# Who are the Alumni Donors? Giving by Two Generations of Alumni from Selective Colleges

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#### Abstract

Using data on former students of 14 private colleges and universities, this paper examines patterns of alumni giving. The data are taken from the College and Beyond survey, which covers individuals who entered one of the institutions in the falls of 1951 and 1976. Contributions by these former students to these colleges and universities tend to be quite concentrated, with half of all donations being given by the most generous 1 percent of the sample. Higher levels of contributions are associated with higher income, having participated in extracurricular activities in college, having had a mentor in college, and the degree of satisfaction with one=s undergraduate experience. The projected donations for the most generous of these alumni over the course of their lifetimes are quite high, with totals for the 1951 cohort exceeding those from the 1976 cohort.

# Who are the Alumni Donors? Giving by Two Generations of Alumni from Selective Colleges\*

#### Charles T. Clotfelter

Donations by alumni are a significant source of revenue for private colleges and universities, and their importance promises to grow in the future. In 1997/98, alumni contributed \$3.3 billion to 658 private institutions, representing 7.9 percent of their educational and general expenditures (Morgan 1998, pp. 38-39). In the wake of a sustained bull market in stocks, some recent university capital campaigns have easily surpassed their ambitious goals. And, as market forces cause tuition increases in private institutions to moderate, as they appear to be doing, income from donations seems likely to assume an increasingly important role in total revenues.

Yet some close observers have raised cautionary flags about the prospects of sustained growth from this source. One fear is that much of the generosity of the current cohort of givers is unique to that generation, that it will be lost when that cohort passes from the scene. In examining rates of volunteering, for example, Goss (1999) finds that the generation now in its retirement years has volunteered at rates unlikely to be matched by subsequent generations.

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Another fear arises from the increasingly meritocratic admissions policies of the most prestigious colleges and universities, whereby the sons and daughters of the social elite increasingly are passed over in favor of applicants with stronger academic credentials. Since the latter tend to come from less wealthy families than the former, these new types of students may give less as alumni than the previous generations of alumni did. This reasoning lies behind Willemain et al.=s (1994) speculation about what they view as the Ademocratization@ of admissions at Princeton during the 1920s. They argue that changes in admissions practices there reduced the prevalence of students from wealthy families, resulting in a decline in the average size of gifts. While neither of these fears is inconsistent with previous research on alumni giving, there is little other work addressing them. More generally, previous studies of alumni giving have not had the luxury of detailed personal information about individual donors at a set of different institutions. (For previous statistical analyses of alumni giving, see, for example, Grant and Lindauer, 1986, Leslie and Ramey, 1988, Lindahl and Winship, 1992, and Willemain, et al., 1994. For treatment of the normative issues surrounding how many resources to devote to raising funds from alumni, see Rooney, 1999).

Using data on alumni from 14 selective private colleges and universities, this paper does three things. First, it describes some interesting aspects of alumni giving, including its constancy, its concentration, and its pattern over time. Second, it compares the level of giving by alumni from two generations, noting the inherent difficulties in such a comparison. Third, it examines how this giving varies according to other variables. The following section describes the data used, using them to trace changes in the types of students who attend these selective institutions. The second section presents information on some of the most striking patterns of alumni

contributions made evident in this data set. The third section compares the amount given by alumni in the two oldest cohorts. The last section is a summary and conclusion.

## I. The Sample Institutions and Their Changing Student Bodies

The data used for this study are based on the College and Beyond survey, which assembled information for three cohorts of individuals who enrolled in a sample of 34 colleges and universities in 1951, 1976, and 1989. (See Bowen and Bok, 1998, Appendix A, for a description of the survey). These individuals were surveyed in 1995 and 1996 and were asked questions covering both their college experience and aspects of their current situation. For each former student the information collected in the survey questionnaire was joined with the student records maintained by the institutions, including such items as courses taken, extra-curricular activities, and honors received. Although not all of the individuals in the resulting sample graduated from these colleges and universities, the vast majority did, and so they are referred to throughout the paper as alumni. For a subset of 14 of these institutions (all of them private), additional data were collected from the institutions own administrative files on each persons contributions for a number of years. This sample of 14 private colleges and universities constitutes the sample for this study.

As has been noted elsewhere, admissions policies at the elite private colleges have changed markedly since World War II, resulting in a decline in the prevalence of children of privilege (Lemann, 1999). The data in the current sample provides an illuminating reflection of this change. Table 1 presents average values for the sampled alumni from all of the 14 sample institutions for which data were available for all three cohorts. To neutralize the effect of changes in relative sample sizes, the figures are weighted so as to give each institution the same weight in each year.

The table reveals some significant changes over this period. Reflecting the trend toward coeducation in undergraduate schools and colleges, the proportion of males in the sample fell from 72 percent in 1951 to 52 percent in 1976. Equally striking is the effect of the opening of admissions to racial and ethnic minority groups, which led to a decline in the percentage white from 98 to 89 percent, a trend that continued past 1976. In the only trend that was not monotonic over the period, the percentage of students from public high schools rose between 1951 and 1976, and then fell again. A similar increase and decline in the public school percentage was observed among freshmen at all private universities and private nonsectarian colleges between 1967 and 1995 (Clotfelter, 1999, p. 9).

Students in the sample institutions were more likely over time to have parents who graduated from college, reflecting the society-wide advance in educational attainment. More striking than this change is the improvement in measured academic quality of students and the broadening geographical appeal of these institutions. Between 1951 and 1976, the average high school rank for these freshmen rose from the 77<sup>th</sup> to the 91<sup>st</sup> percentile, and the average SAT score increased by a remarkable 129 points, with the improvement in both measures continuing to 1989. (See Bowen and Bok, 1998, Figure 2.6, p. 30, for a similar comparison of average SAT scores at four institutions for he three cohorts.) Both of these trends are consistent with the findings of Cook and Frank (1993) and Hoxby and Terry (1998), who show that top students have become more concentrated in a relatively small number of elite institutions. The proportion who attended college in their home state or a bordering state dropped between 1976 and 1989, reflecting the increasing national character of the elite higher education market, a development analyzed by Hoxby (1997). In short, the enrollment patterns in this group of private colleges and

universities did indeed shift over this period. Because most of the 1989 cohort had only just graduated when the survey was conducted, and therefore would have had little opportunity to establish giving patterns, that cohort is omitted from the remainder of the analysis. The sample is further limited by the availability of data. Three institutions provided no data on the 1951 cohort. The resulting data set includes a total of 2,910 individuals for the 1951 cohort and 7,995 for the 1976 cohort. In addition, the number of years of giving data covered differs from institution to institution. Most of the institutions provided giving data, at a minimum, for all of the years from 1991 to 1995.

## II. Giving by Two Cohorts of Alumni: How Much Did They Give?

A natural first question to ask about alumni giving is, simply, how much did they give? Information on giving was collected for four categories: athletics, financial aid, other restricted purposes, and unrestricted. Table 2 shows, by cohort, both the percentage who made contributions in each category and the average amount of contributions for those who did make a contribution. It is clear that relatively few alumni placed any restriction on their gifts, as shown by the low percentages for the three specified categories. Among those who made contributions for those restricted purposes, however, the average gift was in most cases higher than the average for all contributions. Those in the 1951 cohort gave at a higher rate than those in the 1976 cohort; while half of the older cohort made gifts in 1995, only about 32 percent of the younger cohort did. Among those who made donations, average gifts from the 1951 cohort were also much higher (\$1,506), over twice as high on average than those from the younger cohort (\$681). Reflecting the degree to which these mean values are influenced by a relatively small number of

big gifts, the median giving for those who gave in 1995 was \$155 for the 1951 cohort and \$98 for the 1976 cohort. Taking into account both the rate of giving and the average donations for those who did make gifts, the average donation for all alumni was \$751 in the 1951 cohort, compared to only \$216 in the 1976 cohort, representing almost a 3.5:1 ratio.

While published data on aggregate donations are not broken down by age, they can be used as a rough check of the magnitudes of these average levels of donations, and they are in fact similar. Averages based on alumni of all ages in 13 of the 14 institutions covered in the College and Beyond sample reveal that 41 percent of alumni in the liberal arts colleges and 31 percent of those in the private universities made donations in 1995, with average gifts for those who gave of \$834 and \$1,267, respectively (Morgan, 1996).

Quite clearly, the alumni from the 1951 cohort gave at much higher levels on average than the younger cohort did. This disparity by itself does not indicate, however, that the older alumni were more Agenerous. When comparing the behavior of the 1951 and 1976 cohorts, it must be remembered that any observed differences in behavior could be the result of one or more of four different effects: composition, cohort, life-cycle, or income. First, the observed differences in behavior between the cohorts could be due to the kinds of changes in the composition of the sample colleges and universities= student bodies -- in terms of gender, geography, race, and economic status -- that are evident in Table 1. It is possible, as Willemain et al. (1994, p. 627) argue for the case of Princeton, that the Ademocratization of admissions, that is, the reduction in the share of students from wealthy families, will lead to a reduction in donations from younger cohorts.

Second, differences between classes separated by as much as two and a half decades might

easily be due to a Acohort effect, one that is generation-wide. In the present case, cohort effects might be present because the members of the 1951 and 1976 cohorts are literally members of different generations -- one that experienced World War II as teenagers, the other the end of the Vietnam War. Such contrasts in historical periods will envelope differences in life experiences of many dimensions, so that contrasts between the generations= Aworld views cannot be captured adequately with any set of objectively measured variables.

A third possible reason for observed differences is life-cycle effects, those arising from age alone. At the time this survey was taken, the 1951 and 1976 cohorts were, naturally, at different points in their life-cycles. Those in the 1951 cohort would have been 62 years old and would normally have celebrated their 40<sup>th</sup> reunion in 1995. Those in the 1976 cohort would have been only 37 and celebrating their 15<sup>th</sup> reunion year. As documented by many econometric studies of charitable giving, contributions tend to rise with age, independent of income. Auten and Joulfaian (1996), for example, present regression estimates implying that contributions in the 55-64 age bracket exceeded those in the under-45 bracket by a ratio of 2.4:1.<sup>2</sup>

The fourth reason why we might expect the older cohort of alumni to give more is perhaps the most obvious: their incomes are likely to be higher. Every empirical study of charitable giving confirms the existence of a strong positive income effect on charitable giving. Before analyzing these four effects in more detail, it would be incomplete not to acknowledge an additional factor that probably influences the level of alumni giving, and which could explain part of the observed difference between cohorts. This is the fundraising effort expended by the colleges and universities. Although there is little statistical research on this effect, it seems reasonable that these efforts do influence the number of donors and the average size of gifts.

One yardstick for assessing the 3.5:1 ratio of giving between the 1951 and 1976 cohorts documented in Table 2 is Grant and Lindauer=s (1986) study of alumnae contributions to Wellesley, which analyzed average donations for 60 graduating classes. Because their data were essentially a snapshot of giving by different classes, one would expect the differences they observed to be a combination of cohort, life-cycle, and income effects. Their estimated regression for average donations suggests that 62-year old alumnae on average gave roughly three times as much as 37-year olds, slightly less than the gap evident in the College and Beyond data.

Considering the fact that the observed differences between 1951 and 1976 cohorts may contain the effects of income and life-cycle effects as well as a cohort effect, it is by no means obvious that one of these cohorts is any more generous than the other. While there is every reason to think that changing admissions criteria over time have altered the mix of students who attend these selective institutions, these data, as rich as they might appear, cannot isolate a measurable cohort effect.

One logical extension of viewing alumni giving over the life cycle is to ask how much that giving adds up to over a lifetime. Since one oft-cited motivation for alumni giving is a desire to Apay back@the institution (see, for example, Leslie and Ramey 1988, p. 21), it would be interesting to know the total value of a person-s lifetime contributions. Indeed, this is a question that would be of considerable practical importance to university administrators in their long-range financial planning. The current data provide a window of at least a few years out of something like five decades of post-graduate life to observe a person-s contributions. Using an assumed agegiving profile in which giving rises until about age 70, I used the observations obtained from the College and Beyond data to infer estimates of lifetime giving. For each person the present value

of this lifetime giving was calculated, as of age 22. For those alumni who made no donations during the period of coverage, lifetime giving was assumed to be zero. More details about this calculation are given in a companion research note in this issue.

Table 3 shows the resulting distribution of putative lifetime giving by these alumni. The top portion of the table shows that 30 percent of the 1951 cohort and 42 percent of the 1976 cohort were projected to make no gifts over their lifetimes, based on their failure to make any donation during the sample period. At the other end of the distribution, some 4 percent and 1 percent of the alumni, respectively, were projected to give more than \$50,000 over the course of their lives. Average lifetime giving was projected to be almost \$12,000 for the members of the 1951 cohort, compared to about \$7,700 for the 1976 cohort, or about 1.56 times higher for the 1951 cohort than for the 1976 cohort. Due to the large number of alumni who are projected to give nothing over their lifetime, the median values for putative lifetime giving are small, \$771 for the 1951 cohort and \$294 for the 1976 cohort. In judging these figures it should be recalled that these calculations assume that a person-s donations increase over his or her lifetime in a way that is determined by the estimated equation of Grant and Lindauer (1986). If a higher growth rate were assumed, the 1.56 ratio would decline, and vice versa. In any case, however, the most important implication of the calculation is that only a minority of alumni give substantial amounts over their lifetimes.

One yardstick by which these projected quantities can be judged is the tuition level that existed when these alumni entered college. How many alumni will donate over their lifetimes enough, for example, to pay for one years worth of tuition, at the level they knew it when they were in college? If ever there were a moving target, this would be it. Still, it seems a particularly

apt amount for comparison. Among the 14 institutions in the current sample, the average tuition in 1951 was a paltry \$3,350 in 1997 dollars, while by 1976 it was \$10,677 (*Lovejoy*=7, 1952 and Cass and Birnbaum, 1977). Comparing those figures to the distribution of projected contributions considerably widens the difference between the cohorts. Whereas 28 percent of the 1951 cohort are projected to contribute at least one year=8 tuition amount, only about 7 percent of the 1976 cohort are.

## III. Patterns of Alumni Giving

Because they contain both yearly data on giving and detailed survey information, the College and Beyond data offer an unusual opportunity to document several interesting features of alumni giving. For example, directors of development or alumni affairs are keenly aware that alumni differ in the regularity of their giving, ranging from dependable annual givers to Aneverevers. The panel nature of this data set provides a clear picture of how alumni differ in this regard. Table 4 divides the present sample according to the number of years they made contributions during the 1991-1995 period. It shows that most alumni fall into one of the two extreme groups. An impressive 27.5 percent of those in the 1951 cohort made contributions in each of the five years, while about half that percentage showed the same level of constancy among the younger cohort. At the other end of the spectrum, over a third of the 1951 cohort and over half of the 1976 cohort made no contributions at all during this period. Least common among both cohorts were those who made gifts in only a few years. One pattern that one might expect to observe would be giving in only one year, that being the reunion year. Although these data suggest such a pattern, the effect does not appear to be large. The percentage of alumni who

gave in only one of the five years was 8 and 11 percent, respectively. And, as shown in Table 5, while the percentage giving among both cohorts was indeed highest in 1995, corresponding to the reunion year for those in both cohorts who finished college in four years, the difference seems surprisingly small. The more important effect of the reunion year appears to be in the amount given. As Table 5 indicates, the average amounts given during 1995 were well above the five-year average for each cohort, although in neither case was 1995 the highest, a finding similar to that of Willemain, et al. (1994, p. 623) study of Princeton alumni giving.

One other noteworthy feature of giving that leaps out from the data (and one that is surely not lost on development officers) is its very high degree of concentration, a feature noted in previous research, such as Lindhahl and Winship (1994). Table 6 shows the percentage of total contributions made during the 1991-1995 period made by donors, ranked by size of gift. It is evident that the bottom 40 percent of both cohorts gave virtually nothing over this period. The next 40 percent gave a relatively small fraction of the total, leaving the bulk of the giving for the most generous fifth of alumni. In fact, half the dollars given by the 1951 cohort was donated by just 1 percent of its members; for the 1976 cohort that top 1 percent gave 65 percent. Considerable concentration exists even among those who donate something. In this group the top 20 percent contributed 90 percent of all gifts in the 1951 cohort and 88 percent in the 1976 cohort, showing that alumni giving is somewhat more concentrated than the benchmark given by the A80/20 rule@in marketing (also known as Pareto=s law, or the Alaw of the heavy half,@Buell, 1986, pp. 8-10, which states that the most active 20 percent of consumers normally account for 80 percent of total spending on a commodity). It is no wonder that development officers devote a disproportionate share of their attention to a relative handful of alumni donors.

What kind of alumni contribute, and contribute the most? To give a sense of this, Table 7 shows how the giving rate and average size of donation, both defined for the five-year period 1991-1995, differ according to a number of personal characteristics. For the entire sample, 63 percent of the 1951 cohort made at least one contribution over the period, compared to 48 percent for the 1976 cohort, percentages that can also be inferred from Table 4. Average giving over the entire period for those who made any donation B in contrast to 1995 giving only, as in Table 2 -- was \$899 and \$270, respectively. By gender, although men and women were about as likely to make any gift, the average size of gifts from male donors was over twice as large as that for women. This disparity apparently has been a concern at previously all-male institutions that became co-ed. Giving patterns also differed markedly with income level, with those in the top income class being much more likely to give than those below and having a considerably higher average as well. Political philosophy, on the other hand, shows no systematic relationship to giving. Alumni who had leadership positions in extra-curricular activities gave more than those who did not. Those who remembered someone who took a special interest in them during college were also more likely to give, and to give more. Having graduated from the institution where they first enrolled was strongly related to giving. Legacies, those who had relatives who had previously attended the institution, tended to make larger gifts, and they were slightly more likely than other alumni to give at all. Regarding the type of high school attended, there is no clear effect discernible from these averages. SAT score shows little relation to giving among the 1951 cohort, for those who reported such a score. For the 1976 cohort, however, SAT score was positively related both to the propensity to give and the average level among donors. Those who had received honors, including Phi Beta Kappa, gave more.

The next three items in Table 7 reflect answers to attitudinal questions. The first among these reveals that an overwhelming majority of respondents were Avery satisfied@with their undergraduate institution (though the percentage was lower for the younger cohort). Not surprisingly, those who reported being satisfied were more active contributors than those who were not. Similarly, those who were dissatisfied with various specific aspects were less likely to give, and give a lot.

The last three items refer to characteristics of the institutions rather than the respondents. Those who entered liberal arts colleges were more likely to give than those who enrolled in universities, but average giving for those who gave was higher among college alumni only for the 1951 cohort. When institutions were divided by tuition level, there was no systematic pattern for giving, but there does seem to be a relationship to the institutions degree of selectivity in admissions for 1976. For that cohort, the alumni from the most selective institutions were most likely to give, and those givers had the highest average giving.

It is instructive to examine the interaction between two of the strongest factors noted in Table 7: income and satisfaction with the undergraduate institution. Income, of course, has been shown in previous work on charitable giving to be highly correlated with total contributions. That expressed satisfaction should also be important simply seems intuitive. Table 8 presents average giving by income class and degree of satisfaction with the undergraduate college where respondents first enrolled. Almost without exception, in both cohorts, giving rises with income. It is also generally higher within the broad income classes for those who said they were Avery satisfied, with the difference being statistically significant overall and in three of the four income classes for each cohort.

In light of the disproportionate share of total giving made by the largest donors, it is especially interesting to focus on the biggest givers. Table 9 compares the top 1 percent of givers to the entire sample, for each cohort. Not surprisingly, those who contributed the most tended to have the highest incomes, with 97 percent making \$100,000 or more. Perhaps correspondingly, they tended also to be conservatives on economic issues. They also were more likely to be leaders in volunteer activities, particularly so with alumni activities. Corresponding to the tabulations shown above, the big givers were more likely than average to have had someone who advised them in college, somewhat more likely to have been satisfied with their undergraduate experience, and much more likely to be satisfied with life in general. What may be most surprising, at least to those who feared that increasing emphasis on academic record at the expense of family connections would undermine alumni giving, is that the top givers in both cohorts had higher than average SAT scores. All of these differences are statistically significant.

#### IV. Conclusion

Using a rich data set on two age cohorts of former students from 14 selective private colleges and universities, this paper examines patterns of alumni donations. The data come from the College and Beyond study, which combines survey data with information from the institutions= own records for two cohorts of former students. The data offer an unusual amount of information describing each former students past association with his or her undergraduate college.

Reflecting a rising emphasis on meritocratic criteria for admission to the nation=s most selective colleges and universities, the composition of these 14 institutions did change perceptibly

over the period from 1951 to 1989. They became less male, more nonwhite, and less regional, and they enrolled increasing shares of academically high-achieving students. But comparisons of giving between 1951 and 1976 cohorts do not yield any clear reason to worry that these changes will reduce the level of alumni giving to such institutions.

While the act of donating is relatively common among these alumni, the paper reveals that alumni giving is extremely concentrated, with over half of all donations being given by just 1 percent of all alumni. A surprisingly high proportion of the alumni of these private institutions contributes annually. Based on the amount of contributions they made over the period of observation, some of these alumni are projected to give substantial amounts over their lifetimes.

Of all the variables associated with alumni giving highlighted in this paper, perhaps the two most emphatic effects are those of income and satisfaction. Income, of course, has long been found to be highly correlated to charitable giving. In light of the tendency for more affluent donors to favor higher education as an object of their generosity, this strong correlation should come as no surprise. Nor should the effect of expressed satisfaction, although there exists no similar history of studies documenting that relationship, though it should be emphasized that this connection has received virtually no statistical support in the existing literature on charitable giving. (For a detailed analysis of the effect of satisfaction on alumni giving, see Clotfelter, 2000).

In considering what, if anything, these statistical findings imply for colleges and universities, it is well to begin by noting that increasing the level of alumni donations is not, nor should be, the primary aim of any institution. A means to achieving ultimate goals, probably; an indirect measure of success, perhaps; but not an ultimate objective. That said, the bulk of donations come from a relatively small number of alumni. Of course, beyond the obvious step of

focusing on alumni in high-income ZIP codes, the process of identifying and Acultivating®them is quite another matter, which is why sophisticated development offices exist in every thriving private college and university and many public ones as well. Within the age groups containing most of today=s potential big donors, little can be done to change a central determinant of alumni giving B the feelings of satisfaction about the undergraduate experiences of decades ago. For such current prospects, the only options besides the courting by development officers that are likely to have an impact in the short run will be policies likely to arouse dissatisfaction, such as a perceived shift in emphasis from teaching to research, or away from sports. Such tradeoffs are necessarily part of every president=s ongoing calculus. In contrast to these more immediate tradeoffs, the paper=s most important implications relate to long-run effects. Among them is the likelihood that improvements in teaching and advising are likely to have beneficial effects on eventual alumni giving. Although greatly attenuated by time, these benefits should still offer some comfort to institutions seeking, for quite different reasons, to improve undergraduate education.

#### References

Auten, G. and Joulfaian, D. ACharitable Contributions and Intergenerational Transfers.@ *Journal of Public Economics*, 1996, 59, 55-68.

Bowen, W.G. and Bok, D. *The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions*. Princeton, NJ: Princeton University Press, 1998.

Buell, V.P. (ed.). Handbook of Modern Marketing. New York: McGraw-Hill, 1986.

Cass, J. and Birnbaum, M. *Comparative Guide to American Colleges*, 8<sup>th</sup> ed. New York: Harper and Row, 1977.

Clotfelter, C.T. AAlumni Giving to Elite Private Colleges and Universities,@unpublished paper, April 2000.

Clotfelter, C.T. AThe Familiar but Curious Economics of Higher Education: Introduction to a Symposium. *Journal of Economic Perspectives*, 1999, 13 (Winter), 3-12.

Clotfelter, C.T. Federal Tax Policy and Charitable Giving. Chicago: University of Chicago Press, 1985.

Cook, P.J. and Frank, R.H. AThe Growing Concentration of Top Students at Elite Schools, In Clotfelter, C.T. and Rothschild, M. (eds.). *Studies of Supply and Demand in Higher Education*. Chicago: University of Chicago Press, 1993, pp. 121-140.

Goss, K.A. AVolunteering and the Long Civic Generation. *Nonprofit and Voluntary Sector Quarterly*, 1999, 28, 378-415.

Grant, J.H. and Lindauer, D.L. AThe Economics of Charity: Life-Cycle Patterns of Alumnae Contributions, *Eastern Economic Journal*, 1986, 2 (April-June), 129-141.

Hoxby, C.M. AThe Changing Market Structure of U.S. Higher Education,@unpublished working paper, Harvard University, 1997.

Hoxby, C.M. and Terry, B. AExplaining Rising Incomes and Wage Inequality Among the College Educated,@unpublished working paper, Harvard University, 1998.

Lemann, N. *The Big Test: The Secret History of American Meritocracy*. New York: Farrar, Strauss and Giroux, 1999.

Leslie, L.L. and Ramey, G. ADonor Behavior and Voluntary Support for Higher Education Institutions. *Journal of Higher Education*, 1988, 59 (March/April), 115-132.

Lindahl, W.E. and Winship, C. APredictive Models for Annual Fundraising and Major Gift Fundraising. *Nonprofit Management and Leadership*, 1992, 3 (Fall), 43-64.

Lovejoy=s College Guide 1953-54. New York: Simon and Schuster, 1952.

Morgan, D.R. *Voluntary Support of Education 1995, 1998*. New York: Council for Aid to Education, 1996, 1999.

Rooney, P.M. AA Better Method for Analyzing the Costs and Benefits of Fundraising at Universities. *Nonprofit Management and Leadership*, 1999, 10 (Fall), 39-56.

U.S. Bureau of the Census, *Statistical Abstract of the United States*, *1997*. Washington, DC: Government Printing Office, 1998.

Willemain, T.R., Goyal, A., Van Deven, M. and Thukral, I.S. AAlumni Giving: The Influences of Reunion, Class, and Year. *Research in Higher Education*, 1994, 35 (October), 609-629.

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Table 1

Three Cohorts: A Comparison of
Means/Percentages, Weighted by 1976 Enrollment Shares

	1951	1976	1989
Social and economic characteristics (%)			
Male	72	52	48
White	98	89	78
Public high school	64	67	63
Father a college graduate	52	74	76
Mother a college graduate	32	52	61
Academic preparation (mean)			
High school percentile rank	77	91	94
SAT combined	1140	1269	1289
State of residence when applied (%)			
Same state as institution	47	34	26
Bordering state	24	31	27

Note: Calculations for each measure are based on institutions with data for all three cohorts. The values for 1976 are unweighted means calculated for all individuals in the institutions applying to each measure. The means for the other two years weight individual observations so as to give each institution the same weight as its actual share in 1976. Where  $N_{k76}$  is the number of alumni of institution k in 1976 and  $N_{76}$  is the total sample size in that year, its alumni for year t is weighted by  $(N_{k76}/N_{76})/(N_{kt}/N_t)$ .

Table 2
Giving by Category, 1995

Percent who contributed in 1995			ted Average giving by category for those who gave
Cohort	1951	1976	1951 1976
Athletics Financial aid Other restricted Unrestricted	3.8 2.7 6.0 46.9	2.1 1.5 8.0 25.8	462 1,026 1,485 1,128 5,772 1,303 753 289
Total	49.9	31.7	1,506 681
N	2,910	7,995	2,910 7,995

Table 3

Present Value of Putative Lifetime Giving, by Cohort

	1951	1951 Cohort		1976 Cohort		
	Number	Percent	Nun	nber	Percent	
Present value of putative lifetime contributions (1997 \$), age 22						
\$0	869	29.9	3,888	41.8		
\$1 - 1,000	693	23.8	1,959	21.0		
\$1,001 - 5,000	692	23.8	2,146	23.1		
\$5,001 - 10,000	224	7.7	614	6.6		
\$10,001 - 20,000	154	5.3	359	3.9		
\$20,001 - 50,000	156	5.4	217	2.3		
over \$50,000	122	4.2	121	1.3		
Total	2,910	100.0	9,304	100.0		
Mean	\$11,969		\$7,671			
Median	\$771		\$294			
Percentage of average tuition in entering year covered by present value of giving (%)						
0	869	29.9	3,888	41.8		
1 - 25	621	21.3	3,286	35.3		
26 - 100	598	20.6	1,476	15.9		
101 - 300	391	13.4	441	4.7		
Over 300	431	14.8	213	2.3		
Total	2,910	100.0	9,304	100.0		

Notes: Giving in 1997 dollars estimated for ages 22 to 80, based on fitted values and observed values. Present value of that stream calculated at age 22. See Research Note, ACalculation of Putative Lifetime Donations,@for a description of the calculation.

Table 4
Constancy of Giving, 1991-1995

Cohort	1951	1976						
Percentage who contributed in:								
All 5 years	27.5	12.6						
4 years	12.7	9.3						
3 years	8.0	7.6						
2 years	6.7	8.5						
1 year	7.7	11.1						
No years	37.5	51.0						
Total	100.0	100.0						
N	2,910	7,995						

Source: College and Beyond survey; author's calculations. One institution for which no 1995 giving data was excluded from these calculations.

Table 5
Giving by Year, Combined Sample

	Percent givi	Average gi	iving, donors	
Cohort	1951	1976	1951	1976
Year				
1001	44.7	20.0	1 577	107
1991	44.7	30.0	1,577	197
1992	46.6	29.6	1,070	247
1993	45.0	28.8	888	779
1994	46.9	30.8	971	375
1995	49.9	31.7	1,506	681

Note: Based on 2,910 alumni in the 1951 cohort and 7,995 in the 1976 cohort.

Table 6
Concentration of Giving, 1991-1995

Percentage of cohort's total giving Alumni who gave All alumni Cohort 1951 1976 1951 1976 All Alumni ranked by giving 0.7 Lowest 20% 0.0 0.0 0.5 Second 20% 0.0 0.0 1.0 1.4 Third 20% 1.1 0.4 2.4 3.0 4.4 Fourth 20% 4.2 6.1 6.6 **Next 15%** 16.8 13.4 19.7 14.6 Next 4% 26.1 16.1 27.3 15.2 Highest 1% 51.6 65.8 43.0 58.5 All 100.0 100.0 100.0 100.0

Source: College and Beyond survey; author's calculations.

Table 7

1991-1995 Alumni Giving, by Selected Characteristics of Donors

Category	Туре	1951	N 1976	N 1951	Percent who gave 1976	Percent who gave 1951	Mean giving for those who gave 1976	Mean giving for those who gave
All			2,910	9,304	62.5	48.0	899	270*
Gender		Male Female	2,298 612	4,943 4,361	61.2 67.3	47.7 48.3	1,036 432	397* 126*
Household income (\$000s)	150+	865 75 under 150 30 under 75 under 30 Unspecified	2,418 987 716 172 170	73.8 3,245 2,667 584 390	61.8 61.7 53.8 47.1 62.4	1,866 50.5 37.9 25.9 42.8	649* 342 451 96 513	91* 57* 34* 125*
Political philosophy		Conservative Liberal Moderate Unspecified	1,622 548 693 47	4,182 2,423 2,554 145	62.1 65.7 62.1 46.8	50.0 44.6 48.6 35.9	1,132 398 804 310	242* 154* 417 252
Legacy status		Yes No	398 2,512	1,119 8,185	65.3 62.1	51.7 47.5	1,063 872	355 257*
Extracurricular activity		Leader or participant	150	140	78.0	67.1	1,290	1,328
		Non-leading participant Non-participant	<ul><li>223</li><li>2,537</li></ul>	324 8,840	54.7 62.3	49.4 47.6	803 877	118* 252*
Someone took an interest?(a)		Yes No	1,434 1,451	4,530 4,741	65.6 59.6	51.0 45.2	1,110 680	332* 200*

Whether graduated from institution	Unspecified Yes No	25 2,502 408	33 8,064 1,240	52.0 66.7 37.0		30.3 53.8 10.5		164 961 216		628 275* 72*
High school type	Public	1,450	6,198	63.4		48.8		1,097		246*
	Private	1,101	2,019	64.0		48.6		784		420
	Other	102	671	62.8		44.1		605		105*
	Unspecified	257	416	51.0		38.2		271		99*
Person's combined SAT Score	>1299	311	3,269	59.2		52.0		675		434
	1200-1299	438	2,116	64.6		51.0		1,012		228*
	1199-1100	476	1,716	66.8		46.7		1,437		129*
	1000-1099	320	1,055	60.3		43.2		710		123*
	<1000	219	666	69.0		39.3		864		140*
	Unspecified	1,146	482	60.2		34.7		724		143
Was institution person's first choice? Yes	2,297	6,185	64.6		52.7		921		268*	
•	No	528	2,968	54.0		38.5		603		274
	Unspecified	85	151	58.8		41.1		1,946		262
Received honors/Phi Beta Kappa	Yes	636	2,878	69.7		60.4		866		401
	No	2,156	6,239	62.1		43.2		932		187*
	Unspecified	118	187	32.2		14.4		117		42*
Overall satisfaction with institution	Very	2,128	5,999	66.7		55.5		1,012		323*
	Somewhat	555	2,444	55.3		39.1		538		106*
	Other	206	828	40.8		20.1		387		129*
	Unspecified	21	33	38.1		36.4		64		521
Dissatisfied with research or	Yes	1,323	4,274	56.7		39.4		686		205*
teaching (b)	No	1,543	4,958	67.7		55.5		1,060		309*
	Unspecified	44	72	56.8		38.9		563		297
Dissatisfied with other aspects(b)	Yes	1,975	6,768	59.3		43.4		716		270*
1 , ,	No	895	2,466	69.8		60.9		1,259		269*
	Unspecified	40	70	55.0		40.0		401		297

Liberal arts college	Yes	952	1,673	72.8	61.2	952	162*
	No	1,958	7,631	57.5	45.1	866	302*
Institution's tuition (c)	High	900	3,305	54.1	42.1	494	354
	Medium	1,168	2,903	74.1	48.0	1,157	169*
	Low	842	3,096	55.3	54.3	842	283
Selectivity of institution	High		2,961		54.2		355
•	Medium		5,712	•	45.0		233
	Low		631		46.1		124

- (a) Based on the survey question, AWhile you were an undergraduate, did anyone associated with your school, other than fellow students, take a special interest in you or your work **B** that is, was there someone you could turn to for advice or for general support or encouragement?@(Bowen and Bok 1998, p. 319, question A11).
- (b) Respondents were asked, APlease indicate how much emphasis you believe your undergraduate school *currently* places on@a number of aspects, ranking each from Aa great deal@(5) to Avery little/none (1). Then, for the same list, they were asked how much their institution *should* place on each aspect. A respondent was deemed to be dissatisfied with the institution with respect to an aspect if the difference between these two rankings was 2 or more, in either direction. The first measure applies this dissatisfaction criterion to either faculty research or undergraduate teaching. The second applies if the criterion is met for any one of another seven aspects: a broad liberal arts education, intercollegiate athletics, extra-curricular activities other than intercollegiate athletics, a commitment to intellectual freedom, a racially/ethnically diverse student body, quality of residential life, and alumni/alumnae concerns.
- (c) Information on the institution=s tuition, contemporaneous to each cohort, was obtained from college guides and summarized in three categorical dichotomous variables for each year. For the 1951 cohort, these were based on tuition figures reported in *Lovejoy=* (1952). The first was assigned the value of 1 for institutions with reported tuition of \$700 or more per year, the second for \$550-699, and the third for less than \$550. The number of institutions in these categories was three, five, and six, respectively. For the 1976 cohort, these were based on tuition figures reported in Cass and Birnbaum (1977). The first variable was assigned the value of 1 for institutions with reported tuition and fees of \$4,200 for more, second for \$3,600-4,199, and the third for less than \$3,600.

Table 8

Average Alumni Donations, 1991-1995, by Cohort, Income, and Satisfaction with Undergraduate Experience

Household						
income	Under \$30,000	\$30,000 under \$75,000	\$75,000 under \$150,000	\$150,000 and above	Not given	ALL
1951 cohort Very satisfied	123*	543	397*	2,032+	528	1,012*
Not very satisfied	24	200	144	1,233	437	506
No answer	2		114	42		64
All	96	451	342	1,866	513	899
1976 cohort Very satisfied	32	61*	103*	743 <sup>+</sup>	151 <sup>+</sup>	323*
Not very satisfied	37	46	57	268	58	109
No answer	11	31	19	1,220	11	521
All	34	57	91	649	125	270

Note: The question was, "Overall, how satisfied have you been with the education you received at the school at which you first enrolled?"

An asterisk (\*) indicates that means for AVery Satisfied@and ANot Very Satisfied@are significantly different at the 95 percent level; a plus (\*) indicates significance at the 90 percent level.

Table 9

Characteristics of Big Givers: Mean Values for Selected Variables, Top 1% and Full Sample, by Cohort

	1	951	1976		
	Top 1% of donors	Full sample	Top 1% of donors	Full sample	
SAT-combined	1188	1160	1273	1230	
College cumulative GPA	2.38	2.53	3.20	2.99	
Percentages:					
Someone took an interest	74	49	59	49	
Participated in extracurricular activities (a)	15	13	6	5	
Participated in intercollegiate athletics	26	17	29	12	
Post-graduate volunteer activity					
Leader 1994/95, any volunteer activity	82	47	65	44	
Other past or present participant	18	51	33	52	
Leader 1994/95, alumni activities	35	8	31	4	
Other past or present alumni participation	61	41	51	28	
Personal characteristics					
Married	91	85	88	80	
White	100	86	95	82	
Male	94	75	70	53	
Household income \$100,000 or more	97	49	97	46	
Attitudes					
Economic conservative	79	56	64	46	
Social conservative	29	31	19	20	
Very satisfied with life 74		57	74 43		
Satisfied with undergraduate education	100	93	97	91	
Dissatisfied w/ research or teaching	13	19	22	24	
Dissatisfied w/ other aspects	24	46	61	53	

Note: Means are unweighted. Hypothesis that means are equal between top 1 percent and full sample is rejected, at the 95 percent level, for each variable, for both cohorts.

<sup>(</sup>a) In addition to activities such as publications, government, and cheerleading, also includes resident advisor, ROTC, and volunteering.

#### **ENDNOTES**

1 An important practical ques

<sup>1.</sup> An important practical question that arose in using the data on alumni giving provided by institutions was how to determine whether the absence of recorded giving by an individual reflected no contributions by the individual or merely the lack of giving data. Institutions were asked to indicate for each individual whether giving data were available; conversations with those who provided and collected the data suggested that this indicator was not reliable. Instead, the assumption was made that missing data would be assumed to indicate true zero giving except in cases in which the institution provided no giving data for any donors, such as was the case for three institutions for all of the 1951 cohort and several other institutions for some years and cohorts.

<sup>2.</sup> The ratio 2:4:1 is based on logarithmic coefficients of -.399 and .474 in equation (1) (Auten and Joulfaian 1996 Table 2, p. 63), where 65 and over is the omitted age category. For a review of estimated age effects in studies of charitable giving, see Clotfelter (1985, p. 62). Since they rely on cross-section differences, however, these estimated effects could include both generational effects as well as pure life-cycle effects.