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**2008 ABA Joint Fall Meeting of the Section of Taxation and the Section of Real Property, Trust and Estate Law**

**The RPTE Insurance and Financial Planning Committee Presents:**

# Integrating Estate Planning With Investment Strategies Using A Combination of Rolling GRATS and Intra-Family Loans for Effective Wealth Transfers

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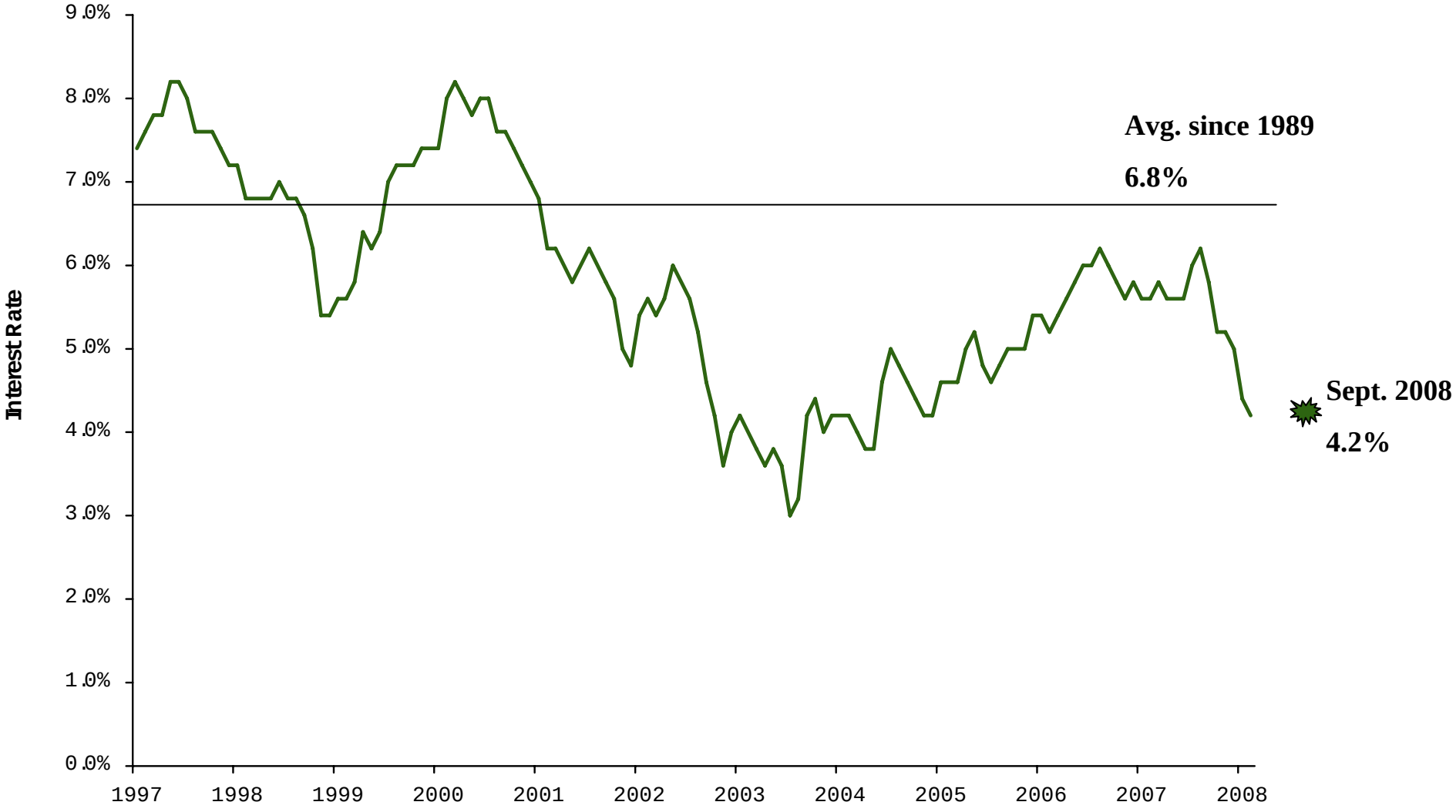
# Integrating Estate Planning With Investment Strategies

## Speakers:


**Mark R. Parthemer, Esq.**
Vice-Chair RPTE Insurance and Financial Planning Committee
Regional Manager
Legacy Planning
Bessemer Trust
Palm Beach, FL
parthemer@bessemer.com

**Andrew M. Parker**
Director Quantitative
Strategies
Bessemer Trust
New York, NY
parkera@bessemer.com

# §7520 Rate – Historical Context




Source: Internal Revue Service

# Integrating Estate Planning With Investment Strategies

**Low Rate Environment Suggests**

- Planning Strategies, including GRATs and Family Loans
- Portfolio Assets are "In Play"

**Thus, today, we will focus on the next frontier for enhanced wealth transfer planning – integrating estate planning and investment strategies.**

**I. Portfolio GRATs**

**II. Family Loans**

**III. Combined Planning**

# I. GRATs - Does the §7520 Rate Really Matter?

## High and Low Section §7520 Rates By Year

| Yr | '89 | '90 | '91 | '92 | '93 | '94 | '95 | '96 | '97 | '98 | '99 | '00 | '01 | '02 | '03 | '04 | '05 | '06 | '07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ⇧ | 11.6 | 11 | 9.8 | 8.6 | 7.7 | 9.4 | 9.6 | 8.2 | 8.2 | 7.2 | 7.4 | 8.2 | 6.8 | 6.0 | 4.2 | 5.0 | 5.4 | 6.2 | 6.2 |
| ⇩ | 9.6 | 9.6 | 8.6 | 6.8 | 6.0 | 6.4 | 7.2 | 6.6 | 7.2 | 5.4 | 5.6 | 7.0 | 4.8 | 3.6 | 3.0 | 3.8 | 4.6 | 5.2 | 5.0 |

**2008:**

| | |
|---|---|
| September | 4.2% |
| 2008 High | 4.3% (Jan.) |
| 2008 Low | 3.2% (May) |

# Impact of the §7520 Rate is Material

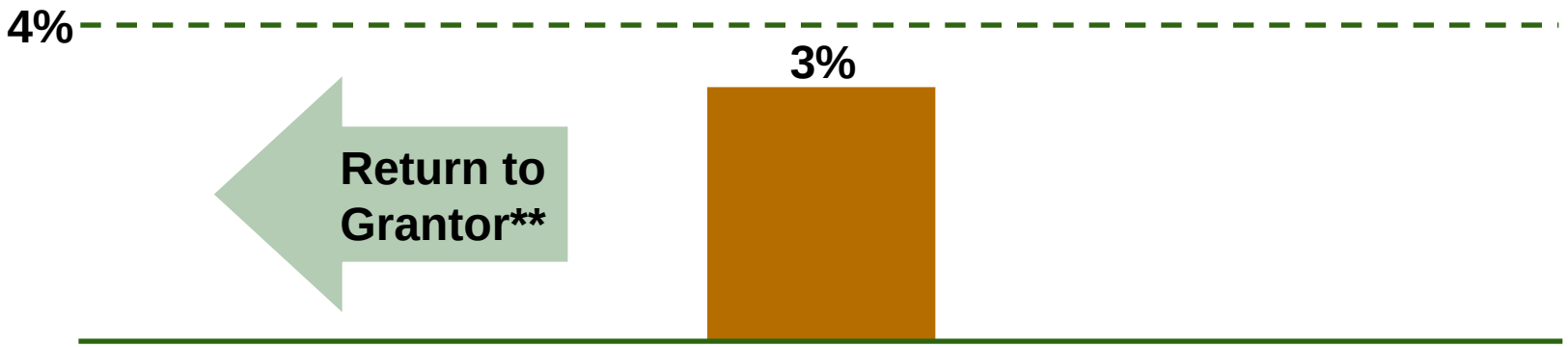
**Example: A 2-year GRAT with $2 million of portfolio assets. Assuming the GRAT is nearly "zeroed out," what amount passes to the remainder beneficiaries transfer-tax free if the rate of return on the investments is 8%?**

| §7520 Rate | Remainder to Beneficiaries |
|---|---|
| 3.8% (June 2008) | $135,446.17 |
| 6.2% (August 2007) | $59,399.41 |

# Understand What Makes the Technique Effective

## "Hypothetical" One-year 4% GRAT with 3% Return*

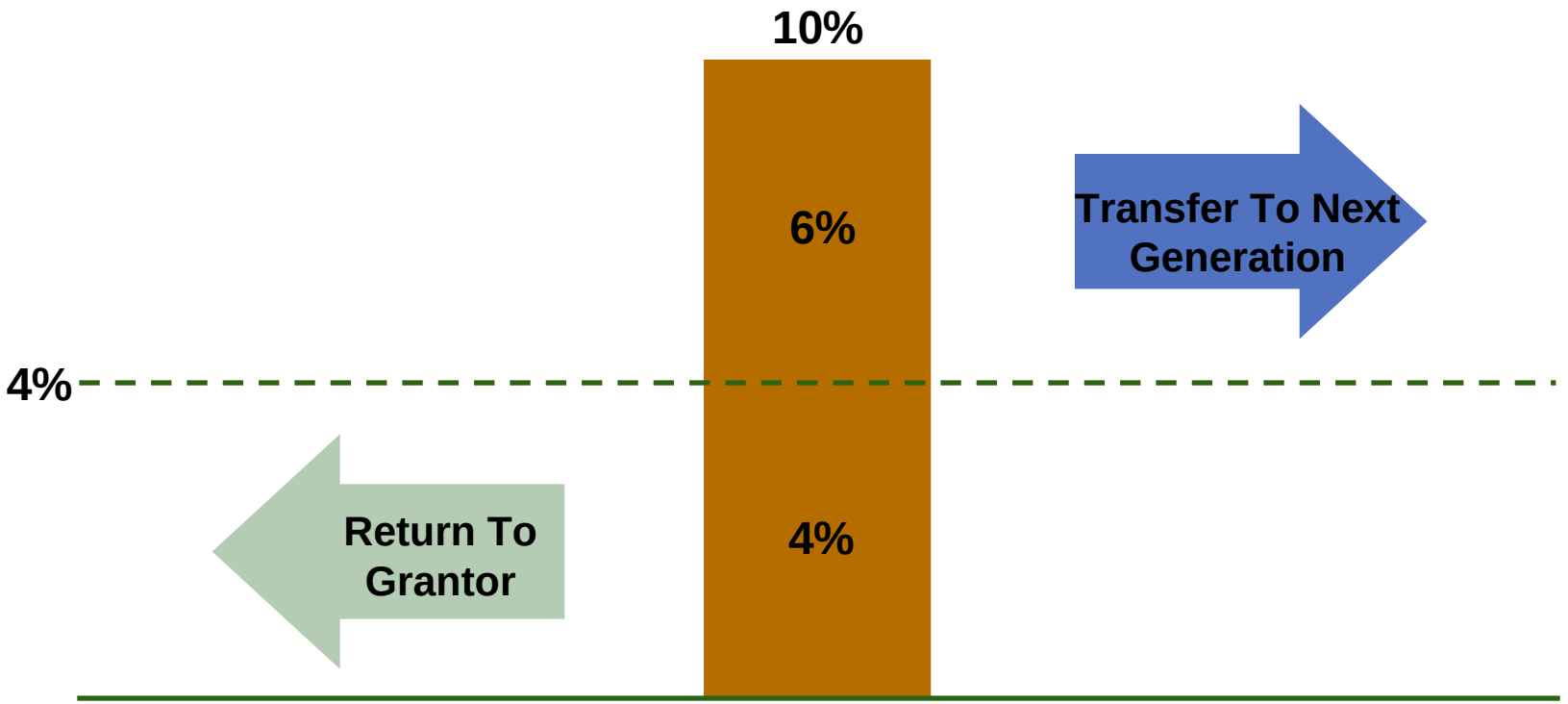
### All value returns to grantor




* The hypothetical examples included in this presentation are for illustration only and are not projections of future returns, tax rates or exemption amounts.
** The hypothetical examples included in this presentation assume an Internal Revenue Code §7520 rate of 4.0%.

# Raise the "Return" Bridge…

## "Hypothetical" One-year 4%* GRAT with 10% Return**

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# Or, Lower the "Annuity" Water.

**Lower the investment return "hurdle" through discounting. The extent of the discount has a concomitant reduction in the "interest" paid back to the Grantor of a nearly "zeroed out" GRAT.**

| Full Value GRAT | 35% Discounted GRAT |
|---|---|
| $622,887<br>"Interest" to Grantor | $404,877<br>"Interest" to Grantor |
| 4.0%<br>Effective annualized rate | 2.6%<br>Effective annualized rate |

# Integrating Estate Planning With Investment Strategies

## Use of Portfolio Assets Surfaces Two Areas to Explore:

### 1. Portfolio GRAT Architecture

- Term – Optimal Maturity
- Annuity – Flat versus Increasing

### 2. Portfolio GRAT Engineering

- Asset Selection – Diversification Anathema
- Substitution Power – Lock-in or Bailout
- Derivatives – Horsepower Fueled by Complexity

# Portfolio GRAT Architecture 101 - Optimal Maturity

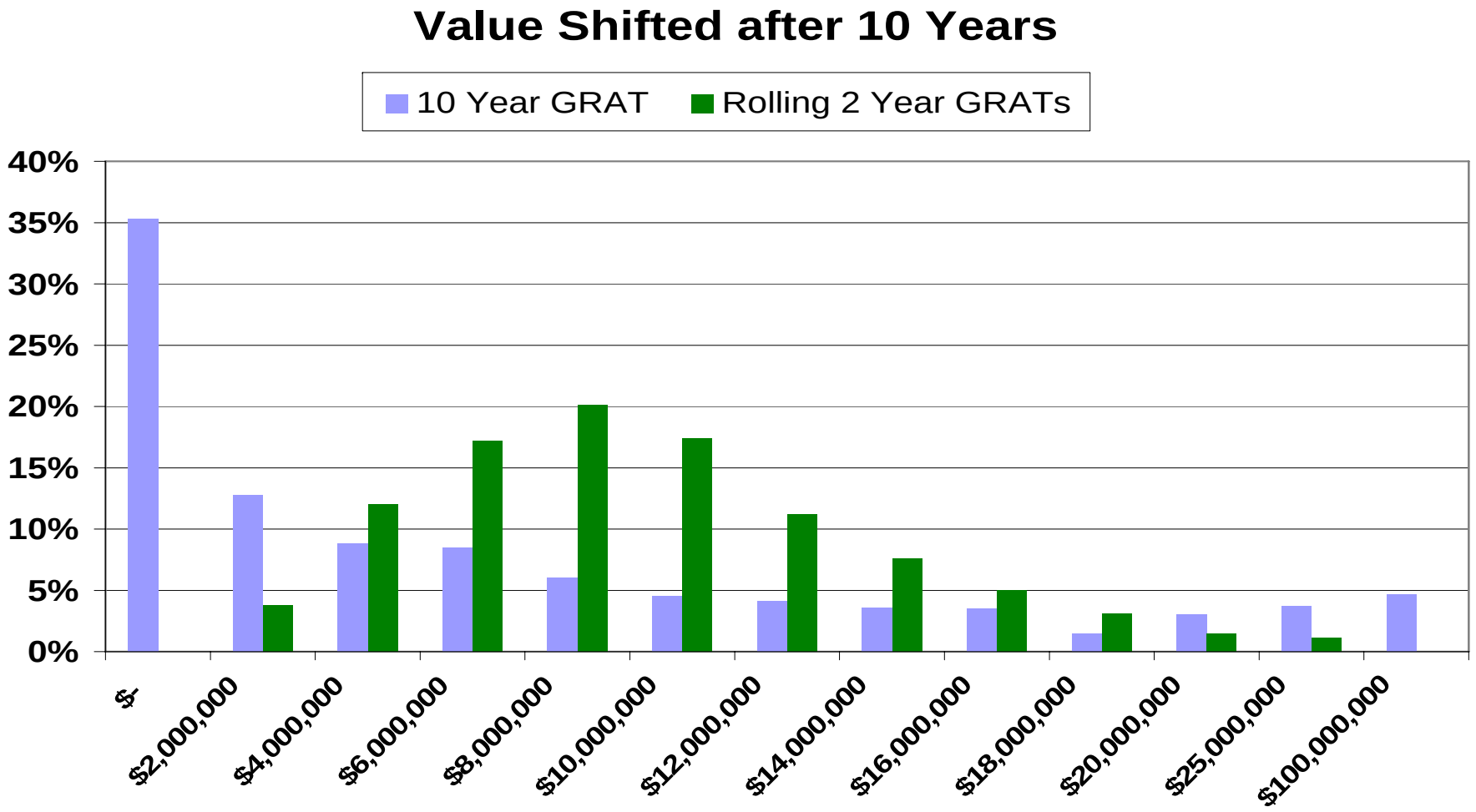
**Myth - Longer term is better because it "locks-in" the AFR and keeps the annuity low – just like a fixed-rate mortgage.**

**Busted!**

- For a typically volatile portfolio asset, despite a rising 7520 rate and ignoring actuarial probability of untimely death, a series of short term GRATs statistically will outperform one long term GRAT.
- Flat, high-income producing assets may still benefit from longer term:
  - Example - the case of the "Horse GRAT".
  - But these situations are atypical and other strategies may be better.

# Portfolio GRAT Architecture 101 - Optimal Maturity

Return = 8%, Risk = 20%, 7520 rate = 3.6%



# Portfolio GRAT Architecture 201 – Flat versus Increasing Annuity*

| Year | Beginning Portfolio Value | IRS Assumed Return** | Required % Annuity | Required $ Annuity | Portfolio Value |
|---|---|---|---|---|---|
| **1** | $10,000,000 | $400,000 | 22.46% | $2,246,271 | $8,153,729 |
| **2** | $8,153,729 | $326,149 | 22.46% | $2,246,271 | $6,233,607 |
| **3** | $6,233,607 | $249,344 | 22.46% | $2,246,271 | $4,236,680 |
| **4** | $4,236,680 | $169,467 | 22.46% | $2,246,271 | $2,159,876 |
| **5** | $2,159,876 | $86,395 | 22.46% | $2,246,271 | $0 |

**Value Transferred if Portfolio Return 4%**
**$0**

**Value Transferred if Portfolio Return 10%** **$2,391,390**

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# Portfolio GRAT Architecture 201 – Flat versus Increasing Annuity*

| Year | Beginning Portfolio Value | IRS Assumed Return** | Required % Annuity | Required $ Annuity | Portfolio Value |
|---|---|---|---|---|---|
| **1** | $10,000,000 | $400,000 | 15.31% | $1,530,782 | $8,869,218 |
| **2** | $8,869,218 | $354,769 | 18.37% | $1,836,938 | $7,387,049 |
| **3** | $7,387,049 | $295,482 | 22.04% | $2,204,326 | $5,478,206 |
| **4** | $5,478,206 | $219,128 | 26.45% | $2,645,191 | $3,052,143 |
| **5** | $3,052,143 | $122,086 | 31.74% | $3,174,229 | $0 |

**Value Transferred if Portfolio Return 4%**
**$0**

**Value Transferred if Portfolio Return 10%** **$2,667,746**

**An additional transfer of over $275,000, or 11.6%!**

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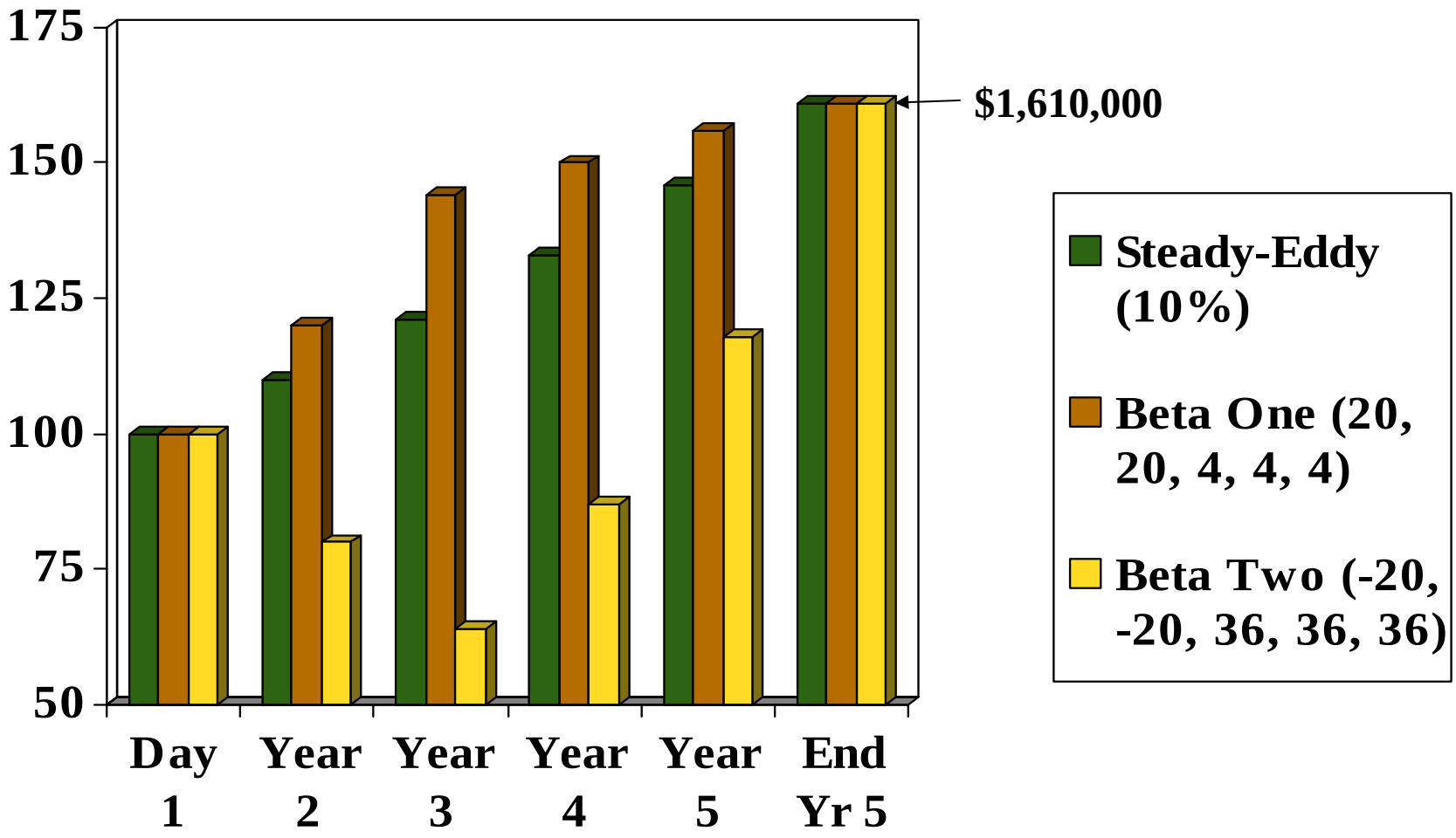
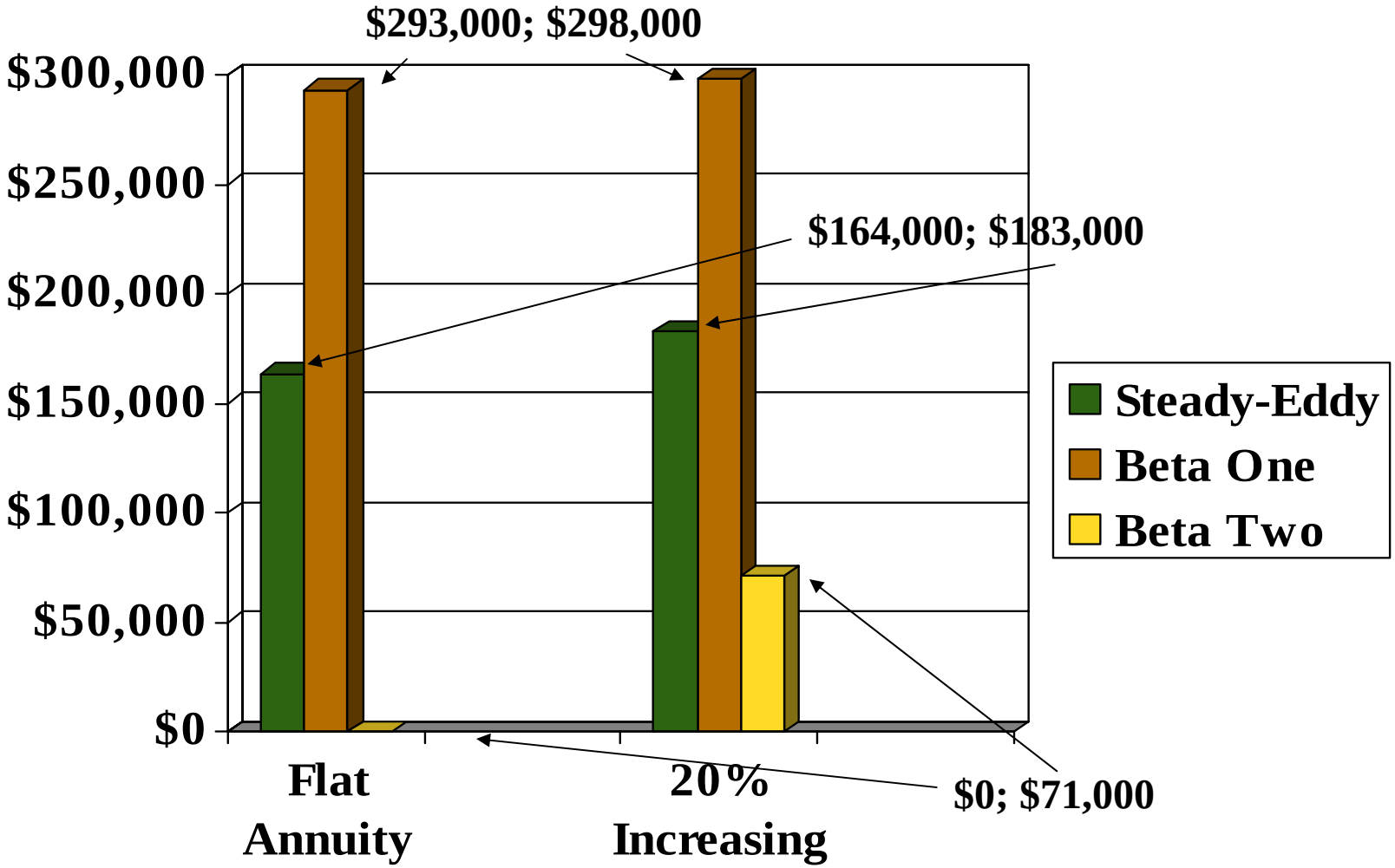
# Portfolio GRAT Architecture 201 – Flat versus Increasing Annuity

## 3 Sample Growth Patterns of $1,000,000 Investments



# Portfolio GRAT Architecture 201 – Flat versus Increasing Annuity

## Final Results:



# Portfolio GRAT Engineering 101 – Asset Selection*

## Let's consider a two stock portfolio

**Company A – 10,000 shares – $50 – $5,000,000**

**Company B – 10,000 shares – $50 – $5,000,000**

**$10,000,000**

## Let's recall that our IRS hurdle rate is 4%**

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# Portfolio GRAT Engineering 101 - Assets Selection*

| | | Return | Ending Value | |
|---|---|---|---|---|
| Company A | – | +20% | $60 | 6,000,000 |
| Company B | – | -20% | $40 | 4,000,000 |
| | | | | 10,000,000 |
| Minimum annuity to grantor** | | | | 10,400,000 |
| Amount transferred to next generation | | | | – 0 – |

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# Portfolio GRAT Engineering 101 - Splitting "Volatile" Assets Into Multiple GRATs*

**GRAT 1:**

| | | | | |
|---|---|---|---|---|
| **Company A** | **+20%** | **$60** | | **6,000,000** |
| | | | **Minimum annuity to grantor** | **5,200,000** |
| | | | **Amount transferred**** | **800,000** |

**GRAT 2:**

| | | | | |
|---|---|---|---|---|
| **Company B** | **-20%** | **$40** | | **4,000,000** |
| | | | **Minimum annuity to grantor** | **5,200,000** |
| | | | **Amount transferred**** | **– 0 –** |
| | | | **Total Transferred** | **800,000** |

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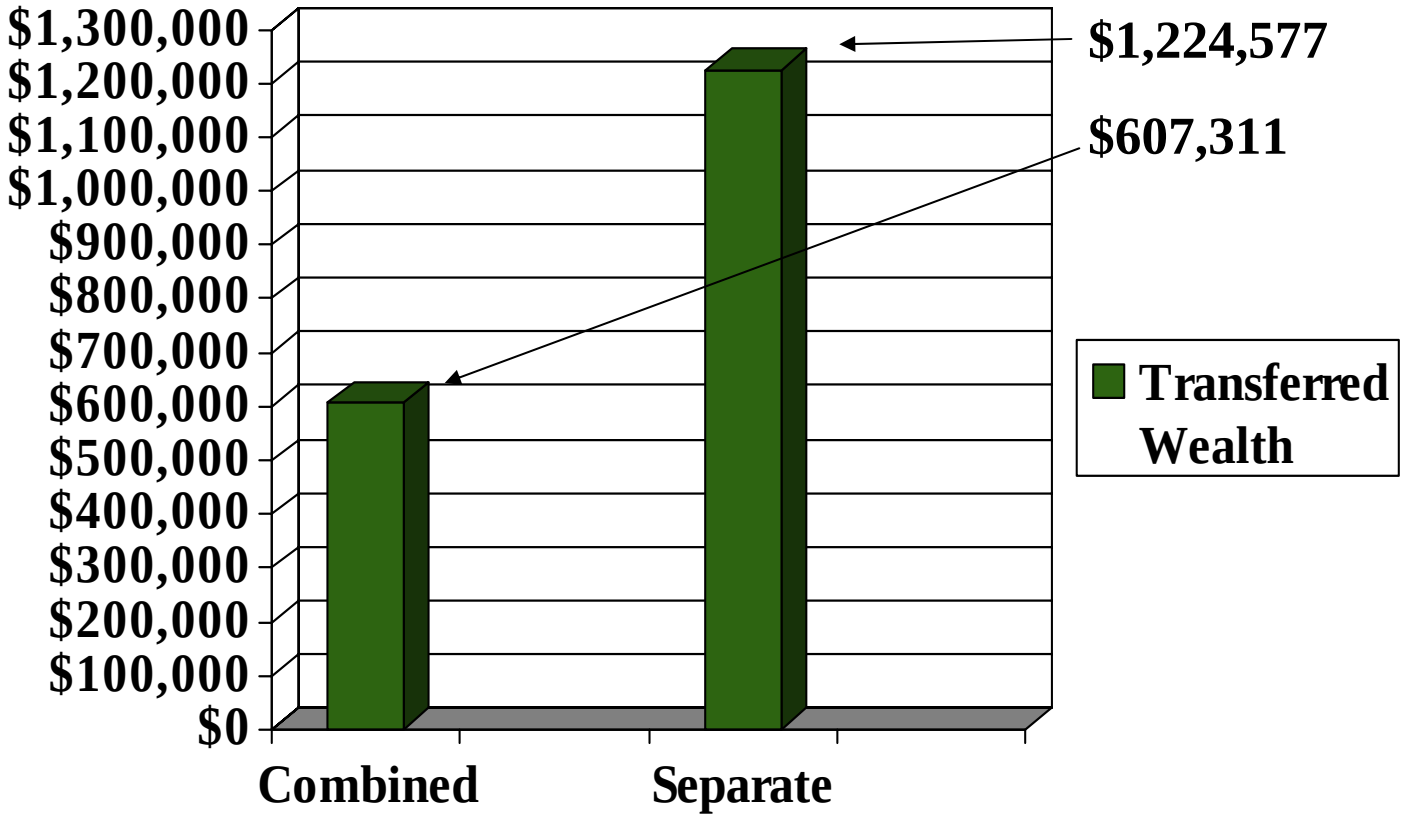
# Portfolio GRAT Engineering 101 - Comparison of Combined versus Separate GRATs One 2-Year; One 3-Year (including 10% growth)



# Portfolio GRAT Engineering 101 - Diversification Anathema

## Portfolio GRAT Drafting Challenge:

- **Rational investors diversify to optimize their portfolios, as markets do not reward for financial risks that can be managed (Modern Portfolio Theory as embraced by Prudent Investor Act)**
  - **Company specific risk**
    - **Managed by exposure among securities in the same asset class**
    - **Think Enron**
  - **Market risk**
    - **Managed by exposure among several uncorrelated asset classes or sectors**
    - **Think "tech bubble"**
- **Draft trust to facilitate trustee mission:**
  - **Right to retain/hold concentrated position, and**
  - **Exonerate from duty to diversify.**

# Portfolio GRAT Engineer 201 – Active Management via Substitution Power

## Reversion To Mean

- **Appears to violate the definition of independent events.**
- **Reflects the fact that the probability function of any random variable, by definition, is nonnegative over every interval and integrates to one over the interval:**

$$\int_{\mu-i}^{\mu+i} P(x)\,dx > \int_{\mu-j}^{\mu+j} P(x)\,dx$$

- **This statistical phenomenon states that the greater the deviation of a random variate from its mean, the greater the probability that the next measured variate will deviate less far.**
- **Example: Shaquille O'Neal, 52.4% NBA career free throw average, shoots and makes 1 free throw a day for 99 consecutive days. Does he have a better than 52.4% chance of making the shot on day 100?**
- **Better chance than Rick Barry (90% NBA career FT avg.) assuming he missed the shot on each of the 99 days?**

# Portfolio GRAT Engineer 201 – Active Management via Substitution Power

## Lock-in Gains:

**When assets in GRAT appreciate significantly and sooner than expected, anticipate Reversion To Mean:**

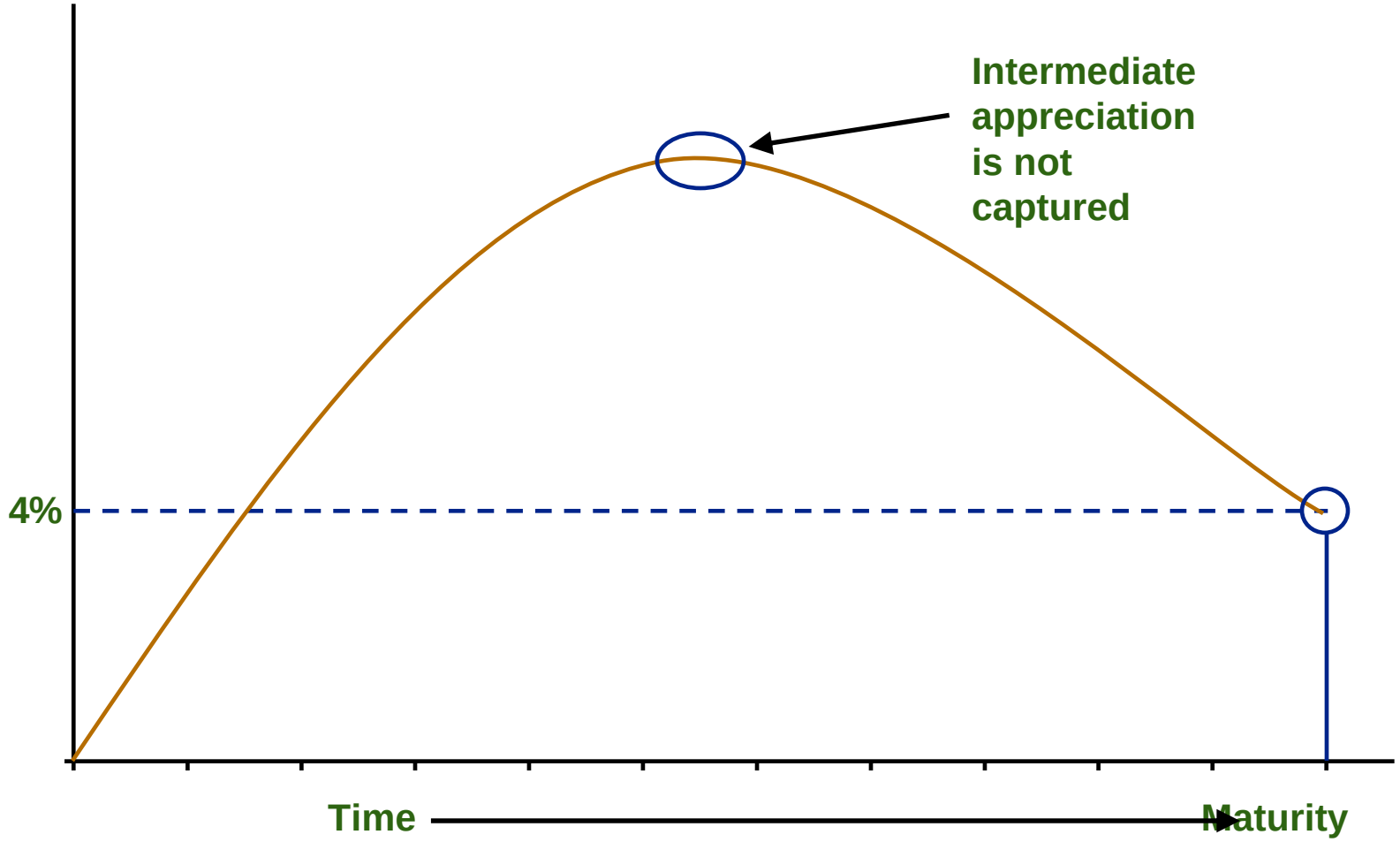
- **Grantor exercise substitution right; invest replacement assets to keep pace with §7520 rate.**
- **Grant re-GRAT's substituted assets to transfer future appreciation.**

# Portfolio GRAT Engineer 201 – Active Management via Substitution Power

## Cut the Losses; Bet on the Future

- **Grantor exercises substitution right when stocks dip**
- **Re-GRAT depressed value assets with a subsequenlty lower "hurdle", position for enhanced positive wealth transfer as assets revert to mean.**
- **Avoid waiting until end of term.**
- **Avoid diluting future appreciation (as assets revert to mean) with "catch-up" from earlier losses.**
- **It is all in how you look at it, so are turbulent financial markets a challenge or opportunity?**

# Portfolio GRAT Engineer 201 – Active Management via Substitution Power

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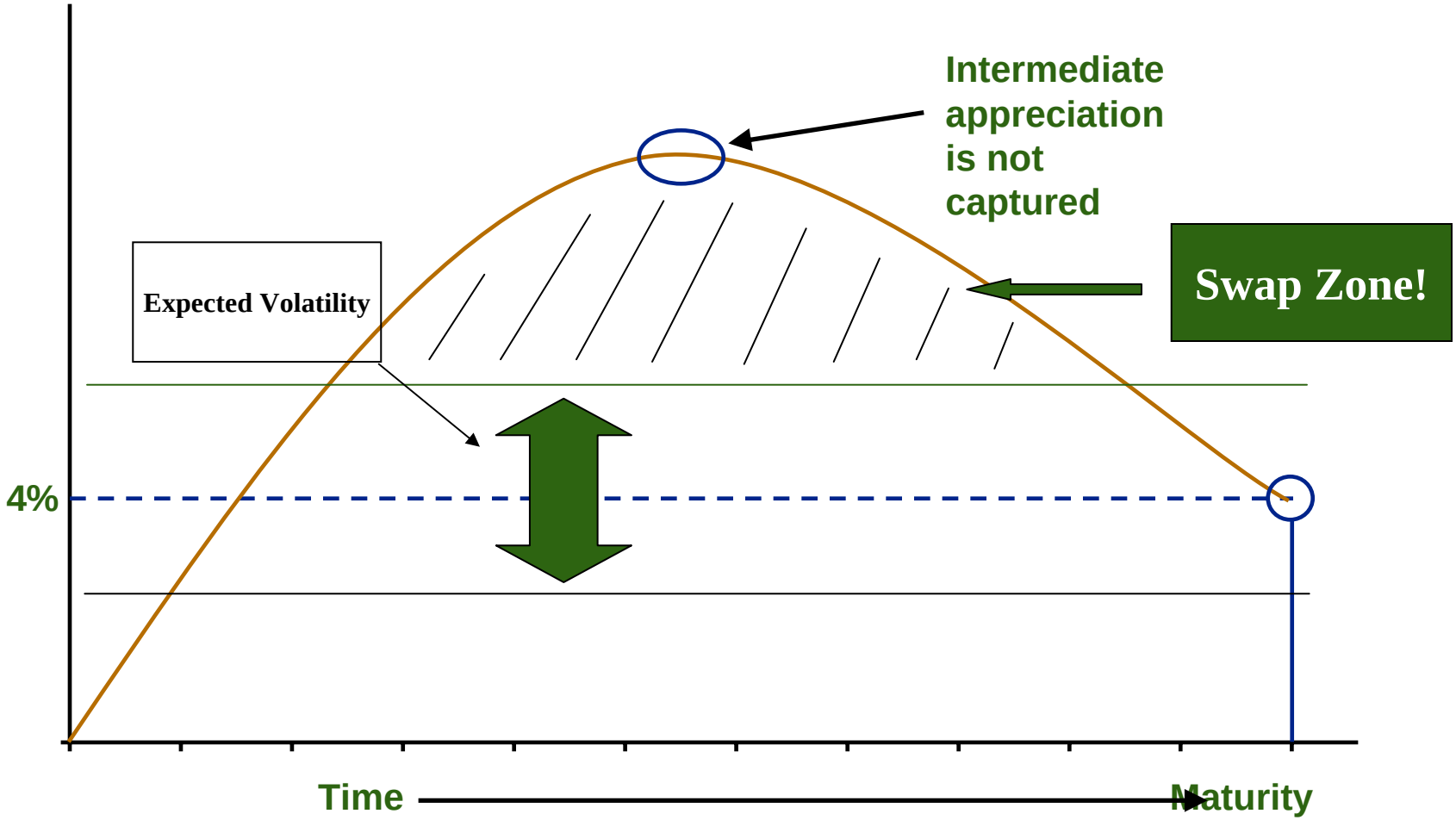
# Portfolio GRAT Engineer 201 – Active Management via Substitution Power



# Portfolio GRAT Engineering Grad School - Derivatives

**Generally more effective with larger standard deviation (more volatile) assets due to friction costs and probability of adding value.**

**Public versus Private:**

- **Consider private hedge transactions to minimize costs.**
- **When appropriate, use grantor's spouse to avoid reciprocal trust issues and income taxation (Section 1041 sales between spouse tax free; PLRs 8644012 & 20012007 sales between grantor trust and spouse tax free).**

# Portfolio GRAT Engineering Grad School - Derivatives

**GRAT Derivative Strategy designed to (1) assure some value will transfer or (2) cap wealth transferred.**

**Grantor's spouse purchases an out-of-the-money option using Black Scholes approach, or other binomial model. Rev. Proc. 98-34 permits private options.**

**Example: If stock worth $10, price of a $12.50 option, depending on volatility, approximately $3.29.**

- **If stock goes above $12.50 at end GRAT term, remainder beneficiaries receive benefit of 25% return plus 32.9% option return, less §7520. Balance of upside reverts to grantor's spouse.**
- **If stock does not exceed $12.50, remainder beneficiaries receive actual growth plus option purchase, less §7520 (e.g., if stock remains at $10, GRAT has $13.29/share).**

# Portfolio GRAT Engineering Grad School - Derivatives

**GRAT Derivative Strategy designed to double gain up to 20% on assets with modest growth expectations during GRAT term.**

1. **Assume GRAT owns 100 shares trading at $100 per share. GRAT purchases at-the-money call option on 100 shares at $100, providing GRAT right to future appreciation.**

2. **GRAT sells an out-of-the-money call option on 200 shares at $120 per share, assuming cost of purchased call option equals proceeds on sold option. Use strike price or number of shares so net no cost to GRAT.**

**Result: GRAT receives double on growth from $100 to $120, and nothing on growth above $120.**

# II. Family Loans

**§1274(d) rates for September, with annual compounding:**

| Loan Duration: | Less than 3 Years | 3 to 9 Years | More Than 9 Years |
|---|---|---|---|
| Rate: | 2.38% | 3.46% | 4.58% |

**Typically, enter into family or other low interest loan in one of two circumstances:**

1. **<u>NEED</u> - When circumstances require wealth and gift tax is too burdensome or GRATs/other techniques take too long.**

2. **<u>OPPORTUNITY</u> – As an arbitrage strategy. Play the spread between the rate of borrowing and the hoped-for higher rate of return the borrower can achieve.**

# Family Loans

## More on the arbitrage strategy (opportunity):

- **Lender lends cash, evidenced by a promissory note.**
- **Borrower uses the cash to invest. If the rate of return on the investment after any taxes and fees exceeds the specified interest rate (the "spread"), the excess is a tax-free transfer to the borrower.**
- **Absolute, as well as relative, economic indicators suggest when it might make financial sense to enter into a family (or other low interest) loan.**

# What Difference Does The AFR Make?

**Example: Client extends $2 million loan to child. Below chart reflects Annual Interest payment under an interest only mid-term, term Note.**

| AFR | Interest Payment |
|---|---|
| 2.74% (rate for May 2008) | $54,800.00 |
| 5.09% (rate in August 2007) | $101,800.00 |

# III. Combined Planning – GRATs and Loans

**Facts:**

**For medical reasons, client's daughter needs to move to new $2.0M home. No equity in current house, even if she could sell it quickly.**

**Parent purchases home pre-construction. When completed, parent sells it to daughter (grantor trust not needed); paid with a 9-year Note.**

**Parent dedicates $10.0M stock portfolio to a series of rolling 2-year GRATs. Distributions from GRATs used to repay loan.**

**Result: Assuming 8% average return on stocks, loan repaid in 5 years.**

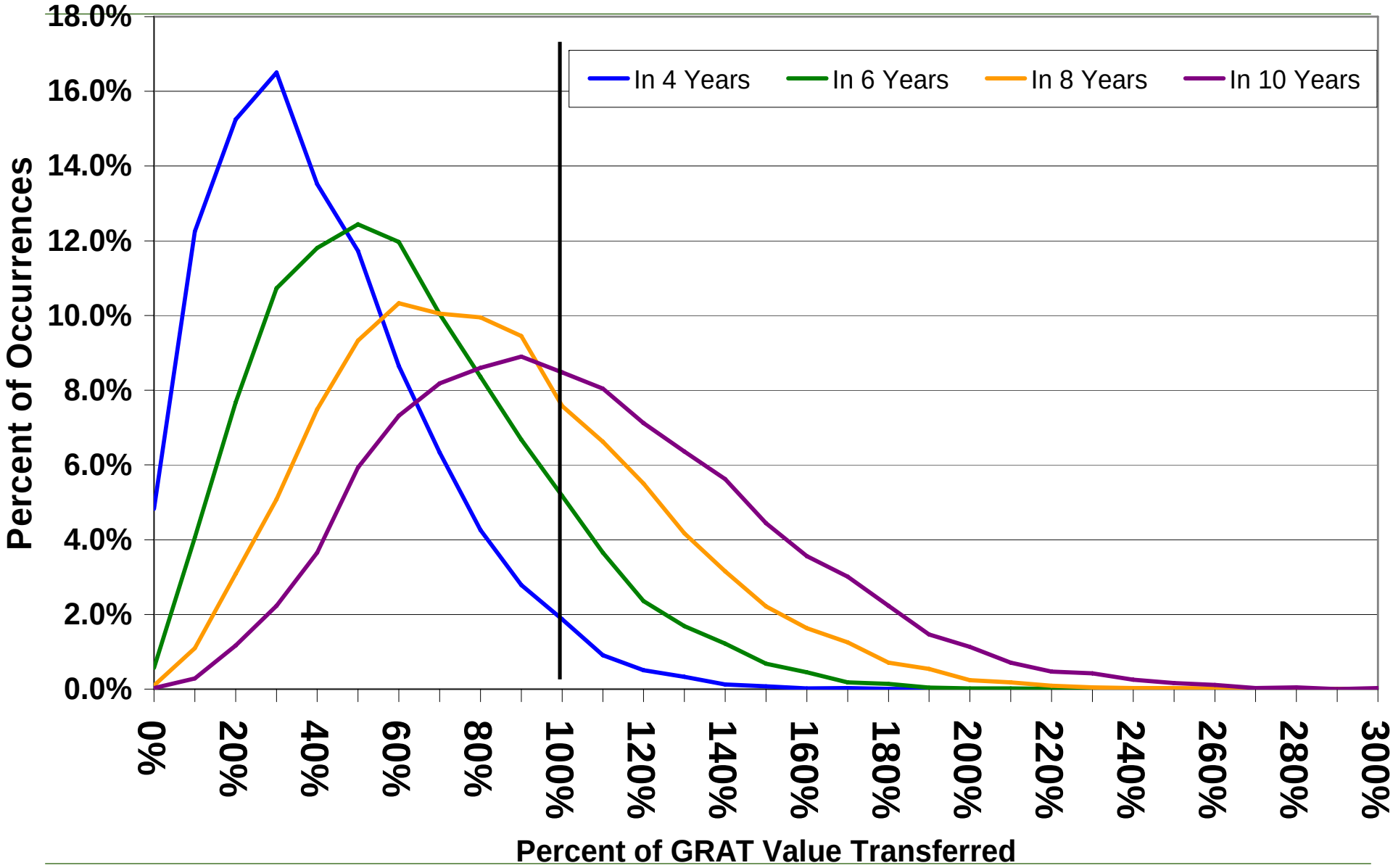
# Would you like to try a combo? 2 Year GRATs to Repay $2.0M Loan

| | |
|---|---|
| **Funding** | $ 10,000,000 |
| **7520 Rate** | 4.20% |
| **Initial Year** | 2008 |
| **Term** | 2 |
| **GRAT Growth** | 8.00% |
| **Beneficiary Growth** | 0.00% |
| **Annuity Increase** | 20.00% |
| **Annuity Factor** | 48.42837% |

| Loan | | Year | Beginning Balance | Interest @ 3.55% | Payments | Ending Balance |
|---|---|---|---|---|---|---|
| | **2008** | 1 | **$ 2,000,000** | $ 71,000 | $ - | $ 2,071,000 |
| | **2009** | 2 | $ 2,071,000 | $ 73,521 | $ (810,423) | $ 1,334,098 |
| | **2010** | 4 | $ 1,334,098 | $ 47,360 | $ (393,819) | $ 987,640 |
| | **2011** | 5 | $ 987,640 | $ 35,061 | $ (714,399) | $ 308,302 |
| | **2012** | 6 | $ 308,302 | $ 10,945 | $ (319,247) | $ - |
| | **2013** | 7 | $ - | $ - | $ - | $ - |
| | **2014** | 8 | $ - | $ - | $ - | $ - |
| | **2015** | 9 | $ - | $ - | $ - | $ - |
| | **2016** | 10 | $ - | $ - | $ - | $ - |
| | **2017** | 11 | $ - | $ - | $ - | $ - |

# Rolling 2-Year GRATs

**The Probability of Transferring Assets over Time**



# Concluding Take-Aways for Portfolio Planning

**GRAT "Tweaks"**

- **Short term "rolling" GRATs**
- **Separate GRATs for separate asset classes**
- **Monitor GRAT performance: Lock in gains or bailout of losses**
- **Consider derivatives to enhance horsepower**
- **Formula to "cap" amount passing to family; balance is returned**
- **Pass GRAT remainder into continuing trust**
  - **Spouse could be a potential beneficiary**
  - **Qualify trust for Grantor income tax status**

**Loans**

- **When rate/investment "spread"**
- **Immediate access to funds**

**Combine Loans with "rolling" GRATs**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