A Consumer Safety Approach to Personal Financial Planning

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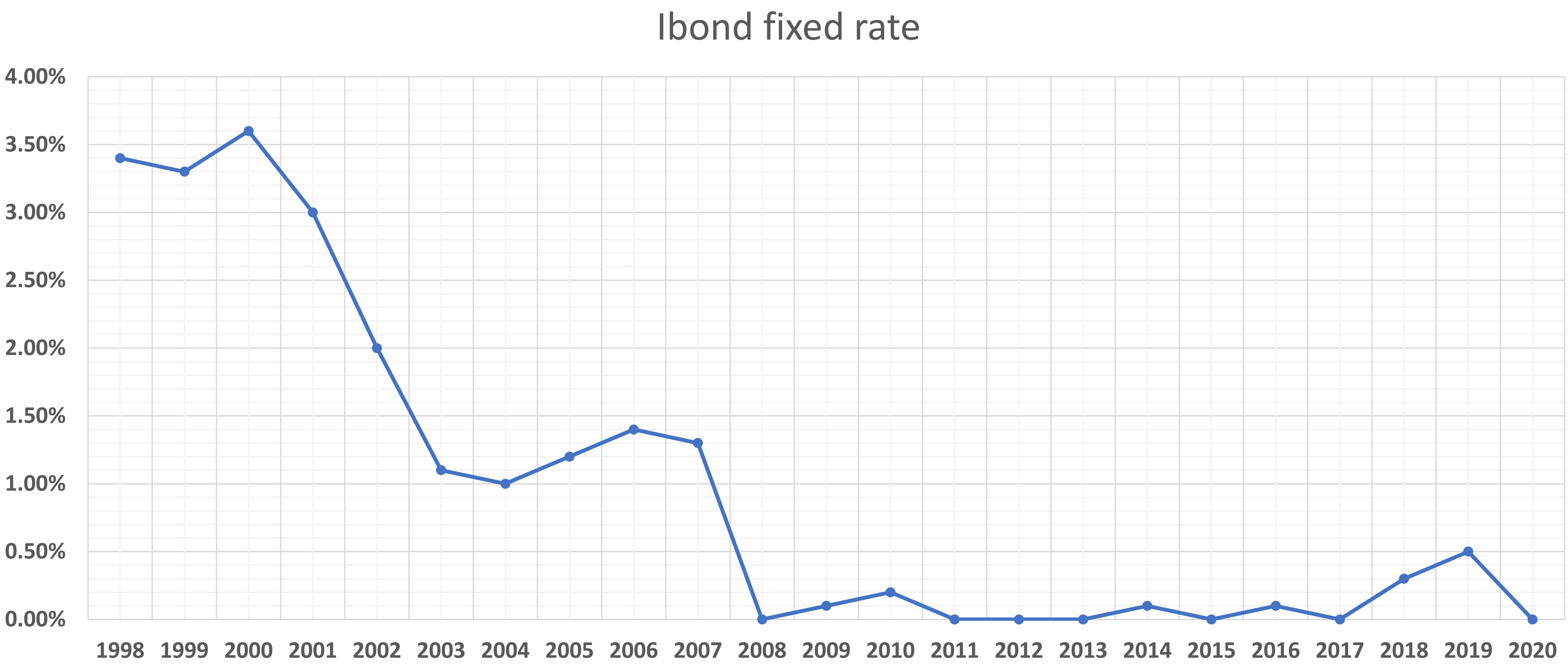
I Bonds: the ultimate safe and liquid asset

- The “best kept secret in America”
- Key features
- Too good to be true?
- Perfect fit for emergency fund
- Why has it not been a successful product innovation?

Al Gore Announcement Sept. 1998

Ibond Fixed Rates 1998 to 2020



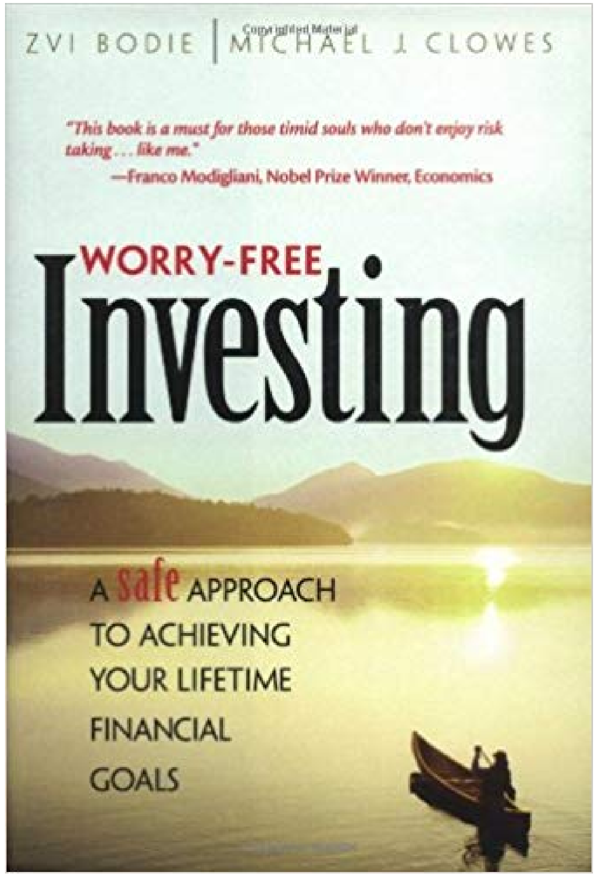
THE SAFETY-FIRST APPROACH TO INVESTING

Hedge by matching client needs with risk-free assets.*

*No asset is completely risk free. The idea is to get as close as possible. But there may be tracking error.

Worry-Free Investing: The Six Steps

1. Set goals.
2. Specify targets.
3. Compute required no-risk saving rate.
4. Determine tolerance for risk.
5. Choose risky asset portfolio.
6. Minimize taxes and transaction costs.



Life-cycle investment products today

- Target-date retirement accounts
- Target-date college tuition accounts
- Health saving accounts
- Common characteristics
  - Specific purpose
  - Specific maturity date
  - Tax advantaged because society wants to encourage saving for this purpose
- Most of the money in these accounts is invested in mutual funds

The trouble with mutual funds

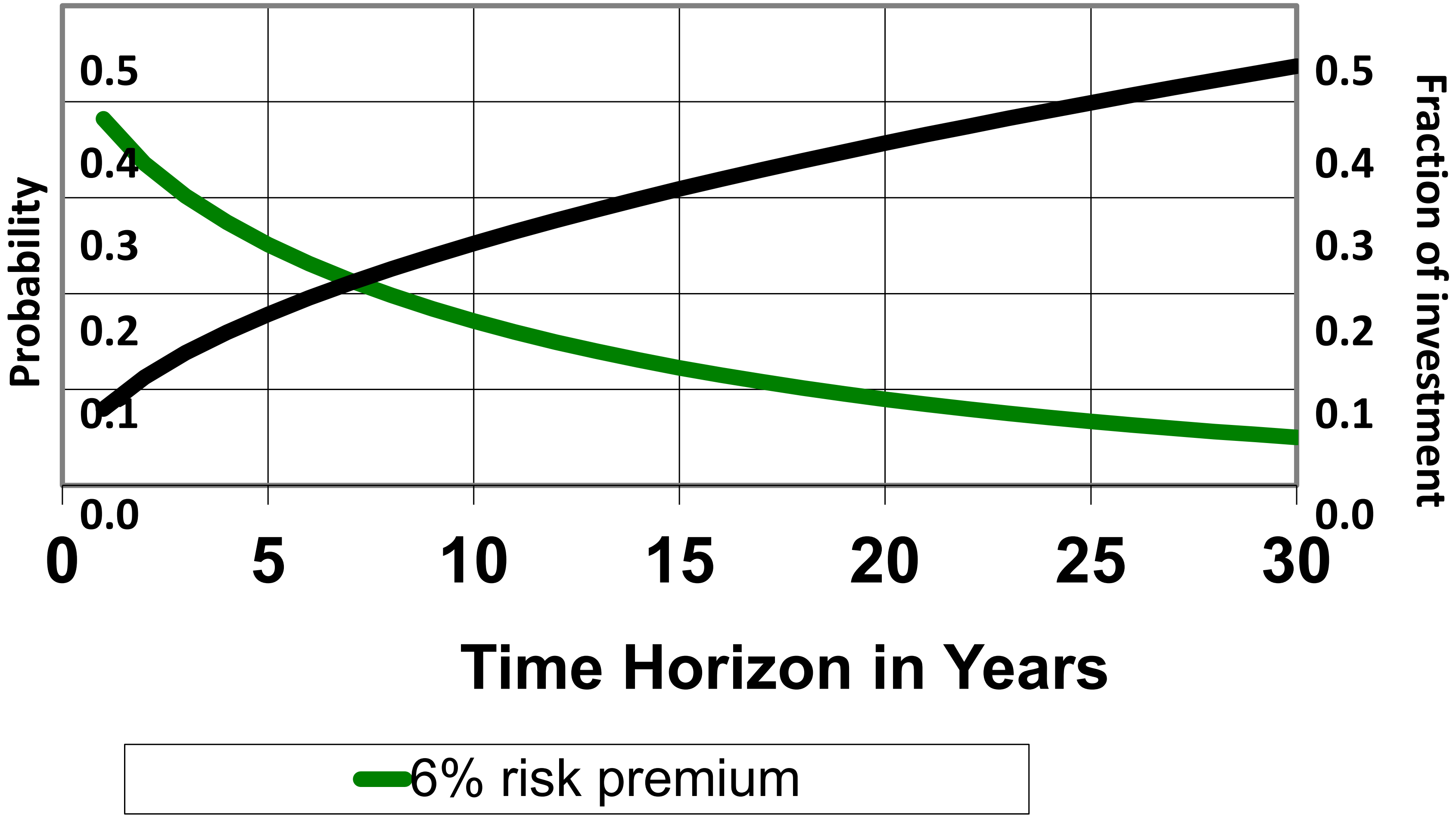
- Not matched to the purpose or the target date of the account
- For a matching strategy, the basic building blocks must be denominated in units that match the purpose and have known maturities.

Economic principles

- No free lunch. The present value of achieving a future target cannot be lowered by taking risk.
- But it can be lowered through contingent contracts that only pay off when needed. Example: life annuities only pay off if annuitant is alive.

The fallacy of time diversification

Probability of shortfall vs. cost of shortfall insurance



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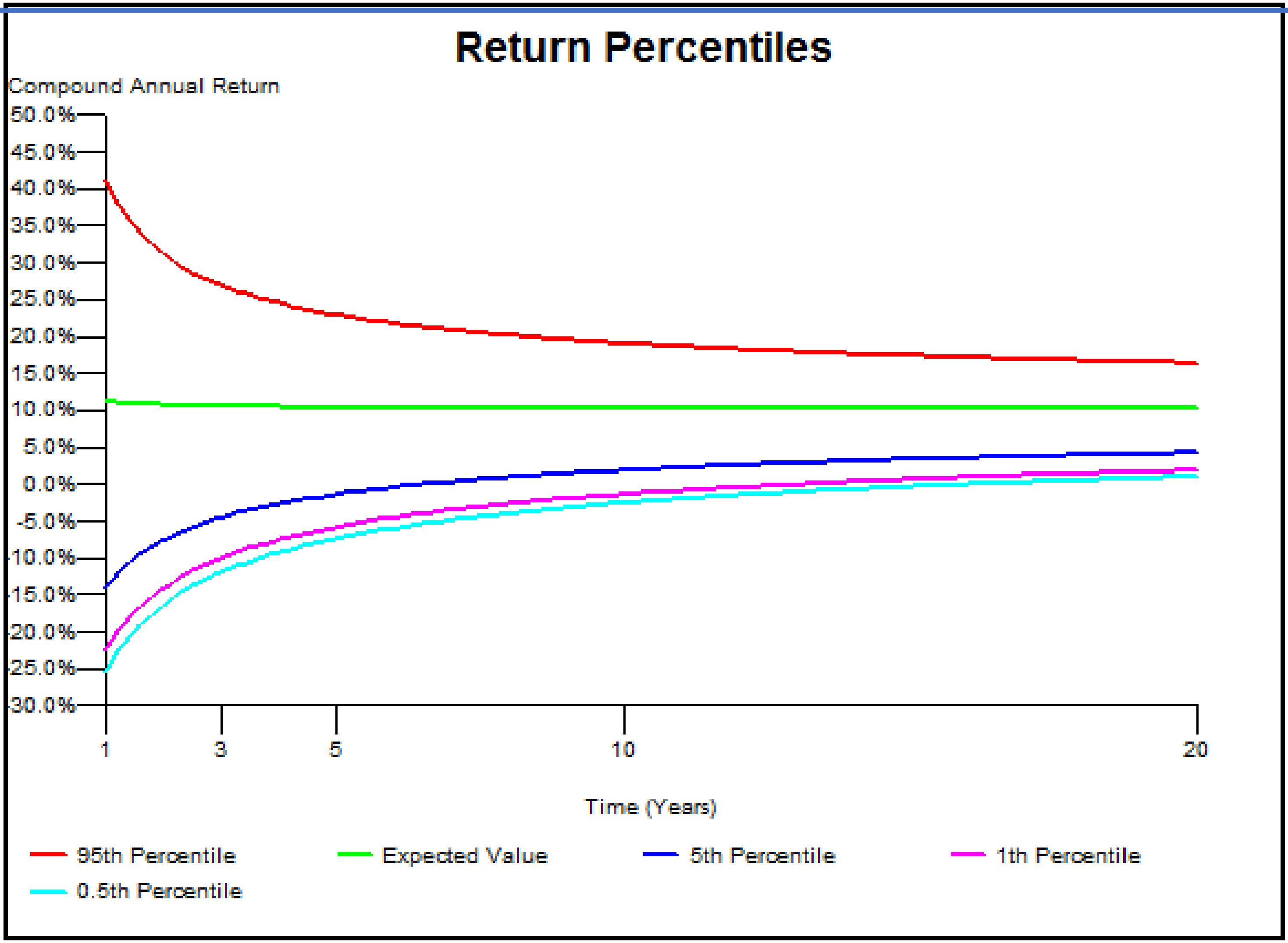
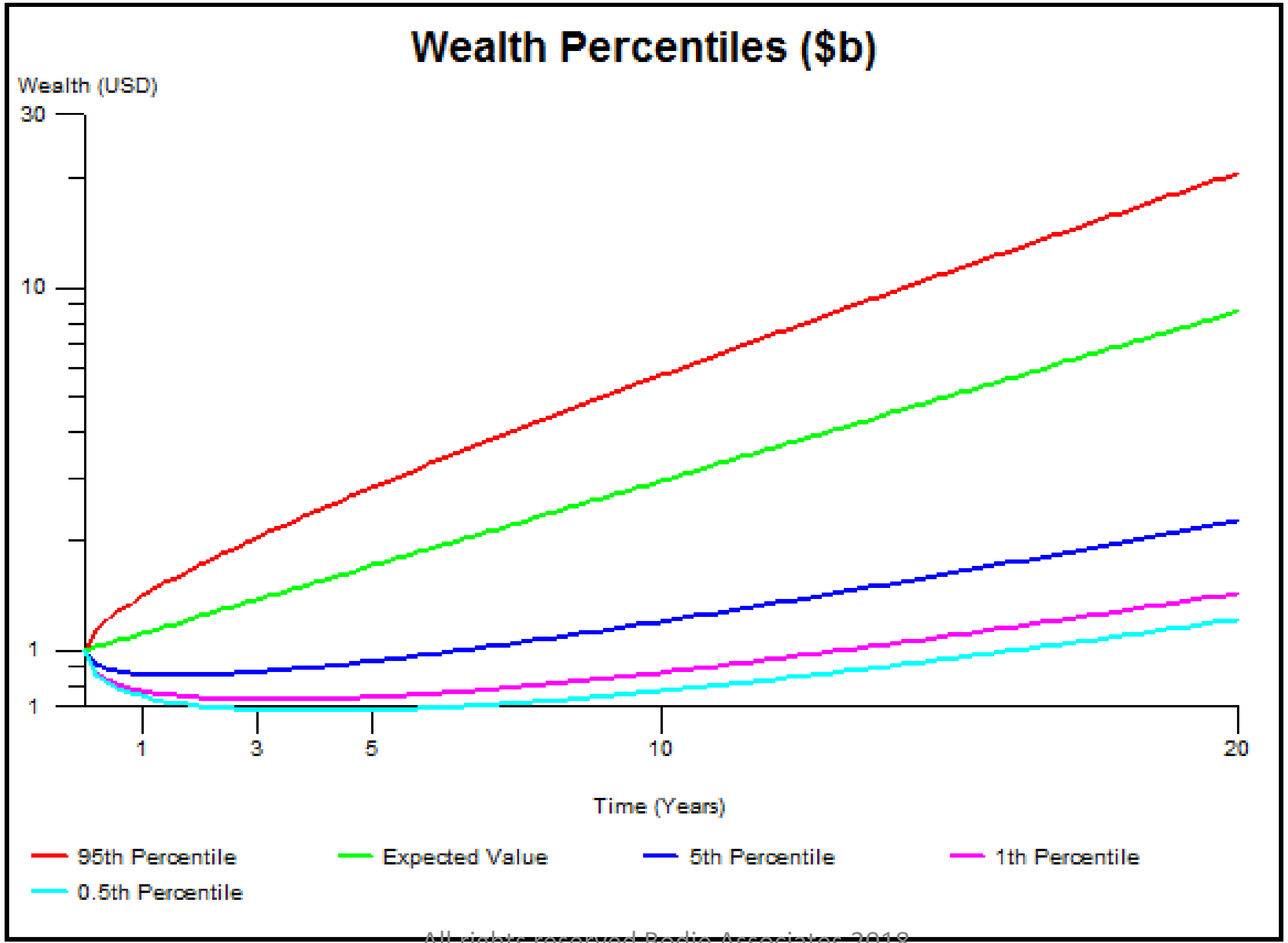
Looking at distribution of rate of return is misleading.



Look at distribution of terminal wealth or lifetime income.



Examples of matching

- Annuities linked to cost of living to achieve a target standard of living in retirement.
- Contracts linked to college tuition.
- Contracts linked to health care costs.

The role of guarantees

- *Caveat emptor* -- Can a client trust a firm that does not guarantee its products?
- Risk is most efficiently managed by the investment firm, not by the client.
- A guarantee transfers risk from the client to the investment firm.
- If risk is truly small, then the cost of the guarantee will be low.
- If the cost of the guarantee is high, then the risk is obviously *not* small.

Structured investments

- Standard design: Guaranteed minimum plus upside participation.
- Options: Caps, multiple indexes.

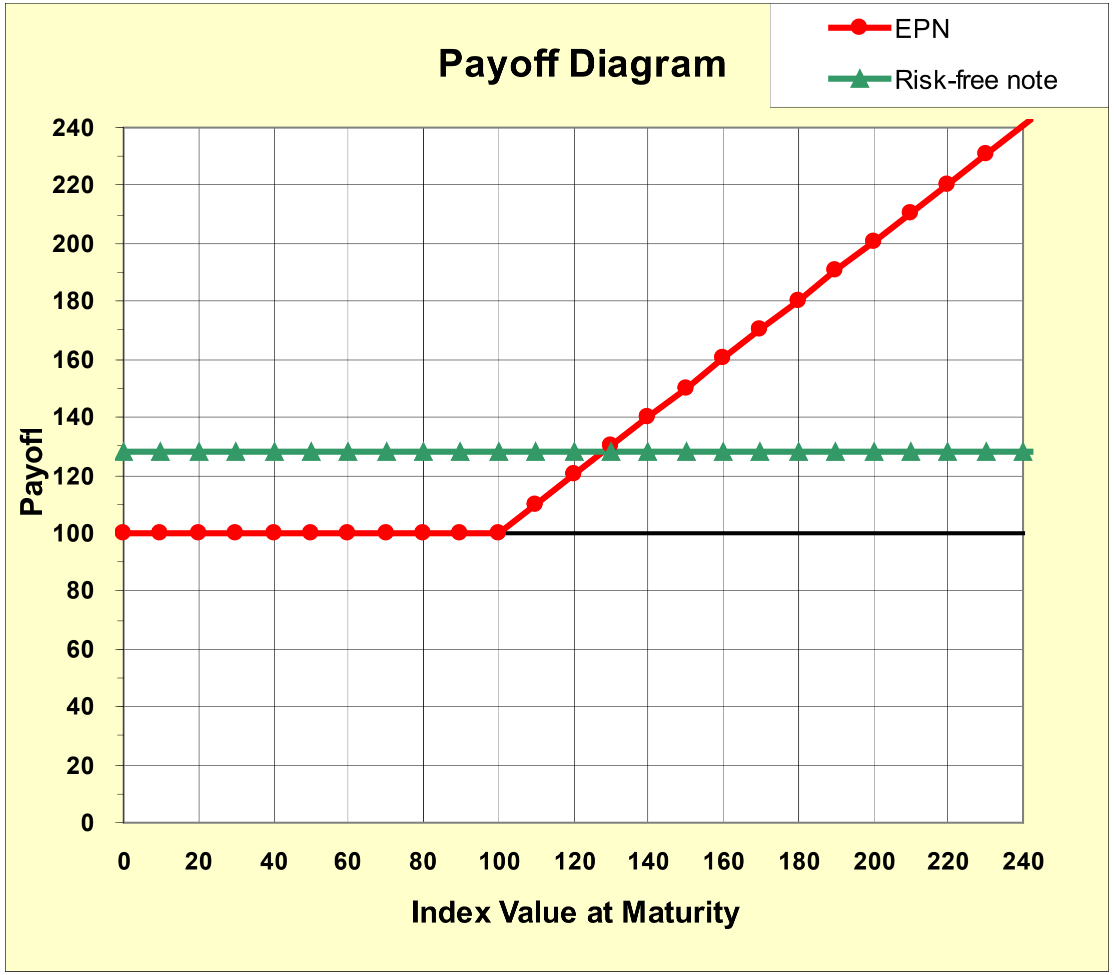
Equity Participation Notes

Inputs:

Volatility	20%
Risk-free interest rate	5%
Dividend yield	2%
Current value of index	100
Strike price	100
Maturity in years	5
Max loss of principal	0%

Outputs:

Price of embedded call	22.01
Participation rate	100.5%



The I Bond Manifesto

September 23, 2021

Consider I Bonds for Your Emergency Fund

Financial planners and investment advisors all tell you to create an emergency fund before you start investing in risky assets. Your emergency fund should be held in safe and liquid assets like FDIC-insured saving accounts. But interest rates on these accounts are close to zero and taxable. Moreover, if these accounts are retirement accounts such as an IRA, withdrawals before age 59½ are subject to a 10% penalty in addition to taxes on the withdrawals.

So where should people invest their emergency funds? We say they should consider U.S. Treasury Series I Saving Bonds, commonly called I Bonds.

Background on IBonds

https://www.treasurydirect.gov/indiv/research/indepth/ibonds/res_ibonds_iratesandterms.htm

Vice President Al Gore officially introduces the Series I Savings Bond