Planned Giving Calculations You Should Know

Date:	November 21, 2019
Time:	1:00 – 2:30 Eastern
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Why Learn This Stuff?

- Give better answers to questions from donors and advisors
- Ask more informed questions of donors and advisors
- Create more thoughtful proposals
- Anticipate issues that donors may face

Present Value

- Basis of deduction calculation for most planned gifts
- Value today of a future payment
- Discounted at an appropriate compound interest rate

Present Value

- $PV = 1 \times (1 + r)^n \times FV$

Where

PV = Present Value
FV = Future Value
R = discount rate
n = number of years in which future value received

Present Value

- **Example:** The present value of $10,000 received in a lump sum in 10 years, assuming one could invest it at 8% if one had the money today, is $4,631.93, calculated as follows:

$$PV = 1/(1 + .08)^{10} \times 10,000 = \$4,631.93$$

Net Present Value

- Value today of a stream of future payments (NPV)
- $NPV = PV_1 + PV_2 + PV_3 + \ldots$

Net Present Value

- **Example:** The present value of receiving $1,000 each year for the next 3 years, assuming an 8% discount rate is calculated as follows:

$$NPV = [1/(1 + .08) \times \$1,000] + [1/(1 + .08)^2 \times \$1,000] + [1/(1 + .08)^3 \times \$1,000]$$

$$NPV_{8\%} = \$925.93 + \$857.34 + \$793.83 = \$2,577.10$$

If 8% changed to 2%:

$$NPV_{2\%} = \$980.39 + \$961.17 + \$942.32 = \$2,883.88$$

IRS Discount Rate

- Known by many names - charitable mid-term federal rate, applicable federal rate, section 7520 rate, rate of the month, IRS discount rate
- IRS interest rate assumption (r) in NPV equation
- 120% of Federal Midterm Rate, rounded to the nearest 0.2%.
- Federal Midterm Rate is average annual yield on government debt instruments with remaining maturities of three to nine years

Mortality Table

- Used in many planned giving calculations
- Expected survivors at each age, given assumed number of survivors at starting age
- Based on the mortality experience of a large sample of people
  - ✓ 2000CM based on 2000 U.S. Census
  - ✓ 2012 IAR based on mortality experience of commercial annuity owners

Mortality Table

- First lines of Table 2000CM

Age	Survivors
0	100000
1	99305
2	99255

- Ends at age 110, where survivors = 0
- Out of 100,000 people at age 0, 99305 alive at age 1, 99255 alive at age 2, etc.
- Likelihood someone age 1 will survive to age 2 is 99305/99255 or 99.9496%.

Mortality Table

- **2000CM** – Deduction calculations; gender neutral, should be replaced soon (10 years are up)
- **2012 IAR** – Annuity reserve calculations; gender specific, annually adjusted for mortality improvement
- **Annuity 2000** – Annuity reserve calculations for pre-2015 gifts; gender specific
- **1983 Basic** – Years gift annuity payments include tax-free or capital gain portions (“expected return multiple”)

Valuing a Lifetime Annuity

- Combine NPV and mortality concepts to compute value of lifetime annuity, such as a gift annuity
- Value of annuity = $(PV_1 \times P_{a1}) + (PV_2 \times P_{a2}) + (PV_3 \times P_{a3}) + \ldots$

  Where,

  $P_{a\#}$ = probability an annuitant will be alive to receive the annuity that year, and

  $PV_{\#}$ = the present value of the payment to be received that year

Valuing a Lifetime Annuity

Example

- if PV_1 = \$925.93 and P_{a1} = .99, then the present value of being promised that payment is:

  \$925.93 x .99 = \$916.67

- Repeat for all possible future payments, then add results to compute value of lifetime annuity

Charitable Deduction

- Charitable deduction for a split interest gift equals the amount transferred minus the value of the non-charitable interest
  - ✓ Gift annuity: non-charitable interest is present value of lifetime annuity (“investment in the contract”)
  - ✓ CRAT: non-charitable interest is present value of lifetime annuity adjusted for possibility CRAT will exhaust

Charitable Deduction

- Effect of IRS discount rate on CGA/CRAT deduction
- The lower the IRS discount rate, the lower the charitable deduction. The affect can be substantial.

Example
Table shows deduction for $100,000 CGA with 75-year-old annuitant

IRS Discount Rate	Deduction
2.0%	$40,418
3.0%	$44,318
4.0%	$47,793

Charitable Deduction

Charitable remainder unitrust

- Pie may get bigger or smaller each year, but payment is always same size wedge of pie
- Regardless of size of pie, same proportion will go to income beneficiaries and charity
- What is important?
  - ✓ Portion of pie removed each year (i.e., the payout rate)
  - ✓ Likelihood payments will be made each year
  - ✓ NOT the IRS discount rate, except for minor adjustment for payment frequency

Charitable Deduction

Example

Table shows deduction for $100,000 CRUT with 75-year-old annuitant:

IRS Discount Rate	Deduction
2.0%	$60,108
3.0%	$60,280
4.0%	$60,449

Charitable Deduction

- **Lead annuity trust** – calculation same as for CRAT, but deduction is for NPV of payments; lower IRS discount rate = higher deduction
- **Lead unitrust** - calculation same as for CRUT, but deduction is for NPV of payments; lower IRS discount rate = higher deduction
- **Retained life estate** – amount transferred minus value of using property for life; lower IRS discount rate = higher deduction
- **Pooled income fund** – amount transferred minus value of income for life; IRS discount rate irrelevant

Life Expectancy

- Life expectancy and mortality related, but NOT the same
- Life expectancy can be derived from mortality
- A person with a particular life expectancy has equal chance of dying before or after years in life expectancy
- Depends on current age and, if using a gender-specific mortality table, gender

Life Expectancy

- Last few years of the 2000CM mortality table:

Age	Survivors
104	248
105	144
106	81
107	43
108	22
109	11
110	0

Life Expectancy

- **Example:** life expectancy of a 104-year-old is survivors at each subsequent age divided by survivors at 104, summed up:

$$S_{105}/S_{104} + S_{106}/_{S104} + S_{107}/S_{104} + S_{108}/S_{104} + S_{109}/S_{104} + .5 = LE$$

$$144/248 + 81/248 + 43/248 + 22/248 + 11/248 + .5 = 1.714$$

- Joint-life expectancy example in paper

Taxation of Gift Annuity Payments

- Determined at time of gift
- Unrelated to character of income earned by gift assets
- Cash gift
  - ✓ Tax-free portion (return of principal)
  - ✓ Ordinary income (taxed at annuitant marginal rate)
  - ✓ All ordinary income once annuitant passes life expectancy (“expected return multiple”)

Taxation of Gift Annuity Payments

- "Exclusion ratio" determines tax-free portion of annuity (portion excluded from tax).

  To compute:

  1. Compute annuitant's investment in the contract
  2. Compute sum of payments over annuitant's life expectancy (the "expected return")
  3. Divide (1) by (2)

Taxation of Gift Annuity Payments

- Meaning
  - ✓ Investment in contract is principal returned over annuitant's life expectancy, so not taxed
  - ✓ Expected return - investment in contract = income earned after donation, so taxed
  - ✓ Once all principal returned over annuitant's life expectancy, payments entirely from income earned after donation, so all taxed

Taxation of Gift Annuity Payments

- Example: payments from $10,000 CGA that makes quarterly payments to a 75-year-old:

TAX BREAKDOWN OF ANNUITY

	Tax-free Portion	Ordinary Income	Total Annuity
2019 to 2019	62.67	18.20	80.87
2020 to 2031	480.50	139.50	620.00
2032 to 2032	129.53	490.47	620.00
2033 onward	0.00	620.00	620.00

Taxation of Gift Annuity Payments

- Gift of long term capital gain property
- Excluded portion split between tax-free and capital gain; Ordinary income same as with cash
  - ✓ Tax-free portion (return of cost basis in principal)
  - ✓ Capital gain portion (return of gain in principal)
  - ✓ Ordinary income (income earned by gift assets)
  - ✓ All ordinary income once annuitant passes life expectancy (“expected return multiple”)

Taxation of Gift Annuity Payments

- Example: payments from CGA funded with $10,000 in stock and $3,000 cost basis that makes quarterly payments to a 75-year-old:

TAX BREAKDOWN OF ANNUITY

	Capital Gain	Tax-free Portion	Ordinary Income	Total Annuity
2019 to 2019	43.87	18.80	18.20	80.87
2020 to 2031	336.35	144.15	139.50	620.00
2032 to 2032	90.67	38.86	490.47	620.00
2033 onward	0.00	0.00	620.00	620.00

Taxation of Charitable Remainder Trust Payments

- Taxation depends on character of income earned by trust
- "Four tiers of income"
  1. Ordinary income – current, past undistributed
  2. Realized gain – current, past undistributed
  3. Tax-free income – current, past undistributed
  4. Return of principal (not taxed)
- But "four tiers" is really eight!
  - ✓ Within tiers 1 and 2, most highly taxed income is distributed first

Taxation of Charitable Remainder Trust Payments

- Eight tiers of income
  1. Up to 37% - ordinary income
  2. 20% - qualified dividends
  3. Up to 37% - short term capital gain income
  4. 28% - capital gain income on sale of collectibles
  5. 25% - capital gain income on sale of real property that is attributable to depreciation recapture
  6. 20% - capital gain income on sale of securities
  7. Tax-free income
  8. Return of principal

Taxation of Charitable Remainder Trust Payments

- Example

  Donor in top income tax brackets funds 5% CRUT

  ✓ antique car valued at $100,000, cost $40,000

  ✓ CRUT sells car immediately and invests proceeds

  ✓ CRUT earns $2,000 interest and $1,000 qualified dividends in first year.

  Distributions in first year taxed as follows:

  ✓ $2,000 ordinary income (interest) – 37%

  ✓ $1,000 qualified dividends – 20%

  ✓ $2,000 capital gain – 28%

Tax Savings

1) Gross Income
   - Above-the-line Deductions

   Adjusted Gross Income (AGI)

   - Below-the-line Deductions
   - Exemptions

   Taxable Income

2) Compute tentative tax

3) Subtract tax credits, if any, to compute income tax owed

Tax Savings

2019 Married Filing Jointly Rates

Taxable Income	Income Tax	% on Excess
$0	$0	10%
19,400	1,940	12%
78,950	9,086	22%
168,400	28,765	24%
321,450	65,497	32%
408,200	93,257	35%
612,350	164,709.50	37%

- Brackets indexed for inflation

Tax Savings

- *Marginal* tax rate
  - ✓ Tax rate on last dollar earned
- *Effective* tax rate
  - ✓ Average tax rate on income

Tax Savings

- Smiths

Combined gross income:	$200,000
Itemized deductions:	- $25,000
Taxable income:	$175,000

  - ✓ 24% *marginal* income tax rate
  - ✓ Tax on $200,000 would be = $28,765 + 24% x ($200,000 - $168,400)) = $36,349
  - ✓ Tax on $175,000 = $28,765 + 24% x ($175,000 - $168,400)) = $30,349
  - ✓ $25,000 in deductions saves $6,000 in tax (24% x $25,000)

Factors That May Affect Tax Savings

- Donor's marginal tax bracket
  - ✓ If 37%, save $3,700 on $10,000 deduction
  - ✓ If 22%, save $2,200 on $10,000 deduction
- 2017 Tax Act changes
  - ✓ Nearly doubled standard deduction
    - o 2019: $24,400 for MFJ, $12,200 for single filer
    - o 2019: Increases $1,300 if over 65, so $27,000 for typical PG donor couple
  - ✓ $10,000 limit on SALT deduction
  - ✓ Eliminated other deductions and personal exemption

Standard Deduction

- Only makes sense to itemize when total deductions will exceed standard deduction
- Charitable deductions offer no tax benefit unless donor itemizes them
- Itemizers declined from about 30% in 2017 to about 10% in 2018
  - ✓ Donors of large planned gifts will still itemize
  - ✓ Donors of modest planned gifts may or may not itemize

Standard Deduction

- Smiths

Combined gross income:	$200,000
Standard deduction:	- $27,000
Taxable income:	$173,000

  - ✓ Don't itemize: tax on $173,000 = $29,869
  - ✓ Itemize: tax on $175,000 = $30,349
  - ✓ $27,000 standard deduction saves $480 more in tax than itemizing

Deduction Limits

- Charitable deductions subject to % of AGI limits
- % of AGI limit depends on type of asset donated
  - ✓ Cash – 60%
  - ✓ Non-cash/not appreciated, short term gain – 50%
  - ✓ Long term appreciated – 30%
- Unused deduction can be carried forward up to 5 additional years

Deduction Limits

- Interaction of 60%, 50%, 30% limits complex
  - ✓ Cash contributions reduce 50% limit, dollar for dollar
  - ✓ Cash contributions also reduce 50% limit when considering the 30% limit on deductions for gifts of long term appreciated property
- Result: only way to deduct more than 50% of AGI in charitable contributions is if contributions deducted made entirely with cash

Deduction Limits

Example - Manuel has $100,000 AGI and makes $40,000 in cash contributions and $20,000 in long term appreciated property contributions

- Manual can deduct all $40,000 in cash contributions
- Deduction for long term appreciated property contributions limited to $10,000
  - ✓ $40,000 in cash contributions reduces 50% AGI limit within which 30% limit applies to $10,000 ($50,000 - $40,000 = $10,000).
- Total deductions will be $50,000 and $10,000 of 30% long term gain contribution will be carried forward.

Tax Benefits That Don't Require Full Deductibility

- Contribute long term capital gain property
- Tax when held more than one year (long term)
  - ✓ Low income taxpayers: 0%
  - ✓ Most taxpayers: 15%
  - ✓ High income taxpayers: 20%
  - ✓ Other rates: 25% (depreciation recapture), 28% (collectibles)

Capital Gains Tax Example

- Donor in 32% income tax bracket: give $100,000 stock with $20,000 basis vs. sell and give proceeds
- Sell stock, give proceeds

Deduction	$100,000
Tax savings @ 32%	- $32,000
CG tax on $80,000 gain @ 15%	+ $12,000
Net cost of gift	**$80,000**

- Give stock

Deduction	$100,000
Tax savings @ 32%	- $32,000
CG tax on $80,000 gain @ 15%	+ 0
Net cost of gift	**$68,000**

Capital Gains Tax Rates

- With 2017 Tax Act, capital gains tax brackets no longer match income tax brackets

Taxable Income (MFJ)	Taxable Income (Single)	Capital Gains Tax Rate
$ 0	$ 0	0%
80,000	40,000	15%
496,600	441,450	20%

- Brackets indexed for inflation
- 37% bracket is $622,050 for MFJ, $518,400 for single

Charitable IRA Rollover

- Traditional and Roth IRA only (can rollover other qualified plan to IRA, then make rollover gift)
- Minimum age – 70 ½
- Maximum annual amount – $100,000
- Payment must be directly to charity
- Outright gifts to public charities only; not to private foundation, supporting organization, donor advised fund, or life income plan
- Can fulfill a pledge
- Counts toward required minimum distribution (RMD)
- Beneficiary of inherited IRA can do rollover

Charitable IRA Rollover: Who Benefits Most?

- Tax benefit
  - ✓ Donor doesn't declare rollover amount as income
  - ✓ No deduction
- Donors who benefit most
  - ✓ Do not itemize deductions
  - ✓ Already contribute 50% - 60% of income
  - ✓ Live in a state with an income tax that does not permit itemized deductions (e.g., MA)
  - ✓ Like the simplicity of making gift directly from an IRA

Transfer Taxes

- Gift tax
- Estate tax
- Generation-skipping transfer (GST) tax
- 2017 Tax Act doubled lifetime exemptions for all three taxes (expires on 12/31/2025)
- In 2020, all three feature $11.58 million exemption and tax rate of 40% on the excess

Transfer Taxation Basics: Federal Estate Tax

- Assessed on estate at death
- Takes into account taxable gifts made during life (and any gift tax paid on those gifts)
- Unlimited marital deduction & charitable deduction
- Transfers through estate get step-up in cost basis
- Exemption portable between spouses
- Deduction for state “death taxes”

Transfer Taxation Basics: Federal Estate Tax

- One in a thousand estates (0.1%) settled in 2020 expected to pay federal estate tax1
- For the few that owe federal estate tax, charitable bequests save $0.40 for every $1 given (i.e., gift costs only $0.60 per $1 given)

Transfer Taxation Basics: Federal Gift Tax

- Unified with federal estate tax
- Assessed on taxable transfers during life
- Unlimited charitable deduction (but gift tax return may still need to be filed)
- Unlimited marital deduction (if spouse U.S. citizen)
- Annual exclusion per donor: $15,000
  - ✓ Each spouse can give $15,000 to any person each year, so parents of a family of three children can transfer $90,000 (2 x 3 x $15,000) to the next generation each year free of tax

Transfer Taxation Basics: Example Factoring in IRD

- Mr. Soto dies in 2019 with an estate worth $15,000,000. He made no taxable gifts during life
- Assume that $1,000,000 of Mr. Soto's estate is from the balance in his qualified retirement plan
- He can save $210,000 in total taxes by making charitable gifts first from his qualified plan and then from other assets, rather than all from other assets

Transfer Taxation Basics: Example Factoring in IRD

	Give IRD to Charity	Give IRD to Son
Estate tax		
Estate tax owed	$968,000	$ 968,000
Income tax		
Balance in qualified plan	$1,000,000	$1,000,000
Income tax deduction	- $1,000,000	- $0
Estate tax attributable to IRD	- $0	- $400,000
Taxable income	$0	$600,000
Income tax owed (son's rate=35%)	**$0**	**$210,000**
Total tax on estate and IRD	**$968,000**	**$1,178,000**

Taxes saved by making gifts from IRD = $1,178,000 - $968,000 = $210,000

Transfer Taxation Basics: Always Give IRD First

- Use IRD assets to fund charitable gifts regardless of estate size
- When estate owes no estate tax, giving IRD to charity saves even more income tax

Income tax	**Give IRD to Charity**	**Give IRD to Son**
Balance in qualified plan	$1,000,000	$1,000,000
Less qualified plan assets donated	- $1,000,000	- $0
Taxable income	$0	$1,000,000
Income tax owed (son's rate=35%)	**$0**	**$350,000**

Questions?

Still Have a Question?

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