

Creating the Optimal Structure for Discounted Zeroed-Out GRATs

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What is the right payout for your client's GRAT?

RECORD LOW SECTION 7520 RATES, the recent *Walton* decision, and uncertainty about the future of the estate tax combine to make grantor retained annuity trusts ("GRATs") particularly favorable at this time. The low rates should make it relatively easy to produce tax-free transfers and under *Walton* taxpayers can now create completely zeroed-out GRATs.

Because a zeroed-out GRAT would produce no taxable gift, there is no risk that taxpayers would pay gift tax that later turned out to be unnecessary or use up any applicable exclusion amount.

Over the years, estate planners have developed strategies to enhance the performance of GRATs. These include increasing payout

GRATs, multiple GRATs, layered GRATs, and GRATs funded with special assets. One such special asset is property for which a valuation discount is available—e.g., family limited partnership (“FLP”) units. But while discounted asset GRATs are often discussed, their economic effects are generally misunderstood. When a taxpayer makes a direct transfer of discounted assets to noncharitable beneficiaries, the mechanism by which the discount creates a tax benefit is very straightforward. The amount of the taxable gift or bequest is simply reduced by the discount percentage. If the discount is 30 percent, the amount of the taxable gift is decreased by 30 percent. When discounted assets are transferred to a zeroed-out GRAT, however, the mechanism by which the discount produces any tax benefits over and above those produced by the GRAT itself is more subtle. The discounts may produce a far greater or lesser benefit than in the case of an outright transfer or perhaps no benefit at all, depending on investment performance and how the GRAT is structured. This article explains the interrelationship between zeroed-out GRATs and discounted assets, points out that a mix of discounted and undiscounted assets may produce significantly better results than using all discounted assets, and discusses the theoretically optimal mix of discounted and undiscounted assets.

HOW ZEROED-OUT GRATs PRODUCE TAX BENEFITS •

A GRAT is a split-interest trust in which the grantor transfers the remainder interest to noncharitable beneficiaries (e.g. the grantor’s children) while retaining a lead annuity interest for a term of years. Although the remainder interest is subject to gift tax, a qualified lead interest is not because the grantor does not transfer it. The amount of the taxable gift is the full value of the property transferred to the trust minus the present value of the qual-

ified retained annuity interest. The value of the taxable gift is fixed at the time the GRAT is created and is not affected by the future performance of trust assets.

Following the recent case of *Walton v. Commissioner*, 115 T.C. 589 (2000), provided the GRAT payments continue to the grantor’s estate should the grantor not survive the GRAT term, it is possible to value the lead interest as an interest for a term certain. The annuity payment can then be set so that the value of the lead annuity interest in a GRAT is equal to the full value of the property transferred to the trust, reducing the value of the taxable gift to zero. Such a GRAT is said to be “zeroed-out.” The lead annuity interest is valued on the assumption that the GRAT assets will produce a total return (income plus appreciation) equal to the rate under Internal Revenue Code section 7520 for the month of the transfer. (All section references are to the Code unless otherwise indicated.) If it turns out that the GRAT assets actually do produce a return equal to the section 7520 rate, the last GRAT payment will exactly exhaust the assets, leaving nothing for the remainder beneficiaries at the end of the GRAT term.

Example 1: Zero-Out in Five Years at 5.8 Percent

Mr. Gray transfers \$1 million to a five-year GRAT for the benefit of his son Jack at a time when the applicable section 7520 rate is 5.8 percent. The annual payout necessary to zero out the GRAT is \$236,106.23 (23.610623 percent of the value of the trust assets). Exhibit 1 on page 28 shows what happens if the GRAT assets produce a total return of 5.8 percent. (In this and all remaining exhibits, all computations are carried out to two places and the results are rounded to the nearest dollar.) Note that there is nothing left to pass to Jack at the end of the trust term.

If the GRAT assets produce a total return in excess of the rate assumed by the IRS, however, assets will be left in the trust at the end of its term to pass tax-free to the owner of the remainder interest as shown in the next example.

Example 2: Zero-Out at 11 Percent

Assume the same facts as in Example 1, except that the total return on the trust assets is now 11 percent instead of 5.8 percent. Mr. Gray has now succeeded in transferring \$214,635 tax-free to Jack. See Exhibit 2 on page 28.

THE EFFECT OF USING DISCOUNTED ASSETS • Now let us look at the effect of using discounted assets.

Discount In, Discount Out

It is first necessary to distinguish between situations in which discounted assets are used to make the annuity payments back to the grantor and those in which nondiscounted assets are used.

Example 3: Zero-Out at 5.8 Percent with a Valuation Discount

Assume the same facts as in Example 1 except that the assets contributed to the partnership are FLP units entitled to a 30 percent valuation discount. This makes the value of the assets transferred to the GRAT \$700,000 instead of \$1 million. The percentage payout necessary to zero out the GRAT is still 23.610623 percent, but the annual annuity amount now decreases to \$165,274.36. Note that this is 70 percent of the original payout amount ($\$165,274.36 = .7 \times \$236,106.23$).

If we assume that the assets used to make the annuity payments are the same discounted partnership units used to fund the GRAT, however, there is really no benefit to using the dis-

counted assets. All we have done is reduced both the starting value of the assets in the trust and the annual payout by 30 percent. The two reductions exactly offset each other and again there is nothing left in the GRAT at the end of the term. See Exhibit 3 on page 28.

It is true that once the assets pass to the children and are taken out of the partnership wrapper they will have their full nondiscounted value again. Since the amount remaining in the GRAT in this example is virtually zero, however, it makes little difference. In this case, the discounted assets function in effect like a different currency. All the relevant numbers are now 70 percent of what they were in Example 1 (beginning balance, growth, and annuity payment).

Example 4: Zero-Out at 11 Percent with a Valuation Discount

Let us return to Example 2, where the assets left in the GRAT appreciated at 11 percent. If a 30 percent discount had been allowed in Example 2, the GRAT would have begun with \$700,000 of assets and made annual payouts of \$165,274. Given the 11 percent total return, the amount left in the GRAT at the end of the term would be \$150,245, as shown in the Exhibit 4 on page 28.

Of course, these assets will eventually have a much higher value when they come out of the partnership wrapper. If we gross up the \$150,245 value of the assets to bring them back to their full value in the hands of the children, the value is the same \$214,635 calculated in Example 2 ($\$150,245 / .7 = \$214,636$).

Discounted Assets In, Nondiscounted Assets Out

To realize a benefit, it is necessary to contribute discounted assets while distributing out nondiscounted assets.

Exhibit 1

Year	Beginning Balance	Growth On Underlying Assets	Annuity Payment	Ending Balance
1	\$ 1,000,000	\$ 58,000	\$ 236,106	\$ 821,894
2	\$ 821,894	\$ 47,670	\$ 236,106	\$ 633,457
3	\$ 633,457	\$ 36,741	\$ 236,106	\$ 434,092
4	\$ 434,092	\$ 25,177	\$ 236,106	\$ 223,163
5	\$ 223,163	\$ 12,943	\$ 236,106	\$ -

Exhibit 2

Year	Beginning Balance	Growth On Underlying Assets	Annuity Payment	Ending Balance
1	\$ 1,000,000	\$ 110,000	\$ 236,106	\$ 873,894
2	\$ 873,894	\$ 96,128	\$ 236,106	\$ 733,916
3	\$ 733,916	\$ 80,731	\$ 236,106	\$ 578,540
4	\$ 578,540	\$ 63,639	\$ 236,106	\$ 406,074
5	\$ 406,074	\$ 44,668	\$ 236,106	\$ 214,635

Exhibit 3

Year	Beginning Discounted Balance	Growth On Underlying Assets	Annuity Payment	Ending Balance
1	\$ 700,000	\$ 40,600	\$ 165,274	\$ 575,326
2	\$ 575,326	\$ 33,369	\$ 165,274	\$ 443,420
3	\$ 443,420	\$ 25,718	\$ 165,274	\$ 303,864
4	\$ 303,864	\$ 17,624	\$ 165,274	\$ 156,214
5	\$ 156,214	\$ 9,060	\$ 165,274	\$ -

Exhibit 4

Year	Beginning Discounted Balance	Growth On Underlying Assets	Annuity Payment	Ending Balance
1	\$ 700,000	\$ 77,000	\$ 165,274	\$ 611,726
2	\$ 611,726	\$ 67,290	\$ 165,274	\$ 513,741
3	\$ 513,741	\$ 56,512	\$ 165,274	\$ 404,978
4	\$ 404,978	\$ 44,548	\$ 165,274	\$ 284,252
5	\$ 284,252	\$ 31,268	\$ 165,274	\$ 150,245

Example 5: Zero-Out at 5.8 Percent with Nondiscounted Assets

Assume the same facts as in Example 3, except that instead of making the annuity payments with discounted assets (e.g. FLP units), the GRAT distributes nondiscounted assets (e.g. cash). The annual payment is based on the initial discounted value of \$700,000, resulting in an annuity of \$165,274. See Exhibit 5 on page 30.

As explained above, if we use discounted assets to set the value for the annual payouts and use discounted assets to make those payouts, the discount washes out. Viewed from the perspective of the remaindermen after the trust terminates and the assets eventually come out of the partnership wrapper, both amounts are really worth 1.42857 times as much (1/.7). The "real" value of the trust assets at the time the GRAT is created is \$1 million and the "real" value of the payments is \$236,106. If undiscounted assets are distributed from the trust in satisfaction of the annuity payments, however, the "real" value of the annuity payments is only \$165,274 instead of \$236,106. Under these assumptions, the tax-free transfer increases from zero to \$397,695. Thus, using a discount on the front end, but not distributing discounted assets, in effect produces a reduction in the payout rate and this reduction is what produces the tax benefit. Of course the assumption that the GRAT is able to pay out all undiscounted assets raises difficult issues, as explained below in the section on practical considerations.

Analyzing Use of Discounted Assets

The economic benefit of using discounted assets in a GRAT can be analyzed in two ways. One is to show the increased amount passing tax-free and the other is to show the reduction in the total return on the GRAT assets necessary to break even.

The increased amount remaining in the GRAT at the end of the term is the future value of a payment stream equal to the reduction in

the annual payout rate appreciated for the term of the GRAT at a rate equal to the total return on the GRAT assets. In Example 3, the reduction in the annual payment needed to zero-out the GRAT was \$70,831.87. This figure represents the difference between the amount necessary to zero out the GRAT when no discount is taken (\$236,106.23) and the amount necessary when a 30 percent discount is taken (\$165,274.36). The future value of a payment stream of \$70,831.87 per year for 5 years, appreciated at a 5.8% rate, is \$397,695, which is identical to the result shown in Example 5.

The higher the total return on the trust assets, the greater the benefit of the discount. For example, if the total return under our facts is 11 percent, the amount passing tax-free works out to \$655,762. The additional benefit is \$441,127, the future value of \$70,831.87 appreciated at 11 percent per year over the term of the GRAT. Note that $\$655,762 - \$441,127 = \$214,635$, which is identical to the amount derived in Examples 2 and 4.

Even more impressive is the reduction in the total return needed to pass assets tax-free to the remainder beneficiaries. With a zero percent return, the amount passing tax-free is \$173,628. Exhibit 5.1 on page 30 shows this result.

Under our facts, the breakeven total return is about -6.04 percent. In other words, the GRAT passes assets tax-free even with a total return far below zero!

The implications of this reduction in breakeven rate are staggering. Virtually any transfer to a zeroed-out GRAT would pass some assets tax-free and even a very modest positive return would pass substantial value.

Practical Considerations

As a practical matter, the economic benefit of using the discounted GRAT technique will not be as dramatic as that shown in the exhibits on pages 28 and 30.

Exhibit 5

Year	Beginning Balance	Growth On Underlying Assets	Annuity Payment	Ending Balance
1	\$ 1,000,000	\$ 58,000	\$ 165,274	\$ 892,726
2	\$ 892,726	\$ 51,778	\$ 165,274	\$ 779,229
3	\$ 779,229	\$ 45,195	\$ 165,274	\$ 659,150
4	\$ 659,150	\$ 38,231	\$ 165,274	\$ 532,107
5	\$ 532,107	\$ 30,862	\$ 165,274	\$ 397,695

Exhibit 5.1

Year	Beginning Balance	Growth On Underlying Assets	Annuity Payment	Ending Balance
1	\$ 1,000,000	\$ -	\$ 165,274	\$ 834,726
2	\$ 834,726	\$ -	\$ 165,274	\$ 669,451
3	\$ 669,451	\$ -	\$ 165,274	\$ 504,177
4	\$ 504,177	\$ -	\$ 165,274	\$ 338,903
5	\$ 338,903	\$ -	\$ 165,274	\$ 173,628

It is important to note that we are not suggesting that discounted assets be distributed back to the grantor in satisfaction of a higher nondiscounted amount. Such a transfer might be treated like a sale of the assets for cash followed by a distribution of the proceeds. The result would be recognition of gain equal to the difference between the discounted and nondiscounted values of the assets.

Rather, when we say that nondiscounted assets are distributed back to the grantor, we mean assets for which a discount is not appropriate, like cash or stock held outside of a partnership. To illustrate, suppose again that a grantor transfers \$1 million to a GRAT and that a 30 percent discount is appropriate. Suppose further that the amount of the required annual annuity payment back to the grantor is \$100,000 per year. We are not saying that discounted as-

sets with a fair market value of \$70,000 be distributed in satisfaction of a \$100,000 obligation. Rather all assets are distributed at their fair market value as of the date of the annuity payment.

If the required annuity payment is \$100,000 and discounted assets are used, the nondiscounted value of the assets would be used. This value would be \$142,857. In other words, it is necessary to transfer \$100,000 of discounted assets with a nondiscounted value of $\$100,000 / .7 = \$142,857$. This is precisely why there is no economic benefit to transferring discounted assets to a GRAT and distributing the same discounted assets back to the grantor. The discount reduces the amount of the required annuity payments, but the value of the payments to the grantors is increased proportionately.

If discounted assets are contributed to the GRAT, but nondiscounted assets are used to

make the annuity payments, where do the non-discounted assets come from? As explained above, the benefit of the discount is lost if the same discounted assets are transferred back to the grantor. One possibility would be to sell some of the assets held by the FLP and distribute the proceeds back to the grantor or to simply distribute partnership assets. If the partnership assets were sold by the GRAT to a party other than the grantor, capital gain would have to be recognized. If the assets were sold to the grantor or distributed in kind, arguably there would be no gain recognition under the rationale of Rev. Rul. 85-13, 1985-1 C.B. 184. The grantor and the trust would be treated as the same taxpayer for federal tax purposes so there would be no tax consequences at all. Although it is generally assumed that this result should apply to transactions between a grantor and a GRAT, we are aware of no rulings or case law specifically applying Rev. Rul. 85-13 in the GRAT context.

Perhaps a more serious concern is that a regular pattern of selling partnership assets or distributing them in kind undermines the rationale for taking a discount on the FLP units in the first place. The basis for taking the discount is that enclosing the assets in a partnership wrapper makes it more difficult for the owner to reach the full value of the underlying assets. If the full value of the underlying assets can easily be pulled out of the partnership, this casts serious doubt on the lack of marketability discount. The same problem arises if the trust makes annual "redemptions" of enough units to make the annuity payments.

Another possibility is to transfer assets to the GRAT that are expected to produce significant income. To the extent that income is available to make annuity payments, it is unnecessary to sell or redeem partnership units to provide nondiscounted assets.

Unfortunately, if the GRAT is zeroed-out, the amount of annual income necessary to make

the payments back to the grantor will be very high. For example, assuming a 5.8 percent section 7520 rate, the payout rates necessary to zero-out a GRAT are as follows for the indicated trust terms:

2 years	54.4%
3 years	37.3%
4 years	28.7%
5 years	23.6%
7 years	17.8%
10 years	13.5%

Income investments commonly available to investors have not historically produced returns anywhere near sufficient to make these annuity payouts. Over the past 50 years, long-term U.S. government and corporate bonds have produced an average annual return of about six percent, while T bills have produced an average return of about five percent. Dividends on large cap stocks have averaged about four to five percent. (Source: Ibbotson Associates.) Moreover, stocks that produce high dividends tend to have relatively low total returns. This is logical, of course, because most of the profits are being distributed out to investors rather than being retained to produce future growth and income.

The result of this shortfall is that the GRAT will be forced to sell or redeem assets or make distributions in kind to make up the difference. Selling or redeeming assets calls valuation discounts into question and the benefit of the discount disappears with respect to any assets distributed in-kind. In addition, total return on assets that produce mainly income is likely to be relatively low and the income will be subject to current taxation at high rates. Finally, sale of assets by the trust would produce current capital gain income for the grantor.

It is possible, of course, that a taxpayer may have "hot assets" that can produce all or most of the income needed to fund GRAT annuity payments if the GRAT term is long enough. If so,

the phenomenal results described above can be achieved. We do not believe that most taxpayers contemplating a GRAT find themselves in this favorable situation.

Asset Mix Alternative

Thus far, we have assumed that all assets transferred to the GRAT are discounted assets and that the only way to distribute nondiscounted assets back to the grantor would be through a sale or redemption. Another possibility is to transfer both discounted and nondiscounted assets to the GRAT. The discounted assets (and appreciation on these assets) would stay in the GRAT to pass to beneficiaries tax-free at the end of the GRAT term. Meanwhile, the nondiscounted assets (and growth on these assets) could be used to make the annuity payments. Although this would reduce the discount, substantial economic benefits would still be possible and the difficulties described above would be avoided.

For any assumptions about total return, discount percentage, and applicable section 7520 rate an optimal mix can be calculated. Nondiscounted assets are paid out first and the optimal mix is set so that the nondiscounted assets are precisely exhausted by the last annuity payment. The reasons are very straightforward. First, a dollar of discounted assets is worth more to the children than a dollar of nondiscounted assets. Eventually, the assets will come out of the partnership wrapper and have their full grossed-up, nondiscounted value again. Second, any discounted assets that return to the grantor are wasted as the whole object is to get them into the hands of the beneficiaries. Example 6 provides an illustration.

Example 6: Optimal Mix of Discounted and Nondiscounted Assets

Assumptions:

- Five-Year GRAT.

- Total value of assets transferred to GRAT = \$1 million.
- GRAT is zeroed-out.
- Section 7520 rate = 5.8%.
- Appreciation rate on GRAT assets = 11%.
- Income = 0.
- Valuation discount = 30%.

Suppose the grantor transfers \$827,453.93 of nondiscounted assets and \$172,546.07 of discounted assets to the GRAT. Because the discounted assets receive a 30 percent discount, their value for gift tax purposes is \$120,782.25 ($.7 \times \$172,546.07 = \$120,782.25$). Thus, the total value of the assets transferred to the trust for tax purposes is \$948,236.18 ($\$948,236.18 = \$827,453.93 + \$120,782.25$). Given the 5.8 percent section 7520 rate, the annual payout necessary to zero-out the GRAT is \$223,884.47. (From Example 1, the annual payout necessary to zero-out the GRAT is 23.610623 percent of the trust assets, and $.23610623 \times \$948,236.18 = \$223,884.47$.)

As Exhibit 6 on page 33 shows, given the 11 percent growth rate, the \$827,454 of nondiscounted assets will exactly exhaust at the end of the 5-year term with annual payments of \$223,884.

Because the nondiscounted assets are sufficient to make all payments, none of the discounted assets have to be used for payments back to the grantor. They grow at 11 percent for five years and at the end of the GRAT term are worth \$203,525. The value of these assets outside of the partnership wrapper is \$290,750 ($\$290,750 = \$203,525 / .7$). This compares with a tax-free transfer of \$214,635 if either all discounted (Example 4) or all nondiscounted (Example 2) assets had been used.

It should be noted that the optimal percentage of nondiscounted assets is rather large—in this case, 82.7 percent of the total assets contributed to the GRAT. These large percentages

are rather typical. At first this may seem counterintuitive. However, a zeroed-out GRAT generally works its magic by returning a large portion of the trust corpus to the grantor in order to pass some assets tax-free to the beneficiary. To avoid discounted assets being "wasted" by going to the grantor, it is necessary to have a large portion of nondiscounted assets to use for the annuity payments.

Of course, while the optimal asset mix can be determined in theory, such a determination depends on knowing the future return on the assets contributed to the GRAT, and such a determination is not possible. If the GRAT is to have a term of more than just two or three years, however, a reasonable estimate should be possi-

ble given past returns for assets of a given type. Further, even a rough estimate could be expected to produce significantly better results than using all discounted assets.

CONCLUSION • For taxpayers with hot assets, discounted, zeroed-out GRATs appear to possess a power far beyond that of any other estate planning strategy. They can transfer assets tax-free even under the least-favorable possible assumptions. As a practical matter, most taxpayers will not have these hot assets, however. They can nevertheless greatly enhance the effectiveness of a GRAT by optimizing the asset mix as explained in this article.

Exhibit 6

DISTRIBUTION OF UNDISCOUNTED ASSETS

Year	Beginning Undiscounted Balance	Beginning Discounted Balance	Growth On Underlying Assets	Annuity Payment	Ending Discounted Balance	End Undiscounted Balance
1	\$827,454	N/A	\$91,020	\$223,884	N/A	\$694,589
2	\$694,589	N/A	\$76,405	\$223,884	N/A	\$547,110
3	\$547,110	N/A	\$60,182	\$223,884	N/A	\$383,407
4	\$383,407	N/A	\$42,175	\$223,884	N/A	\$201,698
5	\$201,698	N/A	\$22,187	\$223,884	N/A	\$ 0

DISTRIBUTION OF UNDISCOUNTED ASSETS

Year	Beginning Undiscounted Balance	Beginning Discounted Balance	Growth On Underlying Assets	Annuity Payment	Ending Discounted Balance	End Undiscounted Balance
1	\$172,546	\$120,782	\$13,286	\$0	\$134,068	
2		\$134,068	\$14,748	\$0	\$148,816	
3		\$148,816	\$16,370	\$0	\$165,186	
4		\$165,186	\$18,170	\$0	\$183,356	
5		\$183,356	\$20,169	\$0	\$203,525	\$290,750

**PRACTICE CHECKLIST FOR
Creating the Optimal Structure for Discounted Zeroed-Out GRATs**

Grantor retained annuity trusts ("GRATs") are particularly favorable at this time. Low section 7520 rates should make it relatively easy to produce tax-free transfers and under *Walton* taxpayers can now create completely zeroed-out GRATs. Because a zeroed-out GRAT would produce no taxable gift, there is no risk that taxpayers would pay gift tax that later turned out to be unnecessary or use up any applicable exclusion amount.

- It is possible to set the value of the lead annuity interest in a GRAT equal to the full value of the property transferred to the trust, reducing the value of the taxable gift to zero. The lead annuity interest is valued on the assumption that the GRAT assets will produce a total return (income plus appreciation) equal to the rate under section 7520 for the month of the transfer.
- If it turns out that the GRAT assets actually do produce a return equal to the section 7520 rate, the last GRAT payment will exactly exhaust the assets, leaving nothing for the remainder beneficiaries at the end of the GRAT term.
- If the GRAT assets produce a total return in excess of the rate assumed by the IRS, however, assets will be left in the trust at the end of its term to pass tax-free to the owner of the remainder interest.
- What about using discounted assets? If we assume that the assets used to make the annuity payments are the same discounted partnership units used to fund the GRAT, there is really no benefit to using the discounted assets. All we have done is reduced both the starting value of the assets in the trust and the annual payout by the discount percentage. The two reductions exactly offset each other.
- To realize a benefit, it is necessary to contribute discounted assets while distributing nondiscounted assets.
- Discounted assets should not be distributed back to the grantor in satisfaction of a higher nondiscounted amount. Such a transfer might be treated like a sale of the assets for cash followed by a distribution of the proceeds. The result would be recognition of gain equal to the difference between the discounted and nondiscounted value of the assets.
- Rather, when nondiscounted assets are distributed back to the grantor, it should be assets for which a discount is not appropriate, like cash or stock held outside of a partnership. If discounted assets are contributed to the GRAT, but nondiscounted assets are used to make the annuity payments, where do the nondiscounted assets come from?
- The benefit of the discount is lost if the same discounted assets are transferred back to the grantor. One possibility would be to sell some of the assets held by the FLP and distribute the proceeds back to the grantor or to simply distribute partnership assets. If the partnership assets were sold by the GRAT to a party other than the grantor, capital gain would have to be recognized.
- Another possibility is to transfer assets to the GRAT that are expected to produce significant income. To the extent that income is available to make annuity payments, it is unnecessary to sell or redeem partnership units to provide nondiscounted assets.

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