and P_{UB} requires that P_G and P_R be calculated separately for each subsample and then a weighted average taken. However, only one of these studies provides the information

necessary to do this. Therefore, the calculations for the other weighted studies are based on the assumption of equal response rates across the subsamples of a given survey.⁴ Second, even low attrition in a long panel study accumulates over time generating a low response rate when calculated relative to the sample in the initial year. However, if an evaluation of the effects of attrition indicate that the sample remains representative, it is reasonable to conclude that attrition is ignorable at least up until the last year covered in the evaluation. The most recent published analysis of attrition in the PSID concluded that it is still representative of the U.S. population (Fitzgerald, Gottschalk and Moffitt 1998). Therefore, for the PS, I calculate P_R using attrition from 1989 (the last year considered in the Fitzgerald et al. study) onwards. Given that 1968-1989 attrition does not seem to have affected the representativeness of the PSID through 1989, and that the most recent PSID income data align well with those from the CPS (Gouskova and Schoeni 2002), it may be that the calculation of P_{LB} and P_{UB} based on post-1989 attrition generates a too conservative (i.e., wide) interval.

3.2 Item Non-response Bounds on the Median Contribution

After calculating sharp bounds on the incidence of giving there are three reasons to proceed under the assumption that survey non-response is ignorable and focus on the bounds implied by item non-response (these are not “sharp” because they rest on the assumption that survey non-response is

⁴Because charitable giving is strongly correlated with income, the primary concern is that response rates may vary with income enough to distort the calculations. This can be checked in one of the studies, the NSP. Selection into that study’s Census subsample was income-based and the response rates by income are available (see Morgan, Dye and Hybels 1977, Appendix I). Using this information to perform an exact calculation of P_{LB} and P_{UB} produced only negligible differences compared to assuming a uniform response rate across income groups.

ignorable). First, field procedures to achieve survey response rates on the order of 75 percent in cross-sections are well-known and are separate from considerations of how to best elicit giving information from respondents. This latter question can be more clearly addressed after abstracting away from survey response rates. Second, this follows a common practice in much research, which is to treat survey non-response as missing at random even if item non-response is treated in different ways. Finally, once the implications of the sharp bounds are gauged as described in Section 3.1, the reader can keep their magnitude in mind while interpreting other results, even if the sharp bounds themselves are not continuously displayed.

Each of the six surveys builds up a measure of a respondent's total giving from responses to a series of component questions in which the respondent is asked whether a contribution was made to a particular type of organization or via a particular method of making a donation. A missing response to one or more of these components implies that the measure of the total amount given is also missing. Similar to the calculation of sharp bounds, a lower bound to, say, the median contribution, is calculated by assigning all of the missing components to zero (the lowest value they could have been) and determining the median of the resulting "lower bound" distribution of giving. Likewise, the upper bound to the median is calculated by assigning total giving to be at the sample maximum for those respondents with any item non-response in the components and determining the median of the resulting "upper bound" distribution. Bounds thus calculated are based solely on item, not survey, non-response.

3.3 Differences in the Lower Bound Distributions of Giving

After determining the effects of survey and item non-response on giving statistics, the paper considers at what points in the distributions of giving do the surveys produce different results. This is done using the lower bound distributions just described. As just discussed, a justification for working with the lower bound distributions is that the assignment of “zero” to missing components of giving is a standard choice made by researchers. Moreover, implementing a more sophisticated imputation procedure for missing giving data is complicated by the uneven quality of income data in the six surveys (income would be the most important variable in any procedure to impute giving). Examining the lower bound distributions avoids that complication. In any event, for those interested in an analysis based on more sophisticated imputation procedures, the present analysis serves as a straightforward benchmark.

Lower bound distributions will be compared using relative distribution methods (Handcock and Morris 1999). An intuitive description of the relative distribution of a comparison dataset to a reference dataset, say giving in the GSS to the GVUS, is to define histogram bins according to the deciles of the GVUS and then place the GSS data into these bins. If the underlying distributions are the same, this relative histogram should be uniform. If, instead, the GSS measured higher giving than the GVUS, the relative histogram would be skewed right. Alternatively, if the GSS and GVUS had the same median, but the GSS had higher variance, the relative histogram would be U-shaped. In this way the relative distribution gives an easily interpretable, visual description of the differences between two empirical distributions.

Figure 1 illustrates the construction of the relative distribution, $G(r)$, in the general case of a random variable, Y , relative to another, Y_0 , with respective cdfs F and F_0 (this brief discussion follows

Handcock and Morris, Chapter 2, which should be consulted for additional details). In Figure 1b y_r is the r -th quantile of the reference distribution F_0 . In Figure 1a, $G(r)$ is the probability that Y will take on values less than this quantile, that is $G(r) = F(Y \leq y_r)$. Because the derivative, $g(r) = dG(r)/dr$, is a valid probability density function, the relative distribution can be used in formal statistical analysis (the underlying random variable is the rank of Y relative to Y_0 ; the realizations of these ranks are the relative data).

In particular, a test that two empirical cdfs are equal can be conducted by testing whether their relative distribution is uniform. Suppose we are interested in testing the equality at a k -vector of percentiles, O , that is: $H_0: G(O) = O$, where $G(O)$ represents a k -vector, the i -th element of which is $G(O_i)$. The test statistic $(G(O)-O) \cdot O^{-1} (G(O)-O)$ is (asymptotically) O^2 with k degrees of freedom under the null. The the i,j th element of the covariance matrix O is $(i \cdot j)$:

$$\frac{G(O_i)(1 - G(O_j))}{m} \cdot \frac{O_i(1 - O_j)g(O_i)g(O_j)}{n} \quad (2)$$

with O_i and O_j are the respective i -th and j -th elements of O , n is the number of observations in the reference dataset, and m is the number of observations in the comparison dataset (see Handcock and Morris Theorem 9.2.2.1). To implement the test, a kernel density estimate is used for $g(\cdot)$. Because this density is uniform under the null, the relative data are reflected around zero and around one prior to the estimation of $g(\cdot)$.

4. The Data

4.1 Differences in Survey Characteristics

Table 1 summarizes the characteristics of the 1996 GVUS, the 1996 GSS, the 2000 GVC, the 1997 CNSGVP, the 1974 NSP, and the 2001 PS. The GVUS is included because of its widespread use among researchers, practitioners, and policy-makers (e.g., Andreoni, Brown and Rischall forthcoming; Andreoni, Gale and Scholz 1996; Clotfelter 1997; Council of Economic Advisors 2000; Nonprofit Almanac 2002; U.S. Census Bureau 2001–Table 560). Indeed, it is the present day standard among household surveys of giving, and because of this I initially use the GVUS as the reference distribution in the relative distribution analyses. The 1996 cross-section is studied because in that year the GVUS questionnaire was also fielded as a part of the GSS. This allows a comparison of the results from the same instrument administered by different survey organizations using different field procedures. The GVC and CSGVP are included because they both use a very different questionnaire. Between themselves, the GVC and CSGVP differ primarily in that they were administered by different survey organizations using different field procedures, and, obviously, in the geographical areas in which they were fielded. The NSP is included because it has the best oversample of high income households ever obtained in a giving survey, a desirable feature because the distribution of giving is highly skewed.⁵ Because of its high quality, it is still used for research purposes, despite its age.⁶ Hence, I will also use

⁵The SCF is the only on-going survey with a high income oversample. Although it queries the amount given to charity, it does so with a single question asked only of those who first say that they gave \$500 or more.

⁶ For example, see Duncan (1999), Jencks (1986) and Schiff (1990). References to earlier research using the NSP can be found in Clotfelter (1985).

the NSP as a reference distribution. Finally, the PS is included because it is the initial wave of the first panel study of giving.⁷

Although there are differences in many of these surveys' design characteristics, Table 1 focuses on response rates, oversamples, survey organization, questionnaire design, respondent selection, and units of analysis. Response rates differ dramatically across surveys. They are higher among the surveys fielded by either a university or government agency (GSS, CSGVP, NSP and PSID) and lower among those fielded by market research firms (GVUS and GVC). The likely reason is that unlike the former organizations, the market research firms did not use multiple call-backs. The GVC response rate (35.1 percent) is higher than that of the GVUS (19.2 percent). In part this is due to the use of a (single) call-back, but more likely than that reflects GVC's use of incentives to secure interviews. However, the incentive—a charitable contribution made on the respondent's behalf—has a drawback in that it likely generates a disproportionately better response rate among people with a higher propensity to make charitable contributions. One indication of this is that although the sample was designed to be self-weighting, it ended up being much more highly educated than a random sample of Californians. Consequently, the GVC provides post-stratification weights to adjust for this and other differences between the sample and the California population.

Weights are also necessary for analyses of the GVUS (which oversampled by race and ethnicity as well as in high income areas), the CSGVP, and the NSP. The NSP actually consists of two

⁷ Introductions and discussions of basic findings are available for the GVUS (Hodgkinson and Weitzman 1996), the GVC (O' Neill and Roberts 2000), the CSGVP (Hall et al. 1997) and the NSP (Morgan, Dye and Hybels 1977).

surveys. One was fielded by the Survey Research Center (SRC) at the University of Michigan, and oversampled high income areas and college-educated respondents. The other was fielded by the U.S. Census which, with IRS assistance, obtained an oversample of high income respondents based on tax returns. Compared to oversampling in high income areas, this is a better method to secure a high income oversample, though it comes at a much higher cost. The PSID also consists of two subsamples: a low-income oversample and a nationally representative sample. At present, the weights necessary to combine both subsamples in a single analysis of the 2001 wave are unavailable. Therefore I restrict attention to respondents from the SRC (nationally representative) subsample (n = 4,463). In addition, this subsample does not include respondents who in 2001 split-off from their 1999 households, recontacts, or proxy respondents.⁸

An important way in which the survey organizations differ, other than their university, governmental, or market research backgrounds, is their experience in getting respondents to answer questions involving dollar amounts. For instance, the CSGVP is a supplement to the Canadian Labour Force Survey which is experienced in collecting wage and earnings information. Similarly, the U.S. Census Bureau, which fielded part of the NSP, has extensive experience in gathering data about earnings and income and, Michigan's SRC, which fielded the other part of the NSP and fields the PSID, has widely-recognized experience in eliciting earnings, income, and wealth information. In contrast, the GSS asks only a few questions about income. Moreover, market research firms have very little experience asking about dollar amounts. Typically they put questions about income at the end

⁸ The numbers of these respondents are 553, 240, and 138, respectively (these numbers come from both the SRC and low-income subsamples).

of their surveys because of the response problems that often ensue.⁹

Table 1 also summarizes differences in how the instruments are designed to cue the recall of respondents (Rs). A detailed description of all six questionnaires is available upon request (Appendix A). The GVUS and GSS ask Rs whether they gave to any of 11 different types of charitable organizations—such as religious, educational, and health—plus a twelfth “any other” category. Likewise, the PS queries giving to ten different charitable purposes and an eleventh “any other” purpose. Similarly, the NSP has Rs begin by answering questions about the type of organization to which the most was given; it then goes on to query giving to the three types of organizations to which the next largest amounts were given. What these approaches share in common is that they cue the R’s recall about giving by asking him or her to think about the types of objectives their giving is trying to achieve. Hence, I refer to these as “output” cues. In contrast, the GVC and CNSGVP use an “input” cue. They get Rs to think about 17 solicitation methods by which they may have transferred money into charitable organizations, such as in response to a telephone solicitation, through payroll deductions, at a shopping center, or through a raffle. This method should perform better in ascertaining smaller gifts that

⁹I will refer to survey organizations as having, or not having, experience in eliciting dollar responses even though such a description does not do justice to the National Opinion Research Center (NORC) which administers the GSS. NORC does have experience in fielding surveys that obtain high quality information about dollar amounts (e.g., the SCF). However, it is not known how many GSS interviewers have also worked on the SCF, and, even so, the GSS’s focus is on measuring social and attitudinal trends and not on obtaining responses to questions about dollar amounts. In fact, the 1996 GSS had only two questions that elicited dollar amount information from respondents, other than the giving questions. These questions (about family and respondent income) presented a respondent with a hand card containing 21 income categories and asked the respondent to simply select a category. Thus, given the rarity and structure of dollar amount questions in the GSS, it would seem that very little interviewer training would have to have been devoted to getting accurate dollar amounts.

many Rs would otherwise fail to recall.

The surveys also differ in respondent selection and unit of analysis. The GVUS and GSS adopt a household unit of analysis, but within each household they select a respondent randomly. Because respondents besides heads and spouses are unlikely to have accurate knowledge of household gifts, most (though not all) of the results below focus on the heads and spouses in these datasets (about 90 percent of the samples). The PSID interviews the head or spouse and asks about the family unit's giving. The NSP selected household heads whose reports of own plus spouses' giving likely account for the majority of household giving. I treat their reports as such.

The unit of analysis in the GVC is not straightforward. If the respondent is married, the spouse's giving is queried only if the respondent reports that all giving is "jointly" done or if the respondent can report on the spouse's "non-joint" giving. Sixty percent of the married respondents fell into this category. The other 40 percent of married respondents were asked only about their own giving, which is therefore a lower bound to the couple's giving. A similar situation arises in the CSGVP where only 40 percent of married respondents reported all of their spouses' giving. The joint gifts reported by this 40 percent were halved in the raw data file (as were specific gifts reported by the other 60 percent as having been jointly made) to generate an individual unit of analysis. I restored these figures to their originally reported amounts to maintain comparability with the GVC and the other datasets. For these reasons, lower bound amounts in the GVC and CSGVP may be less than those in the other surveys. As in these other surveys, I focus mostly on the Rs who were heads or spouses in

the GVC and CSGVP.¹⁰

¹⁰CSGVP confidentiality rules prohibit the release of a direct indicator of whether the respondent is a household head. Therefore, I indirectly identify “heads” based on the available data describing household size, marital status, and respondent’s income relative to household income. This procedure identifies 86 percent of the CSGVP sample as heads, a percentage similar to that in the GVUS, GSS, and GVC.

4.2 Lower and Upper Bounds to the Incidence of Giving

For four of the surveys, it can be determined that a household gave to charity if a “yes” answer was given to any of the component questions that ask whether the household gave toward 12 specific charitable outputs (in the GVUS or GSS) or via 17 specific input methods (in the GVC or CSGVP). A household is known not to have given if all these incidence component questions were answered negatively. However, a mix of “no” and missing responses to these component questions implies that the giving incidence for that household is missing. These missings are set to “no” (“yes”) to calculate a lower (upper) bound to incidence based on item non-response. However, the upper bound cannot be calculated in the GVUS and is understated in the CSGVP.¹¹ Incidence in the NSP and PS is not based on a series of component questions, but instead on the response to a single question. In the PS, this question asked if there was any giving over a threshold amount (\$25).

4.3 Lower and Upper Bounds to Giving Amounts

In all the surveys, except the NSP, if the respondent responded affirmatively to any of the incidence components, she was asked about the amount given. I treat all “don’t know/refused” responses to amount questions, as well as amounts imputed by the survey organizations, as missing. Note that even a single missing amount component implies that a description of the respondent’s total

¹¹The GVUS coded mixtures of “no” and missing responses as if they had answered all 12 questions as “no.” Therefore, a lower bound to incidence in the GVUS can be determined, but not an upper bound. Similarly, missing incidence responses for 13 of the 17 input components in the CSGVP were imputed, presumably to “no.” Thus, the upper bound to incidence in the CSGVP is somewhat understated.

giving is missing. In such cases the lower bound to the respondent's total giving can be studied by setting all missing amount components to zero. An upper bound can be constructed, too, and this is useful for determining upper bounds to quantiles, such as the median gift. In the GVUS and PS, responses to unfolding bracket questions asked following "don't know/refused" amounts are used in determining the bounds.

The NSP is handled differently because it asks respondents to respond to a single question asking about the total amount given to all organizations. Recall, however, that leading up to this question are extensive questions about the four largest gifts made to organizations.¹² Also note that neither the single amount question nor the questions about the largest gifts are asked if the respondent initially reported that total contributions were \$100 or less. Thus, for many NSP donors, all we know is that their gifts were between \$1 and \$100.

Finally, the GVUS and PS do not ask about giving to political and union organizations. Therefore, I deduct such giving from the other surveys, with the exception of the GVC. In that case, a clean subtraction is not possible.

4.4 Adjustments of Amounts Over Time

With the exception of the GVUS and the GSS, the surveys were fielded in different years and

¹²If the response to the total amount question is missing (123 observations) or imputed (80 observations) I use the answers to the questions about giving to (up to) four organizations to create lower and upper bounds. These bounds are adjusted according to information about wives' giving if such contributions were separate (as they are for 141 observations, of which 77 observations provided useful information while 64 observations had missings).

their amount data consequently must be adjusted across time. Note that even if the different surveys would have generated exactly the same giving data if asked in the same year, the growth of income over time implies that, all other things equal, more recently fielded surveys will measure higher giving. In short, there must be an adjustment for real income growth as well as inflation.

Both adjustments are made using the growth in average household income (in nominal dollars) between the year covered by the survey and 1999. For example, the NSP data are scaled by the ratio of 1999 average household income (\$54,842) to 1973 average household income (\$12,162), a factor of 4.51. The factor for the GSS and GVUS is 1.22 and for the PS is 0.96. The GVC data are scaled by the ratio of U.S. median household income to California median income over 1997-1999, which is 0.94 (state-level medians, but not averages, are published in the *Current Population Reports*).

Income in each of these cases is before taxes, although after-tax incomes are used to scale the CSGVP.^{13 14} In any event, because some may prefer another set of across-time adjustments, I perform some analyses adjusting average or median giving in different datasets to the same level. These

¹³An adjustment of the CSGVP using before-tax income seems less appropriate because Canadians may view the greater services provided by their government as mitigating the need for private donations. The CSGVP data are first scaled by the ratio of after-tax U.S. to Canadian household income (1.09) in 1997 and then by a factor (1.10) that accounts for household income growth in the U.S. from 1997 to 1999. Other ways of scaling the Canadian data are possible, but these lead to smaller adjustments. Given that CSGVP giving levels turn out to be much lower than in the other surveys, it seems most interesting to study the data after adjusting by the largest scale factor one can reasonably use.

For similar reasons it could be argued that after-tax incomes should be used to scale the older NSP. Although the Census Bureau's published data on after-tax household incomes does not extend back to 1973, using them would certainly lead to a higher scale factor for the NSP.

¹⁴ U.S. average income data is from <http://www.census.gov/hhes/income/histinc/h03.html> and the state-level medians from <http://www.census.gov/prod/2000pubs/p60-209.pdf>. Canadian income data is from <http://www.statcan.ca/english/Pgdb/People/Families/famil05a.htm>.

analyses abstract away from differences in the level of giving and focus on differences in the shape of the distributions of giving.

4.5 Missing Data

Missing data occur in the determination of total giving if the respondent does not know or refuses to answer either the incidence or amount question for any of the components of giving that were queried. The first nine rows of Table 2 describe the extent of missing data in the component questions by looking at missing incidence responses, missing amount responses conditional on having responded affirmatively to the incidence question, and missing amounts for either of these first two reasons. The next six rows summarize the number of components missing per respondent. The final row lists the number of component questions in each survey. All observations from each dataset are used and they are not weighted.

The results for the GVUS are based on its 12 component questions pertaining to output purposes. The frequency of missing incidence responses varies by specific component, of course, but on average 17.9 percent of the responses are missing (i.e., this is the average of the 12 percentages missing in the GVUS component questions). The component with the fewest missing responses has 6.2 percent missing and the component with the most has nearly 25 percent missing (giving to religious organizations and “other” purposes, respectively). Conditional on having given, 14.8 percent of the amounts given are missing when averaged across the 12 components; the range is 11 to 28 percent. Altogether, one-fifth of the giving components are missing either because the incidence or the amount conditional on incidence are missing. Clearly, there are extensive missing data in the GVUS.

Missing data are much less extensive in the GSS. This is clear in the incidence and amount missing for any reason (11.3 and 13.5 percent, respectively). The GVUS did better on conditional amounts because of the unfolding brackets following non-response, without which nearly one-quarter of the GVUS conditional amounts would have been missing. Because the GVUS and GSS questionnaires were identical (except for the use of unfolding brackets), the lower frequency of missing data in the GSS may be attributable to interviewer training methods used in university-affiliated survey organizations. Even if this conjecture is granted for the moment, the much better missing data performance obtained by a market research organization using a questionnaire with input cues in the GVC (column 3) indicates that it is not a straightforward matter of university-affiliated survey organizations always producing better results. It appears that respondents are much more likely to provide answers in response to input cues.

The surveys administered by organizations with extensive experience in obtaining information about dollar amounts do better yet. Missing incidence information is essentially negligible and amounts missing for any reason are very low: 1.8, 3.9, and 0.5 percent in the CSGVP, NSP and PS, respectively. If there is a disadvantage to using output, rather than input, cues in terms of less missing data, this disadvantage can be overcome if the survey organization has the necessary expertise (recall the NSP and PS use output cues).

The missing data advantage of the CSGVP, NSP and PS results in fewer respondents having any missing data, as seen in the bottom portion of Table 1. While between 29 and 34 percent of the respondents in the GVUS, GSS and GVC have one or more missing components, the frequency in the other surveys is 15 percent or less. Indeed, in these surveys most of the respondents that did have

missing data, missed only one component. Finally note that in the PS only 1.5 percent of the respondents have any missing data in their giving responses. In addition, to interviewers trained to get dollar amount responses, the PS's performance on this count may be due to the experience their respondents have in answering interviewers' questions about dollar amounts.

5. Results

5.1 Sharp Bounds on the Incidence of Giving

I begin to assess the effects of survey non-response and item missing data on giving statistics with a consideration of the sharp bounds on the incidence of giving displayed in Figure 2. For this figure and the remaining analyses, the samples are restricted to respondents who were heads or spouses. In the figure, the top and bottom of each vertical line mark the sharp bounds for the corresponding dataset. For instance, the sharp bounds for the GUVS indicate all that can be said with complete certainty is that the proportion of the GUVS sample that gave to charity is somewhere between 13.5 and 94.3 percent. Because of its much better response rate, the sharp bounds for the GSS are much closer together: 53.9 to 80.3 percent. The triangle and square on the GSS line mark the bounds on the incidence of giving assuming that survey non-response is ignorable.¹⁵ These bounds are much narrower which is, of course, an indication that most of the difference between the sharp lower and upper bounds is due to survey non-response. That is to say, the determination of whether a household gave or not is insensitive to the missing item responses discussed in Table 2.

¹⁵Recall that this upper bound cannot be calculated for the GVUS. This also implies that the GUVS sharp upper bound displayed in the figure is somewhat understated.

Overall the figure demonstrates the advantage of the better response rates achieved in the GSS, CSGVP, NSP and PS: the sharp bounds are closer together. The figure also shows that, ignoring survey non-respondents, the surveys using input cues (GVC and CSGVP) measure a higher incidence of giving than surveys using output cues (GVUS, GSS and PS). The one exception is the NSP, a survey using output cues that measures incidence (88 percent) close to the CSGVP.¹⁶ The gap between lower and upper sharp bounds suggests that caution be used in drawing conclusions about whether one study has measured a higher incidence of giving than another. For example, had the non-respondents been successfully interviewed, the measured incidence of giving in the GVC could well have fallen into the range measured in the GSS, a reasonable possibility in light of the incentive the GVC offered to potential respondents and the highly educated sample it obtained. Indeed, this might explain the higher incidence measured in the GVC compared to that measured using a very similar questionnaire in the CSGVP.

Keeping this caution in mind, it is nevertheless noteworthy that the GVUS, GSS and PS each measure the incidence of giving to be around 70 percent despite potential differences in the characteristics of each survey's non-respondents. This is especially important for the GVUS because it suggests that it is may be acceptable to assume that GVUS's numerous non-respondents are ignorable, as least those kinds of non-respondents whom the GSS and PS successfully interviewed and as far as the incidence of giving is concerned.¹⁷

¹⁶This may be due to the NSP's high income oversample, but that explanation is not entirely convincing. One would expect the oversample to affect the measurement of amounts, not incidence.

¹⁷The GSS used multiple call-backs and the GVUS used none. Therefore, the kinds of GVUS non-respondents picked up in the GSS are probably those less likely to be at home.

5.2 Item Non-response Bounds on the Median Contribution

Figure 2 shows the beginning points for the sharp lower and upper distributions of giving for each dataset, and the distance between the sharp lower and upper bounds would, of course, persist throughout the distribution of giving. In fact, the distance would widen as the effects of missing amount information are taken into consideration. To focus on the effects of missing amounts, I ignore the survey non-respondents. And unlike the case with incidence, a single missing amount component necessarily implies that the total amount is unknown. Indeed, most of the missing data problems discussed in Table 2 impinge upon our ability to determine the amount given.

To get a sense of the effect of missing amounts Table 3 presents the median contribution, conditioning the sample to include only those respondents who made charitable donations. Figure 3 is a visual display of the same information. The first (second) row of Table 3 displays the lower (upper) bounds due to item non-response. The lower bound to the median in the GVUS is \$488. The upper bound is indeterminate because just over one-half of the GVUS respondents who gave had some missing information about their donated amounts.¹⁸ Both lower and upper bounds can be determined in the GSS and GVC and are both around \$400 and \$1,400, respectively. The \$1,000 distance between these bounds reflects the difficulty these surveys had in getting respondents to answer the amount questions. Surveys with more experience along these lines did much better; the distances between the

¹⁸Among head and spouse GVUS respondents, 35.2 percent have missing data (slightly higher than in Table 2 which described all GVUS respondents) and this missing data is concentrated among the respondents who give. Hence, 50.7 percent of all GUVS head/spouse respondents who give had missing data. Figure 3 reflects this indeterminacy by placing the upper bound at the top of the figure (\$1,500).

lower and upper bounds are in the \$50-\$70 range in the CSGVP, NSP and PS.

It is standard for analysts to assume that missing component amounts are zero and work with the lower bound distributions as in row 1. Row 3 of Table 3 presents (bootstrapped) confidence intervals for the median of the lower bound distributions (the triangles and squares in Figure 3). These intervals are very narrow compared to the distance between the lower and upper bounds in the GVUS, GSS and GVC, but on the same order of magnitude for the other three surveys. The implication is that reported confidence intervals for the first three surveys could well be dominated by missing data problems.

These potential problems notwithstanding, there are several interesting features among the medians to the lower bound distributions in Table 3. First, the lower bound median of the GVUS is one-third higher than that of the GSS. This may reflect a lack of randomness in the GVUS non-respondents (i.e., they were disproportionately givers of smaller amounts). Second, and surprisingly, the GVC median is between these, even though the GVC's input cue questionnaire perhaps would have been expected to do better at measuring smaller gifts. Indeed, this expectation is borne out by the very low median gift measured in the CSGVP. Finally, with its high income oversample, the NSP measures a much higher median gift than the other surveys, save one, the PS. I move on now to a more detailed analysis of the lower bound distributions.

5.3 Lower Bound Distributions

Table 4 presents summary statistics for the lower bound distributions of giving. The top four rows of the table contain statistics describing all of the head or spouse respondents in each dataset.

The remaining rows describe only those head and spouse respondents who gave positive amounts. To make this distinction clear, the first and fifth rows contain the (unweighted) number of observations in their respective sections.

The second row contains the lower bound incidences which were marked as triangles in Figure 2. Row 3 shows the average amounts given, including in the average respondents who did not give. Despite the use of identical questionnaires, the GVUS measures a much lower average gift than does the GSS: \$901 compared to \$1,218. This is entirely due to a single observation in the GSS (the largest two gifts in each survey are listed in the last two rows of the table). When the largest gift is removed from each sample, the average gifts are nearly identical (\$798 and \$835 in row 4).¹⁹ Again, somewhat surprisingly, the average gift in the GVC is closer to that in the GSS (an output cue survey) than to that in the CSGVP (the other input cue survey). Though they produced similar conditional medians, the average NSP gift (unconditional) is nearly 50 percent higher than the average PS gift, the closest among the other five surveys.²⁰ The high income oversample in the NSP clearly enabled it to ascertain some very large gifts.

However, these large gifts appear only at the extreme top of the NSP distribution. Turning to the conditional gifts in the bottom portion of Table 4, the NSP and PS distributions are relatively close

¹⁹The effects of the largest gifts on the averages across all of the surveys can be seen by comparing rows 3 and 4. Large gifts make about a \$100 difference in the averages in the GVUS, GVC and PS and have a negligible effect in the CSGVP and the NSP. Only in the GSS is the average dominated by an outlier.

²⁰Of course, some of this difference is due to the higher incidence of giving in the NSP. But as the bottom portion of Table 4 shows, the majority of this difference persists in the average conditional amounts.

up through the ninth decile. In fact, through that decile, it is the PS that measures larger contributions.²¹

The NSP and PS measure much larger gifts throughout the distribution than do the other four surveys.

The GVUS, GSS and GVC are fairly close to each other, at least until the last three deciles. The

CSGVP measures much lower giving than these at every point in the distribution.²²

The information in the bottom portion of Table 4 is displayed in the relative histograms in Figures 4.1 through 4.5, in which the GVUS is the reference distribution. Figures 4.1 and 4.2 show modest differences between the distributions of the GSS and the GVC and that of the GVUS, primarily at the bottom and middle of the distributions. More striking differences are seen in the other relative distributions. Figure 4.3 shows that the CSGVP amounts are concentrated in the lowest three GVUS deciles. In contrast, the NSP and PS amounts fall more frequently in the top GVUS deciles, especially the ninth (Figures 4.4 and 4.5). Table 5 contains results from applying the procedure described in Section 3.3 to test the statistical significance of these differences. Almost all of the differences are statistically significant at any standard level. The exceptions are the GSS and GVC: the evidence of a difference relative to the GVUS at the top of the distribution is weak for the GSS (p-value =0.071) and non-existent for the GVC.

Recall that the NSP is noteworthy for having obtained the best quality high income oversample

²¹The bottom four deciles of the NSP are at \$5 because that survey did not query amounts if donors said their gifts totaled \$100 or less. Consequently, the lower bound for such donors is \$1 (1973 dollars), which brought forward by the 4.51 scale factor generates the \$5 decile boundaries.

²²The number of positive gifts included in the bottom of Table 4 is slightly less than the incidence of giving reported in row 1. This is because when all amount information is missing, the lower bound amount is set to zero. Setting it to one dollar in those cases where we know from the incidence questions that the respondent gave would cause only minor changes in the results.

in a giving survey. It is therefore of interest to consider whether the PS measures large amounts comparable to those obtained in the NSP (it is clear from Table 4 and Figures 4.1 through 4.4 that the other four surveys measure much smaller amounts than in the NSP). The histogram of the PS relative to the NSP is presented in Figure 5. Aside from the mass of PS amounts in the fifth NSP decile, the relative histogram appears nearly uniform, indicating close agreement between the two surveys through the ninth decile.²³

This agreement is analyzed in Table 6 which tests the equality of the five other datasets with the NSP at the seventh, eighth, and ninth deciles. Equality at these deciles can clearly be rejected for every dataset except the PS. It is of interest to ask whether the differences between the other data sets and the NSP at the top of the distribution are simply a matter of the NSP measuring larger gifts over all, or, controlling for differences in the central locations, do the shapes of the distributions differ? After additive shifts of the GVUS, GSS, GVC and CSGVP to either the NSP median or mean there are still statistically significant differences at the top. Therefore, the differences between these distributions and the NSP are due to both location and shape.²⁴

Figure 6 shows that the PS matches the NSP through the 92 nd percentile by graphing the top

²³The mass consists of all the PS amounts greater than \$5 but less than \$677. Recall that the NSP did not attempt to quantify gifts less than \$100 in 1973 dollars.

²⁴Additive shifts such as these do not increase the dispersion of the data. I also considered multiplicative shifts, that is, multiply all of the data so that the mean is equivalent to the NSP mean. Equality between the NSP and the scaled GVUS at the top of the distribution cannot be rejected (p-value = 0.161). Equality between the NSP and the GVC scaled to the NSP median also cannot be rejected (p-value = 0.141). However, recall that multiplicative scaling of the the data does increase the dispersion; hence the exercise alters location and shape simultaneously.

ten quantiles from each dataset. At that percentile, which occurs at \$5,184 in the PS and \$5,412 in the NSP a test that the two quantiles are equal has a p-value of 0.378. A test of the joint hypothesis that the two distributions are equal at the 90 th, 91 st and 92 nd quantiles cannot be rejected at the five percent level (p-value = 0.065). However, the divergence in the plots at the 93 rd percentile is more noticeable (\$5,568 in the PS and \$6,089 in the NSP), and the p-value for the difference at that percentile is 0.044 (0.003 for the joint test of equality at the 90 th through 93 rd percentiles).

5.4 Sensitivity Analysis

Although the conditional distributions of the PS and NSP are similar (at the middle and top), there is a potential problem in using conditional distributions to make the comparison: the incidence of giving varies quite a lot between the two surveys. This would not be an issue if the additional givers detected in the NSP are uniformly scattered throughout the conditional distribution, but the concern is that they disproportionately came from the bottom. Equivalently stated, if the PS failed to detect this large number of small givers, the effect is that the PS conditional distribution in Table 4 and the figures is shifted much higher than it should be. Table 7 considers the extent of this potential problem by making several adjustments to the NSP and PS data.

For ease of comparison, columns 1 and 2 in Table 7 repeat the conditional giving distributions from Table 4, columns 5 and 6. The incidences of giving in these columns (row 1) are derived from the lower bound amounts being greater than zero and are slightly lower than those reported in Table 4 (see footnote 21). First, assume that the higher incidence in the NSP is accurate, is composed of kinds of respondents who gave very small amounts, and that such respondents were not detected by the PS. If

these respondents had been detected by the PS, the conditional distribution would appear as in column 3 which adjusts 16.7 percent of the non-givers in the PS to be givers of one dollar. Hence, the incidence of giving in the adjusted PS matches that in the NSP. The conditional distribution of the adjusted PS is below that of the NSP everywhere from the middle through the top. Although it no longer matches the NSP so closely, the adjusted PS is much closer to the NSP than any of the other four surveys.

However, this adjustment would be too extreme if the higher incidence in the NSP is due, at least in part, to its high income oversample. In that case the “additional” givers detected in the NSP would have come from higher up in the conditional distribution, not all from the bottom. In fact, there is some evidence of this: nearly all of the Census sample—the high income oversample of which was based on IRS records and therefore presumably better than the SRC high income area oversample—gave (99 percent) compared to only 87 percent of the SRC sample. Therefore, column 4 considers an alternative adjustment to the PS in which the percentage of givers of between one and 25 dollars estimated from the GVC (6.6 percent—the highest sugc estimate from the remaining datasets) is added to the bottom of the PS conditional distribution. The adjusted distribution is still below that of the NSP, but the difference at the upper three deciles is not statistically significant.

Finally, it may be that using the change in average household income to convert the data over the long time span from 1973 to 1999 results in too large of an adjustment. Indeed, if this adjustment were merely 15 percent too large, even the PS distribution in column 3 would align with the properly adjusted NSP at the ninth decile. In fact, some evidence from the high income oversample SCF would seem justify a much smaller across-time adjustment to the NSP: just over 34 percent of the SCF

respondents said they gave \$500 or more to charity in 1997, or \$550 in 1999 household income adjusted dollars. The corresponding figure from the NSP is 46 percent. Column 5 of Table 7 presents an alternative adjustment of the NSP so that its percentage of respondents giving more than \$550 matches that in the SCF (the 1973 to 1999 adjustment factor is 2.2). This alternative NSP distribution is now below all of variously adjusted PS distributions. However, if the original household income adjustment factor (4.51) was too large, using the 2.2 factor to bring the NSP into alignment with the giving incidence in the SCF may be going too far in the other direction. The incidence of giving \$500 or more in the SCF is likely understated because it is based on a single question with very little introduction, leaving respondents with insufficient time to recollect non-salient instances of giving. Nevertheless, the exercise serves to illustrate that adjustment factors somewhat less than that based on household income may be reasonable, and such adjustments would produce NSP conditional giving distributions not all that different from the PS.

6. Conclusions

This study analyzes the distribution of charitable giving. It is the first to do so by using several major household surveys of giving, describing missing data patterns, and using relative distribution methods to examine the surveys' measurements of giving at various points in the distribution. The analysis produces four main results.

First, survey organizations that have experience in getting respondents to answer questions about dollar amounts produce much less missing data when they ask about giving. Indeed, missing amount data in the GVUS, GSS and GVC may have larger effects on giving estimates than does

sampling variation. Second, although surveys that use input cues measure a higher incidence of giving relative to output cue surveys, the evidence suggests that the additional givers they capture donate very small amounts: the input cue GVC finds more donors at the bottom of the giving distribution relative to the output cue GVUS, rather than at the top. The same finding obtains for the input cue CSGVP.²⁵

Third, while the choice of survey instrument does seem to influence the measurement of the amount of giving (conditional on having given), it does so in a way that interacts with the interviewers' experience with dollar amount questions. Recall that the two surveys that measure the highest giving use recall cues based on outputs (either the type of charitable purpose or about the largest gifts made to an organization—the PS and NSP, respectively) and also use interviewers experienced in collecting dollar information. In contrast, two other surveys (GVUS and the GSS) similarly cue on output but use interviewers less experienced at collecting dollar amounts; they measure much lower giving. The other survey using interviewers with dollar amount experience (the CSGVP) but presenting respondents with input, rather than output, cues measures the lowest giving among the six surveys. Hence, the design of the survey instrument appears to strongly interact with the experience of the interviewers fielding it to produce the measured structure of giving. Such interactive effects may be part of the explanation of why the present results differ from those in Rooney et al. (2001), who found that higher giving was

²⁵At first, one might conclude that the higher incidence in the NSP may be evidence that the surveys with lower incidence (the GVUS, GSS and PS) have missed givers of large amounts (the NSP, after all, does measure the largest giving of the six surveys). However, recall that the PS matches the large giving in the NSP through the 92 nd percentile. The larger giving in the NSP beyond that point is likely due to the high income oversample rather than to the higher level of incidence it obtained.

measured with input, not output, cues.²⁶

Finally, among the five surveys that do not have a high income oversample, only the PS is able to measure giving high up into the conditional distribution, matching the high income oversample NSP through the top 92 nd percentile. This is similar to the finding that the PS's measurement of wealth matches that obtained with the high income oversample in the SCF, though in the case of wealth the match goes up through the 98 th percentile.²⁷

There are several other qualifications to keep in mind when considering these conclusions. First, response rates were low enough in some surveys to allow skepticism about the conclusions. For instance, if the GVUS and GVC systematically missed large givers, then that might explain their low amounts of giving rather than the interviewers' inexperience in obtaining dollar information. However, this concern is mitigated, at least somewhat, by the similarity between the results from the GVUS and the higher response rate GSS. Furthermore, the GVC incentive to participate likely attracted, rather than missed, generous respondents.

Second, recall that the missing amount data in the GVUS, GSS and GVC is extensive.

²⁶It may be that the interviewers inexperienced in collecting dollar information, such as those used to collect the data analyzed by Rooney et al., are better able to collect giving data with an input cue instrument rather than an output cue instrument. This conjecture is supported by the better missing data performance and the higher giving incidence in the input cue GVC relative to the GVUS and GSS (all of these surveys used interviewers with limited dollar amount experience). It is, however, not supported by the present finding that the GVC did not measure larger amounts of conditional giving, in contrast to the measurements obtained with a comparable instrument in Rooney et al. Hence, a fully satisfying explanation of the difference between the present results and those in Rooney et al. remains to be found.

²⁷See Juster, Smith and Stafford (1999). Obviously, in comparing wealth data from two cotemporaneous surveys the issue of adjusting one of the data sets across a long time period did not arise.

Consequently, conclusions resting primarily on the results from these surveys (e.g., that the donors who go undetected by output cue surveys generally make small contributions) could well be reversed if those missing amounts had been accurately measured. The conclusions the paper draws in these situations rests on an assumption that those missing amounts are small.

Third, the surveys differ in other ways, besides the ones I have called attention to, and these other differences may account for patterns in results. For instance, the comparison in the present paper assumes that the differences in populations due to time (in the case of the NSP) and country (in the case of the CNSGVP) affect the level of giving but not the distribution of giving. So, it may be that the adjustment of the NSP data was too large. However, it would take a much lower adjustment to bring the NSP closer to the GVUS, GSS and GVC than it is to the PS. Such an adjustment could be justified by using the evidence in the SCF at face value, but I have argued that the giving data in the SCF itself is likely underestimated. Of course, the adjustment across time may not be large enough, as faster income growth at the top of the U.S. distribution might suggest. Although this would not alter the conclusion that the PS is the closest nationally representative survey to the NSP, it would imply that the PS does less well than I have claimed at the top of the giving distribution.

The conclusion that higher giving is obtained with output cues administered by interviewers experienced in collecting dollar amounts rests in large part on the lower giving measured in the CSGVP. However, it could well be that this lower giving has more to do with differences in expenditure policy and social conditions between the U.S. and Canada than with the design of the survey questionnaires. In addition, smaller gifts may have been reported in the CSGVP in part because many married respondents were guided to report their gifts, but not those of their spouses. Therefore, the question of

whether input cues necessarily elicit reports of lower giving—even when the cues are administered by experienced interviewers—should be further investigated.

More generally, differences in the pattern of results which I have attributed to the experience of interviewers in obtaining dollar amount information, may in fact be due to other differences between the surveys. Although I find the “dollar experience” explanation to be satisfying, there may be other explanations that are also consistent with the results. It must be remembered that I am attempting to draw conclusions from what is, in effect, a small sample of six datasets.

Finally, the results in the present paper are restricted to univariate giving statistics. What has not been considered is whether the PS and NSP, for example, produce similar joint distributions of giving and income. Such questions are natural next steps in evaluating the quality of giving data, and the PS and NSP seem the best surveys with which to proceed. Of course, it may be better to first ask if the PS and NSP are both overestimating giving. Although giving is not highly salient and respondents may tend to forget their donations, giving is socially desirable and there is the possibility that some respondents may overstate their self-reports of generosity. One way to check whether giving in the PS and NSP is overstated is to ask whether giving at the top of these distributions is similar to that measured in the SCF and in income tax data. If social desirability effects are an issue, they should have a much smaller effect in the SCF because it asks only two questions about giving, in contrast to the more detailed questioning in the PS and NSP. The comparison to income tax data would be informative because, while overstatement of charitable deductions has tax advantages, there is some evidence that the degree of overstatement is relatively small (Slemrod 1989).

Although these qualifications must be kept in mind, the results at present point to the importance

of using interviewers trained in obtaining information about dollar amounts and questionnaires that cue on charitable output or largest gifts when collecting data on charitable giving. The evidence described herein is that surveys doing both measure substantially more giving than those that omit one or the other.

Table 1. Giving Datasets

Datasets	Characteristics
<i>Giving and Volunteering in the United States (GVUS) 1996.</i>	Response rate = 0.192 ^a ; n = 2,719. Oversampled African-Americans, Hispanics, high income areas; post-stratification. Fielded by Gallup. Questionnaire cues on “output.” Random respondent; household unit of analysis.
<i>General Social Survey (GSS) 1996.</i>	Response rate = 0.761; n = 1,444. Self-weighting. Fielded by NORC (U. Chicago). Questionnaire same as GVUS. Random respondent; household unit of analysis.
<i>Giving and Volunteering in California (GVC) 2000.</i>	Response rate = 0.351; n = 2,406. Post-stratified weighting. Fielded by Hebert. Questionnaire cues on “input” (similar to CSGVP below). Random respondent; mixed units of analysis.
<i>Canadian National Survey of Giving, Volunteering and Participating (CSGVP) 1997.</i>	Response rate = 0.783; n = 18,301. Survey design and post-stratification weights. Fielded by Statistics Canada. Questionnaire cues on “input.” Random respondent; individual unit of analysis.
<i>National Study of Philanthropy (NSP) 1974.</i>	Response rate = 0.783; n = 2,897. Oversampled college educated, high income area, and high income respondents (via IRS selection); post-stratification. Fielded by SRC (U. Michigan) and U.S. Census. Questionnaire cues on “output.” Head respondent; head and spouse unit of analysis.

<i>Philanthropy Panel Study (PS) 2001.</i>	Response rate = 0.656 ^b ; n = 4,463. ^c Oversampled low-income (not used in this study). Fielded by SRC (U. Michigan). Questionnaire cues on “output.” Head or spouse respondent; family unit of analysis.
--	---

Notes:

^a The actual rate has not been published. This figure taken from Kirsch, McCormack and Saxon-Harrod's (2001) general discussion of response in the GVUS series.

^b This is the cumulative response rate since 1989. The annual response rates varied between 95 and 98 percent.

^c The SRC (nationally representative) subsample only. The entire sample, including the low-income oversample, has n = 7,457.

Table 2. Missing Data in the Component Questions About Giving

		GVUS	GSS	GVC	CSGVP	NSP	PS
Incidence missing	Avg.	0.179 ^a	0.113	0.024	0.001 ^b	0.005	0.001
	Min.	0.062 ^a	0.054	0.004	0.001 ^b	0.004	0.001
	Max.	0.249 ^a	0.175	0.107	0.002 ^b	0.006	0.002
Amount missing, conditional on incidence	Avg.	0.148	0.175	0.104	0.062	0.077	0.012
	Min.	0.110	0.095	0.063	0.031	0.071	0.008
	Max.	0.283	0.273	0.205	0.089	0.082	0.016
Amount missing for any reason	Avg.	0.200	0.135	0.045	0.018	0.039	0.005
	Min.	0.134	0.123	0.016	0.004	0.022	0.003
	Max.	0.255	0.188	0.107	0.044	0.057	0.008
Percentage of respondents with missing data							
No missing components		0.660	0.710	0.676	0.846	0.917	0.985
Some missing components		0.340	0.290	0.324	0.154	0.083	0.015
1 missing component		0.072	0.104	0.166	0.099	0.046	0.010
2 missing components		0.021	0.031	0.064	0.026	0.018	0.003
3-5 missing components		0.031	0.022	0.072	0.024	0.020	0.002
6 or more missing compnts.		0.217	0.134	0.022	0.006	-	0.001
Number of component questions		12	12	17	17	4	11,6 ^b

Notes: All respondents from each data set are included. The GVUS is used to illustrate how to read the table. There are 12 component questions about giving in the GVUS and two parts (incidence and amount) for each component. Each of these has a certain percentage of missing responses. The average of those missing percentages for the 12 component incidence questions is 17.9 percent and the range is 6.2 to 24.9 percent. Conditional on giving, the average of the 12 missing percentages for the amount questions is 14.8 percent and the range is 11 to 28.3 percent. Combining the incidence and conditional amount parts to determine missing data for either reason indicates that the average missing percentage was 20 percent (among the 12 components) with a range of 13.4 to 25.5 percent. The next six rows present the per respondent distribution of missing data. The other columns are calculated in a similar manner, only the number of components differ (see the bottom row).

^a Understates the amount of missing data because respondents reporting a sequence of no gifts and missings were imputed to have made no gifts.

^b Results based on only four components.

^b The PS queries 11 different incidence categories, but only six separate amount categories.

**Table 3. Item Non-response Bounds on the Median Gift
(Conditional on Giving a Positive Amount).**

	GVUS	GSS	GVC	CSGVP	NSP	PS
Median Giving						
Lower bound	488	366	408	168	677	768
Upper bound	indeterminate ^a	1,464	1,393	241	731	835
Confidence interval on the lower bound (95 pct.)	427 to 494	305 to 412	352 to 469	159 to 179	589 to 789	706 to 816

Notes: In this and subsequent tables only head (or spouse) respondents are included (sample non-response is assumed to be ignorable). All amounts are adjusted to 1999 dollars using household income. Weights are used for the GVUS, GVC, CSGVP and the NSP. The PS results are based on the SRC (nationally representative) subsample only.

^a Cannot be determined because 50.7 percent GVUS givers have missing amount data.

Table 4. Summary Statistics for the Lower Bound Distributions of Giving.

	GVUS	GSS	GVC	CSGVP	NSP	PS
Number of observations	2,424	1,270	2,037	15,745	2,802	4,463
Incidence	0.703	0.708	0.954	0.899	0.880	0.708
Average amount given	901	1,218	1,132	507	2,109	1,431
Average without the max.	798	835	1,042	504	2,087	1,326
Amounts, conditional on giving						
Number of obs. giving	1,546	793	1,875	14,492	2,572	3,119
First decile	49	43	33	22	5	106
Second decile	122	94	94	42	5	240
Third decile	220	134	169	72	5	384
Fourth decile	306	244	277	118	5	499
Fifth decile	488	366	408	168	677	768
Sixth decile	612	549	610	244	1,128	1,152
Seventh decile	976	781	915	348	1,691	1,776
Eight decile	1,586	1,403	1,407	522	2,706	2,712
Ninth decile	2,769	3,050	2,678	1,020	4,510	4,628
Average	1,399	1,951	1,256	492	2,435	2,047
Average without the max.	1,239	1,337	1,155	489	2,409	1,897
Maximum amount given	118,950	487,981	159,000	48,072	2,255,000	471,840
Next largest amt. given	61,000	62,220	79,451	32,753	1,578,500	73,728

Notes: Incidence is the frequency of occurrence. Deciles, averages, and maxima are in 1999 dollars. The numbers of observations are unweighted. Incidence in the PS indicates whether the respondent

gave more than \$25; in the other surveys there is no such threshold.

Table 5. Tests of Equality of Conditional Distributions of Giving with *Giving and Volunteering in the U.S.*

Datasets	Quantiles		
	10, 20, 30	40, 50, 60	70, 80, 90
<i>General Social Survey (GSS)</i>	13.554 (0.004)	12.617 (0.006)	7.016 (0.071)
<i>Giving and Volunteering in California (GVC)</i>	18.278 (0.000)	26.689 (0.000)	2.397 (0.494)
<i>Canadian National Survey of Giving, Volunteering and Participating (CSGVP)</i>	309.849 (0.000)	535.417 (0.000)	635.041 (0.000)
<i>National Study of Philanthropy (NSP)</i>	2405.700 (0.000)	369.634 (0.000)	50.255 (0.000)
<i>Philanthropy Panel Study (PS)</i>	136.049 (0.000)	163.896 (0.000)	76.168 (0.000)

Notes: In column 1 the null hypothesis is that the 10 th, 20 th, and 30 th quantiles of the dataset in a selected row are equal to those of *Giving and Volunteering in the U.S.* In column 2 the null hypothesis is based on the 40 th, 50 th, and 60 th quantiles and in column 3 the 70 th, 80 th, and 39 th quantiles. The results are the chi-squared test statistic. P-values are in parentheses.

Table 6. Tests of Equality of the Tops of the Conditional Distributions of Giving with the *National Study of Philanthropy*.

Datasets	χ^2	p-value
<i>Giving and Volunteering in the United States (GVUS)</i>	86.920	0.000
<i>General Social Survey (GSS)</i>	57.613	0.000
<i>Giving and Volunteering in California (GVC)</i>	101.534	0.000
<i>Canadian National Survey of Giving, Volunteering and Participating (CSGVP)</i>	1,621.648	0.000
<i>National Study of Philanthropy (NSP)</i>	.	.
<i>Philanthropy Panel Study (PS)</i>	0.360	0.948

Notes: The null hypothesis is that the 70 th, 80 th, and 90 th quantiles of the dataset in a selected row are equal to those of the *National Study of Philanthropy*.

Table 7. Sensitivity Analysis of the NSP and PS Lower Bound Distributions of Giving (Conditional).

	NSP	PS	PS +16.7 percent small givers	PS + 6.6 percent small givers	NSP adjusted according to the SCF
Incidence based on lower bound amounts greater than zero	86.6	69.9	86.6	76.5	86.6
First decile	5	106	1	29	2
Second decile	5	240	24	144	2
Third decile	5	384	144	288	2
Fourth decile	5	499	288	442	2
Fifth decile	677	768	480	624	330
Sixth decile	1,128	1,152	768	960	550
Seventh decile	1,691	1,776	1,248	1,488	825
Eight decile	2,706	2,712	2,208	2,496	1,320
Ninth decile	4,510	4,628	3,895	4,320	2,200
Number of observations	2,572	3,119	3,864	3,414	2,572

Notes: Columns 1 and 2 repeat the conditional giving distributions in Table 4, columns 5 and 6. The incidences of giving in these columns (row 1) are derived from the lower bound amounts being greater than zero (and are therefore slightly lower than those reported in Table 4; see footnote 19). Column 3 assumes that 16.7 percent of the PS respondents actually gave a small amount even though they did not report so; this aligns the PS incidence with that from the NSP. Column 4 assumes that 6.6 percent of the PS respondents actually gave \$25 or less, as in the GVC, but were screened out by the PS's initial question. Column 5 adjusts the 1973 NSP data so that the percentage of respondents who gave \$500 or more is the same as that measured by the 1998 SCF (34.2 percent); the adjustment factor is 2.2. The last row contains the number of (unweighted) observations used to calculate the corresponding conditional distribution.

Figure 1a. Comparison Distribution.

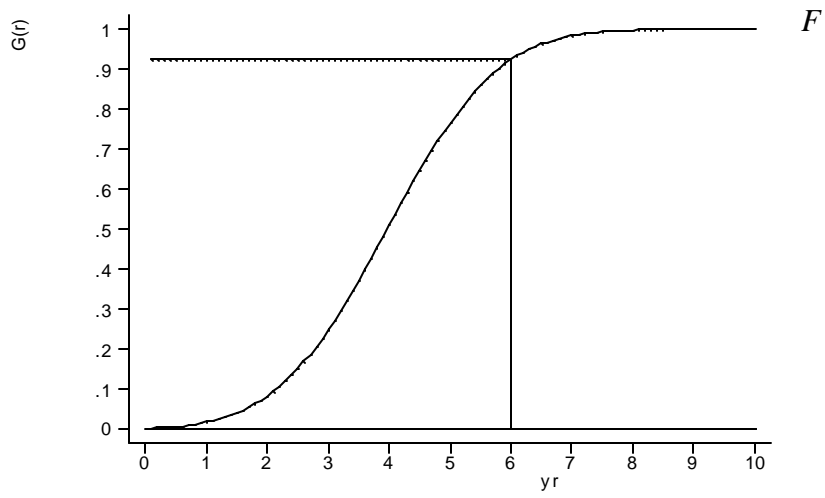
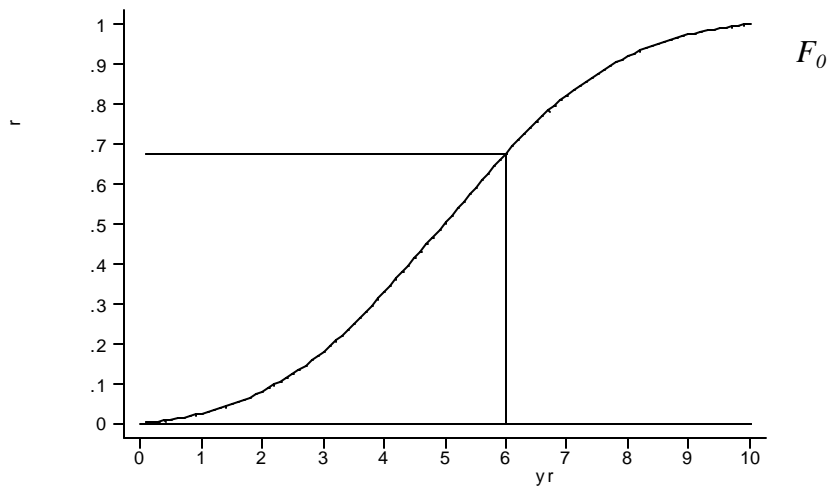


Figure 1b. Reference Distribution.



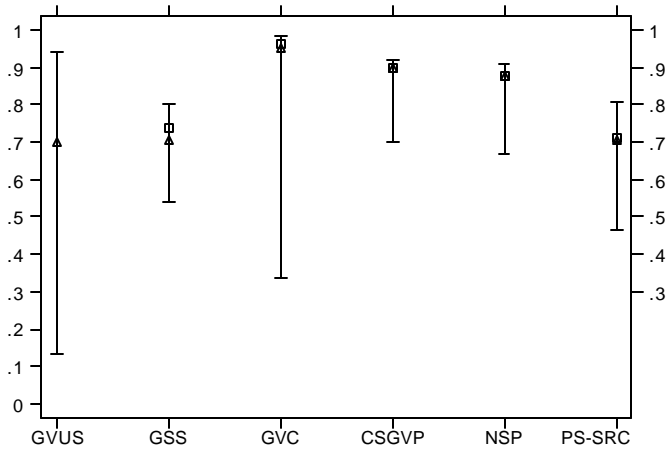


Figure 2. Incidence of Giving: Sharp Lower and Upper Bounds.

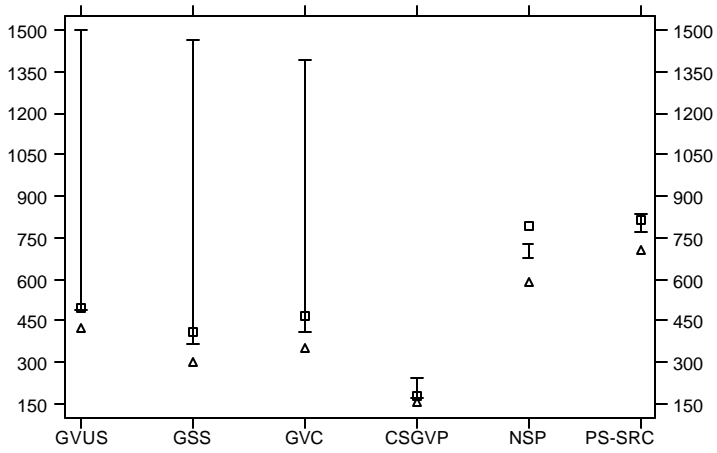


Figure 3. Median Gifts: Item Non-response Bounds and 95 Percent CIs

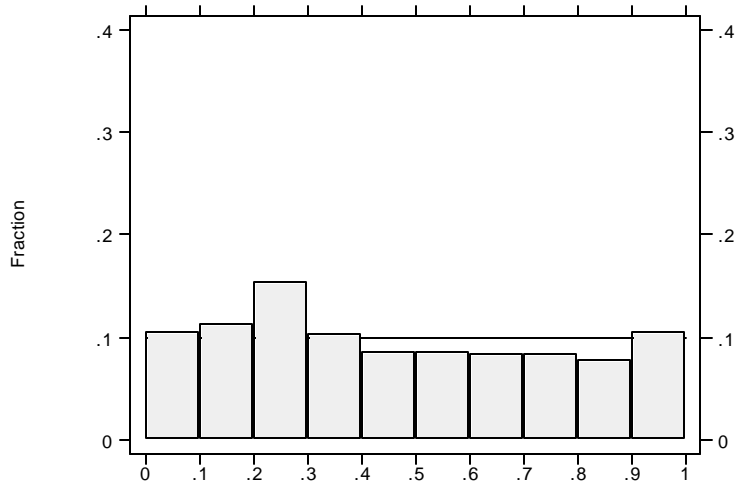


Figure 4.1. GSS Relative to GVUS

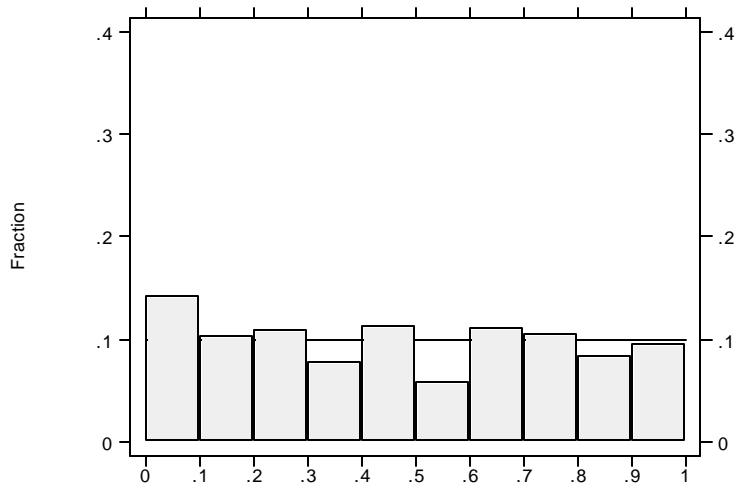


Figure 4.2. GVC Relative to GVUS

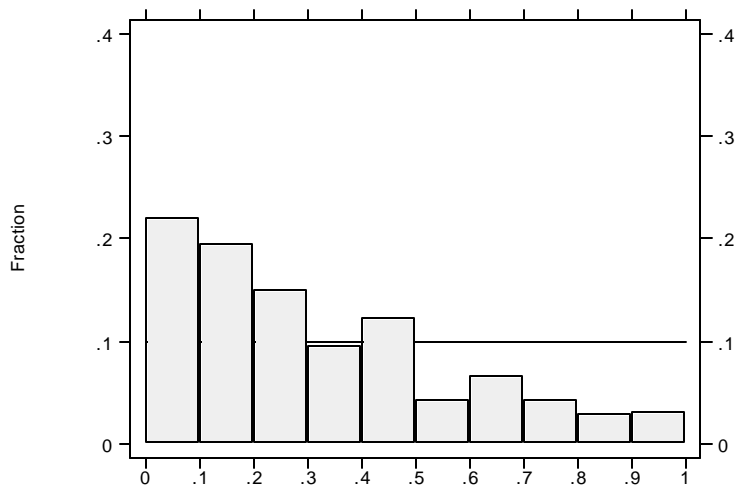


Figure 4.3. CSGVP Relative to GVUS

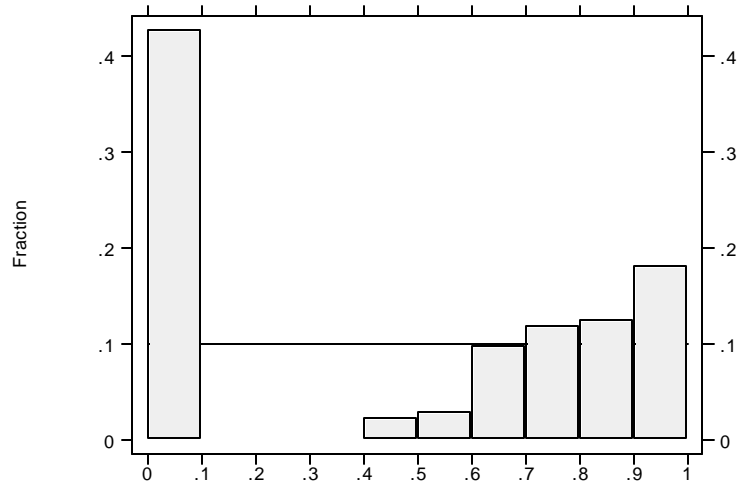


Figure 4.4. NSP Relative to GVUS

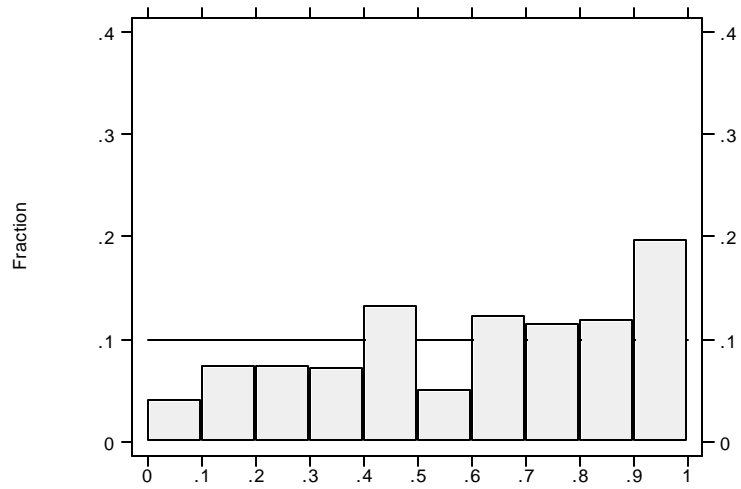


Figure 4.5. PS Relative to GVUS

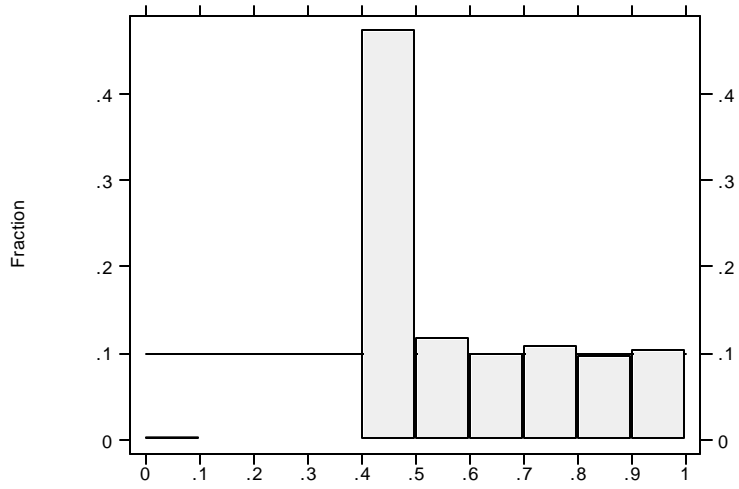


Figure 5. PS Relative to the NSP

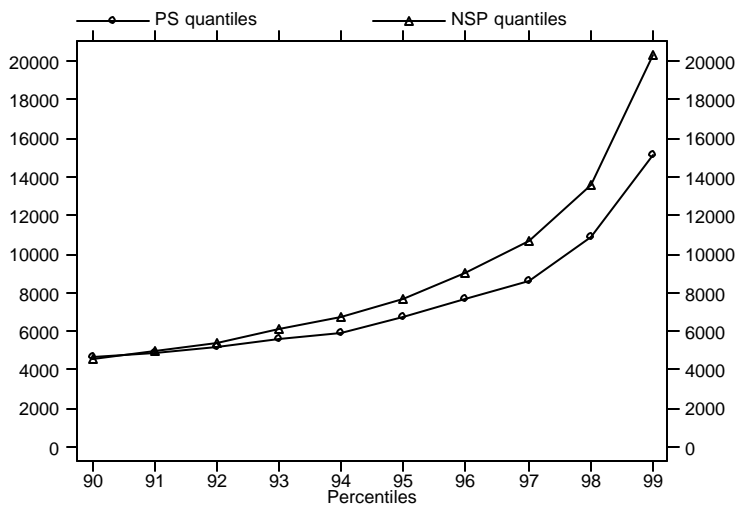


Figure 6. Top Ten Quantiles of the PS and NSP.

References

- AAFRC Trust for Philanthropy. 2002. *Giving U.S.A.* New York: American Association of Fund-Raising Council.
- Andreoni, James, Eleanor Brown and Isaac Rischall. forthcoming. "Charitable Giving by Married Couples: Who Decides and Why Does It Matter?" *Journal of Human Resources*.
- Andreoni, James, William G. Gale and John Karl Scholtz. 1996. "Charitable Contributions of Time and Money." Mimeo, University of Wisconsin-Madison.
- Berking, Helmuth. 1999. *Sociology of Giving*. Thousand Oaks, CA: Sage.
- Clotfelter, Charles T. 1985. *Federal Tax Policy and Charitable Giving*. Chicago: University of Chicago Press.
- _____. 1997. "The Economics of Giving." In John W. Barry and Bruno V. Manno (eds.), *Giving Better, Giving Smarter: Working Papers of the National Commission of Philanthropy and Civic Renewal*. Washington, DC: National Commission on Philanthropy and Civic Renewal.
- Council of Economic Advisors. 2000. "Philanthropy in the American Economy." Mimeo, Council of Economic Advisors.
- Duncan, Brian. 1999. "Modeling Charitable Contributions of Time and Money." *Journal of Public Economics* 72: 213-242.
- Fitzgerald, John, Peter Gottschalk and Robert Moffitt 1998. "An Analysis of Sample Attrition in Panel Data: The Michigan Panel Study of Income Dynamics." *Journal of Human Resources* 33(2): 251-299.
- Gouskova, Elena and Robert F. Schoeni. 2002. "Comparing Estimates of Family Income in the Panel Study of Income Dynamics and the March Current Population Surveys, 1968-1999." Mimeo, University of Michigan: Institute for Social Research.
- Hall, Michael, Tamara Knighton, Paul Reed, Patrick Bussiere, Don McRae and Paddy Bowen. 1997. *Caring Canadians, Involved Canadians: Highlights from the 1997 National Survey of Giving, Volunteering and Participating*. Ontario: Statistics Canada.
- Handcock, Mark S. and Martina Morris. 1999. *Relative Distribution Methods in the Social Sciences*. New York: Springer-Verlag.
- Havens, John J. and Paul G. Schervish. 2001. "The Methods and Metrics of the Boston Area Diary Study." *Nonprofit and Voluntary Sector Quarterly* 30 (3): 527-550.
- Hodgkinson, Virginia A. and Murray S. Weitzman 1996. *Giving and Volunteering in the United States: Findings from a National Survey*. Washington, D.C.: Independent Sector.
- Jencks, Christopher. 1986. "Who Gives to What?" In Walter W. Powell (ed.), *The Nonprofit Sector: A Research Handbook*. New Haven: Yale University Press.
- Juster, F. Thomas, James P. Smith and Frank Stafford. 1999. "The Measurement and Structure of Household Wealth." *Labour Economics* 6: 253-275.
- Kirsch, Arthur D., Michael T. McCormack and Susan K.E. Saxon-Harrold. 2001. "Evaluation of Differences in Giving and Volunteering Data Collected by In-Home and Telephone Interviewing." *Nonprofit and Voluntary Sector Quarterly* 30 (3): 495-504.

- Komter, Aafke E. (editor). 1996. *The Gift: An Interdisciplinary Perspective*. Amsterdam: Amsterdam University Press.
- Lee, Lichang, Jane Allyn Piliavin and Vaughn R.A. Call. 1999. "Giving Time, Money, and Blood: Similarities and Differences." *Social Psychology Quarterly* 62(3): 276-290.
- Manski, Charles F. 1995. *Identification Problems in the Social Sciences*. Cambridge: Harvard University Press.
- Morgan, James N., Richard F. Dye and Judith H. Hybels. 1977. "Results from Two National Surveys of Philanthropic Activity." In *Research Papers Sponsored by The Commission on Private Philanthropy and Public Needs, Volume I: History, Trends, and Current Magnitudes*. Washington, DC: U.S. Department of the Treasury.
- Nonprofit Almanac: The New Nonprofit Almanac and Desk Reference*. 2002. San Francisco: Jossey-Bass.
- O'Neill, Michael and William L. Roberts. 2000. *Giving and Volunteering in California*. San Francisco: University of San Francisco.
- Rooney, Patrick M., Kathryn S. Steinberg and Paul G. Schervish. 2001. "A Methodological Comparison of Giving Surveys: Indiana as a Test Case." *Nonprofit and Voluntary Sector Quarterly* 30 (3): 551-568.
- Schervish, Paul G. and John J. Havens. 1998. "Embarking on a Republic of Benevolence? New Survey Findings on Charitable Giving." *Nonprofit and Voluntary Sector Quarterly* 27 (2): 237-242.
- Schiff, Jerald. 1990. *Charitable Giving and Government Policy: An Economic Analysis*. New York: Greenwood Press.
- Slemrod, Joel. 1989. "Are Estimated Tax Elasticities Really Just Tax Evasion Elasticities? The Case of Charitable Contributions." *Review of Economics and Statistics* 71(3): 517-522.
- U.S. Census Bureau. 2001. *Statistical Abstract of the United States, 2001*. Washington, D.C.: U.S. Government Printing Office.
- Thiessen, Victor. 1968. "Who Gives a Damn? A Study of Charitable Contributions." Ph.D. dissertation, University of Wisconsin.
- Vesterlund, Lise. 2001. "Why People Give." Mimeo, University of Pittsburgh.

Appendix A. Questionnaires in the Six Surveys.

This appendix reproduces the question sequences used in the six surveys. Text appearing in italics are my clarifying notes, but otherwise the text appears exactly as in the questionnaires. Question numbers are retained as they appear in the instruments should the reader want to locate these questions in the original questionnaires.

Giving and Volunteering in the United States, 1996

Q. 23 Listed on this card are examples of many different fields in which people and families contribute money or other property for charitable purposes. I mean making a voluntary contribution with no intention of making a profit or obtaining goods and/or services for yourself. In which, if any, of the fields listed on this card have you and the members of your family or household contributed some money or other property in 1995? Just read off the letter of each field.

Health organizations
Education
Religious organizations
Human services
Environment
Public/society benefit
Recreation - adults
Arts, culture, and humanities
Youth development
Private and community foundations
International/foreign
Other (SPECIFY)

Interviewer Note: For each item in Q23, "including any contributions through payroll deduction to this area"

For each area checked in Q23, ask Q24 thru Q25.

Q. 24 I see you did contribute some money or other property to (**area in Q23**). Did you and the members of your family or household contribute only to one organization or more than one?

Q. 25 Approximately how much money and/or the cash equivalent of property have you and the

members of your family or household contributed to (area in Q23) in 1995?

If respondent is not sure, ask for best estimate. If the respondent still cannot answer, and only if no answer given, ask Q25a.

Q. 25a For each of the areas in which you contributed money, which categories on this card best describes how much you and the members of your family gave?

The card displayed ten bracketed categories with boundaries at 25, 50, 100, 150, 200, 250, 300, 350, and 400 (or more) dollars.

The General Social Survey, 1996

Q. 630 Listed on this card are examples of many different fields in which people and families contribute money or other property for charitable purposes. I mean making a voluntary contribution and not with the intention of making a profit or obtaining goods and/or services for yourself. In which, if any, of the fields listed on this card have you or members of your family or household contributed some money or other property in 1995? Just read off the letter of each field.

Health

Education

Religious organizations

Human services (difference between this and Public/society benefit?)

Environment

Public/society benefit

Recreation - adults

Arts, culture, and humanities

Work-related organization

Political organizations or campaigns

Youth development

Private and community foundations

International/foreign

Informal-alone-not-for-pay

Other (SPECIFY)

Q. 631 Approximately how much money or the cash equivalent of property have you contributed in each of the fields listed above in the past twelve months?

Giving and Volunteering in California, 2000

Now I have some questions about giving money or goods to charitable organizations. We know that some people give money or goods to charitable or other nonprofit organizations, while others, for a variety of good reasons, choose not to give. So don't be concerned if you have not contributed. Remember that nonprofit organizations include those we traditionally think of as charitable, religious organizations, and so-called public organizations, like public television.

But before I ask some specific questions about charitable contributions, I need to know a little about your household.

Several questions then ascertain the number of adults in the household, their relationship, the respondent's position in the household, and whether the respondent makes contributions jointly with a spouse, and if not, does the respondent know how much the spouse gives. These questions are used to determine whether the respondent is asked about his or her own giving only or that giving along with the spouse's giving. After these questions have been asked, the interviewer says:

I have one final definition before we begin. Donations can include money or goods. By goods I mean things like articles of clothing, furniture, a car, works of art, or other things. Please make the best estimate you can of the dollar value of any goods you have given. You may use the purchase price for new goods, market value for works of art, or resale value, say at a yard sale, for used goods. If you have claimed a value on your income tax return, use that value. Any questions?

Q. 52 In the past 12 months, have you (and your spouse/partner) made one or more than one donation by paying to attend a charity or other nonprofit event, whether or not you actually went or by sponsoring someone in an event like a walkathon or marathon?

If "yes" interviewer asks Q. 74-79. If no, the interview continues with the next method (Q. 53).

Qs. 74-78 ask the name of the organization, what it does (if not clear from the name), and whether and how the respondent was asked to donate. Then the respondent was asked:

Q. 79B [IF ONE DONATION] What was the value of this donation in dollars? Include the value of goods as well as money.

Q. 79B [IF MORE THAN ONE DONATION] Thinking of all of the donations of this type what was the approximate total value of these donations during the last 12 months?

After ascertaining the amount corresponding to Q. 52, the next method is queried:

Q. 53 In the past 12 months, have you (and your spouse/partner) made a charitable donation by using payroll deductions?

This pattern was repeated, asking about contributions made (1) “in memorial”, (2) to Churches, Temples, Synagogues, and Mosques, (3) by sending amounts directly to health, education, arts, social service, and international organizations, (4) in response to requests from family and friends, (5) co-workers, (6) door-to-door collectors, (7) telephone and internet requests, (8) media appeals, (9) mail solicitation, and (10) without being asked. Affirmative responses to any of these led to the Q. 74-79 sequence to determine amounts, except for contributions to churches, etc. In that case, regular and special amounts were separately queried.

After this, five “one-shot” questions were asked about amounts contributed (1) by playing charity-sponsored games, (2) in public cash boxes, (3) in the form of food and clothing, (4) by giving art to a museum, and (5) in “any other ways”. For example:

Q. 65 In the past 12 months, approximately how much did you (or members of your family) spend on charity-sponsored games or premiums, e.g., raffles, lottery tickets, bingo, girl scout cookies, or coupon books, or other items? Please don't include government sponsored lotteries such as Lotto or money you previously mentioned.

Canadian National Survey of Giving, Volunteering and Participating, 1997

CI01 Now I have a few questions about financial contributions to charitable and non-profit organizations.

Then whether giving decisions are made on the respondent's own, jointly with a spouse, or a mixture of the two is determined. This determines the framing of the next question.

CI03 I would like to know if

*you (for respondents who decide "on own" or with a mixture of that and joint)
you and your spouse/partner (for respondents who decide jointly)*

have made any financial contributions to a charitable or non-profit organization in any of the following ways in the past 12 months.

For the "mixture" decision-makers, the following was then added:

Please include donations made by you personally or donations made jointly with your spouse/partner.

CQ03A In the past 12 months, have you made a charitable donation by responding to a request through the mail?

If "yes" interviewer asks CC04 to CQ10. If no, the interview continues with the next method (CQ03B).

CC04 to CQ07 ask the name of the organization, what it does (if not clear from the name), the amount given, and whether the donation was "joint" or "personal" (there was no CQ08 or CQ09). Then CQ10 asks if any other donations were made by this method (e.g., through the mail), and if so repeats CC04 to CQ07 for each such donation.

CQ03B IN THE PAST 12 MONTHS, have you made a donation by paying to attend a charity event? (PLEASE DO NOT INCLUDE ANY DONATIONS YOU HAVE ALREADY MENTIONED TO ME.)

This pattern was repeated, asking about contributions made (1) through payroll deduction, (2) sponsoring someone in an event, (3) "in memoriam", (4) in response to requests from a co-worker, (5) a door-to-door collector, (6) shopping centre collector, or (7) a telephone

caller, (8) through a collection at a Church, Synagogues, or Mosque, (9) in response to a request made over television or radio, (10) by approaching an organization on one's own, and (11) by "any other way". Affirmative responses to any of these led to the CC04 to CQ10 sequence to determine amounts.

This was followed by some questions about tax effects and motives. Then four additional ways of donating were queried using a different format. For example whether the respondent bought a charity-sponsored raffle or lottery ticket, and if so, for how much and whether the purchase was "personal" or "joint". The three other ways queried were attending a charity sponsored bingo or casino, (2) making a purchase whose proceeds went to a charity, and (3) giving at a public cash box.

National Study of Philanthropy, 1974

C1. (SRC version) Now we have some questions about your contributions of money, property, or possessions. Let's start with your contributions to religious or other charitable organizations. Did you (or your wife) give anything in 1973 to a religious organization or to other charities such as the United Way, Heart Association, educational institutions, or other things like these?

(CENSUS version) Now we have some questions about your contributions of money, property, or possessions. Let's start with your contributions to religious or other charitable organizations, community groups and educational institutions, but not political or social groups. Did you (or your wife) give anything in 1973 to such organizations, including your church, a college, the United Way, the Heart Association, or other things like these? (88.0)

C2. Did these contributions amount to more than \$100?

If the answer to either C1 or C2 was "no" the respondent was skipped out of the remaining giving questions.

C3. To what organization did you give the most in 1973?

C4. Tell me about the (first) organization you just mentioned. Did you give money, or did you give property or possessions?

If money was given: C5. How much money did you give to that organization in 1973?

If property was given: C6. What type of property or possessions did you contribute?

C7. About how much was this worth when you gave it?

Several questions about the reasons why the respondent gave to this organization were asked. Then:

C16. Are there other organizations to which you also gave a large portion of your total gifts in 1973 (MONEY AND PROPERTY OR POSSESSIONS)?.

This led to a repetition of the previous pattern for up to three additional organizations. Then the respondent was asked:

C23. Aside from the organizations we have talked about, how many other organizations did you contribute to in 1973?

C24. Now, if we add up all your contributions of money and property or possessions, what would the total come to for 1973?

The respondent was also asked whether his wife made any gifts not included in his previous and, if so, what was the amount of those gifts.

Philanthropy Panel Study, 2001

T-INTRO. In this next to the last section, we will be talking about donations of time and money to charitable organizations.

Charitable organizations include religious or non-profit organizations that help those in need or that serve and support the public interests. They range in size from national organizations like the United Way and the American Red Cross down to local community organizations. They serve a variety of purposes such as religious activity, helping people in need, health care and medical research, education, arts, environment, and international aid. Our definition of charity does not include political contributions.

Donations include any gifts of money, assets, or property made directly to the organization, through payroll deduction, or collected by other means on behalf of the charity. This interview is limited to donations made during the calendar year 2000.

T1. During the year 2000, did [you/you or anyone in your family] donate money, assets, or property with a combined value of more than \$25 to religious or charitable organizations?

If the answer was “no” the respondent was skipped out of the remaining giving questions. Otherwise, the respondent was asked:

T2. Did you make any donations specifically for religious purposes or spiritual development, for example to a church, synagogue, mosque, TV or radio ministry? Please do not include donations to schools, hospitals, and other charities run by religious organizations. I will be asking you about those donations next.

If the answer was “no” the respondent was skipped to a question about giving to combined funds. Otherwise, the respondent was asked:

T2a. Altogether, what was the total dollar value of all donations [you/you and your family] made in 2000 towards religious purposes?

If the response was “don’t know” or a refusal, the respondent asked to place the amount of the gift with one of a set of unfolding brackets. For giving to religious purposes the brackets were set at: \$100, \$300, \$1,000, and \$2,500. For giving to all other purposes the brackets were set at: \$100, \$200, \$500, and \$1,000.

If the respondent had given to religious purposes then the respondent was asked:

T3. Not counting the donations you just told me about, did [you/you or anyone in your family] donate to any organization that served a combination of purposes (during 2000)? For example, the United Way, the United Jewish Appeal, the Catholic Charities, or your local community foundation?

If the respondent had NOT given to religious purposes then the respondent was asked:

Did [you/you or anyone in your family] donate to any organization that served a combination of purposes (during 2000)? For example, the United Way, the United Jewish Appeal, the Catholic Charities, or your local community foundation?

If the response was “yes” then an amount was queried just as was done in T2. This process was repeated asking about gifts to: (1) organizations that help people in need of food, shelter, or other basic necessities, (2) health organizations, and (3) educational organizations. Then the respondent was asked:

T7. Not counting any donations you already told me about, did [you/you or anyone in your family] make donations (during 2000) of money, assets, or property to charitable organizations with purposes other than those we just talked about? For example, to...

- a. Youth and family services?
- b. Arts, culture, and ethnic awareness?
- c. Improving neighborhoods or communities?
- d. Preserving the environment?
- e. International aid or world peace?
- f. Any other charitable purpose or organization we did not mention?

If the answer to any of these was “yes” the respondent was asked to provide a total amount given. That is T7 obtained information about giving to up to six purposes, but the amount queried was not disaggregated across those purposes.

The entire questionnaire can be viewed at:

http://www.isr.umich.edu/src/psid/cai_doc/2001_Interview_Year/Section_T____Philanthropy.htm

Appendix B: Additional Tables

Table B.1. Bounds on the Incidence of Giving

Bound	GVUS	GSS	GVC	GSGVP	NSP	PSID
Sharp upper bound	0.943 ^a	0.803	0.987	0.922 ^b	0.910	0.809
Upper bound if survey non-response is ignorable	n.a. ^a	0.741	0.963	0.900 ^b	0.880	0.709
Lower bound if survey non-response is ignorable	0.703	0.708	0.954	0.899	0.880	0.708
Sharp lower bound	0.135	0.539	0.335	0.704	0.670	0.465
Sample size	2,424	1,270	2,037	15,745	2,802	4,463

Notes: This table corresponds to Figure 2 in the text. Respondents are heads of households or their spouses only.

^a All incidence item non-response was imputed to zero in the raw data.

^b Incidence item non-response was imputed (probably to zero) for 13 out of 17 components in the raw data.

Table B.2 Lower Bound Distributions of Giving (Unconditional).

	GVUS	GSS	GVC	CSGVP	NSP	PS
First decile	0	0	1	0	0	0
Second decile	0	0	39	18	5	0
Third decile	0	0	113	43	5	0
Fourth decile	31	24	199	78	5	168
Fifth decile	122	93	328	130	5	336
Sixth decile	293	204	507	199	902	576
Seventh decile	500	366	790	300	1,353	994
Eight decile	885	732	1,313	461	2,255	1,920
Ninth decile	2,056	1,830	2,533	893	4,285	3,442
Number of observations	2,424	1,270	2,037	15,745	2,802	4,463

Notes: Lower bounds (in sample item missings set to zero), heads and spouses, adjusted to 1999 dollars using household income, nonresponse assumed to be ignorable, weighted. Incidence is the frequency of occurrence; deciles, averages, and maxima are in dollars; numbers of observations are unweighted.

Notes: The n=6,525 from the PS do not include proxy respondents (n=138), splitoffs (n=553), or recontacts (n=240). Incidence in the PS indicates whether the respondent gave more than \$25; in the other surveys there is no such threshold. The PS amounts in column 2 are in year 2000 dollars, but the amounts from the other data sets are in 1999 dollars; the implication is that the PS amounts should be reduced by four percent when comparing to the other data sets. This is done in column 3.

Table B3. Tests of Equality of Conditional Distributions of Giving with *Giving and Volunteering in the U.S.*: Differences in Shapes Conditional on Equivalent Location

Datasets	Quantiles		
	10, 20, 30	40, 50, 60	70, 80, 90
<i>General Social Survey (GSS)</i>	Med. mult.	Different shapes	Med. add. Avg. add. Avg. mult.
<i>Giving and Volunteering in California (GVC)</i>	Med. mult.	Different shapes	Med. add. ^a Med. mult. Avg. add. Avg. mult.
<i>Canadian National Survey of Giving, Volunteering and Participating (CSGVP)</i>	Different shapes	Different shapes	Med. mult. Avg. mult.
<i>National Study of Philanthropy (NSP)</i>	Different shapes	Different shapes	Avg. mult.
<i>Philanthropy Panel Study (PS)</i>	Different shapes	Different shapes	Med. mult.

Note: Replicates Table 5 but with various shifts of the GVUS distribution to align its central location with the comparison distributions. Because the central locations are equivalent by construction, a rejection of the equality of the comparison quantiles to the shifted GVUS quantiles indicates that the shapes of the distributions at those quantiles differ. Failure to reject indicates that the shapes of the distributions at those quantiles are similar.

Four shifts are considered and are described below. If the shift is listed in the table, it means that the comparison distribution and the GVUS distribution shifted in the indicated manner had similar shapes at those quantiles.

Description of the shifts:

Median additive—move the median of the GVUS distribution to the median of the comparison dataset using an additive adjustment.

Median multiplicative—move the median of the GVUS distribution to the median of the comparison dataset using a multiplicative adjustment.

Average additive—move the average of the GVUS distribution to the average of the comparison dataset using an additive adjustment.

Average multiplicative—move the average of the GVUS distribution to the average of the comparison dataset using a multiplicative adjustment.

^a The top quantiles of the GVC were equivalent to those of the GVUS prior to any location shifts (see Table 5). The location shifts in the present table do not reverse this result.