

Investing for Non-Profit Donations

Given the tax advantages of gifting appreciated assets, with a little planning one can often currently give to charities at no after-tax cost, or at other times give five or ten dollars for every after-tax dollar of cost. This paper spells out how that might be done, and some of the necessary preconditions. The challenge addressed here is how to optimize ones dollars towards non-profits and purposes important to us.

The term "planned giving" is ordinarily a euphemism for where we intend our money to go after we die. The vehicles for expediting our wishes are usually our will — whether we created one or the state gave us one— beneficiary designations, joint ownerships, life insurance and uniform donor trusts as well as other trusts. However, if each year you decide to live on a third of your income and investment gains, save or invest a third, and have the other third go to your community in the form of taxes and gifts — that is also planned giving. To give at little cost after taxes also requires some planning and at a level in between "Who gets it when I die?" and "What are we going to donate this year?"

Cultivated agriculture began when early nomads discovered that they could plant and cultivate the grains they had been finding and thus greatly increase their food supply. Many churches and charities mention in their materials that they accept appreciated stocks. However, when one offers the stock one finds that they have never had such a gift, don't know how to proceed, and have to create the necessary brokerage account. For both donors and charities, it is like the early nomads picking the grain from where it happened to grow, rather than finding a lot and then planting and cultivating for a harvest. The farmer who plants beans is more likely to harvest beans, even if a few corn stalks volunteer. The farmer who plants nothing is likely to have mostly weeds. Just as the farmer diversifies in different fields, investing for donations requires a specific strategy.

So how does this work?

To take an example, Kara Lot decided she wanted to capitalize on tax advantages and expedite ongoing gifts to her favorite charities. To do so, she identified \$100,000 that would feed her charities year after year. The money and investments stayed in her after-tax brokerage account, but were tagged for donations by identifying them as a specific portfolio. Contrary to her normal investing style, the \$100,000 was invested in ten volatile, venture capital type stocks. What might be considered reasonable returns and consequent tax and gift implications are shown in the first table.

Table 1. Reasonable Scenario

Investment	Cost	Annual	Value	Gain/Loss	After One Year				
		Return	@1Yr		Gave	Sold	Gave or Sold	Retained	
Stock 1	10,000	200%	30,000	20,000	30,000		30,000		
Stock 2	10,000	150%	25,000	15,000	25,000		25,000		
Stock 3	10,000	90%	19,000	9,000	19,000		19,000		
Stock 4	10,000	15%	11,500	1,500				11,500	
Stock 5	10,000	10%	11,000	1,000				11,000	
Stock 6	10,000	5%	10,500	500				10,500	
Stock 7	10,000	-5%	9,500	-500				9,500	
Stock 8	10,000	-25%	7,500	-2,500				7,500	
Stock 9	10,000	-100%	0	-10,000		-10,000	-10,000		
Stock 10	10,000	-100%	0	-10,000		-10,000	-10,000		
Total	100,000		124,000	24,000	74,000	-20,000		50,000	
Return on Portfolio 24%					147%	-100%	48%	0%	
Cost 30,000 20						20,000	50,000		
Tax deduction @ 33% combined state & fed marginal rates 24,667						6,667	31,333	Replace	
Net after-tax cost							18,667	Replace	
Multiplier (Gift/after-tax cost)							4.0		

To walk through the table, ten speculative stocks are purchased at \$10,000 each. After one year, three stocks have between them had gains of \$44,000 for a 147% return. Two stocks have gone bankrupt. The remaining five stocks have as a group averaged no gains or losses and will be held over for the next year. The three high-return stocks will be donated to one or more charities. Five stocks with a cost basis of \$50,000 have been removed from the portfolio with an aggregate tax deduction of \$31,333, assuming a 33% marginal tax bracket for federal and state income taxes. The net result is that \$74,000 was given to one or more charitable organizations at a cost to the donor of \$18,667. Each donor's dollar resulted in four dollars for a charity.

A multiplier of four compares to a multiplier of 1.5 for a normal charitable deduction, assuming the same 33% marginal tax bracket. A one hundred dollar gift has a cost to the donor of \$67 after the tax deduction and after it becomes advantageous to have itemized deductions rather than take a standard deduction.

Let's contrast a designated donation portfolio with typical gifting of appreciated stock. First of all the gifting of appreciated stock with significant tax benefits doesn't happen if the donor invests in low-risk, non-volatile stocks. The gifting intent and tax benefits of gifting appreciated stock turns upside down the normal strategy of limiting risk. Just as for the farmer that doesn't plant corn, not much corn is going to be there for harvesting, if Kara Lot doesn't invest for high gains and high losses, the tax benefit is not there.

Secondly, typical tax benefit calculations ignore the attendant losses and bankruptcy stocks that accompany high-growth and speculative stocks and portfolios. While there is a tax benefit to writing off the loss, unless one were at a 100% tax bracket it would never equal the cost. Therefore, to look at the tax benefits of gifting an appreciated stock is to look at only part of the cost related to that appreciated stock.

So what would it take to accelerate the tax benefits so as to donate a gift and have no after-tax cost to the donor? At a total marginal tax rate of 33%, a triple in value with no bankruptcies would produce gifts with no after-tax net cost to the donor. If the total marginal tax rate were 50%, it would take a double in stock values to have it be at no cost to the donor. However, in our example, the gift would then be \$60,000 instead of \$90,000.

Table 2. Scenario For No-Cost Giving

Investment	Cost	Annual	Value	Gain/Loss	After One Year				
		Return	@1Yr		Gave	Sold	Gave or Sold	Retained	
Stock 1	10,000	300%	40,000	30,000	40,000		40,000		
Stock 2	10,000	175%	27,500	17,500	27,500		27,500		
Stock 3	10,000	125%	22,500	12,500	22,500		22,500		
Stock 4	10,000	35%	13,500	3,500				13,500	
Stock 5	10,000	30%	13,000	3,000				13,000	
Stock 6	10,000	10%	11,000	1,000				11,000	
Stock 7	10,000	-5%	9,500	-500				9,500	
Stock 8	10,000	-10%	9,000	-1,000				9,000	
Stock 9	10,000	-25%	7,500	-2,500				7,500	
Stock 10	10,000	-35%	6,500	-3,500				6,500	
Total	100,000		160,000	60,000	90,000	0	90,000	70,000	
Return on Por	Return on Portfolio 60%						200%	0%	
Cost							30,000		
Tax deduction @ 33% combined state & fed marginal rates							30,000	Replace	
Net after-tax cost - 0 -									
Multiplier (Gift/after-tax cost) Infiniti									
If at the 50% marginal taxes, have to double instead of triple on highly appreciated stocks.									

The beauty of this dynamic or scheme is that it can continue year after year like an endowment, with the donor replenishing the account from tax savings.

What makes it work?

Giving at no after-tax cost to the donor is dependent upon three variables:

- 1. Investment volatility.
- 2. Tax rates.
- 3. Other tax return conditions.

The more the donated appreciated stocks have appreciated, the greater the tax deduction relative to the original cost or basis. And of course volatile portfolios are going to have stocks that decline in value or go bankrupt. The losses also provide tax benefits.

As for tax rates, someone at a marginal federal tax rate of 25% plus 8% state income taxes can receive a tax benefit of one third the donations and losses. Higher tax rates make it easier to have gifts be no-cost after taxes, and lower tax rates make it more difficult to be no-cost or have lower after-tax net costs.

Other tax return conditions refers to factors such as the gifted assets being less than 30% of the Adjusted Gross Income, and having other capital gains sufficient to offset any losses.

How would one go about selecting stocks for a high return, volatile portfolio?

Investors have a variety of approaches to selecting a portfolio with probabilities of exceptionally high returns. Some imitate a venture capital fund, and study the stories, proposals and case for new companies aspiring to rapid growth. Value investors might pick severely undervalued stocks. While normally price volatility is a measure used to avoid stocks, in this case it is like playing give-away checkers, picking stocks with a probability of volatility. My preferred approach is to use data mining tools to find characteristics of stocks that have historically had high probabilities of strong price appreciation. Note that we are selecting the characteristics or screen criteria for high appreciation, not the stocks themselves that have had significant appreciation. Once we have the historically determined criteria, we apply the criteria to the current market to select the group of stocks to be reviewed and from which purchases will be made.

As an example, using a data mining tool called KnowledgeSEEKER, I searched through monthly data since October of 2002 published by the American Association of Individual Investors (AAII) in their *Stock Investor Pro* database, looking for screen criteria that:

- 1. Had high returns
- 2. Consistently every month,
- 3. Selected an adequate and consistent number of stocks each month,
- 4. Differentiated each variable at a significance level of p < .000000.

Two possible sets of screen criteria for stock selection are shown below to illustrate the expectations for returns, the reasons for those expectations, and the actual screen criteria.

Here are definitions for two screens that we will compare.

Table 3. Screen 1: Variables	Value
Percent Rank-Return on assets 12months	>31
Total liabilities/assets, last quarter	>53.1<70.8
Percent Rank-Rel Strength-Weighted last 4 Quarters, 40:20:20:20.	>51<91
Industry Price/Cash Flow Per Share	<9.4
Growth 5 Years in Earnings per Share from Continuing Operations	>23.9
Float	>25.7
Piotroski F Score , Last Year	7, 8, or 9

Table 4. Screen 2: Variables	Value
Price/sales	<8.18
Total liabilities/assets, last quarter	>106.1<193.2
Percent rank-return on assets 12 months	>21<41
Growth over 3 years in percent rank-free cash flow	>21<81

As for results, one would want to look through the count, average return, standard deviation and coefficient of variation for each screen for each month to get a sense for the returns and consistency. The presentation here is limited to summary data. The calculations have been double-checked, but are not guaranteed.

Table 5	RUA		Screen 1 Screen 2							
	Return	Cum	Count	Avg Ret	St	Cum	Count	Avg Ret	St	Cum
		Yr		52weeks	Dev	Yr		52weeks	Dev	Yr
		Later				Later				Later
Monthly for Seven Years										
Average	6		18	33	63		11	53	105	
Count * AvgRet / SD					9.4				5.6	
Standard Deviation	0.2		7	43	32		4	93	115	
Coefficient of Variation	3.6		0.4	1.3	0.5		0.3	1.8	1.1	
Correlation Russell 3000				0.87				0.74		
Median	11		16	36			12	39		
Max	62		38	106			17	373		
Min	-47		6	-49			2	-74		
Last Twelve Months										
Average	26	1,283	10	59	53	4,854	9	173	260	8,366
StDev Last 12 month sets		199				1,130				6,623
Coefficient Variation		0.16				0.23				0.79

To interpret the Table 5, the Russell 3000 had an annual return rate of 6% (actually 5.9%) when you take the average of each month's return for the next year. This compares to 33% for Screen 1 and 53% for Screen 2. Screen one had an average of 18 stocks selected each month from which to

choose, while Screen 2 had fewer at eleven. The average of the standard deviations within the selections for each month was 63% for Screen 1 and much higher at 105% for Screen 2.

Multiplying the average count times the average return and dividing by the average standard deviation gives a single metric that is useful when comparing many potential screens. The higher number is better.

The next line gives the standard deviation of the count, return and standard deviations for each month. The coefficient of variation is the standard deviation divided by the average return. Smaller numbers are better. The coefficient of variation is the inverse of the Sharpe Ratio without the "risk-free" rate of return. Note that the coefficient of variation for the market is two to almost three times as great as for the high-return screens. When also looking at the median, maximums and minimums for each month to compare the two screens, one might be inclined so far in the analysis to go with Screen 2 because of the very high returns.

When we look at the last twelve months of available data, we see that Screen 1 has returns more than double the market, while Screen 2 has returns almost seven times the market. However, when we look at the monthly variation, the standard deviation for Screen 1 of 53% is less than the return rate of 59%, while the standard deviation for Screen 2 of 260% is half again as large as the return of 173%.

Another way to compare market returns and the two screens is to look at cumulative returns. To do this we start with the first month of October, 2002, and calculate what \$1,000 would have become one year later applying the average return for the stocks selected. At the end of the year, we take the result and apply the average return for October, 2003, and continue forward for each year. We then do the same for returns at the end of November each year, and on for twelve different sets of seven-year data. Table 5 shows the average for these twelve sets, as well as the standard deviation and coefficient of variation (SD/Avg).

Looking at the cumulative data, to have \$1,000 become \$8,366 in the seven years compared to \$1,283 for the market and \$4,854 for Screen 1 is certainly enticing – that is until one looks at the variability between starting the test at different months during the year. Screen 2 is shown to be too unpredictable for my tastes.

Since we are looking for very high return stocks, an analysis by return distribution is also appropriate.

Table 6	Screen 1			Screen 2			
Returns	Count	Percent Records	Avg 1 yr return	Count	Percent Records	Avg 1 yr return	
<=-10%	172	20%	-34%	329	33%	-46%	
>=-9 < 30%	265	31%	12%	213	21%	8%	
>=30%< 100%	350	41%	56%	238	24%	61%	
>=100%	62	7%	150%	218	22%	236%	
Total	849	100%	31%	998	100%	53%	

Both screens had almost half of all selections returning 30% or more in the next year, however, Screen 2 had three times as many returning more than 100%.

While one might expect comparable returns in the future, we have no assurance that that will happen. I would expect returns significantly above market returns but less than found historically. These screens tend to go through phases, often working well, then not working as well, and then working again. Much of this variation is avoided by excluding many of the price or technical variables, such as price as percent of 52-week high, since such variables are very dependent upon market volatility patterns.

What is presented here is a methodology for selecting volatile, high return portfolios, rather than a recommendation for a specific screen.

A limitation of one-year forward returns is that the latest historical data are necessarily from a year ago or more. Therefore, it is prudent to run the same screen over the past few years using one-month returns to get a picture of whether or not the screen has been working more recently and over different time periods. I also compare three-month and six-month forward returns.

Additionally, there is nothing to say that one couldn't wait two years or five years to achieve the desired stock appreciation. Indeed, most gifts of appreciated stock are from donors who happen to have employer or other stocks that have been held for many years and now have a minimal basis. The minimum holding period is one year to qualify for gifting appreciated stock.

While it would seem advantageous to have a segmented portfolio for donation purposes, there is nothing to say that the investor couldn't substitute in high-gain or high-loss stocks from other portfolios. It merely makes it more difficult to evaluate the portfolio and strategy. Similarly, one could identify a portfolio for donation purposes and later decide to not make the donation. Indeed, it is prudent to have selection criteria that produce high returns independent of tax advantages, as the tax laws may change.

Who will do this?

The older we get the more likely it is that we have either minimal financial resources or financial resources far in excess of what we need to live our accustomed lifestyle.

Many baby boomers who don't have defined-benefit pension plans and have maybe a quarter to a half million dollars in 401k plans, are going to have to make some serious adjustments to their lifestyle if and when they retire. Pulling a usually sustainable 4.5% annually from a half- million retirement account yields \$22,500 a year, which combined with Social Security may not permit the accustomed lifestyle.

On the other hand, because of geometric progression many people ten years after retirement have more income than they ever had while employed. Those assets which are most likely going to go to heirs, charities and taxes need to be managed according to optimum returns and not merely placed in low-return fixed income investments merely because the owners happen to be in their eighties. Indeed, to take advantage of charitable giving at no cost after taxes, a designated portfolio has to be managed very aggressively with volatile stocks – the exact opposite of what is normally recommended and feels most comfortable for many of these potential donors. So-called lifestyle investments and age-based allocation plans have no relevance for the assets in excess of what is necessary to support one's lifestyle, including extraordinary circumstances such as long-term care.

Constraints and Issues to Consider

For the potential donor there are several prerequisites or important considerations:

- 1. The donor must have a commitment to charitable giving.
- 2. The donor must be open to the idea of having a volatile portfolio, and know how to construct or obtain such a portfolio. The work involved, or management expenses, are likely to be greater than for most portfolios. Stock selection screens developed from data mining large stock databases have been a fruitful way to create high-gain portfolios.
- 3. The donor must have assets in a non-qualified brokerage account.
- 4. Generally, the deduction for gifting of publicly traded appreciated assets is limited to 30% of AGI. While there is a carry-forward provision for five years, the donor must have income sufficient to allow the deductions. Special limitations apply when gifting to private foundations. Gifting of non-appreciated assets is limited to 50% of AGI, and attention must

- be paid to the limitations imposed by combinations of appreciated and non-appreciated assets. Realized losses from a volatile designated portfolio would reduce the AGI.
- 5. The donor must have capital gains outside the donation-designated portfolio in order to offset any realized capital losses from the donation-designated portfolio. The donor must not have a reservoir of carried forward losses on Schedule D of the federal tax 1040. (Such losses are like a non-performing asset. The way to get rid of them is to invest for capital gains. Such investments should be weighed based on their after-tax returns, not unlike how municipal bonds are evaluated.)
- 6. The higher the tax rates the greater the multiplier effect of giving appreciated assets and writing off losses. Tax rates may go up or down based on income or changes in tax law.

Regarding the potential non-profit organization,

- 1. It has to have a mission and evidence of ongoing effectiveness that appeals to prospective donors.
- 2. It must have a trusted advisory relationship with the donor in order to point the donor in the direction of this strategy.
- 3. It must be willing to postpone the receipt of gifts in order to have them grow.
- 4. It often has to have an account at the same brokerage as the donor in order to receive and then sell the appreciated stock.

Summary

To take advantage of the tax benefits of gifting appreciated stocks, one really needs a designated portfolio devoted to volatile stocks. Tax deductions enable a multiplier effect of more dollars going to the charity than the after-tax net cost to the donor. A normal tax-deductible gift from someone at a marginal federal tax rate of 25% and 8% state, doing itemized deductions, might have a multiplier effect of 1.5, meaning a \$100 gift cost the donor \$67. Depending upon tax rates and the returns from highly-volatile portfolios, multipliers of 4 (\$1 cost to \$4 for the donor) and much higher are clearly possible.