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Triangulation
Integrating Life Insurance into the Estate and Investment Plans

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How Life Insurance Typically Is Integrated into the Estate and Investment Plans

- **Representative facts**
  - Married couple, $20 million estate (current value), $10.9 exclusion available (inflation-adjusted)
  - Current estate tax liability = $3.6 million (i.e., [$20 million–$10.9 million] x 40%)
  - Integrated solution to this problem
    - Fund an irrevocable life insurance trust (ILIT) using annual exclusion gifts
    - Use annual gifts to pay premiums on a $3.6 million second-to-die policy

- **Potential issues**
  - The solution is temporary
    - Estate value may increase or decrease
    - Applicable exclusion grows with inflation
    - Circumstances (e.g., tax laws, state of domicile, spending) may change
  - The proposal is actually *two* proposals
    - Create and fund an irrevocable trust
    - Invest all of the funding proceeds in life insurance. …But would a blend of insurance and a capital-market portfolio be preferable?
  - *Failure to integrate the insurance concept with estate- and investment-planning strategies*

Source: AB

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Road Map

- The current environment: why now might be an ideal time to revisit how we think about life insurance

- Basic life insurance planning: focus on beneficiary's needs, not traditional rules of thumb based upon income replacement (e.g., 10 times after-tax earnings)

- The life insurance illustration: mining its contents and displaying the results

- The highest and best use of life insurance: integration with multigenerational estate and investment planning

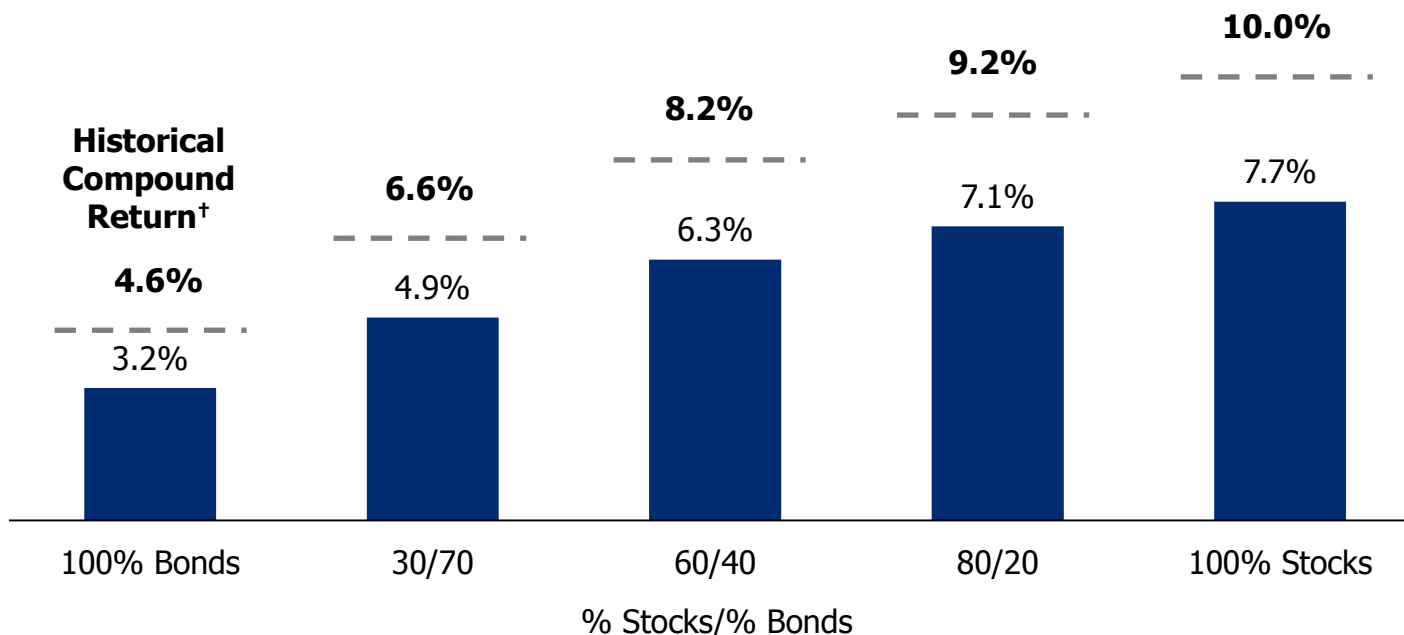- Conclusion: life insurance planning dos and don'ts

Source: AB

The Current Environment:

Why Now Might Be an Ideal Time to Revisit
How We Think About Life Insurance

Future Returns Are Likely to Be Lower

Median Return Projections* for Next 30 Years
vs. 30-Year Historical Compound Return‡

Bar chart showing Median Return Projections and Historical Compound Return by stocks/bonds allocation:

% Stocks/% Bonds	Historical Compound Return†	Median Return Projection
100% Bonds	4.6%	3.2%
30/70	6.6%	4.9%
60/40	8.2%	6.3%
80/20	9.2%	7.1%
100% Stocks	10.0%	7.7%

Based on Bernstein's estimates of the range of returns for the applicable capital markets over the periods analyzed. **Data do not represent past performance and are not a promise of future results or a range of future results**. See Appendix, Notes on Wealth Forecasting System, for details.
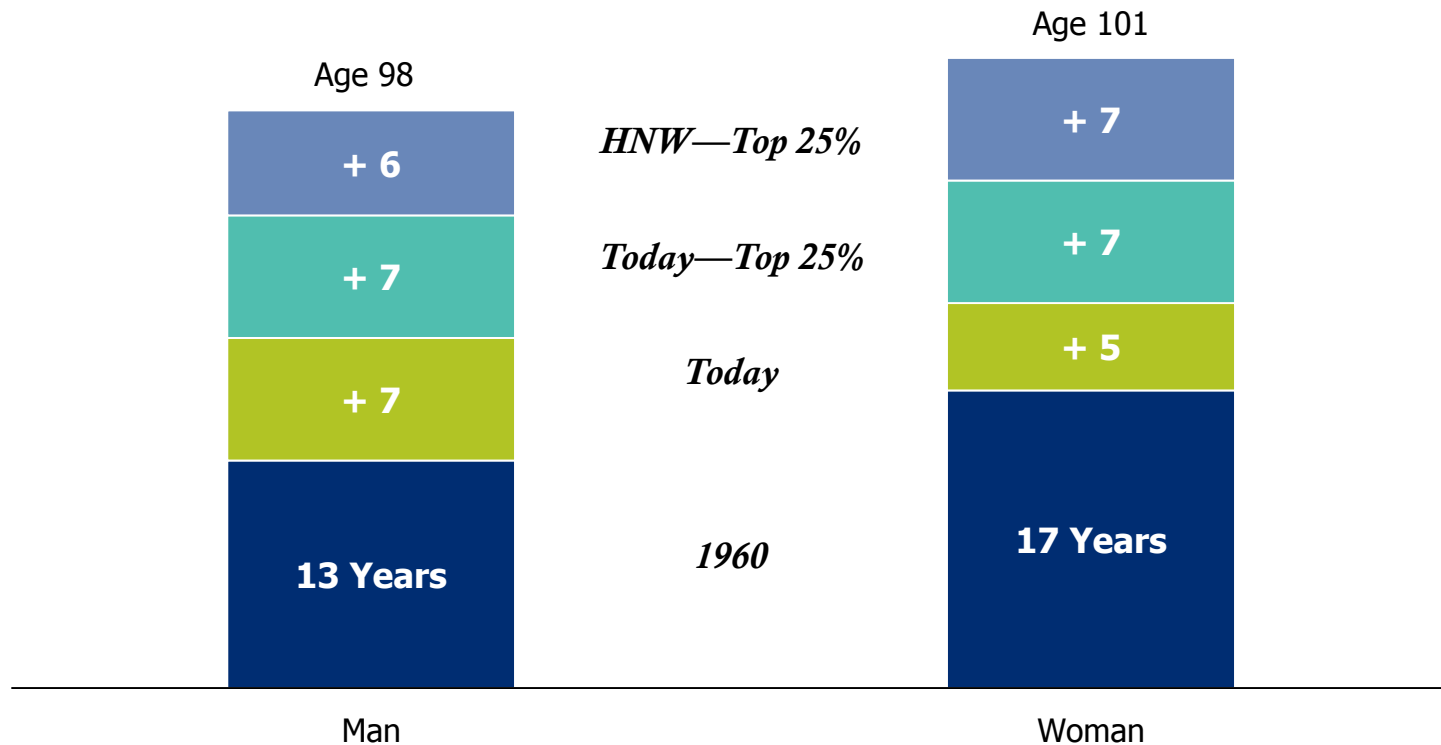
*Projected pretax 30-year compound annual growth rate. Stocks (or "global equities") are modeled as 21% US diversified, 21% US value, 21% US growth, 7% US small-/mid-cap,22.5% developed international, and 7.5% emerging-market stocks, and bonds are modeled as intermediate-term diversified municipal bonds. Reflects Bernstein's estimates and the capital-market conditions as of December 31, 2015.

‡Historical compound return calculated from January 1, 1986, through December 31, 2015 with equities represented as follows: 70% S&P 500 and 30% MSCI EAFE from 1986 through 1987, and 70% S&P 500, 25% MSCI EAFE, and 5% MSCI EM thereafter; bonds represented by the Lipper Short/Intermediate Municipal Bond Fund Average.
Source: Lipper, MSCI, Standard & Poor's, and AB

People Are Living Longer

Average Life Expectancy for a 65-Year-Old*

Age 98 (Man)

- + 6 — *HNW—Top 25%*
- + 7 — *Today—Top 25%*
- + 7 — *Today*
- 13 Years — *1960*

Age 101 (Woman)

- + 7 — *HNW—Top 25%*
- + 7 — *Today—Top 25%*
- + 5 — *Today*
- 17 Years — *1960*

Man   Woman

*Source: Social Security Administration, Society of Actuaries, and M Financial Group

Federal Wealth Transfer and Income Taxes: Then and Now

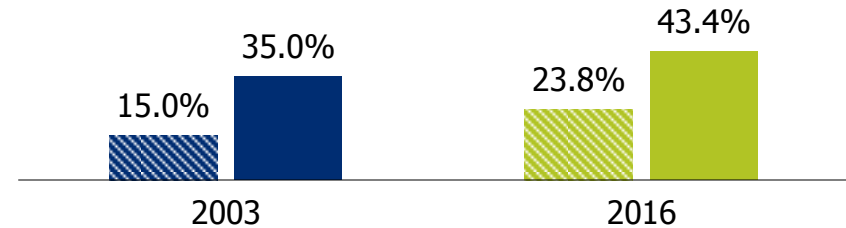- ■ **Applicable exclusion amount**

  $675,000 (2001) — $5.45 Mil. (2016)

- ■ **Transfer tax rate**

  55% (2001) — 40% (2016)

- ■ **Income tax rates***

  2003: 15.0% / 35.0% — 2016: 23.8% / 43.4%
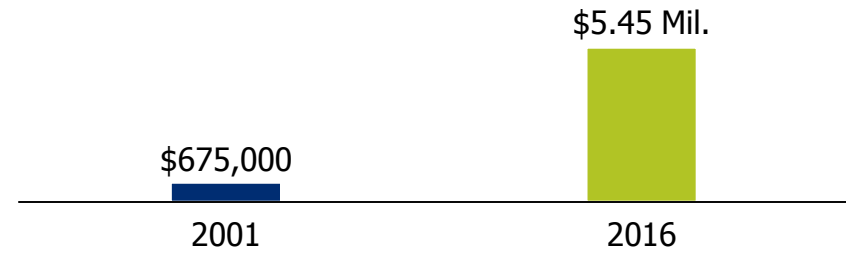
⊠ Long-Term Capital Gain/Qualified Dividend
■ Short-Term Capital Gain/Ordinary Income

*The top income tax rates in 2016 include the 3.8% Medicare surtax on net investment income. The top ordinary income/short-term gain rate and qualified dividend/long-term gain rate in 2016 are 39.6% and 20%, respectively.
Source: Internal Revenue Service (IRS) and AB

Projected Effect of Inflation on Applicable Exclusion

Applicable Exclusion Amount
Nominal (USD Millions)
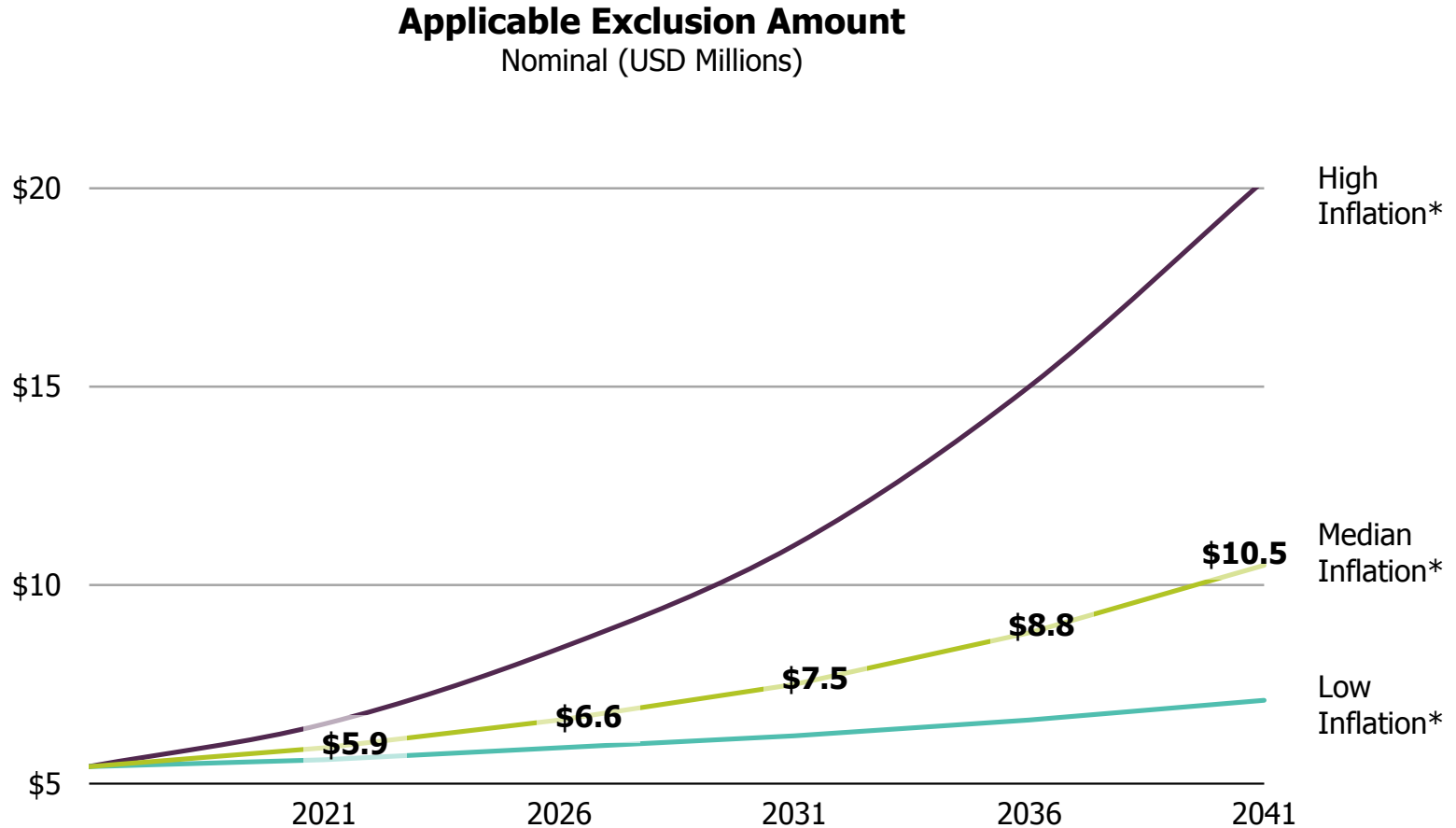
*Based on increases in inflation, rounded to the nearest $100,000 in this display. Applicable exclusion amount shown is for an individual, based upon 10th ("high"), 50th ("median"), and 90th ("low") percentile outcomes for the inflation-adjusted applicable exclusion amount.

Based on Bernstein's estimates of the range of returns for the applicable capital markets. **Data do not represent past performance and are not a promise of actual results or a range of future results.** See Appendix, Notes on Wealth Forecasting System, for details.

Source: AB

Basic ATRA-Math*: Consider Likely Post-Transfer Appreciation, Not Just Gap Between Effective Estate and Capital-Gains Tax Rates

Is anticipated $[A_{pt} \times T_e] > [T_{cg} \times \{(V - B) + A_{pt}\}]$?;

where:

A_{pt} = Post-transfer appreciation;

T_e = Transfer<u>or</u>'s effective <u>estate</u> tax rate

T_{cg} = Transfer<u>ee</u>'s effective <u>capital-gains</u> tax rate

V = Current asset value

B = Current adjusted basis

> *Expected timing of transaction and transferor's death are also key variables*

Basic Life Insurance Planning:

Focus on Beneficiary's Needs,
Not Merely Replacing Lost Income

Wealth Transfer Framework: Key Questions Post-ATRA

Lifestyle Spending

Personal Reserve

Core Capital

- How likely is it that core assets needed to support lifestyle will be *less than* the inflation-indexed applicable exclusion over time?

- Does the inflation-indexed exclusion provide an opportunity to reserve more for long-term care?

Extra Spending

Opportunistic

Children Grandchildren

Charity

Surplus Capital

- How much (if any) can stay in the estate without estate tax exposure?

- What are the *income* tax characteristics of capital earmarked for wealth transfer?

- What are the income tax consequences to the beneficiary upon liquidation?

- Can grantor trusts be used to facilitate periodic repositioning of assets, based on potential for growth *and* favorable income tax characteristics?

Source: AB

The Amount of Death Benefit Should Depend upon the Relationship over Time Between Need . . .

Wealth over Time
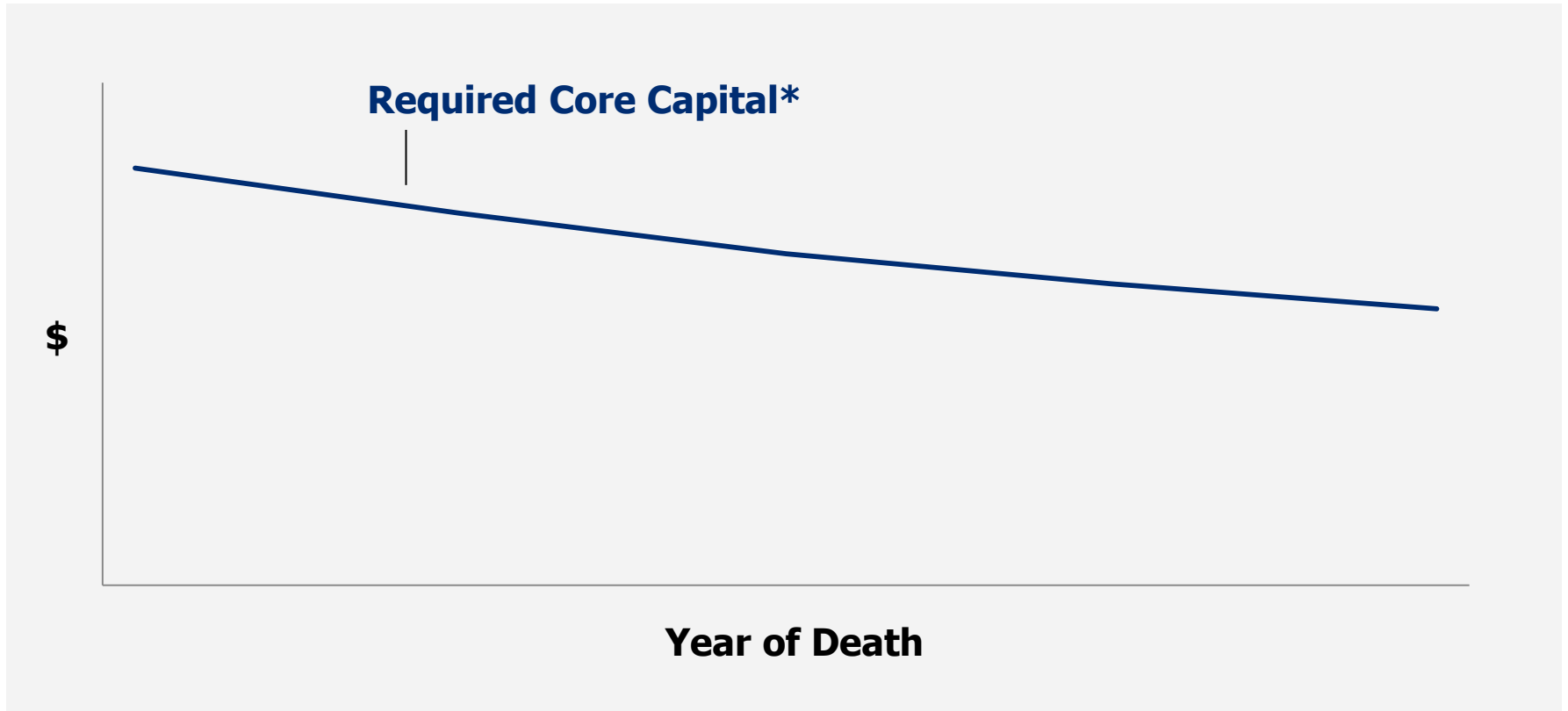
Required Core Capital*

$

Year of Death

*"Required Core Capital" is the portfolio value required to support the survivor's lifetime spending at a 90% level of confidence.
Source: AB

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. . . And Portfolio Value

Wealth over Time

Required Core Capital*

$

Portfolio Value

Year of Death

*"Required Core Capital" is the portfolio value required to support the survivor's lifetime spending at a 90% level of confidence.
Source: AB

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The Ideal Amount of Death Benefit Is the Difference Between How Much One Needs and How Much One Is Likely to Have
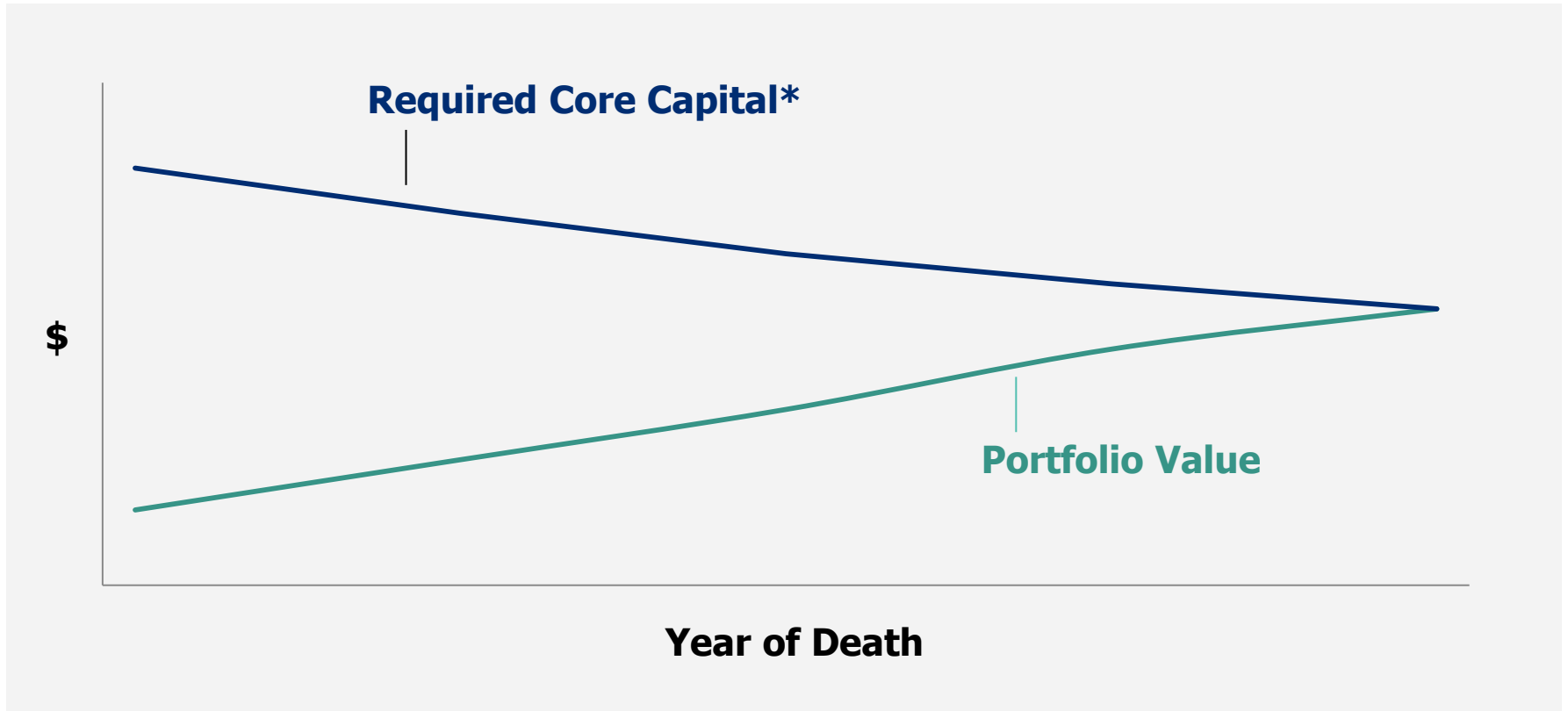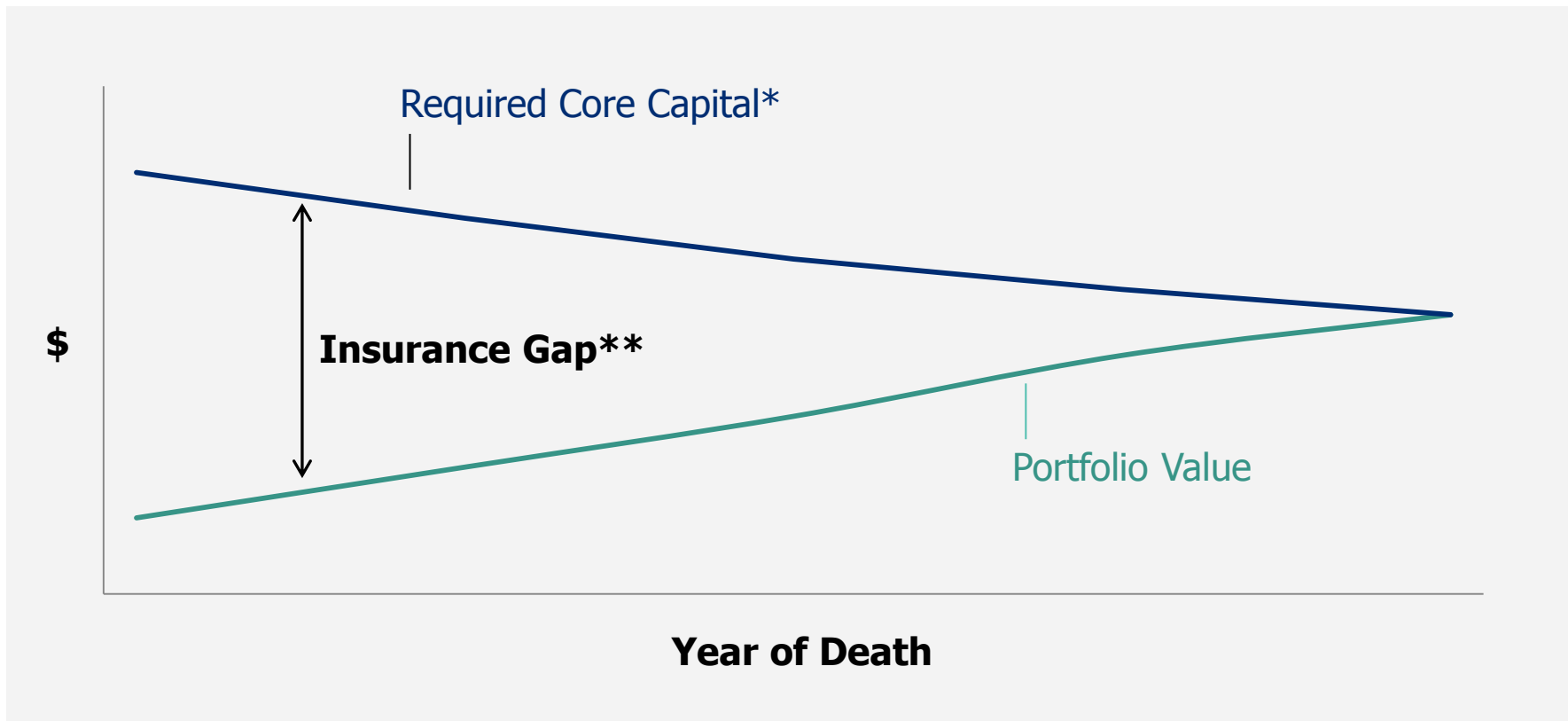
Wealth over Time

*"Required Core Capital" is the portfolio value required to support the survivor's lifetime spending at a 90% level of confidence.
**"Insurance Gap" equals, at any given point in time, the difference between Required Core Capital and projected Portfolio Value, usually depicted at the 90th percentile in Bernstein's Wealth Forecasting System^SM. See Appendix, Notes on Wealth Forecasting, for details.
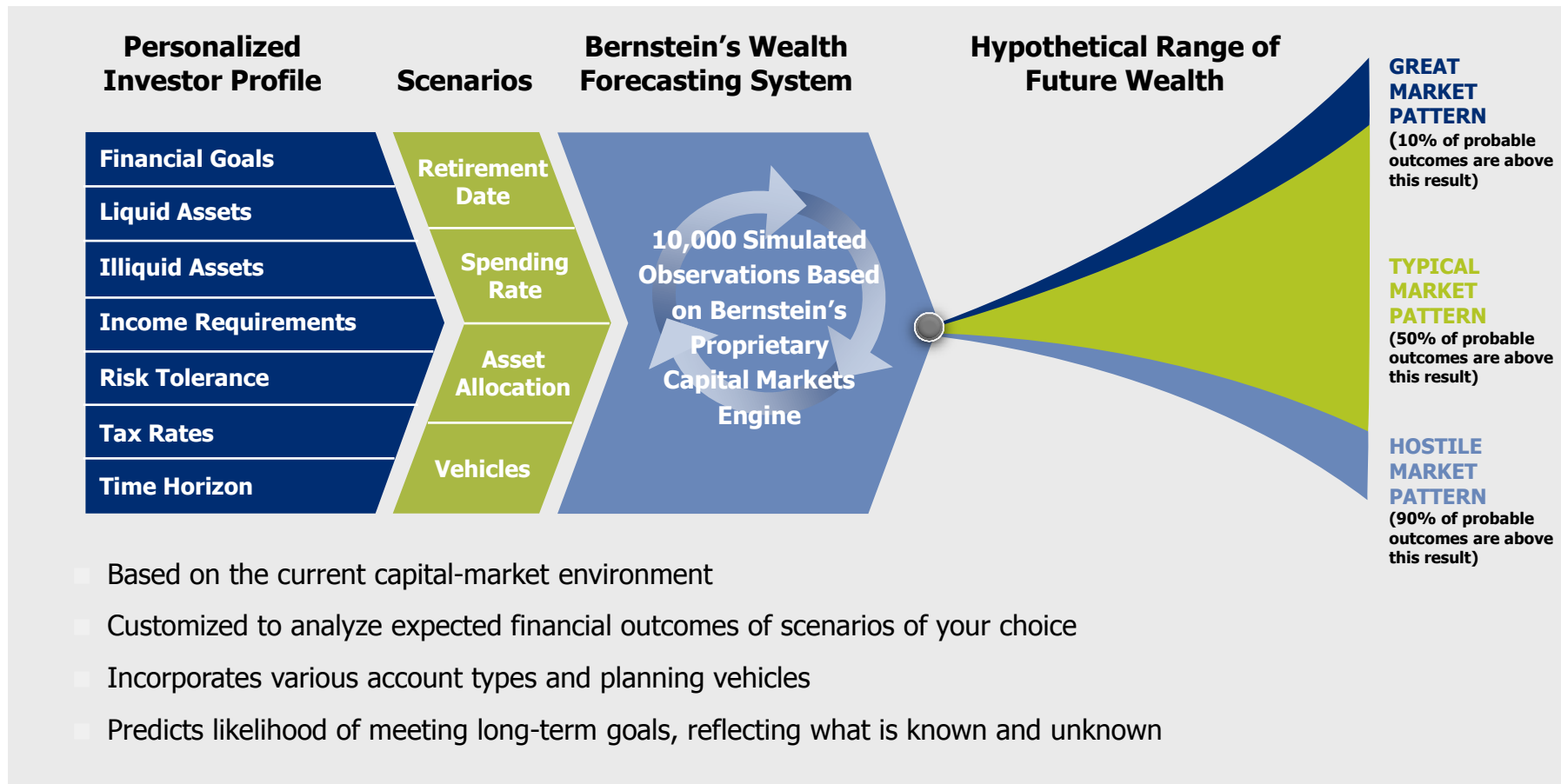Source: AB

Insurance Gap Case-Study Assumptions

- Steve and Edie, aged 42 and 39, respectively, with two young children
    - Retirement savings = $300,000 (so far)
    - Steve's expected annual salary = $247,000, adjusted for inflation
    - Steve intends to make maximum contributions to his 401(k) plan, with a 3% annual employer match
    - Expected retirement age = 66
    - Annual spending = $100,000, adjusted for inflation

- Based upon this information, we expect Steve to be at or above his core capital requirement upon retirement at age 66,* but there is a problem . . . What if death intervenes?

> *Key research question:*
> *How much death benefit*
> *should Steve maintain?*

*Based on Bernstein's estimates of range of returns for applicable capital markets over the applicable period. **Data do not represent past performance and are not a promise of actual future results or a range of future results.** See Appendix, Notes on Wealth Forecasting, for details. Core analysis results available upon request.
Source: AB

Our Forecasting Model Quantifies the Probability of Expected Outcomes Under Various Scenarios

Personalized Investor Profile

- Financial Goals
- Liquid Assets
- Illiquid Assets
- Income Requirements
- Risk Tolerance
- Tax Rates
- Time Horizon

Scenarios

- Retirement Date
- Spending Rate
- Asset Allocation
- Vehicles

Bernstein's Wealth Forecasting System

10,000 Simulated Observations Based on Bernstein's Proprietary Capital Markets Engine

Hypothetical Range of Future Wealth

GREAT MARKET PATTERN
(10% of probable outcomes are above this result)

TYPICAL MARKET PATTERN
(50% of probable outcomes are above this result)

HOSTILE MARKET PATTERN
(90% of probable outcomes are above this result)

- Based on the current capital-market environment
- Customized to analyze expected financial outcomes of scenarios of your choice
- Incorporates various account types and planning vehicles
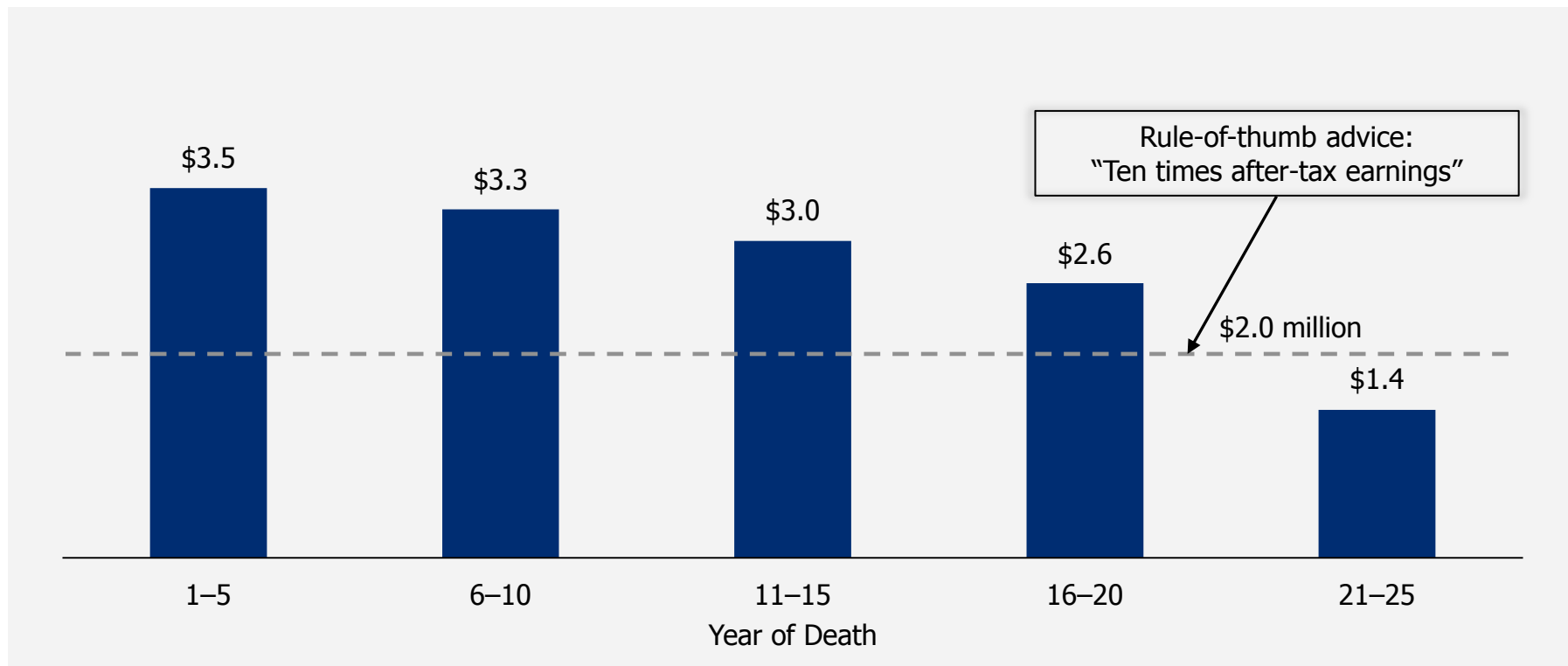- Predicts likelihood of meeting long-term goals, reflecting what is known and unknown

Bernstein's Wealth Forecasting System[SM] is based upon our proprietary analysis of historical capital-market data over many decades. We look at variables such as past returns, volatility, valuations, and correlations to forecast a vast range of possible outcomes relating to market asset classes, not Bernstein portfolios. While there is no assurance that any specific outcome suggested by the model will actually come to pass, by quantifying the possibilities of achieving financial goals under changing, and sometimes extreme, capital-market conditions, the tool should help our clients make better choices. See Notes on Wealth Forecasting System at the end of this presentation for further details.
Source: AB

Often, the Amount of Death Benefit Needed Declines as Investors Age and Their Portfolios Grow

Estimated Death Benefit to Achieve Core Capital*
$ Millions (Nominal)

Rule-of-thumb advice: "Ten times after-tax earnings"

$3.5 | $3.3 | $3.0 | $2.6 | $2.0 million | $1.4

Year of Death: 1–5 | 6–10 | 11–15 | 16–20 | 21–25

Potential Solution: Staggered Term Policies

Estimated Death Benefit to Achieve Core Capital*
$ Millions (Nominal)

Customized advice: $3.5 million of coverage using three policies of differing terms

15-yr term $900,000

20-yr term $1.2 million

25-yr term $1.4 million

Rule-of-thumb advice: "Ten times after-tax earnings"

$2.0 million

$3.5 $3.3 $3.0 $2.6 $1.4

1–5   6–10   11–15   16–20   21–25

Year of Death

*Represents the total amount of death benefit, in nominal dollars, needed to achieve the core capital required to support the surviving spouse's lifetime annual spending of $100,000, inflation-adjusted, with a 90% level of confidence, assuming median portfolio growth over the next 25 years. Typically, we would model portfolio growth more conservatively in a gap analysis. Note that, among other possible solutions, the required death benefit could take the form of (1) a series of "staggered" term life insurance policies or (2) a single flexible-premium, flexible-death-benefit universal life (UL) policy.
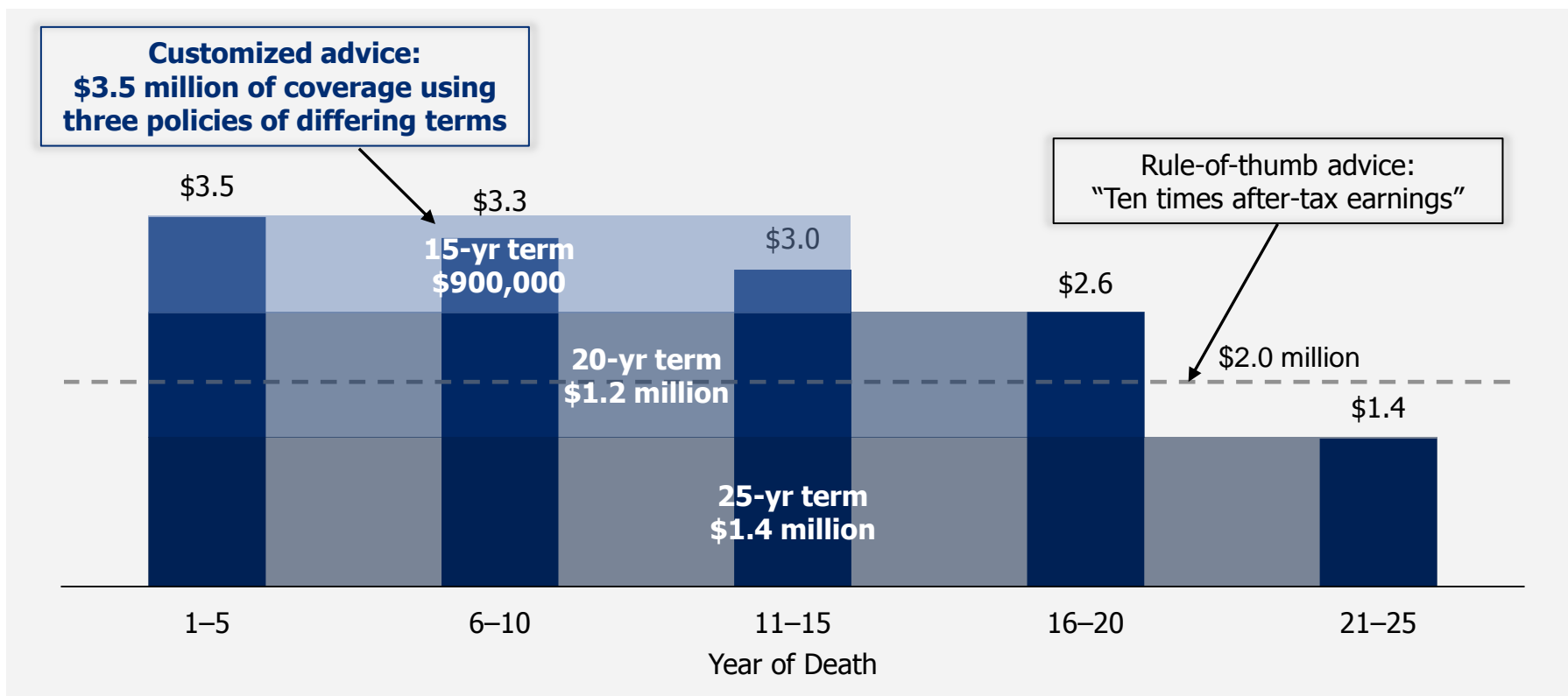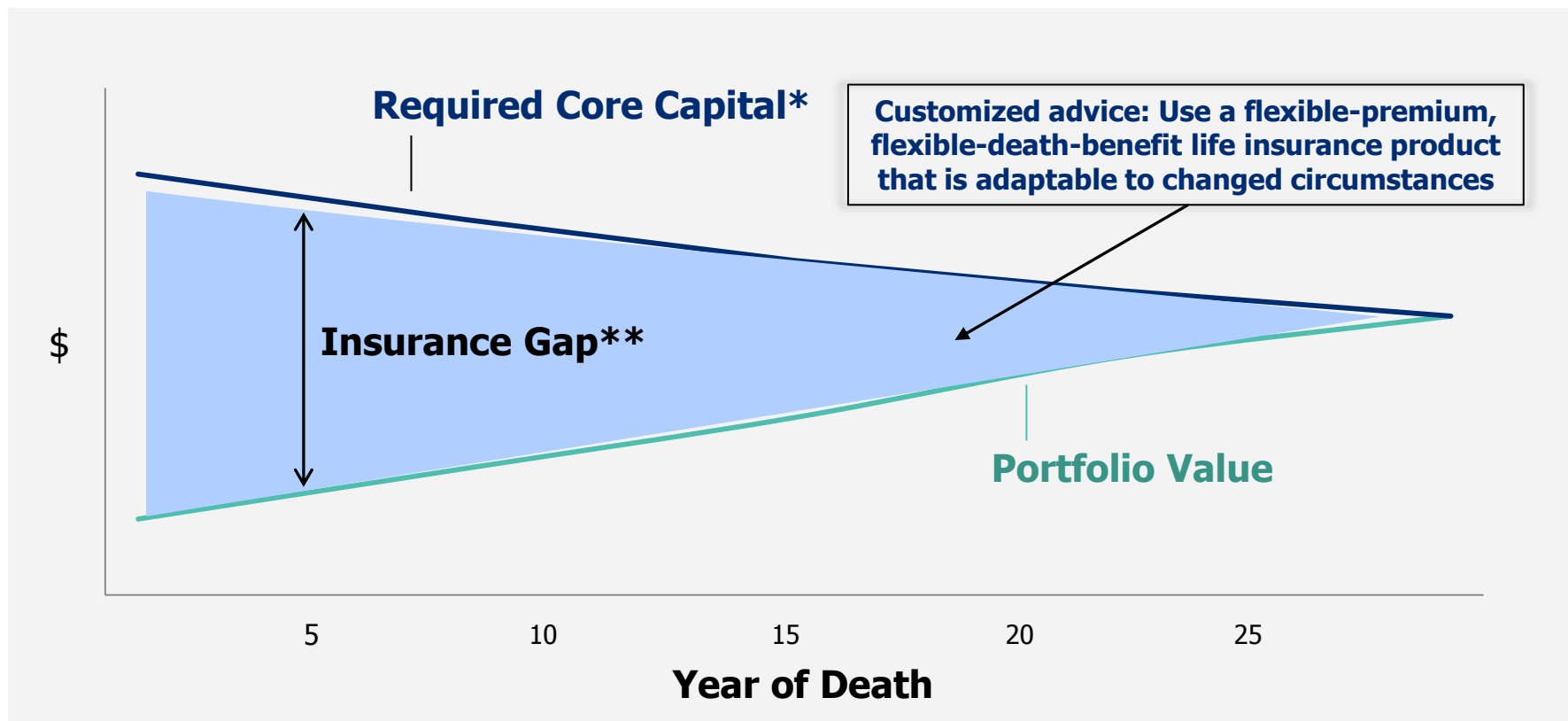
Based on Bernstein's estimates of the range of returns for the applicable capital markets over the applicable period. **Data do not represent past performance and are not a promise of actual future results or a range of future results.** Bernstein does not provide legal, tax, or insurance advice; investors should consult experts in those areas before implementing any insurance strategy.

Source: AB

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A Better Solution? Actively Managed Universal Life Insurance

Wealth over Time

Required Core Capital*

Customized advice: Use a flexible-premium, flexible-death-benefit life insurance product that is adaptable to changed circumstances

$

Insurance Gap**

Portfolio Value

5   10   15   20   25

Year of Death

*"Required Core Capital" is the portfolio value required to support the survivor's lifetime spending at a 90% level of confidence.
**"Insurance Gap" equals, at any given point in time, the difference between Required Core Capital and projected Portfolio Value, usually depicted at the 90th percentile in Bernstein's Wealth Forecasting System. See Appendix, Notes on Wealth Forecasting, for details.
Source: AB

Life Insurance Diagnostics:

How Do I Know Whether My Policy Is "Sick" or "Healthy"?

If a Picture Paints a Thousand Words, Why Is an Illustration So Hard to Understand?

- **What's the deal with life insurance illustrations?**

  - They are too long (14–17 pages is typical)

  - The text tends to be poorly written (e.g., lots of jargon)

  - Data are displayed in mind-numbing, tabular format; some information is hidden

  - Assumptions may be unreasonable… and may not account for future changes (e.g., increases in policy expenses)

  - Variable policies assume straight-line market returns

- **What if, instead, we were to:**

  - Critically assess the assumptions upon which the illustration is based?

  - Reduce the key information contained in the illustration to a single page?

  - Display the information graphically, rather than in tables?

  - Include a *realistic* estimate of life expectancy?

  - Measure success or failure using metrics that clients can readily understand, rather than unfamiliar concepts like "internal rate of return"?

Source: AB

Sample Diagnostic Display: What a "Sick" Policy Looks Like
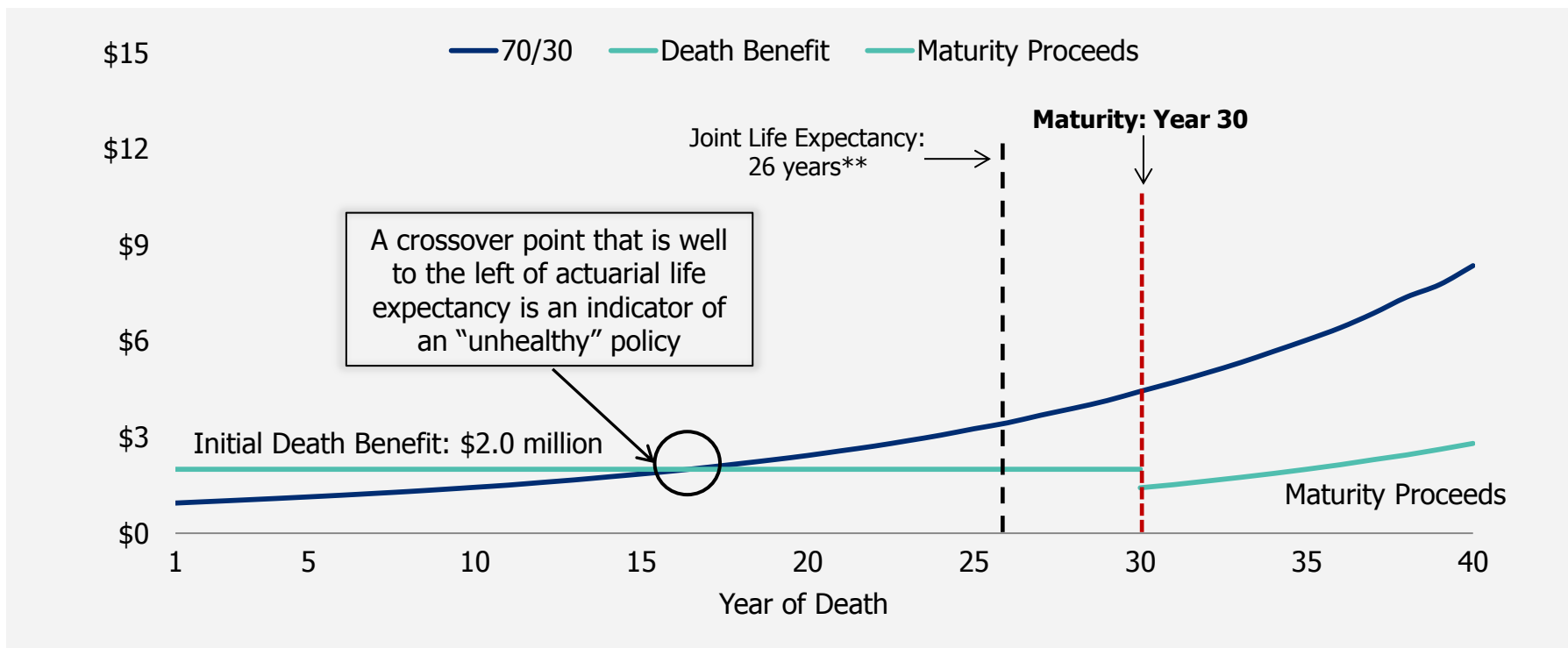
Median Wealth to Beneficiary*
Stock/Bond Allocation
$ Millions (Nominal)

Legend: —— 70/30 —— Death Benefit —— Maturity Proceeds

Joint Life Expectancy: 26 years**

Maturity: Year 30

A crossover point that is well to the left of actuarial life expectancy is an indicator of an "unhealthy" policy

Initial Death Benefit: $2.0 million

Maturity Proceeds

Year of Death

*In this analysis, we compare the policy death benefit to an investment in a taxable capital-market portfolio consisting of 70% globally diversified stocks and 30% intermediate-term municipal bonds. Amount invested in this portfolio is the estimated after-tax policy cash surrender value of $900,000. Upon maturity of policy in 2045, policyholder surrenders for cash value; estimated after-tax proceeds of $1,450,000 are invested into a similar taxable capital-market portfolio. Portfolios are taxed at top marginal federal income tax rate and a 6.5% state tax rate.
**For a high-net-worth couple, late sixties, nonsmokers, highest underwriting category: 26 years (estimated)
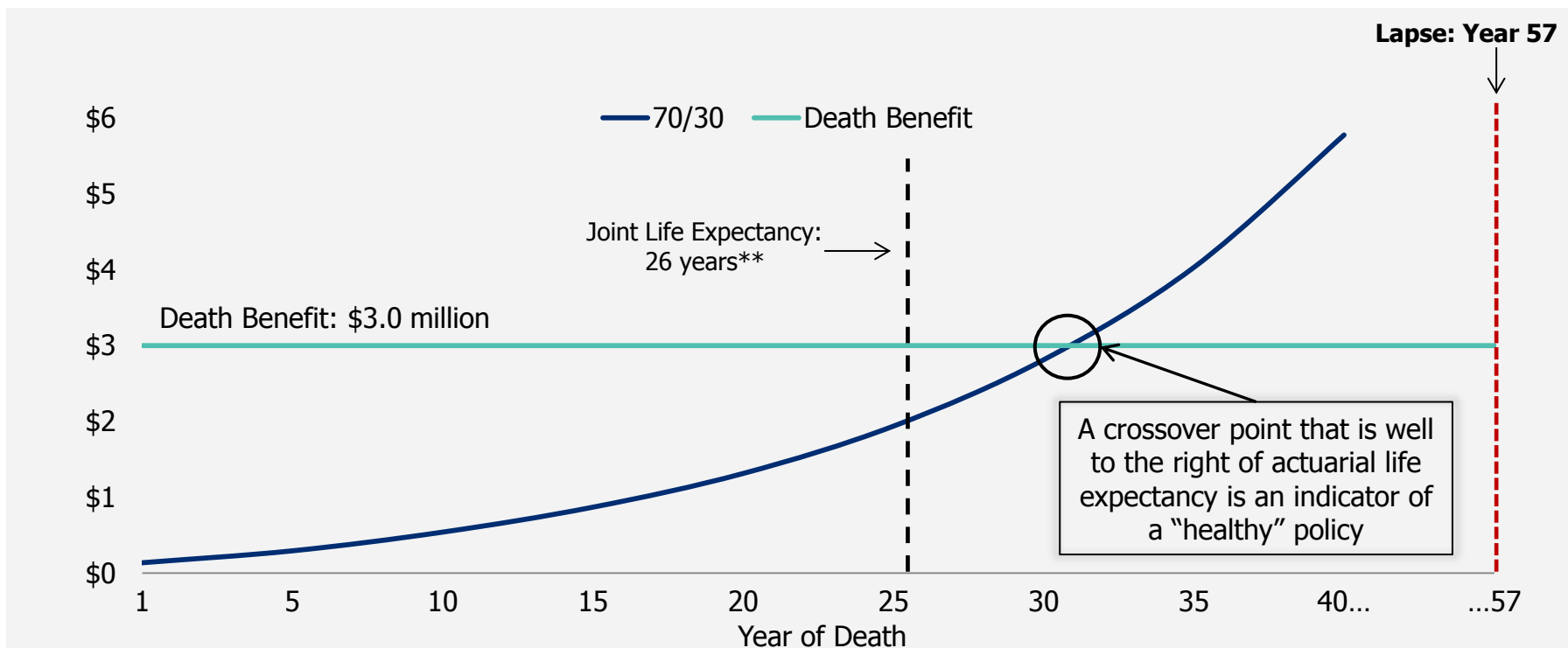Based on Bernstein's estimates of the range of returns for the applicable capital markets over the applicable period. **Data do not represent past performance and are not a promise of actual future results or a range of future results.** Bernstein does not provide legal, tax, or insurance advice; investors should consult experts in those areas before implementing any insurance strategy.
Source: AB

Sample Diagnostic Display: What a "Healthy" Policy Looks Like

Median Wealth to Beneficiary*
Stock/Bond Allocation
$ Millions (Nominal)

Lapse: Year 57

Legend: —— 70/30   —— Death Benefit

Death Benefit: $3.0 million

Joint Life Expectancy: 26 years**

A crossover point that is well to the right of actuarial life expectancy is an indicator of a "healthy" policy

Y-axis: $6, $5, $4, $3, $2, $1, $0

X-axis (Year of Death): 1, 5, 10, 15, 20, 25, 30, 35, 40..., ...57

*In this analysis, we compare the policy death benefit to an investment in a taxable capital-market portfolio consisting of 70% globally diversified stocks and 30% intermediate-term municipal bonds. Amounts invested in this portfolio consist of (i) policy cash surrender value of $100,000 plus (ii) $30,000 per year through 2061 that otherwise would be paid to the insurance company as policy premiums. Portfolio is taxed at top marginal federal income tax rate and a 6.5% state tax rate. Policy cash surrender values and premiums are based on in-force illustration provided by client.
**For a high-net-worth couple, late sixties, nonsmokers, highest underwriting category: 26 years (estimated)
Based on Bernstein's estimates of the range of returns for the applicable capital markets over the applicable period. **Data do not represent past performance and are not a promise of actual future results or a range of future results.** Bernstein does not provide legal, tax, or insurance advice; investors should consult experts in those areas before implementing any insurance strategy.
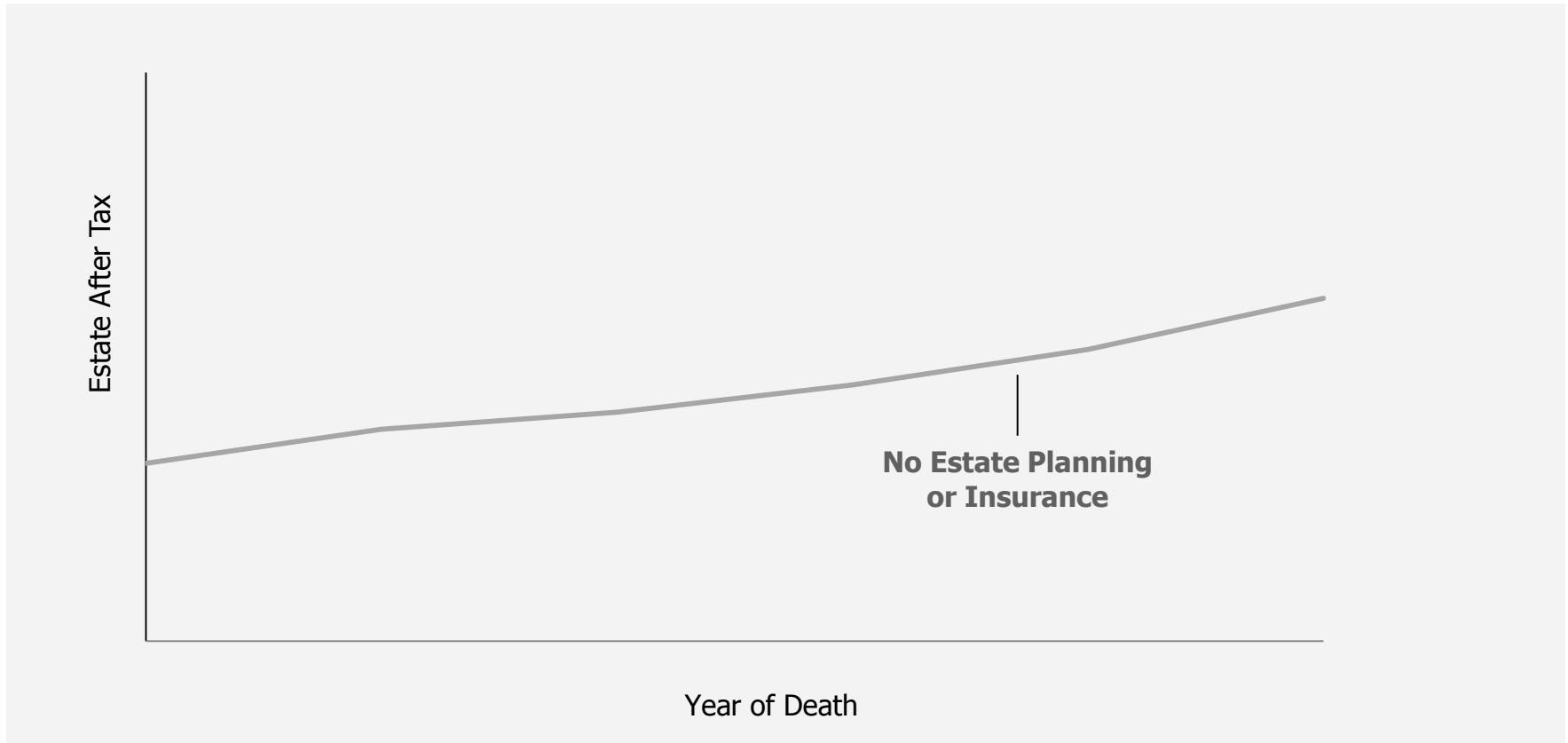Source: AB

Pulling It All Together:

The Integration of Insurance, Estate, and Investment Planning

The Highest and Best Use of Life Insurance:
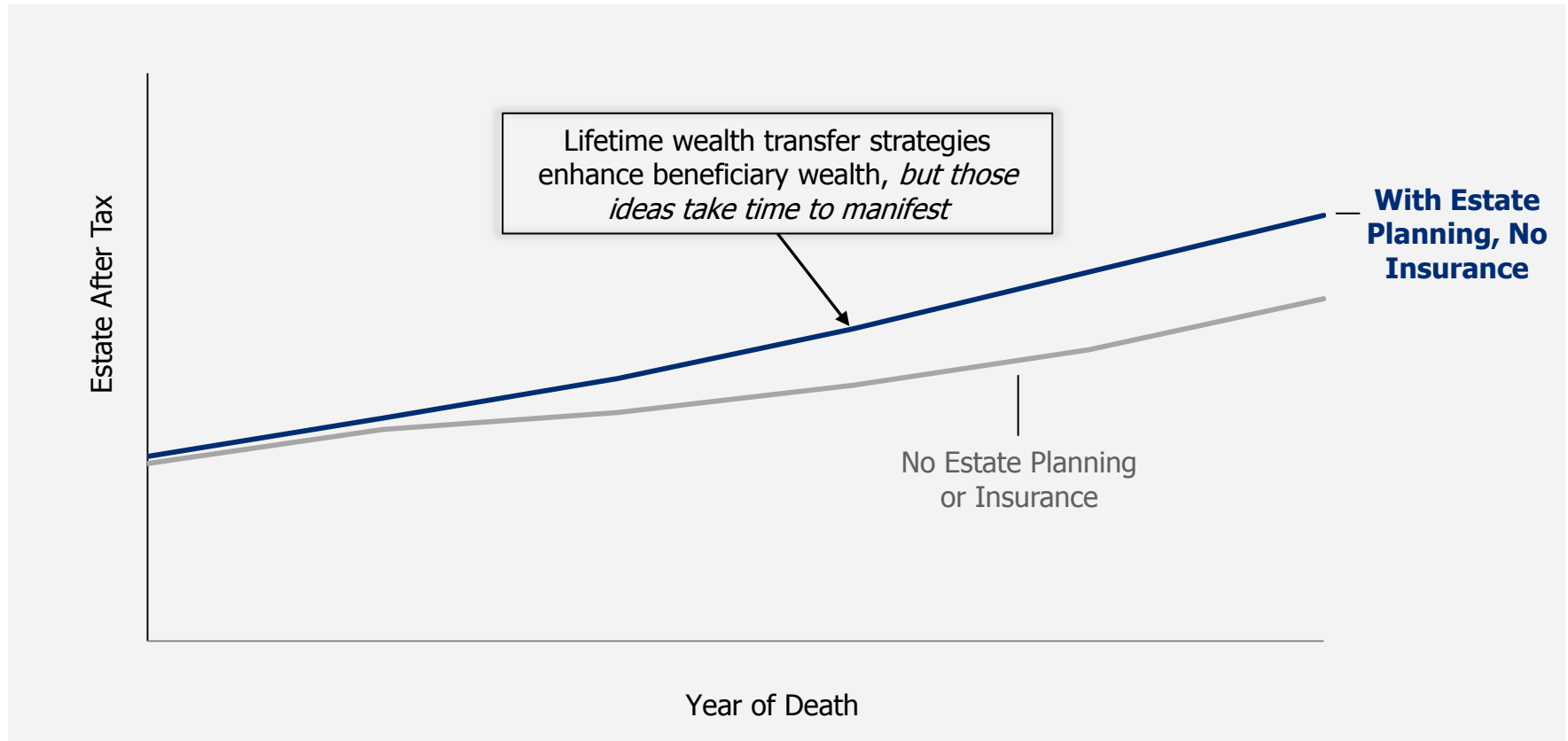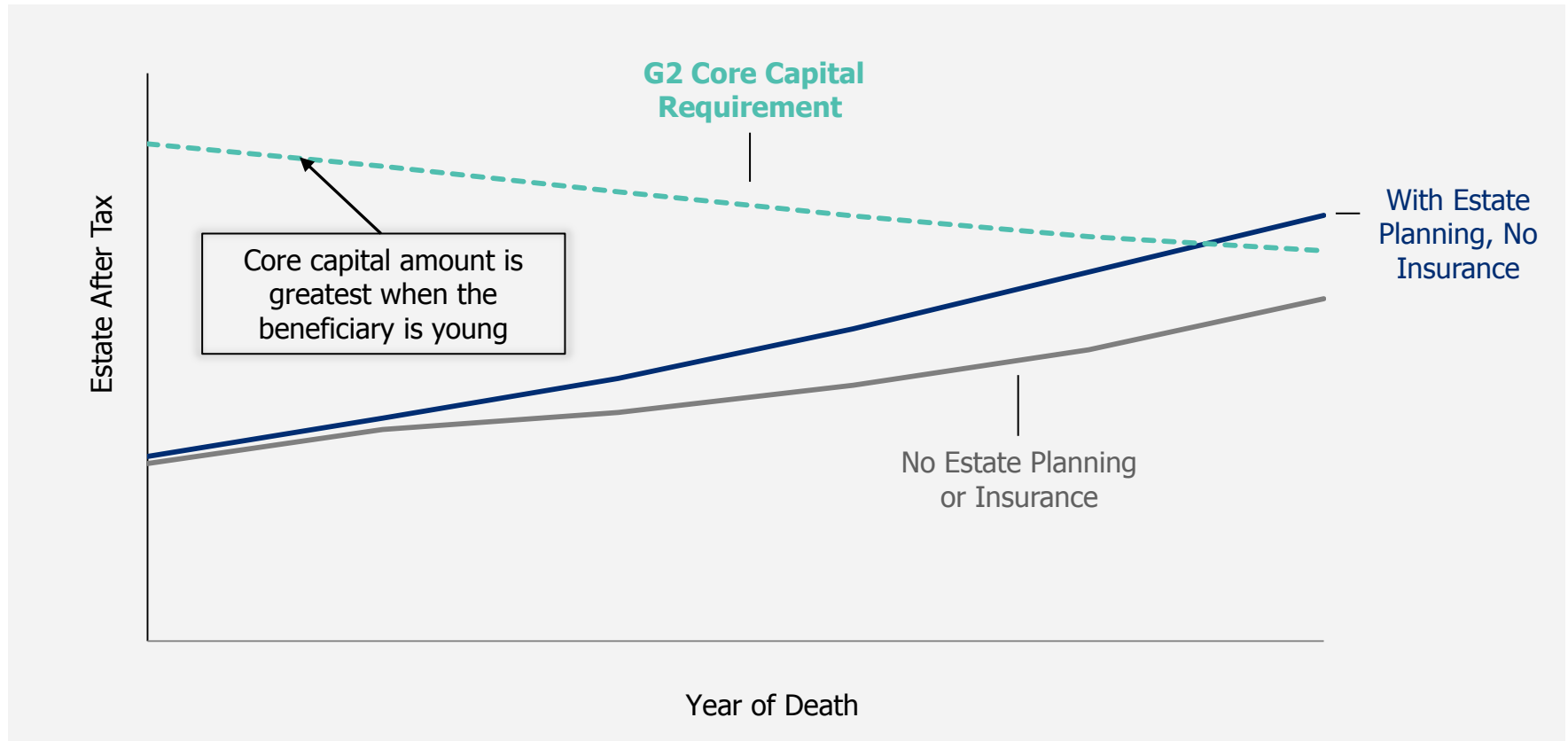# To Provide Wealth When Beneficiaries May Need It Most

Median Wealth to Beneficiary*

*This display is for illustrative purposes only. The case study that follows provides a numerical example.
Source: AB

The Highest and Best Use of Life Insurance:
To Provide Wealth When Beneficiaries May Need It Most

Median Wealth to Beneficiary*

Lifetime wealth transfer strategies enhance beneficiary wealth, *but those ideas take time to manifest*

With Estate Planning, No Insurance

No Estate Planning or Insurance

Estate After Tax

Year of Death

*This display is for illustrative purposes only. The case study that follows provides a numerical example.
Source: AB

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The Highest and Best Use of Life Insurance:
To Provide Wealth When Beneficiaries May Need It Most

Median Wealth to Beneficiary*

G2 Core Capital Requirement

Core capital amount is greatest when the beneficiary is young

With Estate Planning, No Insurance

No Estate Planning or Insurance

Estate After Tax

Year of Death

*This display is for illustrative purposes only. The case study that follows provides a numerical example.
Source: AB

BERNSTEIN

The Highest and Best Use of Life Insurance:
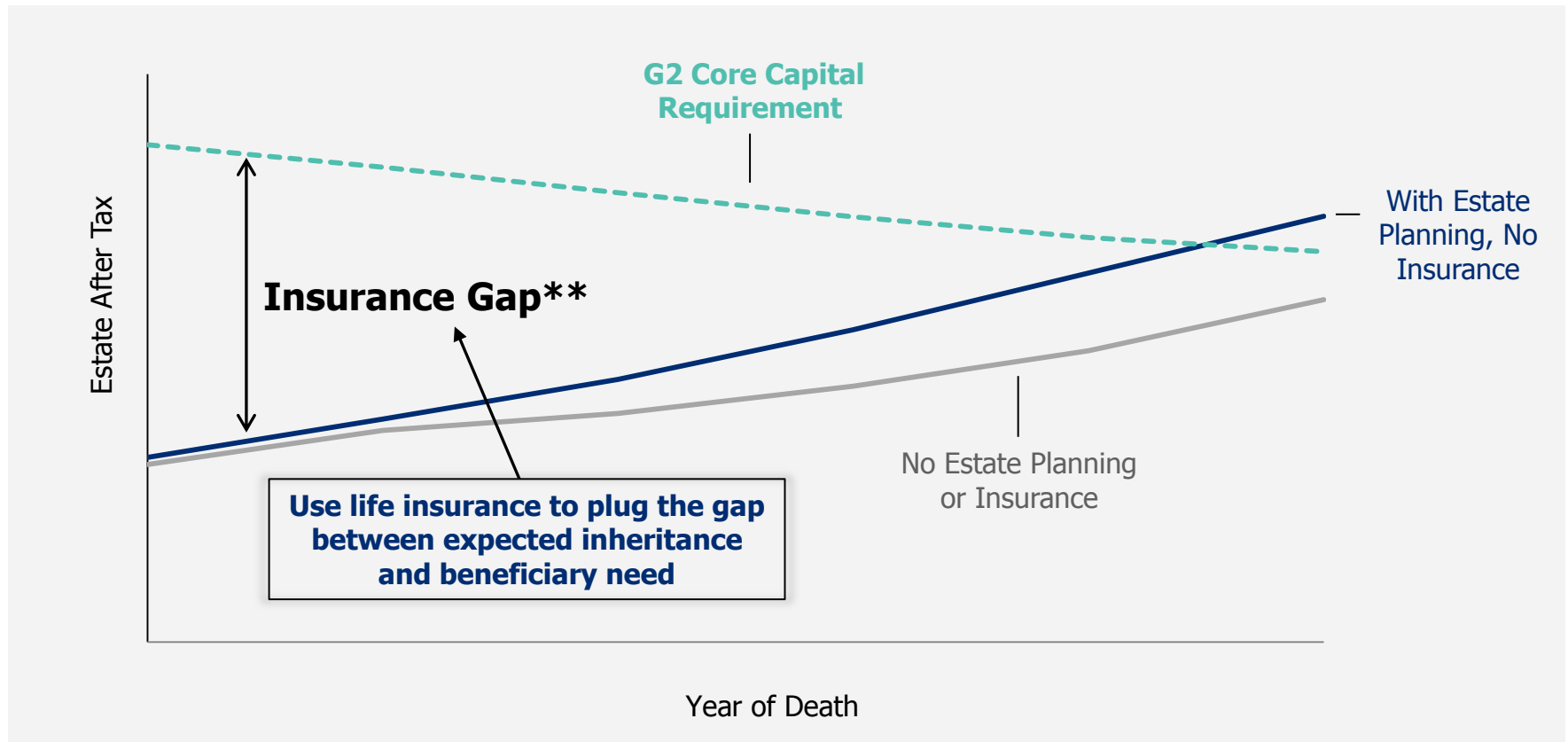# To Provide Wealth When Beneficiaries May Need It Most

Median Wealth to Beneficiary*

G2 Core Capital Requirement

Estate After Tax

Insurance Gap**

With Estate Planning, No Insurance

No Estate Planning or Insurance

Use life insurance to plug the gap between expected inheritance and beneficiary need

Year of Death

*This display is for illustrative purposes only. The case study that follows provides a numerical example.
**Insurance Gap is the amount of death benefit needed in order for the estate after tax to equal the G2 core capital requirement.
Source: AB

Integrated Solution Case-Study Assumptions

- Adam and Eve, each aged 71, with two adult children and two young grandchildren

  - Portfolio value = $15 million; one-half taxable, other half divided between an IRA and a Roth IRA

  - Invested 50% in stocks, 50% in bonds*

  - Annual spending = $300,000, adjusted for inflation**

- Traditional ILIT established years ago to help pay estate taxes owns two second-to-die policies

  - Total death benefit = $5 million

  - Aggregate cash value = $1 million

  - Aggregate annual premiums = $30,000

> *Key research questions:*
> *Surrender both policies?*
> *Or retain one or both?*

*"Stocks" are modeled as 21% US value, 21% US growth, 21% US diversified, 7% US small- and mid-cap, 22.5% developed international, and 7.5% emerging market; "bonds" are modeled as intermediate-term municipal bonds.
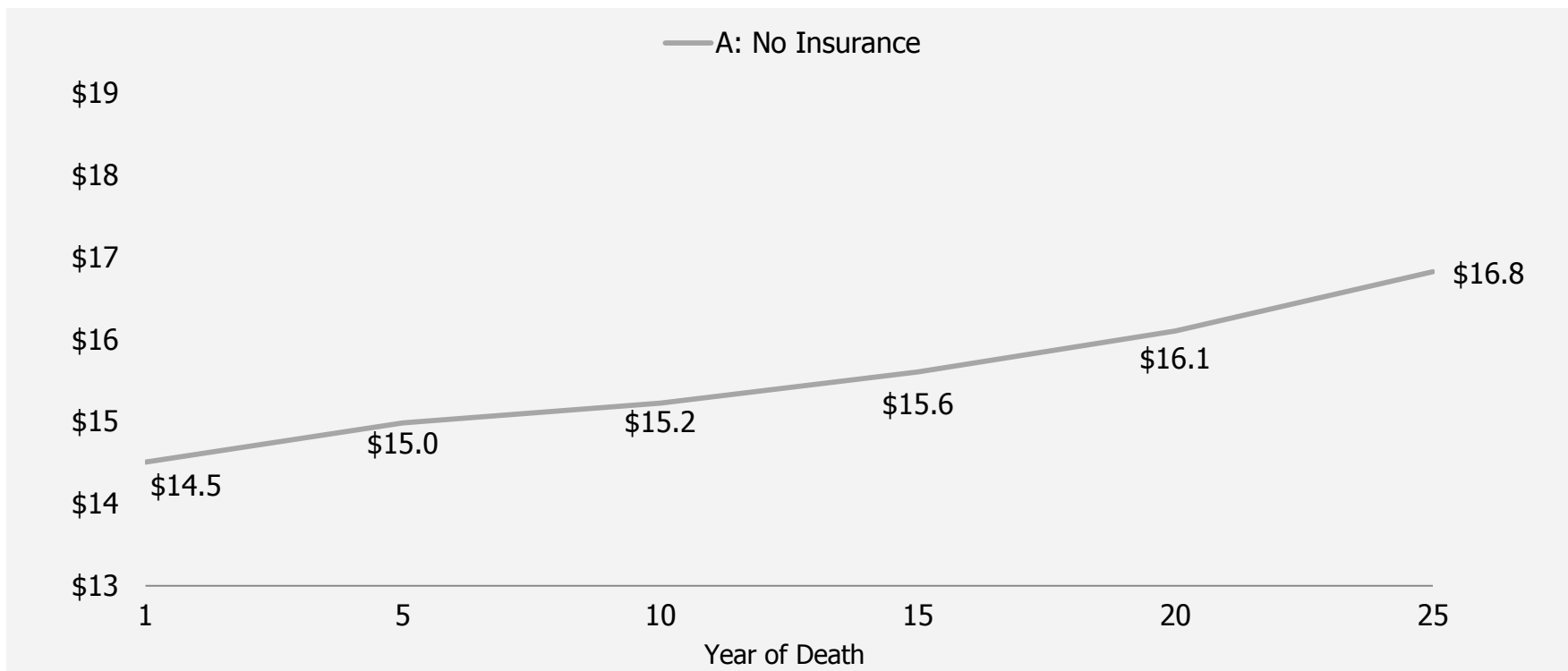**Except for $300,000 of deferred compensation to be realized over three years, virtually all taxable income consists of (1) minimum required distributions from traditional IRA and (2) portfolio income. State income tax rate is 6.5%.
Source: AB

An Unhedged Plan Should Enhance Beneficiary Wealth over Time . . .

Median Wealth to Beneficiaries*
After Estate Tax
$ Millions (Real)

Legend: —— A: No Insurance

Data points (Year of Death vs Value):
- Year 1: $14.5
- Year 5: $15.0
- Year 10: $15.2
- Year 15: $15.6
- Year 20: $16.1
- Year 25: $16.8

X-axis: Year of Death (1, 5, 10, 15, 20, 25)
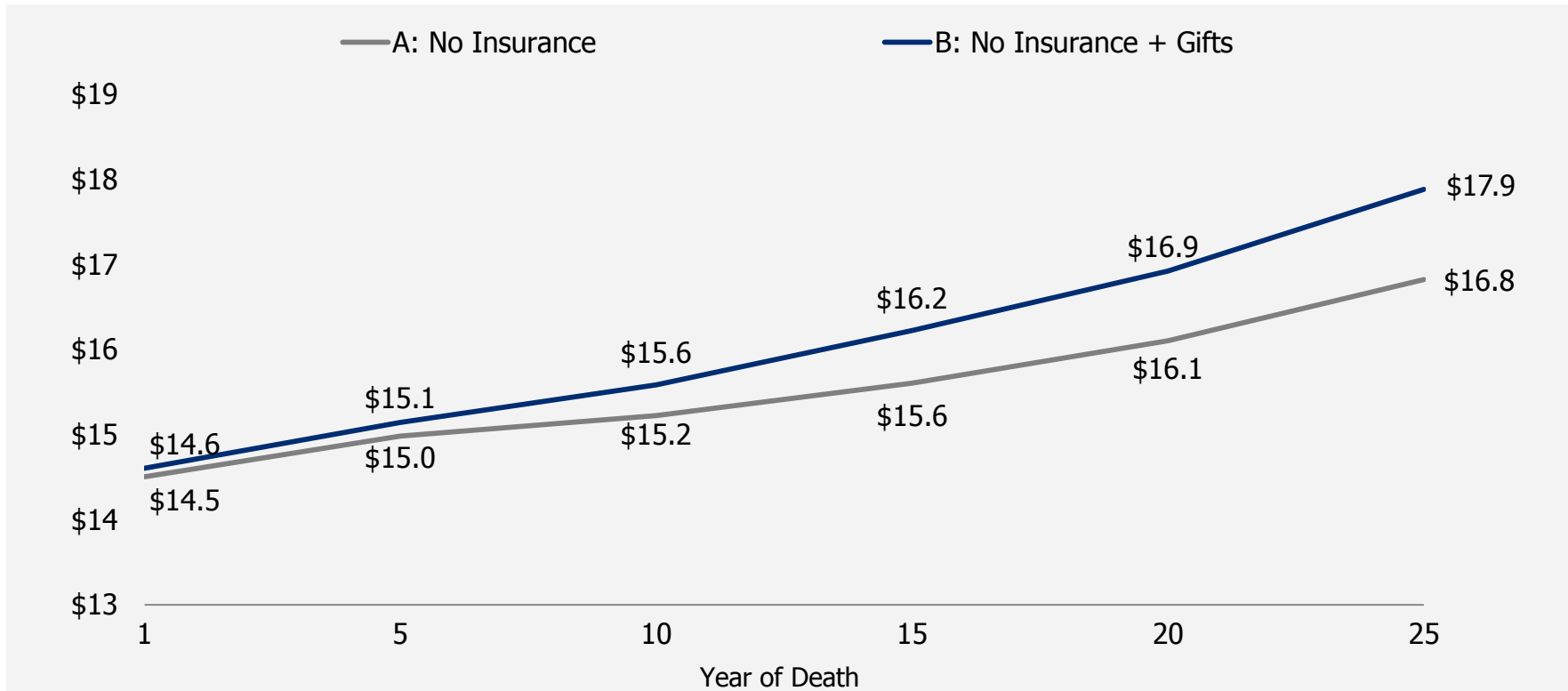Y-axis: $13, $14, $15, $16, $17, $18, $19

*"Median Wealth to Beneficiaries" means 50th percentile outcome of Bernstein's wealth forecasting model, plus aggregate insurance death benefit, if any, reduced by federal estate tax for any wealth held on personal balance sheet. "Year of Death" means the year of death of the last of the insureds to die. We computed estate tax assuming remaining exclusion of $10.9 million indexed for inflation in accordance with applicable law, assuming annual inflation of 2.7%. Based on Bernstein's estimates of the range of returns for the applicable capital markets over the applicable period. **Data do not represent past performance and are not a promise of actual future results or a range of future results.** Bernstein does not provide legal, tax, or insurance advice; investors should consult experts in those areas before implementing any insurance strategy.
Source: AB

Lifetime Wealth Transfer Strategies Help, but Generally Not in a Way That Addresses Beneficiaries' Needs

Median Wealth to Beneficiaries*
After Estate Tax
$ Millions (Real)

Legend: A: No Insurance (gray) — B: No Insurance + Gifts (blue)

X-axis: Year of Death (1, 5, 10, 15, 20, 25)
Y-axis: $13 – $19

B: No Insurance + Gifts data points: $14.6, $15.1, $15.6, $16.2, $16.9, $17.9
A: No Insurance data points: $14.5, $15.0, $15.2, $15.6, $16.1, $16.8

*"Median Wealth to Beneficiaries" means 50th percentile outcome of Bernstein's wealth forecasting model, plus aggregate insurance death benefit, if any, reduced by federal estate tax for any wealth held on personal balance sheet. "Year of Death" means the year of death of the last of the insureds to die. We computed estate tax assuming remaining exclusion of $10.9 million indexed for inflation in accordance with applicable law, assuming annual inflation of 2.7%. "G2 Core Capital Requirement" represents how much capital beneficiaries may need collectively to meet their respective spending goals with a high level of confidence; a client may choose to "finance" a percentage or all of that requirement.
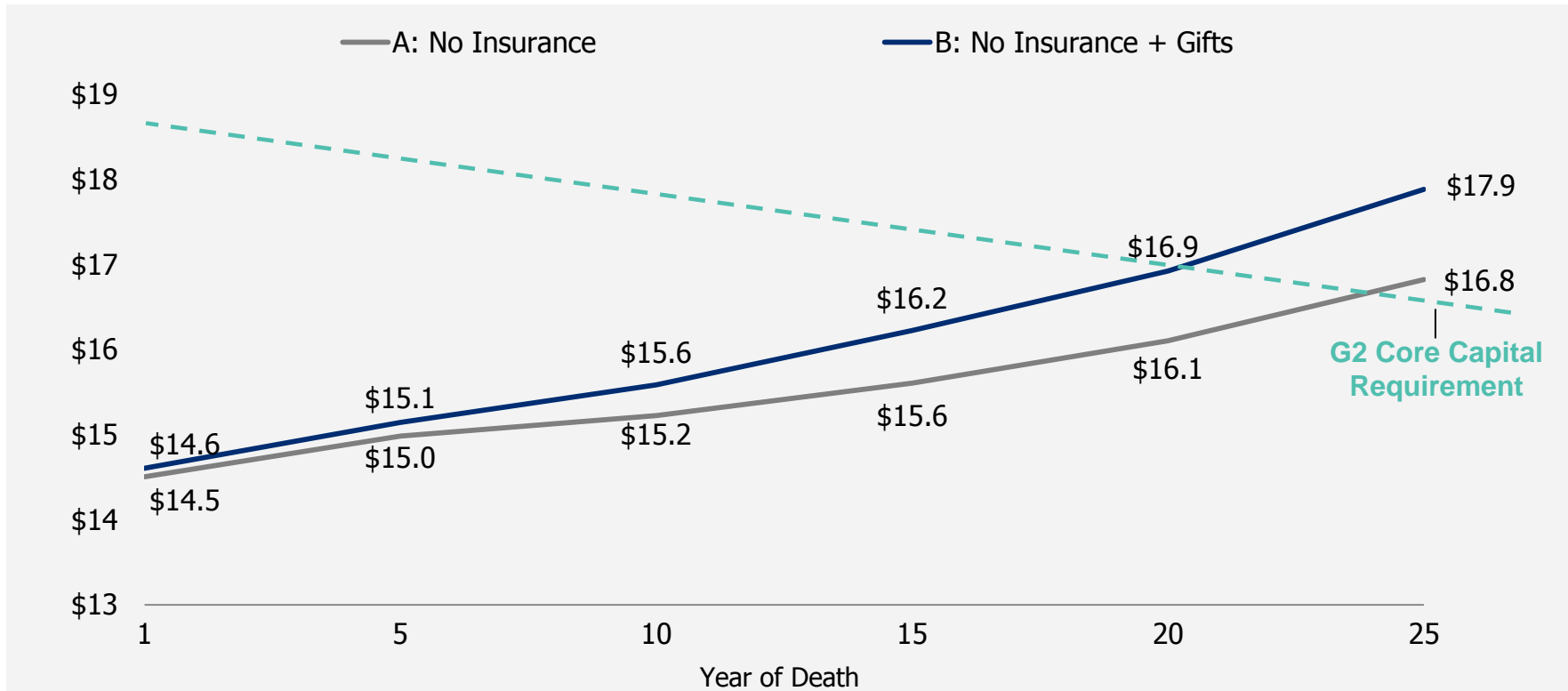Based on Bernstein's estimates of the range of returns for the applicable capital markets over the applicable period. **Data do not represent past performance and are not a promise of actual future results or a range of future results.** Bernstein does not provide legal, tax, or insurance advice; investors should consult experts in those areas before implementing any insurance strategy.
Source: AB

Lifetime Wealth Transfer Strategies Help, but Generally Not in a Way That Addresses Beneficiaries' Needs

Median Wealth to Beneficiaries*
After Estate Tax
$ Millions (Real)

Chart legend: A: No Insurance (gray line), B: No Insurance + Gifts (dark blue line)

Y-axis: $13 to $19
X-axis: Year of Death (1, 5, 10, 15, 20, 25)

B: No Insurance + Gifts data points: $14.6, $15.1, $15.6, $16.2, $16.9, $17.9
A: No Insurance data points: $14.5, $15.0, $15.2, $15.6, $16.1, $16.8

G2 Core Capital Requirement (dashed green line, declining from ~$18.7 to ~$16.4)

*"Median Wealth to Beneficiaries" means 50th percentile outcome of Bernstein's wealth forecasting model, plus aggregate insurance death benefit, if any, reduced by federal estate tax for any wealth held on personal balance sheet. "Year of Death" means the year of death of the last of the insureds to die. We computed estate tax assuming remaining exclusion of $10.9 million indexed for inflation in accordance with applicable law, assuming annual inflation of 2.7%. "G2 Core Capital Requirement" represents how much capital beneficiaries may need collectively to meet their respective spending goals with a high level of confidence; a client may choose to "finance" a percentage or all of that requirement.
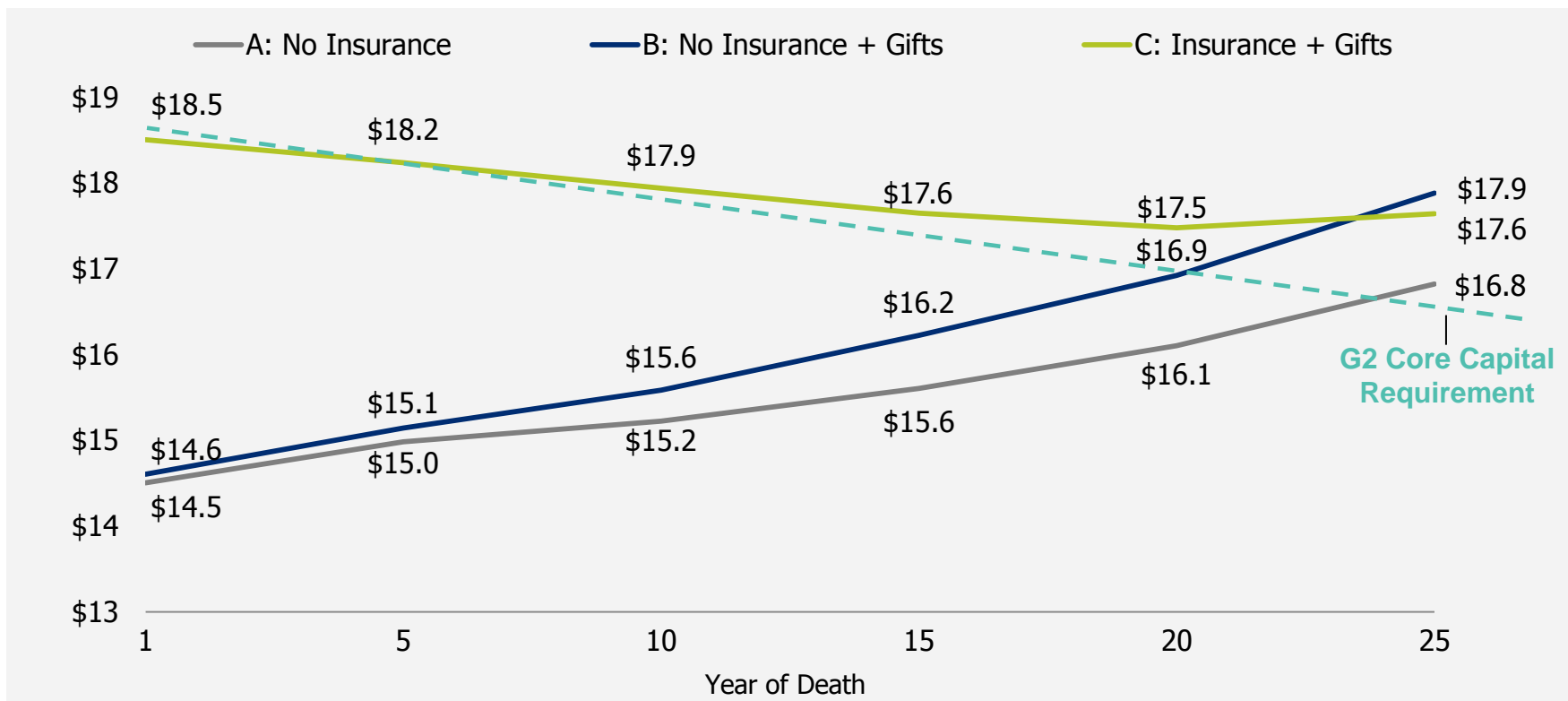Based on Bernstein's estimates of the range of returns for the applicable capital markets over the applicable period. **Data do not represent past performance and are not a promise of actual future results or a range of future results.** Bernstein does not provide legal, tax, or insurance advice; investors should consult experts in those areas before implementing any insurance strategy.
Source: AB

A Plan That Truly Integrates Life Insurance Tends to Match Beneficiaries' Needs Better than an Unhedged Plan

Median Wealth to Beneficiaries*
After Estate Tax
$ Millions (Real)

Legend: A: No Insurance | B: No Insurance + Gifts | C: Insurance + Gifts

Chart data points:
- $18.5, $18.2, $17.9, $17.6, $17.5, $17.9, $17.6
- $14.6, $15.1, $15.6, $16.2, $16.9, $16.8
- $14.5, $15.0, $15.2, $15.6, $16.1
- G2 Core Capital Requirement

X-axis: Year of Death (1, 5, 10, 15, 20, 25)
Y-axis: $13 – $19

*"Median Wealth to Beneficiaries" means 50th percentile outcome of Bernstein's wealth forecasting model, plus aggregate insurance death benefit, if any, reduced by federal estate tax for any wealth held on personal balance sheet. "Year of Death" means the year of death of the last of the insureds to die. We computed estate tax assuming remaining exclusion of $10.9 million indexed for inflation in accordance with applicable law, assuming annual inflation of 2.7%. "G2 Core Capital Requirement" represents how much capital beneficiaries may need collectively to meet their respective spending goals with a high level of confidence; a client may choose to "finance" a percentage or all of that requirement.
Based on Bernstein's estimates of the range of returns for the applicable capital markets over the applicable period. **Data do not represent past performance and are not a promise of actual future results or a range of future results.** Bernstein does not provide legal, tax, or insurance advice; investors should consult experts in those areas before implementing any insurance strategy.
Source: AB

Conclusion:

Dos and Don'ts of Life Insurance
Planning Today

Life Insurance Don'ts

- **DON'T** base the amount of death benefit on rules of thumb (e.g., 10 times after-tax earnings)

- **DON'T** determine premiums based solely upon gift tax annual exclusions that are presently available

- **DON'T** base the amount of death benefit entirely on the amount of estate tax that would be owed if the insured were to die tomorrow

- **DON'T** limit life insurance to illiquid estates only; fully liquid families can benefit from owning some life insurance

- **DON'T** assume that term insurance is always the best answer; the insurance advisor is in the best position to assess the market and recommend an appropriate product or array of products to meet the need*

*Subject, of course, to the effect of premium costs over time on family or beneficiary wealth, as the case may be. A product that is too expensive will be exposed by modeling its cost.
Source: AB

Life Insurance Dos

- **DO** use life insurance to hedge both estate *and income* tax risks

- **DO** use life insurance to supplement liquidity

- **DO** integrate insurance, estate, and investment planning; avoid the temptation to "silo-ize"

- **DO** base the amount of death benefit on expected needs (driven by spending) of the intended beneficiaries

- **DO** recognize that the true power of life insurance is its potential to deliver more capital to the beneficiaries *when they need it most*—when they are young

- **DO** recognize the complementary nature of life insurance: it provides an immediate potential benefit, whereas estate- and investment-planning benefits take time to build

- **DO** use estate and investment planning to shorten the *duration* of life insurance coverage; it's duration, not death benefit, that makes insurance expensive

Source: AB

Appendix

The Current Environment:

Additional Displays

Gap Between Estate and Capital-Gains Tax Rates Varies by State

California
High Income Tax,
No State Death Tax

New York City
High Income Tax,
State Death Tax

Florida
No Income Tax,
No State Death Tax

Washington
No Income Tax,
State Death Tax

Blended Rate*

State/Local

Medicare

Federal

California: Capital-Gains Tax 36.6%, Estate Tax 40.0%, gap 3.4%
New York City: Capital-Gains Tax 36.0%, Estate Tax 49.6%, gap 13.6%
Florida: Capital-Gains Tax 23.8%, Estate Tax 40.0%, gap 16.2%
Washington: Capital-Gains Tax 23.8%, Estate Tax 52%, gap 28.2%

Capital-Gains Tax | Estate Tax (repeated for each state)

*Based on Health Care and Education Reconciliation Act of 2010 and ATRA. Rates represent Bernstein's estimate of the top marginal tax, federal and state income, capital gains, and estate tax brackets. Blended rates assume that the taxpayers in New York City and California are in AMT; the 3.8% Medicare surcharge on net investment income is adjusted to reflect the offset for state or local income taxes paid. Bernstein is not a legal, tax, or estate advisor. Investors should consult these professionals as appropriate before making any decisions.
Numbers may not sum due to rounding.
Source: IRS and AB

Some Assets Will Benefit from Step-Up; Others May Not

Asset Type

↑
Step-Up Important

- Creator-Owned Copyrights, Trademarks, Patents, and Artwork
- Negative-Basis Commercial Real Property LPs
- Artwork, Gold, and Other Collectibles
- Low-Basis Stock
- Roth IRA Assets
- High-Basis Stock
- Fixed Income
- Cash

Step-Up Not Important
↓

- Stocks at a Loss
- Variable Annuities
- Traditional IRA and Qualified Plan Assets

Tax Characteristic

- Ordinary ⟶ Long-Term

- Ordinary and Long-Term
- 28% Long-Term
- 20% Long-Term
- Tax-Free
- Minimal Gain
- Typically Minimal Gain
- Basis = Face Value
- Capital Loss Erased
- Partially IRD*
- 100% IRD*

*"IRD" means income in respect of a decedent.
Source: AB

Some Assets Will Benefit from Step-Up; Others May Not

Asset Type	Comments
Creator-Owned Copyrights, Trademarks, Patents, and Artwork	During the life of the creator of intellectual property and artwork, the creator has a zero basis in the asset, and all payments, whether from a sale of the asset or from the licensing of the property, are considered ordinary income. On the death of the creator, the property is included in the estate and receives a step-up in basis to fair market value. The beneficiaries receive the asset immediately as a long-term capital-gains asset. The foregoing does not apply to patents that qualify for and are sold under Section 1235 of the Internal Revenue Code of 1986, as amended, which qualify for long-term capital-gains tax treatment.
Negative-Basis Commercial Real Property LP or LLC Interests	Owners of partnership interests with a negative basis would recognize long-term capital-gains and ordinary income upon a taxable transaction due to accelerated depreciation and a reduction of the partner's share of debt. Upon death, the negative basis is eliminated because the partnership interests and the underlying property receive a step-up in basis (with a partnership election). For this purpose, "negative basis" means debt in excess of tax basis; as a technical matter, one's adjusted basis cannot be less than zero.
Artwork, Gold, and Other Collectibles	Artwork and gold (including gold ETF investments) are considered "collectibles" under the Code, and they are subject to a 28% long-term capital-gains tax rate. Gains are also subject to the Medicare surcharge.
Low-Basis Stock	Capital asset subject to a 20% long-term capital-gains tax rate and the Medicare surcharge. The step-up in basis eliminates the gain.
Roth IRA Assets	With a Roth IRA, the ordinary income tax of a traditional IRA has essentially been prepaid. Because the assets in a Roth IRA will grow income tax–free, will be distributed tax-free to the beneficiaries, and will not be subject to the Medicare surcharge, this is one of the better things to pass through the estate. As with other IRA and qualified plan assets, during life the owner is unable to give Roth IRA assets to noncharitable beneficiaries. As such, these assets are often includable in the estate of the decedent owner.
High-Basis Stock	Capital asset subject to a 20% long-term capital-gains tax rate and the Medicare surcharge. Because the tax basis is high, very little gain is eliminated by the step-up in basis.
Fixed Income	Most fixed-income investments are purchased at or near par and have very little appreciation potential above their basis. As such, very little gain is eliminated by the step-up in basis. A couple of exceptions to this rule include bonds purchased at a deep discount and long-duration bonds in a falling interest-rate environment.
Cash	Basis of cash is always equal to its fair market value (face value).
Stocks at a Loss	Death results in a step-down in basis. The capital loss that the decedent could have recognized prior to death is eliminated and does not pass to the beneficiaries.
Variable Annuities	Payments are taxable as ordinary income and return of basis. The ordinary income portion is considered income In Respect of a Decedent (IRD). As such, on death, the beneficiaries continue to recognize the ordinary income portion of the payments, and there is no benefit to the step-up in basis.
Traditional IRA and Qualified Plan Assets	All assets in traditional IRAs and in qualified plans are considered 100% IRD (other than nondeductible contributions to IRAs). As such, there is no benefit to the step-up in basis at the death of the owner, and the beneficiaries continue to be subject to ordinary income (but not the Medicare surcharge) on any distributions. Because these assets cannot be given during life to noncharitable beneficiaries, these assets are problematic in that they often use up the decedent's applicable exclusion amount for estate tax purposes (unless passed to a spouse or charity). The benefit from the IRD income tax deduction applies only to federal (not state) estate tax paid. Under ATRA, the federal rate is only 40%; for some, that rate would have been 55% had the sunset provisions of EGTRRA 2001 come into effect as scheduled on 1/1/2013.

Bernstein does not provide tax, legal, or accounting advice. Please consult professionals in those areas before making any decisions.
Source: AB

Lifetime Wealth Transfer Case Study
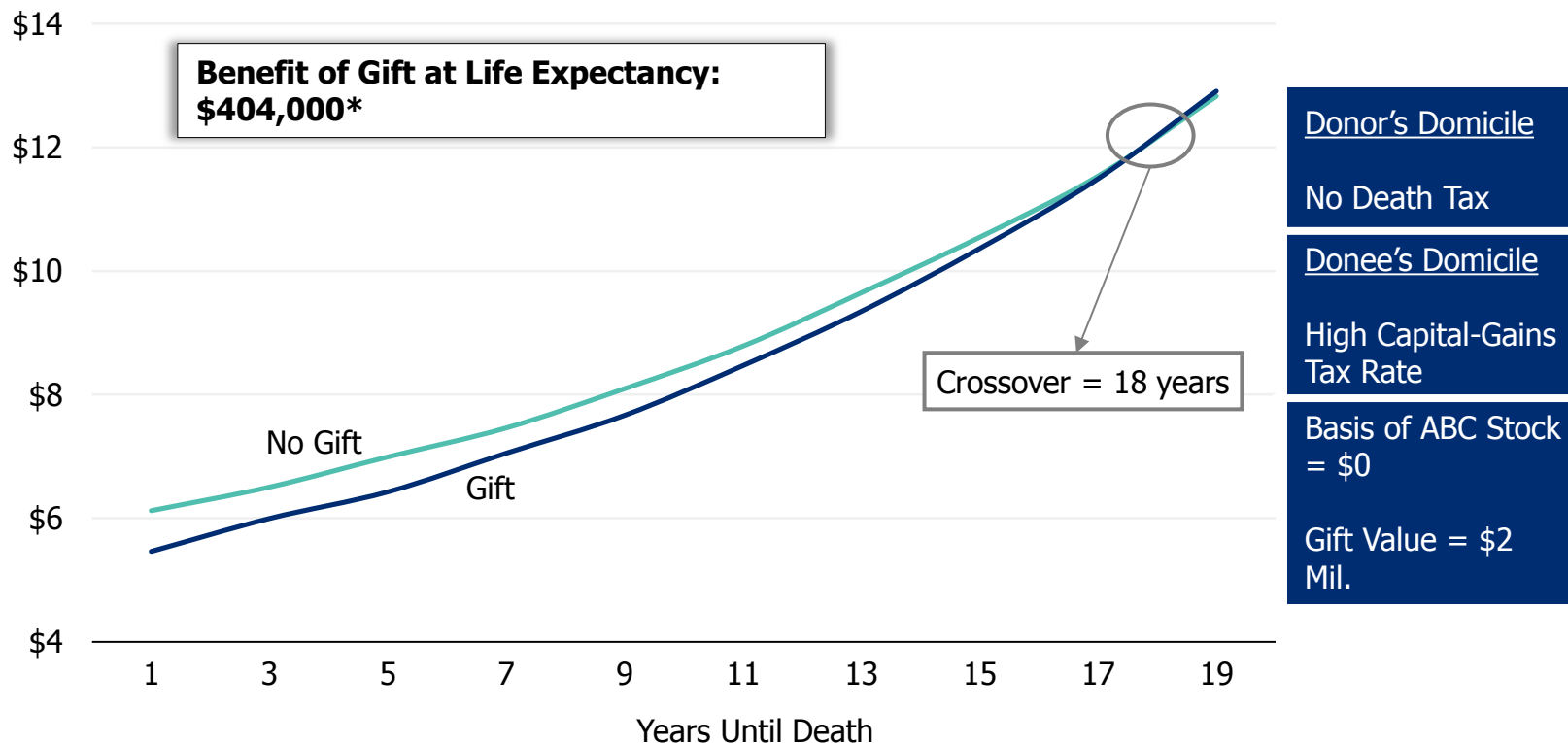
Gift-or-Hold Case-Study Assumptions

- Potential donor, a widow aged 65, with $6.25 million liquid estate

  - $2 million of highly appreciated ABC stock

  - Remaining assets invested 60% in stocks, 40% in bonds*

- Considering a gift to her child of the ABC stock … but concerned about losing a step-up in basis

> *Key research question:*
> *How do the donor's and donee's tax domiciles affect the likely outcome?*

*"Stocks" are modeled as 21% US value, 21% US growth, 21% US diversified, 7% US small- and mid-cap, 22.5% developed international, and 7.5% emerging market; "bonds" are modeled as intermediate-term municipal bonds. Spending is assumed to be offset by pension income; therefore, no spending has been modeled in this study.
Source: AB

Gift Is Not as Compelling When Estate vs. Income Tax Gap Is Small

Median Value of Donee's Gift and Inheritance
After Estate and Capital-Gains Taxes
Nominal ($ Millions)

Benefit of Gift at Life Expectancy: $404,000*

Crossover = 18 years

No Gift

Gift

Years Until Death

Donor's Domicile

No Death Tax

Donee's Domicile

High Capital-Gains Tax Rate

Basis of ABC Stock = $0

Gift Value = $2 Mil.

Based on Bernstein's estimates of range of returns for applicable capital markets over the applicable period. **Data do not represent past performance and are not a promise of actual future results or a range of future results.** Asset values represent estimated liquidation value net of capital-gains tax assuming top federal and California tax rates.
*23-year life expectancy for a 65-year-old female is based on the Society of Actuaries RP-2000 Mortality Tables.
See Appendix, Notes on Wealth Forecasting System, for details.
Source: Society of Actuaries RP-2000 Mortality Tables and AB

Gift Is More Compelling When Tax Gap Is Large

Median Value of Donee's Gift and Inheritance After Estate and Capital-Gains Taxes
Nominal ($ Millions)

Benefit of Gift at Life Expectancy: $1,344,000*

Gift

No Gift

Crossover = 8 years
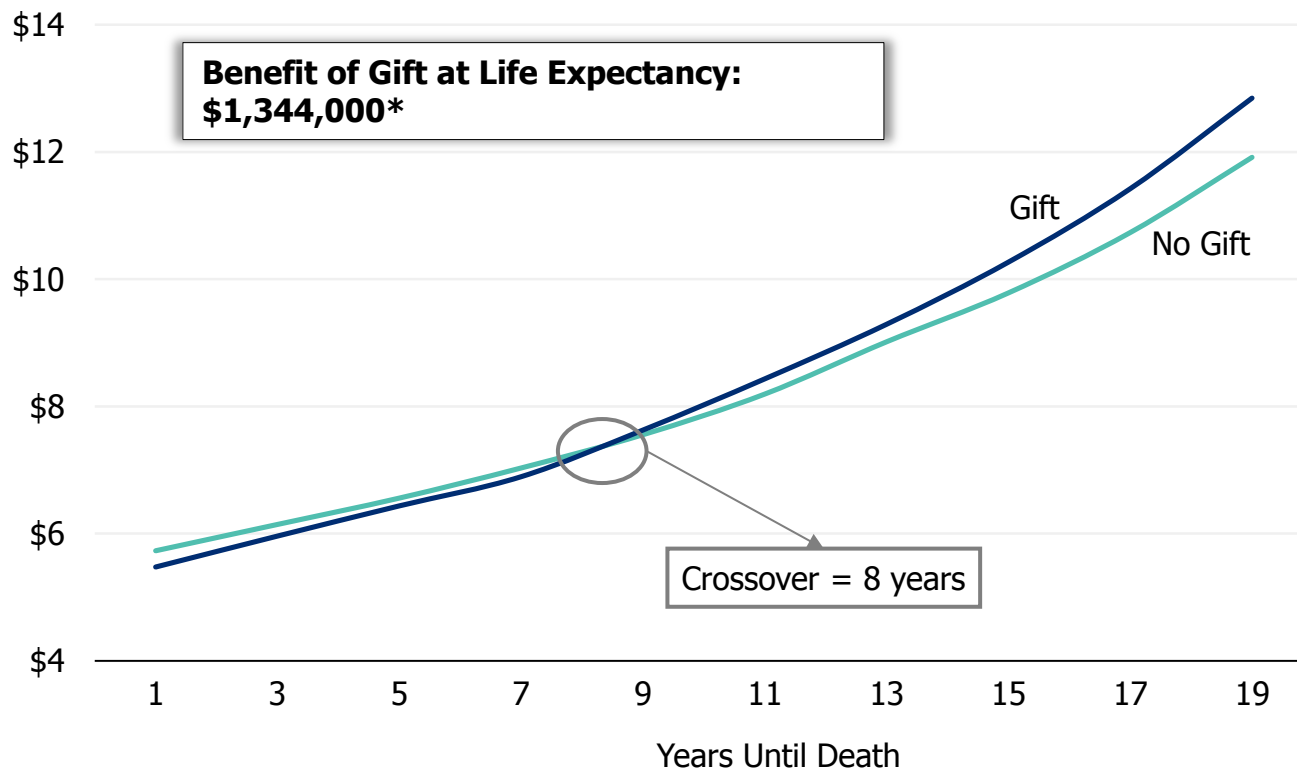
Donor's Domicile

Death Tax
No Gift Tax

Donee's Domicile

No Income Tax

Basis of ABC
Stock = $0

Gift Value = $2
Mil.

Years Until Death

Based on Bernstein's estimates of range of returns for applicable capital markets over the applicable period. **Data do not represent past performance and are not a promise of actual future results or a range of future results.** Asset values represent estimated liquidation value net of capital-gains tax assuming top federal and California tax rates.
*23-year life expectancy for a 65-year-old female is based on the Society of Actuaries RP-2000 Mortality Tables.
See Appendix, Notes on Wealth Forecasting System, for details.
Source: Society of Actuaries RP-2000 Mortality Tables and AB

Buy-Sell Agreement Case Study

Assumptions

This presentation has been prepared for John to help quantify certain life insurance and capital market alternatives to the whole life insurance proposal that he recently received. In each alternative case, excess funds not needed to fund the life insurance policy are instead invested in a portfolio of marketable securities. Each insurance policy shown in this analysis has an initial death benefit of $10 million.*

In conjunction with this analysis, we requested and received anonymous quotes from a reputable insurance advisor for the following alternatives to whole life insurance:

- 20-year term
- 30-year term
- Universal life

AGE / RESIDENCE
John is 36 years old and a resident of Chicago, Illinois.

TAX RATE
For purposes of this analysis, we assume that assets invested in a capital market portfolio are subject to top marginal federal and Illinois state income tax rates.

ASSETS
For purposes of this analysis, we assume that portfolio assets are invested 80% in return-seeking asset classes and 20% in risk-mitigating asset classes. Throughout, we refer to this diversified portfolio as the "80/20 portfolio."**

*In Northwestern Mutual's illustration, the whole life policy's death benefit increases over time. For purposes of this analysis, we assume that the death benefit of that policy will increase as illustrated, despite the fact that these future increases are not guaranteed.
**More specifically, "80/20 portfolio" means 11.2% US diversified stocks, 15.1% US value stocks, 15.1% US growth stocks, 5.6% small/mid cap stocks, 9.0% low volatility stocks, 13.7% developed international stocks, 4.2% emerging markets stocks, 6.1% high-risk international stocks, 20% intermediate-term diversified municipal bonds. See Appendix, Notes on Wealth Forecasting, for details.
Source: AB

Life Insurance Alternatives

Policy Type	Annual Premium*	Funding Period*
Whole Life	$200,000	13 years
20-year term	$4,160	20 years
30-year term	$8,066	30 years
Universal Life	$70,320	13 years

*As illustrated. Premium outlays are not adjusted for the time value of money.
Sources: Northwestern Mutual Life (whole life); SouthCap Brokerage Group, LLC (other policy types).

Assumptions: "Crossover" Analysis

In this section of the analysis, we modeled two scenarios:

Scenario A: Whole Life Insurance
- Invest $200,000, after-tax, per year for 13 years (through 2028) in a whole life insurance policy.
- We graphically depict the death benefit shown in the whole life illustration.

Scenario B: 80/20 Portfolio / No Insurance
- Invest $200,000, after-tax, per year for 13 years (through 2028) in the 80/20 portfolio.
- We graphically depict the after-tax value of that portfolio over time.

Research Question: How long does John have to live before the whole life insurance policy becomes a "bad" investment (i.e., at what point does the value of the 80/20 portfolio first become likely to exceed the life insurance death benefit) in "typical" (50th percentile) markets?

If John Lives at Least 35 Years (to Age 71), the 80/20 Portfolio Is Likely to Outperform the Whole Life Death Benefit

Whole Life Illustration Growth vs. 80/20 Portfolio*
After Income Taxes, Typical Markets**
$ Millions, Nominal
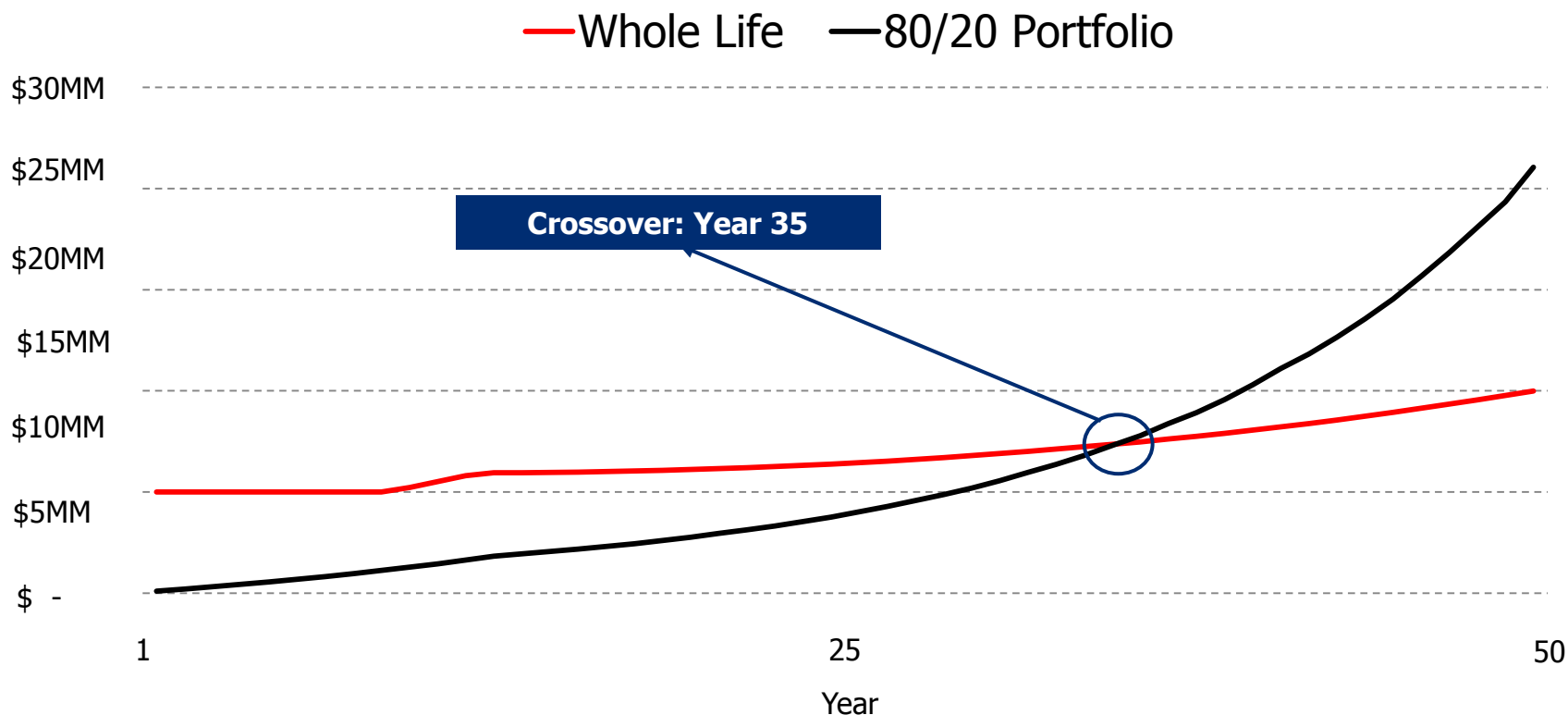
— Whole Life   — 80/20 Portfolio

Crossover: Year 35

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Assumptions: Buy 20-Year Term and Invest the Difference

In this section of the analysis, we model two scenarios:

Scenario A: Whole Life Insurance
- Invest $200,000, after-tax, per year for 13 years (through 2028) in a whole life insurance policy.
- Invest $200,000, after-tax, per year for the following 7 years (2029 through 2035) in the 80/20 portfolio.
- We graphically depict the death benefit shown in the whole life illustration *plus* the after-tax value of the 80/20 portfolio.

Scenario B: 20-Year Term
- Invest $4,160, after-tax, per year for 20 years (through 2035) in a 20-year term life insurance policy.
- Invest $195,840, after-tax, per year for 20 years (through 2035) in the 80/20 portfolio.
- We graphically depict the death benefit shown in the 20-year term illustration *plus* the after-tax value of the 80/20 portfolio.
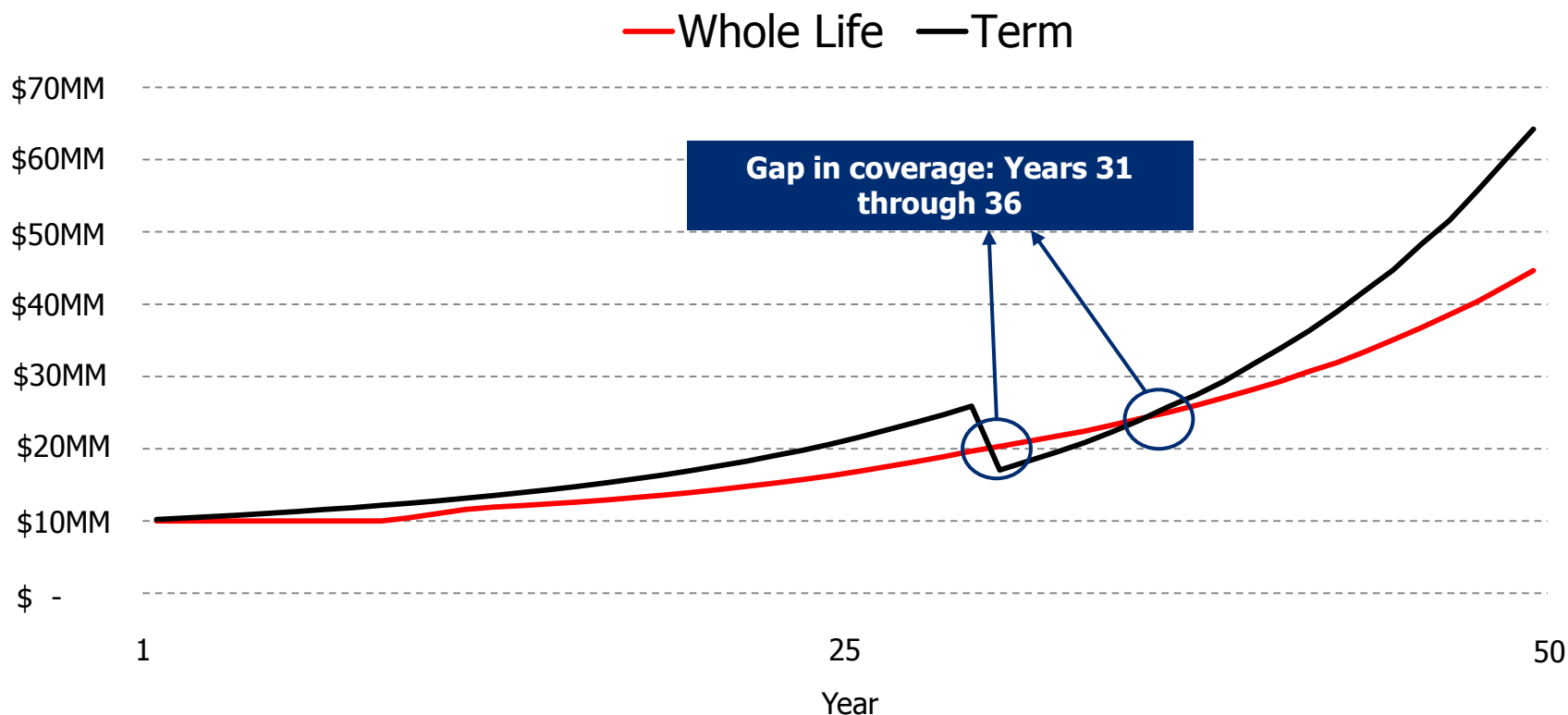- After 20 years, the term policy lapses, leaving only the after-tax value in the 80/20 portfolio.

Research Question: Which scenario is likely to provide the greatest after-tax benefits to John's family over time in "typical" (50th percentile) markets?

20-Year Term Is Likely to Leave a Significant Gap in Coverage If Death Occurs Between Ages 56 and 72

Whole Life vs. 20-Year Term*
80/20 Portfolio, After Income Taxes, Typical Markets**
$ Millions, Nominal
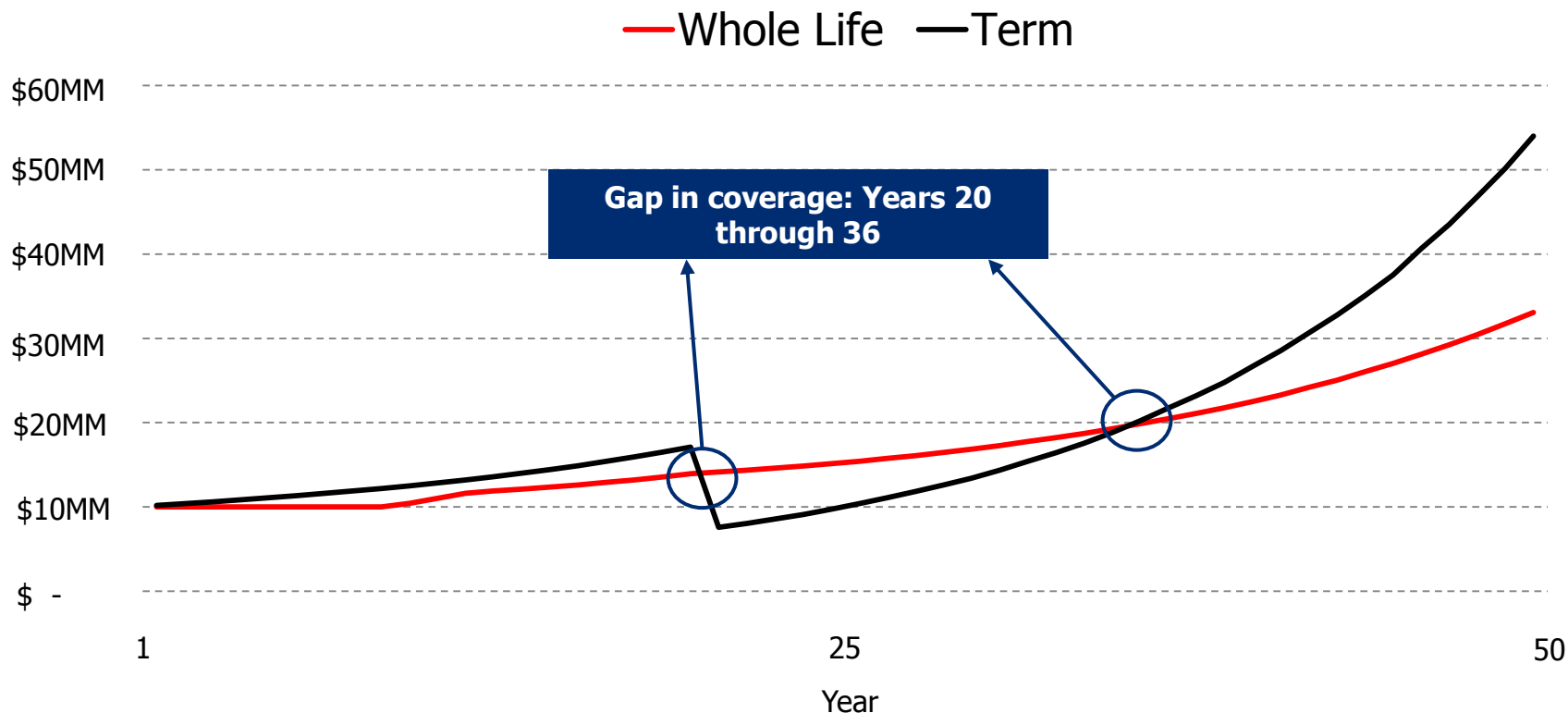
Legend: —— Whole Life   —— Term

Gap in coverage: Years 20 through 36

Y-axis: $60MM, $50MM, $40MM, $30MM, $20MM, $10MM, $ -

X-axis (Year): 1, 25, 50

Portfolio values (not policy death benefits) are based on Bernstein's estimates of the range of returns for the applicable capital markets over the next 50 years. Data do not represent past performance and are not a promise of actual or range of future results. See Appendix, Notes on Wealth Forecasting System, for details.
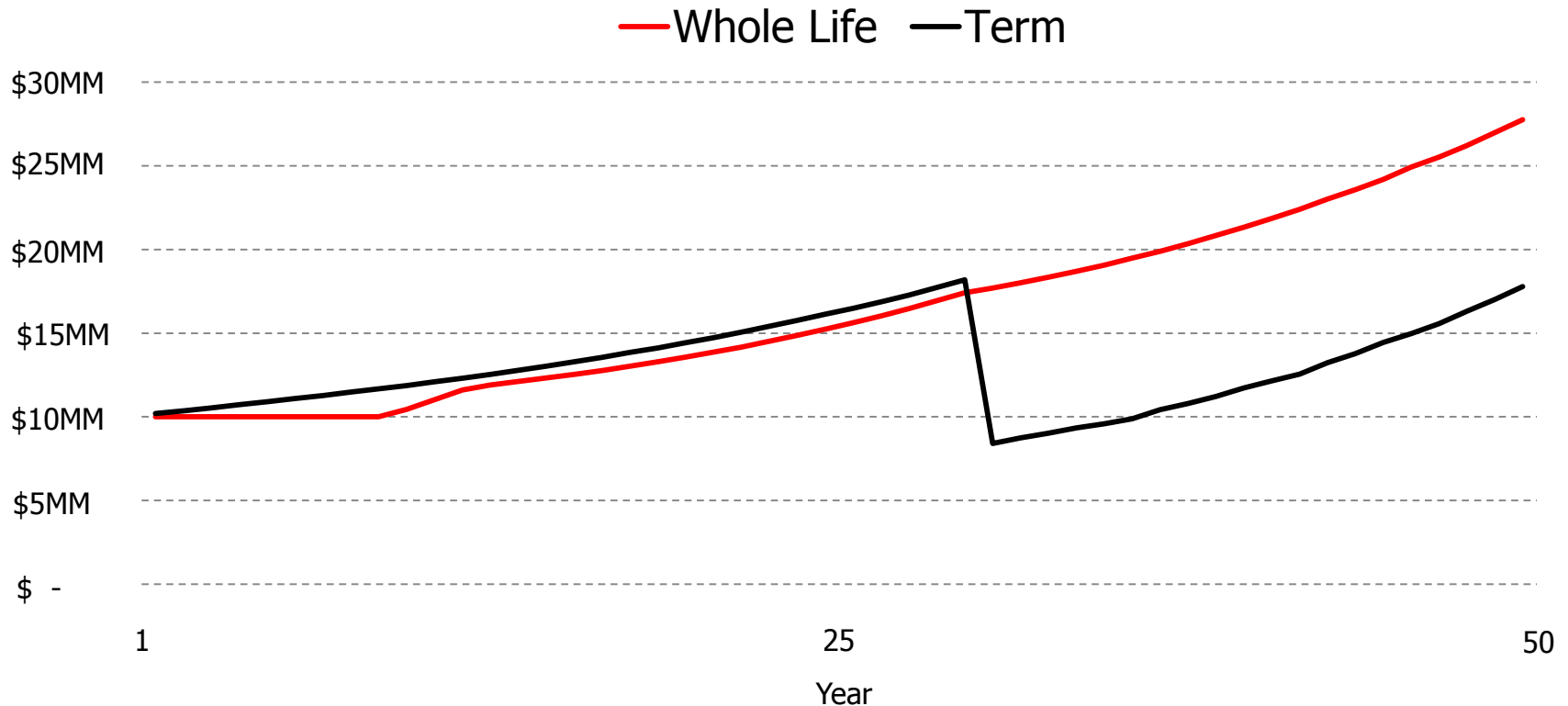*"Whole Life" and "20-Year Term" scenarios are described on the immediately preceding page.
**"80/20 Portfolio" is described on the page titled "General Assumptions." "Typical markets" means the median result of 10,000 trials for applicable capital markets in Bernstein's Wealth Forecasting System.
Source: AB (insurance illustrations were provided by third parties and are available upon request).

Assumptions: Buy <u>30</u>-Year Term and Invest the Difference

In this section of the analysis, we model two scenarios:

Scenario A: Whole Life Insurance
- Invest $200,000, after-tax, per year for 13 years (through 2028) in a whole life insurance policy.
- Invest $200,000, after-tax, per year for the following 17 years (2029 through 2045) in the 80/20 portfolio.
- We graphically depict the death benefit shown in the whole life illustration *plus* the after-tax value of the 80/20 portfolio.

Scenario B: 30-Year Term
- Invest $8,066, after-tax, per year for 30 years (through 2045) in a 30-year term life insurance policy.
- Invest $191,934, after-tax, per year for 30 years (through 2045) in the 80/20 portfolio.
- We graphically depict the death benefit shown in the 30-year term illustration *plus* the after-tax value of the 80/20 portfolio.
- After 30 years, the term policy lapses, leaving only the after-tax value in the 80/20 portfolio.

Research Question: Which scenario is likely to provide the greatest after-tax benefits to John's family over time
- In "typical" (50th percentile) markets?
- In "poor" (90th percentile) markets?

30-Year Term Substantially Closes that Coverage Gap . . .

Whole Life vs. 30-Year Term*
80/20 Portfolio, After Income Taxes, Typical Markets**
$ Millions, Nominal

Legend: —— Whole Life —— Term

Gap in coverage: Years 31 through 36

Y-axis: $70MM, $60MM, $50MM, $40MM, $30MM, $20MM, $10MM, $ -

X-axis (Year): 1, 25, 50

Portfolio values (not policy death benefits) are based on Bernstein's estimates of the range of returns for the applicable capital markets over the next 50 years. Data do not represent past performance and are not a promise of actual or range of future results. See Appendix, Notes on Wealth Forecasting System, for details.
*"Whole Life" and "30-Year Term" scenarios are described on the immediately preceding page.
**"80/20 Portfolio" is described on the page titled "General Assumptions." "Typical Markets" means the median result of 10,000 trials for applicable capital markets in Bernstein's Wealth Forecasting System.
Source: AB (insurance illustrations were provided by third parties and are available upon request).

[AB] BERNSTEIN

. . . But _May_ Lag the Whole Life Policy in Poor Markets

Whole Life vs. 30-Year Term*
80/20 Portfolio, After Income Taxes, _Poor_ Markets**
$ Millions, Nominal

Legend: —— Whole Life —— Term

Y-axis: $30MM, $25MM, $20MM, $15MM, $10MM, $5MM, $ -

X-axis: 1, 25, 50 — Year

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Assumptions: Buy Universal Life and Invest the Difference

In this section of the analysis, we model two scenarios:

Scenario A: Whole Life Insurance
- Invest $200,000, after-tax, per year for 13 years (through 2028) in a whole life insurance policy.
- Invest $200,000, after-tax, per year for the following 17 years (2029 through 2045) in the 80/20 portfolio.
- We graphically depict the death benefit shown in the whole life illustration *plus* the after-tax value of the 80/20 portfolio.

Scenario B: Universal Life (sometimes referred to as "UL")
- Invest $70,320, after-tax, per year for 13 years (through 2028) in a universal life insurance policy.
- Invest $129,680, after-tax, per year for 13 years (through 2028), and $200,000, after-tax, per year for the following 17 years (2029 through 2045) in the 80/20 portfolio.
- We graphically depict the death benefit shown in the universal life illustration *plus* the after-tax value of the 80/20 portfolio.
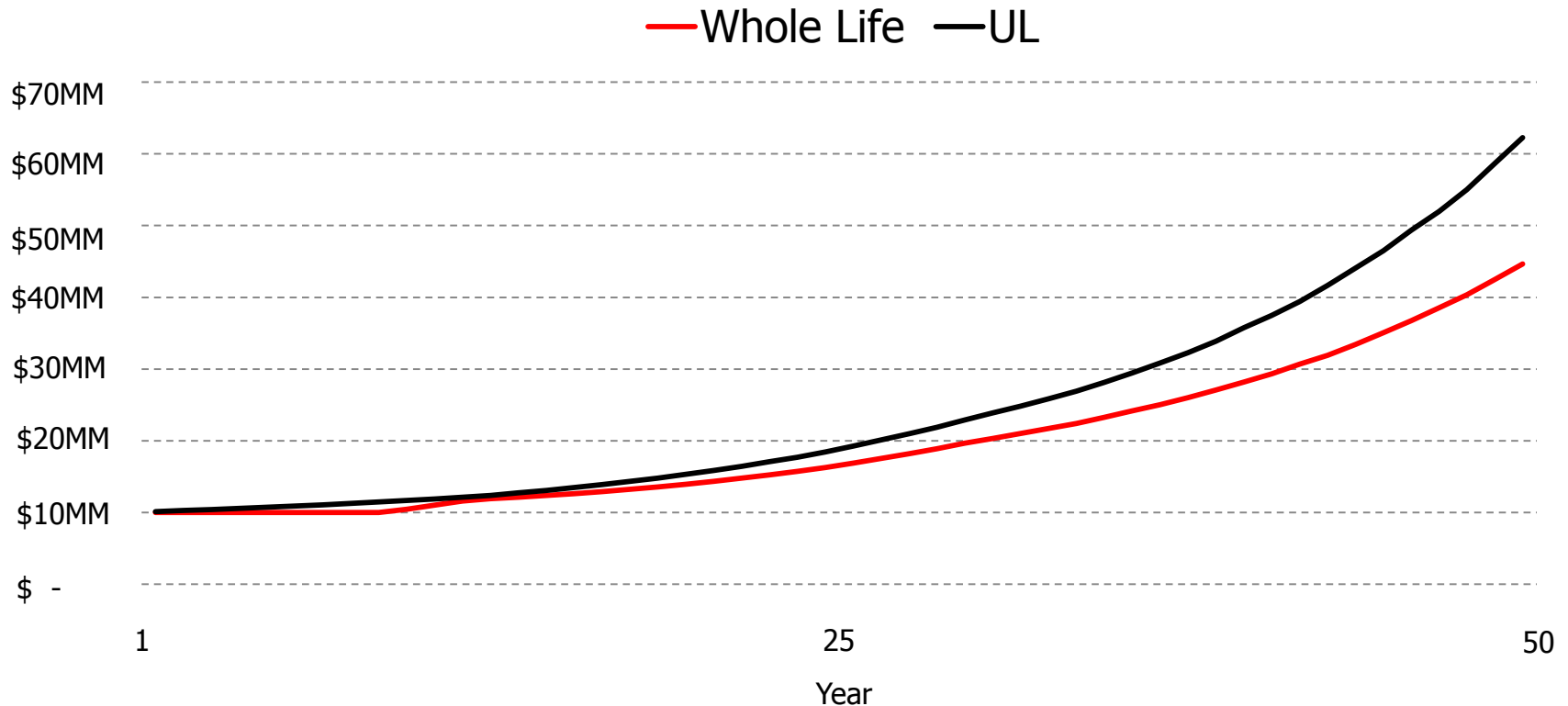
Research Question: Which scenario is likely to provide the greatest after-tax benefits to John's family over time
- In "typical" (50th percentile) markets?
- In "poor" (90th percentile) markets?

Buying Universal Life and Investing the Difference Is Likely to Outperform the Whole Life Policy in "Normal" Markets . . .

Whole Life vs. UL*
80/20 Portfolio, After Income Taxes, Typical Markets**
$ Millions, Nominal

Legend: —— Whole Life —— UL

Y-axis: $70MM, $60MM, $50MM, $40MM, $30MM, $20MM, $10MM, $ -

X-axis (Year): 1, 25, 50

Portfolio values (not policy death benefits) are based on Bernstein's estimates of the range of returns for the applicable capital markets over the next 50 years. Data do not represent past performance and are not a promise of actual or range of future results. See Appendix, Notes on Wealth Forecasting System, for details.
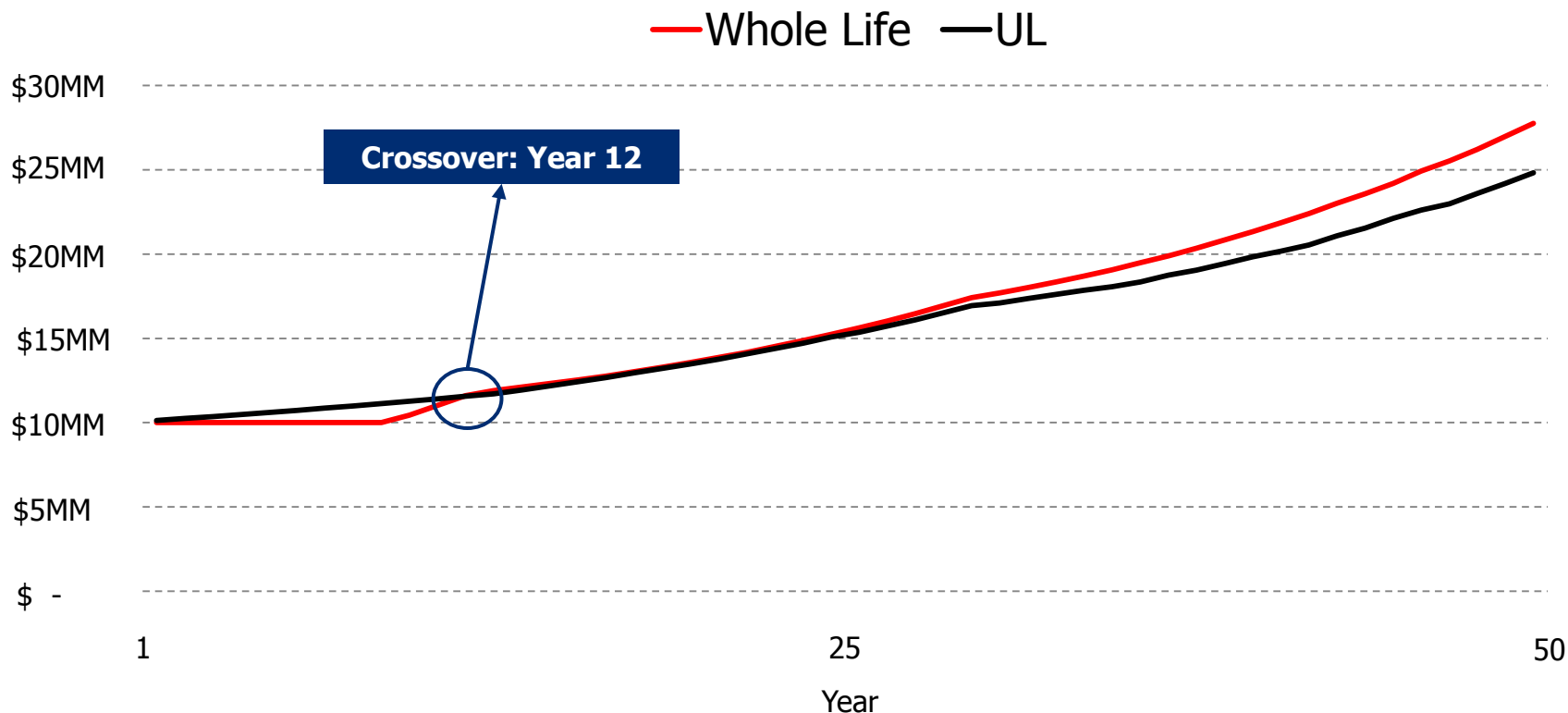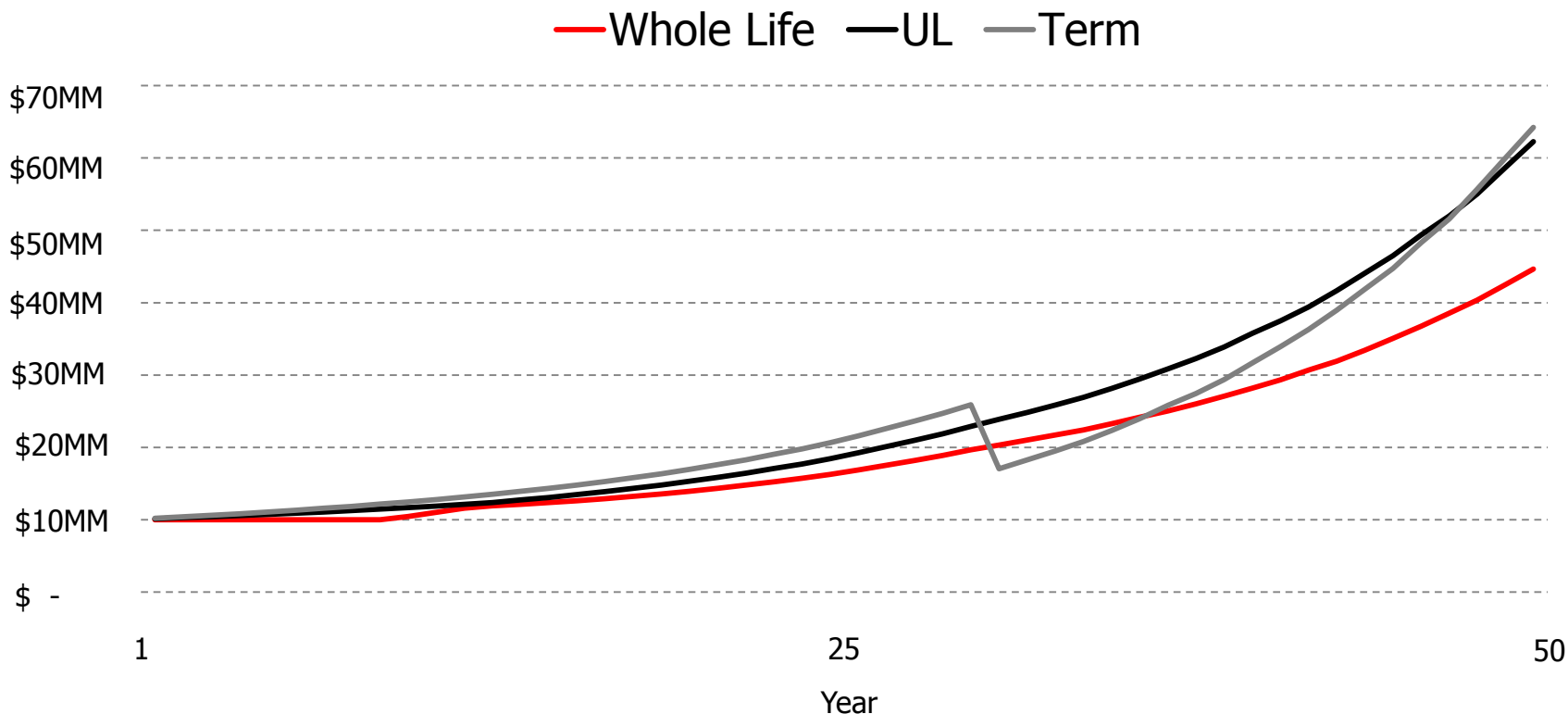*"Whole Life" and "UL" scenarios are described on the immediately preceding page.
**"80/20 Portfolio" is described on the page titled "General Assumptions." "Typical Markets" means the median result of 10,000 trials for applicable capital markets in Bernstein's Wealth Forecasting System.
Source: AB (insurance illustrations were provided by third parties and are available upon request).

. . . But *May* Lag Whole Life in Sustained Poor Markets

Whole Life vs. UL
80/20 Portfolio, After Income Taxes, *Poor* Markets**
$ Millions, Nominal

—— Whole Life —— UL

Crossover: Year 12

$30MM
$25MM
$20MM
$15MM
$10MM
$5MM
$ -

1   25   50

Year

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Overall, Some Combination of 30-Year Term and Universal Life Seems Best . . .

Whole Life vs. UL vs. 30 Year Term*
80/20 Portfolio, After Income Taxes, Typical Markets**
$ Millions, Nominal

Whole Life — UL — Term

Portfolio values (not policy death benefits) are based on Bernstein's estimates of the range of returns for the applicable capital markets over the next 50 years. Data do not represent past performance and are not a promise of actual or range of future results. See Appendix, Notes on Wealth Forecasting System, for details.
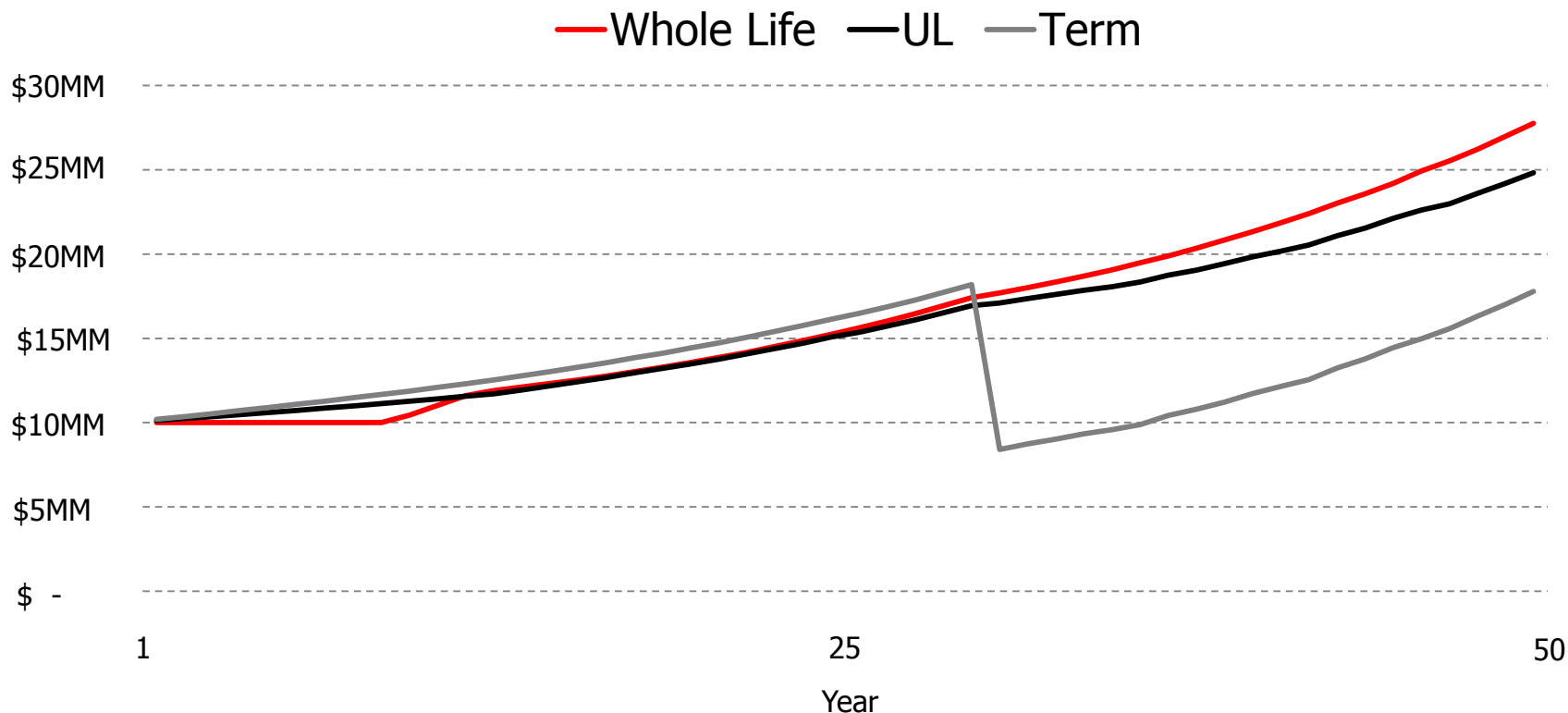*"Whole Life," "UL," and "30-Year Term" scenarios are described on the preceding pages.
**"80/20 Portfolio" is described on the page titled "General Assumptions." "Typical markets" means the median result of 10,000 trials for applicable capital markets in Bernstein's Wealth Forecasting System.
Source: AB (insurance illustrations were provided by third parties and are available upon request).

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. . . With an Overweight to Universal Life, and Perhaps a Dash of Whole Life, as a Hedge Against Down Markets

Whole Life vs. UL vs. 30 Year Term*
80/20 Portfolio, After Income Taxes, _Poor_ Markets**
$ Millions, Nominal

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Bernstein Recommendations

The recommendation that John acquire whole life insurance is not entirely without merit, but he needs to consider the relative benefits and costs of that proposal.

- Whole life insurance is expensive relative to term and universal life insurance.
- That additional expense carries an "opportunity cost" that can be recovered, in part, by instead buying term / universal life (rather than whole life) and investing the difference.
- John might include a modest dose of whole life in his insurance portfolio if he is concerned about
  - Sustained poor performance in the capital markets (such that whole life actually "outperforms" the broader markets); or
  - The possibility that he may live beyond the lapse dates of any term or universal life policies that he is considering.

How much death benefit does John actually need?

- The life insurance proposal seems to assume that John should acquire $10 million of death benefit—without necessarily explaining how that amount was determined or whether that amount may change over time.
- Bernstein recently published research showing how we use our quantitative tools to help investors like John "right size" the amount of insurance he acquires based upon the projected needs of his beneficiaries.
- We can customize our research to his family's needs, if that would be of interest to him.

Source: AB

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Notes on Wealth Forecasting System

1. Purpose and Description of Wealth Forecasting System^{SM}

Bernstein's Wealth Forecasting System is designed to assist investors in making their long-term investment decisions as to their allocation of investments among categories of financial assets. Our planning tool consists of a four-step process: (1) Client-Profile Input: the client's asset allocation, income, expenses, cash withdrawals, tax rate, risk-tolerance level, goals, and other factors; (2) Client Scenarios: in effect, questions the client would like our guidance on, which may touch on issues such as when to retire, what his/her cash-flow stream is likely to be, whether his/her portfolio can beat inflation long-term, and how different asset allocations might affect his/her long-term security; (3) The Capital Markets Engine: our proprietary model that uses our research and historical data to create a vast range of hypothetical market returns, which takes into account the linkages within and among the capital markets, as well as their unpredictability; and (4) A Probability Distribution of Outcomes: Based on the assets invested pursuant to the stated asset allocation, 90% of the estimated ranges of probable returns and asset values the client could experience are represented within the range established by the 5th and 95th percentiles on "box-and-whiskers" graphs. However, outcomes outside this range are expected to occur 10% of the time; thus, the range does not guarantee results or establish the boundaries for all outcomes. Estimated market returns on bonds are derived taking into account yield and other criteria. An important assumption is that stocks will, over time, outperform long bonds by a reasonable amount, although this is in no way a certainty. Moreover, actual future results may not meet Bernstein's estimates of the range of market returns, as these results are subject to a variety of economic, market, and other variables. Accordingly, the analysis should not be construed as a promise of actual future results, the actual range of future results, or the actual probability that these results will be realized. The information provided here is not intended for public use or distribution beyond our private meeting. Of course, no investment strategy or allocation can eliminate risk or guarantee returns.

2. Retirement Vehicles

Each retirement plan is modeled as one of the following vehicles: traditional IRA, 401(k), 403(b), Keogh, or Roth IRA/401(k). One of the significant differences among these vehicle types is the date at which mandatory distributions commence. For traditional IRA vehicles, mandatory distributions are assumed to commence during the year in which the investor reaches the age of 70.5. For 401(k), 403(b), and Keogh vehicles, mandatory distributions are assumed to commence at the later of (i) the year in which the investor reaches the age of 70.5 or (ii) the year in which the investor retires. In the case of a married couple, these dates are based on the date of birth of the older spouse. The minimum mandatory withdrawal is estimated using the Minimum Distribution Incidental Benefit tables as published on www.irs.gov. For Roth IRA/401(k) vehicles, there are no mandatory distributions. Distributions from Roth IRAs/401(k)s that exceed principal will be taxed and/or penalized if the distributed assets are less than five years old and the contributor is less than 59.5 years old. All Roth 401(k) plans will be rolled into a Roth IRA plan when the investor turns 59.5 years old, in order to avoid minimum distribution requirements.

3. Rebalancing

Another important planning assumption is how the asset allocation varies over time. We attempt to model how the portfolio would actually be managed. Cash flows and cash generated from portfolio turnover are used to maintain the selected asset allocation between cash, bonds, stocks, REITs, and hedge funds over the period of the analysis. Where this is not sufficient, an optimization program is run to trade off the mismatch between the actual allocation and targets against the cost of trading to rebalance. In general, the portfolio is expected to be maintained reasonably close to the target allocation. In addition, in later years, there may be contention between the total relationship's allocation and those of the separate portfolios. For example, suppose an investor (in the top marginal federal tax bracket) begins with an asset mix consisting entirely of municipal bonds in his/her personal portfolio and entirely of stocks in his/her retirement portfolio. If personal assets are spent, the mix between stocks and bonds will diverge from targets. We put primary weight on maintaining the overall allocation near target, which may result in an allocation to taxable bonds in the retirement portfolio as the personal assets decrease in value relative to the retirement portfolio's value.

Notes on Wealth Forecasting System

4. Expenses and Spending Plans (Withdrawals)

All results are generally shown after applicable taxes and after anticipated withdrawals and/or additions, unless otherwise noted. Liquidations may result in realized gains or losses, which will have capital-gains tax implications.

5. Modeled Asset Classes

The following assets or indexes were used in this analysis to represent the various model classes:

Asset Class	Modeled as:	Annual Turnover
Int.-Term Diversified Municipals	AA-rated diversified municipal bonds of 7-year maturity	30%
Int.-Term Taxables	Taxable bonds of 7-year maturity	30%
US Diversified	S&P 500 Index	15%
US Value	S&P/Barra Value Index	15%
US Growth	S&P/Barra Growth Index	15%
US Small-/Mid-Cap	Russell 2500 Index	15%
Developed International	MSCI EAFE Index (Unhedged)	15%
Emerging Markets	MSCI Emerging Markets Index	20%

6. Volatility

Volatility is a measure of dispersion of expected returns around the average. The greater the volatility, the more likely it is that returns in any one period will be substantially above or below the expected result. The volatility for each asset class used in this analysis is listed in the Capital-Market Projections section at the end of these Notes. In general, two-thirds of the returns will be within one standard deviation. For example, assuming that stocks are expected to return 8.0% on a compounded basis and the volatility of returns on stocks is 17.0%, in any one year it is likely that two-thirds of the projected returns will be between (8.9)% and 28.8%. With intermediate government bonds, if the expected compound return is assumed to be 5.0% and the volatility is assumed to be 6.0%, two-thirds of the outcomes will typically be between (1.1)% and 11.5%. Bernstein's forecast of volatility is based on historical data and incorporates Bernstein's judgment that the volatility of fixed-income assets is different for different time periods.

Notes on Wealth Forecasting System

7. Technical Assumptions

Bernstein's Wealth Forecasting System is based on a number of technical assumptions regarding the future behavior of financial markets. Bernstein's Capital Markets Engine is the module responsible for creating simulations of returns in the capital markets. These simulations are based on inputs that summarize the current condition of the capital markets as of September 30, 2015. Therefore, the first 12-month period of simulated returns represents the period from September 30, 2015, through September 30, 2016, and not necessarily the calendar year of 2015. A description of these technical assumptions is available on request.

8. Tax Implications

Before making any asset-allocation decisions, an investor should review with his/her tax advisor the tax liabilities incurred by the different investment alternatives presented herein, including any capital gains that would be incurred as a result of liquidating all or part of his/her portfolio, retirement-plan distributions, investments in municipal or taxable bonds, etc. Bernstein does not provide tax, legal, or accounting advice. In considering this material, you should discuss your individual circumstances with professionals in those areas before making any decisions.

9. Tax Rates

Bernstein's Wealth Forecasting System has used various assumptions for the income tax rates of investors in the case study. See the assumptions in the case study (including footnotes) for details. The federal income tax rate is Bernstein's estimate of either the top marginal tax bracket or an "average" rate calculated based upon the marginal rate schedule. For 2014 and beyond, the maximum federal tax rate on investment income is 43.4%, and the maximum federal long-term capital-gains tax rate is 23.8%. Federal tax rates are blended with applicable state tax rates by including, among other things, federal deductions for state income and capital-gains taxes. The state tax rate generally represents Bernstein's estimate of the top marginal rate, if applicable.

10. Estate Transfer and Taxation

The Wealth Forecasting System models the transfer of assets to children, more remote descendants, and charities, taking into account applicable wealth transfer taxes. If the analysis concerns a grantor and his or her spouse, the System assumes that only the first to die owns assets in his or her individual name and that no assets are owned jointly. It is further assumed that the couple's estate plan provides that an amount equal to the largest amount that can pass free of federal estate tax by reason of the federal unified credit against estate taxes (or, if desired, the largest amount that can pass without state death tax, if less) passes to a trust for the benefit of the surviving spouse and/or descendants of the first-to-die, or directly to one or more of those descendants. It is further assumed that the balance of the first-to-die's individually owned assets passes outright to the surviving spouse and that such transfer qualifies for the federal estate tax marital deduction. Any state death taxes payable at the death of the first-to-die after 2010 are assumed to be paid from the assets otherwise passing to the surviving spouse. To the extent that this assumption results in an increase in state death taxes under any state's law, this increase is ignored. In addition, it is assumed that the surviving spouse "rolls over" into an IRA in his or her own name any assets in any retirement accounts (e.g., an IRA) owned by the first to die, and that the surviving spouse withdraws each year at least the minimum required distribution ("MRD"), if any, from that IRA.

At the survivor's death, all applicable wealth transfer taxes are paid, taking into account any deductions to which the survivor's estate may be entitled for gifts to charity and/or (after 2010) the payment of state death taxes. The balance of the survivor's individually owned assets passes to descendants and/or charities and/or trusts for their benefit. The survivor's retirement accounts (if any) pass to descendants and/or charities. To the extent that a retirement account passes to more than one individual beneficiary, it is assumed that separate accounts are established for each beneficiary and that each takes at least the MRD each year from the account. In all cases, it is assumed that all expenses are paid from an individual's taxable accounts rather than his or her retirement accounts to the maximum extent possible.

Notes on Wealth Forecasting System

11. Capital-Market Projections ("Basic" and "Integration" Case Studies)

	Median 40-Year Growth Rate	Mean Annual Return	Mean Annual Income	One-Year Volatility	40-Year Annual Equivalent Volatility
Int.-Term Diversified Municipals	3.7%	4.0%	3.8%	4.2%	10.0%
Int.-Term Taxables	4.9%	5.3%	6.4%	5.1%	11.4%
US Diversified	7.7%	9.5%	3.3%	20.5%	24.1%
US Value	8.0%	9.7%	3.9%	20.0%	23.5%
US Growth	7.4%	9.6%	2.7%	22.8%	25.6%
US Small-/Mid-Cap	7.8%	10.1%	2.9%	23.4%	26.1%
Developed International	8.4%	10.7%	3.6%	22.7%	24.8%
Emerging Markets	6.6%	10.8%	4.6%	32.8%	31.6%
Inflation	3.1%	3.5%	n/a	1.3%	13.5%

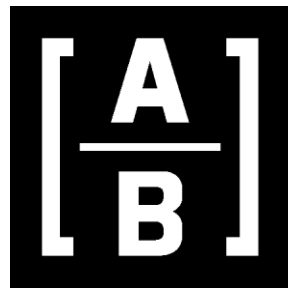|	Median 25-Year Growth Rate	Mean Annual Return	Mean Annual Income	One-Year Volatility	25-Year Annual Equivalent Volatility
Int.-Term Diversified Municipals	3.1%	3.3%	3.3%	4.2%	6.7%
Int.-Term Taxables	3.9%	4.2%	5.5%	5.1%	7.1%
US Diversified	7.0%	8.7%	2.8%	20.5%	18.3%
US Value	7.3%	8.9%	3.4%	20.0%	18.0%
US Growth	6.7%	8.7%	2.3%	22.8%	19.8%
US Small-/Mid-Cap	7.2%	9.3%	2.4%	23.4%	20.9%
Developed International	7.9%	10.1%	3.4%	22.7%	19.6%
Emerging Markets	6.0%	10.0%	3.8%	32.8%	27.9%
Inflation	2.7%	3.1%	n/a	1.3%	10.5%

Based on 10,000 simulated trials, each consisting of 25-year and 40-year periods. Reflects Bernstein's estimates and the capital-market conditions of September 30, 2015.
Data do not represent past performance and are not a promise of actual future results or a range of future results.

Notes on Wealth Forecasting System

12. Capital-Market Projections ("Gift-or-Hold" Case Study in Appendix)

	Median 40-Year Growth Rate	Mean Annual Return	Mean Annual Income	One-Year Volatility	30-Year Annual Equivalent Volatility
Cash Equivalents	2.8%	3.1%	3.1%	0.0%	8.9%
Int.-Term Diversified Municipal Bonds	3.1%	3.3%	3.1%	3.3%	7.1%
US Diversified	7.7%	9.3%	2.9%	16.3%	18.8%
US Value	8.0%	9.5%	3.4%	15.8%	18.5%
US Growth	7.5%	9.4%	2.3%	18.2%	20.1%
Developed International	8.4%	10.4%	3.4%	18.0%	19.5%
Emerging Markets	6.5%	10.4%	3.8%	25.8%	27.0%
US Small-/Mid-Cap	7.9%	10.0%	2.5%	18.6%	21.3%
Inflation	3.0%	3.3%	n/a	1.0%	9.6%
Single Stock	3.6%	9.3%	2.0%	34.6%	34.6%

Based on 10,000 simulated trials, each consisting of 30-year periods. Reflects Bernstein's estimates and the capital-market conditions of March 31, 2013.
Data do not represent past performance and are not a promise of actual future results or a range of future results.