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Understanding Key Metrics for a Healthy Charitable Gift Annuity Pool

Charitable gift annuities (CGAs) are a popular component of many non-profits' planned giving programs. Non-profits benefit from long-lasting donor stewardship that can result in impactful gifts, helping to further the organizations' missions. CGAs are appealing to donors because they are simple to understand, establish and fund, and they provide the security of a lifetime fixed income stream.

While CGA programs can benefit donors and charitable organizations alike, there are risks associated with these programs. Chief among them is the non-profit's obligation to make lifetime payments to annuitants, regardless of underlying market performance or whether annuitants' life expectancies surpass actuarial expectations.

To sustain a successful CGA program, charitable organizations must understand these risks and their potential impact. Key metrics can help non-profits analyze, monitor and mitigate their potential risk exposure, helping to promote a healthy gift annuity program.

CGAs Are Highly Sensitive to Market Volatility

With any type of investment, there is an inherent risk that market conditions will negatively impact the rate of return the investor wants or needs to receive. CGAs are particularly sensitive to market volatility because the charity owes fixed payments to annuitants. When the rate of return for a CGA pool is not high enough to sustain gift annuity pool payments for the annuitants' lives, the charity itself needs to make up the shortfall.

A related, but lesser known, risk that is associated with issuing CGAs is timing risk. This is the risk that investment returns in the early years of a CGA will be negative, thereby increasing the likelihood of the gift exhausting before the annuity matures. For example, if a CGA with an 8% payout is issued during a period of negative investment returns, the CGA will likely be unable to recover enough to support lifetime annuity payments—even if market conditions improve.

To illustrate the impact of market volatility, Exhibit 1 compares the end value of a \$100,000 gift based on three different return streams that each have a 10-year annualized return of +4.5%. As shown, the residuum in year 10 is significantly different based upon the timing of the returns. Even though the overall return is identical, the market value of the stream that began with three years of low returns is significantly lower than the one that saw higher returns in its first three years.

Exhibit 1. Timing of Returns Has Significant Impact



Note: Assume a total gift amount of \$100,000, with \$8,000 annuity paid at end of the year over a 10-year time horizon, and a 4.5% 10-year annualized return.

Of course, no single organization can control market risk. However, non-profits can mitigate risk in their CGA pools by adopting a long-term approach to investing that includes diversification and a consistent review of how market conditions may impact the CGA pool.

The Pool of Annuitants Also Introduces Risk

Longevity risk is another key consideration for a CGA pool. The American Council on Gift Annuities (ACGA) sets recommended CGA rates using mortality assumptions. In general, the longer an annuitant's life expectancy, the lower the suggested CGA payout rate. If annuitants outlive their expected actuarial mortality, the non-profit is obligated to make more annuity payments than originally calculated at gift funding.

Non-profits offering CGAs also need to be mindful of concentration risk, which can arise when the assets and liabilities of a CGA pool are concentrated with a small number of annuitants. If that group of annuitants outlives their actuarially determined life expectancies, or if the CGA pool goes through periods of poor performance, the health and viability of the entire CGA pool could be negatively impacted.

For example, a charity may have a CGA pool of 100 gifts with a total market value of \$6 million. One donor, Mrs. Smith, has 20 of those gifts with a total market value of \$2 million and receives annual annuity payments of \$160,000. Mrs. Smith's life expectancy is 88, but she lives to be 100 years old.

Because Mrs. Smith lives 12 years longer than expected at gift inception, the charity is responsible for an additional \$1.92 million in annuity payments (\$160,000 x 12). If the pool experiences even a short period of underperformance, the negative impact would only exacerbate the challenge of making the payments for the longer term.

Like market risk, charitable organizations cannot directly control longevity risk. The risks can be mitigated, however, by setting appropriate gift acceptance policies, adhering strictly to those policies, and conducting ongoing reviews of the policies and their actual impact to the CGA pool.

Key Metrics to Analyze CGA Pools

Non-profits can use several metrics to analyze their CGA pools. It's important to analyze individual gifts, as well as the pool as a whole, to obtain a more comprehensive view.

Average & Median Ages

It's helpful to calculate the average and median ages of a CGA pool in order to analyze the age dispersion and potential longevity of the pool. If, for example, the average age skews older, this would indicate that there is a shorter time horizon for the pool's assets to grow. Comparing the average age to the median age will help to analyze the number of gifts by donors' ages. The average age is determined by adding the ages of all annuitants and then dividing that by the number of annuitants. The median age is determined by finding the midpoint in the sequential list of all annuitants' ages.

Effective Payout

Calculating the effective payout can help determine whether a gift will be able to sustain its annuity payments given the pool's rate of return. Effective payout is the percentage of total market value that is being distributed as annuity payments. For example, a gift with a market value of \$50,000

and an annuity payout of \$5,000 has an effective payout of 10%.

Knowing the effective payout at both the individual gift level and at the pool level will help provide a clear picture of the pool's distribution rate, which can then be measured against the pool's rate of return. A good rule of thumb is that the pool's rate of return should be at least half of the pool's effective payout.

Projected Years to Exhaustion

Non-profits can also benefit by estimating how many years a gift has left until maturity, so they can be more prepared to subsidize any payments down the line. Using the current market value of a gift, the amount it is contractually obligated to pay the annuitant and the pool's rate of return, non-profits can estimate how many years remain before the gift will be exhausted. Monitoring this metric on a continuous basis can help non-profits identify potentially problematic gifts.

In addition to monitoring the potential for exhaustion based on current rate of return, it is also important to monitor gifts with a large discrepancy between the gift's projected years remaining based on the annuitant's life expectancy, and the anticipated years to exhaustion based on projected investment returns.

As shown in the example in Exhibit 2, there are still 19.3 years remaining for the gift based on mortality tables. However, at any of the rates of return shown, the gift would be exhausted more than nine years before the anticipated maturity date—leaving the non-profit responsible for those additional payments.

Exhibit 2. Analyzing Projected Years to Exhaustion

Assumed Annual Growth (Net of Fees)		-3%	0%	3%	6%
Gift Years Remaining	19.3	6.52	7.33	8.40	9.94

Projected Remainder Value

The projected remainder value is an estimate of the amount the charity will ultimately receive. This projection is based on the estimated years remaining (based on mortality tables), the annuity amount to be paid and an assumed rate of return.

This value is only an estimate and is subject to change as certain variables change. For planning purposes, it is helpful to see how much may be distributed to charity, and when those distributions are expected. Perhaps more importantly, the projected remainder value can identify gifts that are not likely to provide any benefit and will instead be liabilities for the charity. For charities that follow ACGA rate guidelines, the benchmark for the projected remainder value as a percentage of the original gift is 50%.

Annual Distributions by Annuitant

It is important to maintain and track all gift values separately. However, it is just as important to identify and track the values of the largest annuity recipients, as they can have a tremendous impact on the overall CGA pool.

Calculating each of the top five annuitants' total annuity payment as a percentage of the total pool's payment will determine how much of the pool's assets are concentrated with those individuals.

Review the Metrics Collectively to Make an Assessment

To see how these metrics work together to deliver an assessment of an overall pool, we evaluate two different CGA pools.

In looking at Pool 1, some of the individual metrics are positive. The current value of the pool indicates that overall, it has maintained 60% of the original gifts' value. Applying the rule of thumb that a pool's rate of return should be about half of

Exhibit 3. Evaluating Different CGA Pools

	CGA Pool 1	CGA Pool 2
Number of Gifts	220	225
Current Fair Market Value	\$6,000,000	\$20,000,000
Original Gift Value	\$10,000,000	\$21,000,000
Average Effective Payout	12%	7%
Total Annuity	\$700,000	\$1,500,000
Average Age	87	80
Median Age	92	83
Top 5 Annuitant Payments	\$150,000	\$1,000,000
Average Gift Years Remaining–Mortality	10	15
Average Gift Years to Exhaustion–6% Rate of Return	8	22
Projected Remainder Value–6% Rate of Return	\$2,500,000	\$10,000,000

the pool's effective payout shows the pool's effective payout appears reasonable. Concentration risk also appears to be low, as the top five annuitants' payments are only 21% of the total annuity payments.

However, there are also some red flags. The average and median ages are quite high. This indicates that the pool is skewing older, which, in turn, means shorter time horizons. The average gift years remaining based on life expectancy is higher than the estimated number of years to exhaustion. This indicates there are gifts in the pool that may exhaust before the actuarially determined mortality. The projected remainder value is just 25% of the original gift value. This may indicate that there are several gifts in the pool that have already exhausted and/or have a large liability that cannot be sustained by the gifts themselves.

At first glance, Pool 2 also has some positive metrics. The pool has a very strong current gift value retention of 95% of the original value. It also has a low effective payout, and a projected remainder value of almost 50% of the original gift value.

However, the concentration of the top five annuity payments is troubling as those payments account for more than 65% of the total payments for

the pool. This indicates that there are a few individual annuitants who have large annuity payouts. If one or more of those annuitants live longer than their expected mortality, this concentration could be extremely detrimental to an otherwise healthy pool.

Although both pools reflect some positive metrics, there are a few areas of concern. Pool 2 certainly has fewer reasons for concern and is overall in better shape; however, the non-profit should consider reviewing the concentration of annuitants receiving large payments, especially if any of those annuitants want to fund another CGA. Pool 1 definitely requires a detailed review to determine which individual gifts are in danger of exhaustion and an action plan should be developed that includes a review of the investment strategy and gift acceptance policies. By measuring these factors and reviewing their findings, the non-profits responsible for each pool can be more prepared to address these potential problems.

Take a Big Picture Approach to CGA Metrics

When reviewing and analyzing metrics for a CGA pool, it is important to take a comprehensive and cohesive approach. Each individual gift's metrics are critical in evaluating and understanding the

projected health of the greater CGA pool. In addition, certain metrics may tell one story when considered alone, but reveal something else entirely when analyzed in the context of other information.

Understanding these key metrics and using them to analyze charitable gifts is only one component of maintaining a healthy CGA pool. By itself, analysis of key metrics will not result in long-term success. Non-profits also need to implement processes to review the findings and to develop appropriate action plans based on the results of such reviews.

By including CGA pool analysis as a regular part of their gift acceptance policies and investment reviews, non-profits will have meaningful, quantitative trend information to guide discussions about risk. In turn, this will help the various stakeholders at the charity understand the role CGAs play in the organization's financial, investment and fundraising goals.

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Crystal is a director of relationship management for the BNY Mellon Wealth Management Planned Giving group. In this role, she is responsible for managing the Greensboro, North Carolina client relationship team. She also works directly with large, complex clients on all aspects of their planned giving programs and coordinates resources throughout BNY Mellon to provide support and expertise.

Crystal joined the firm in 2006, when Mellon acquired U.S. Trust's planned giving business. She has more than 10 years of experience in the planned giving business, including charitable trust tax preparation and tax process management.

Crystal received a bachelor's degree in accounting from Winston-Salem State University and is a Chartered Advisor in Philanthropy.[®] She is a member of the Partnership for Philanthropic Planning and Serves on the boards of the American Council on Gift Annuities (ACGA), the North Carolina Planned Giving Council and the Winston-Salem State University Foundation.

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