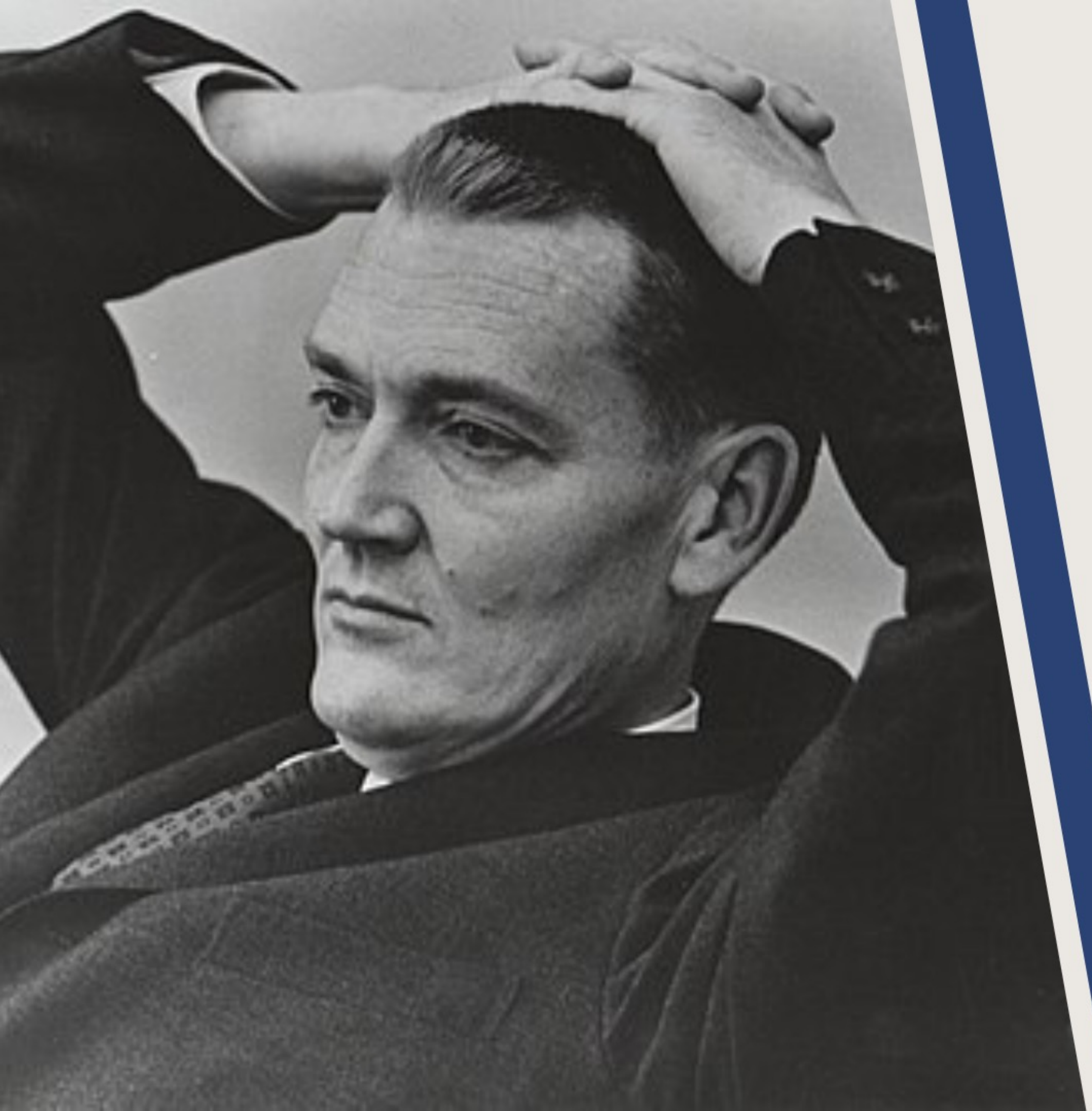

Bogleheads University
101 Track

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Agenda

- 1:00-1:05 **Welcome and introduction**
- 1:05-1:25 What You Need to Do Before You Invest—**Christine Benz**
- 1:25-1:45 The Basics of Investing—**Allan Roth**
- 1:45-2:05 Investment Selection—**Rick Ferri**
- 2:05-2:15 Break
- 2:15-2:35 The Basics of Tax-Advantaged Accounts—**Mike Piper**
- 2:35-2:55 Factors to Consider When Choosing an Asset Allocation—**Christine Benz**
- 2:55-3:00 Break
- 3:00-3:20 Examples of Asset Allocations—**Jim Dahle**
- 3:20-3:40 Tax-efficient Portfolio Management–**Mike Piper**
- 3:40-4:00 **Q&A** With the Faculty

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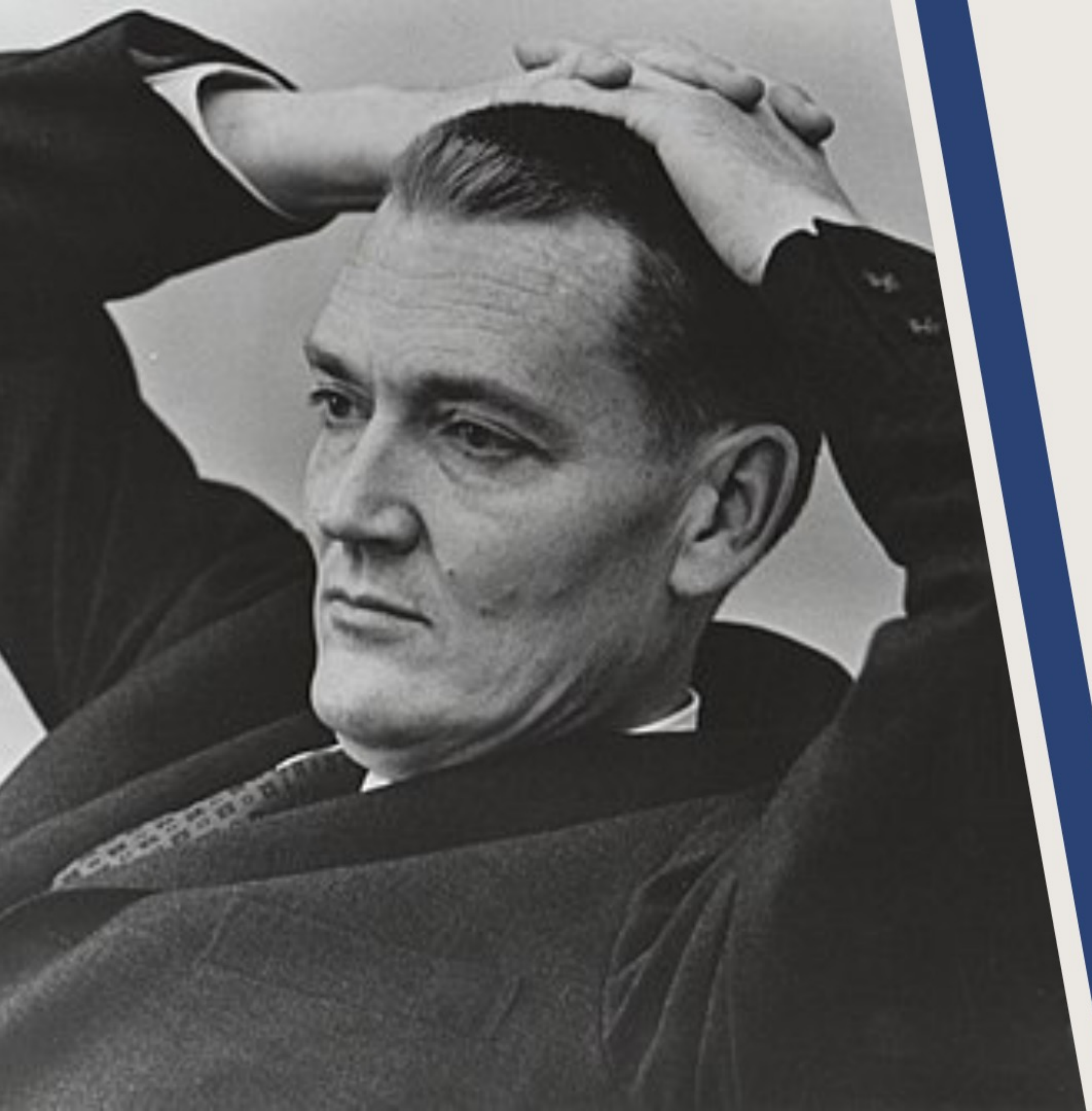

What You Need to Do Before You Invest

Christine Benz

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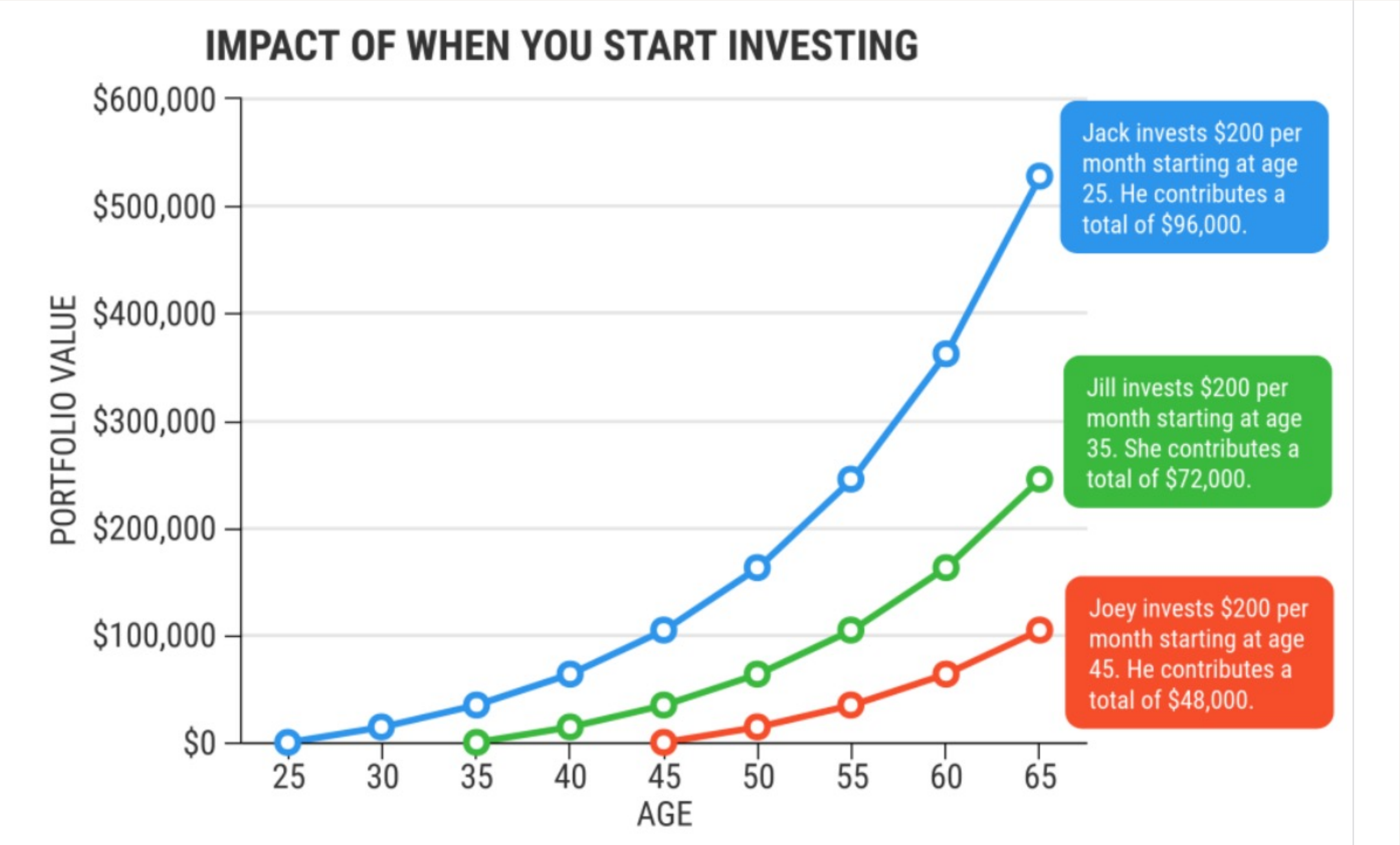
Getting an early start in investing IS important



Source: US News

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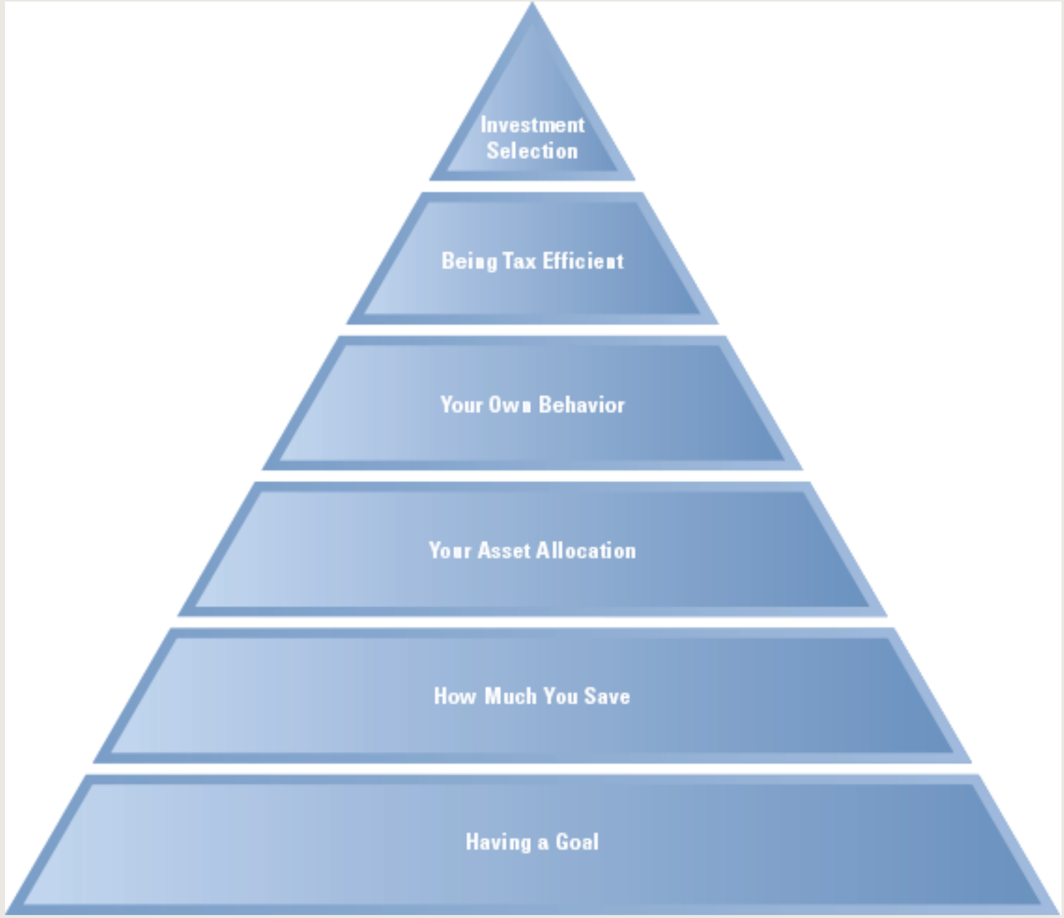
But you need to find your financial footing first.

- Find your “why?”
- Burnish “human capital”
- Create a safety net
  - Property and casualty, disability, life insurance (if dependents are in the picture)
  - Emergency fund
- Manage debt with care
- Create a budget and set a savings target

Find your why: Goals are the base of everything



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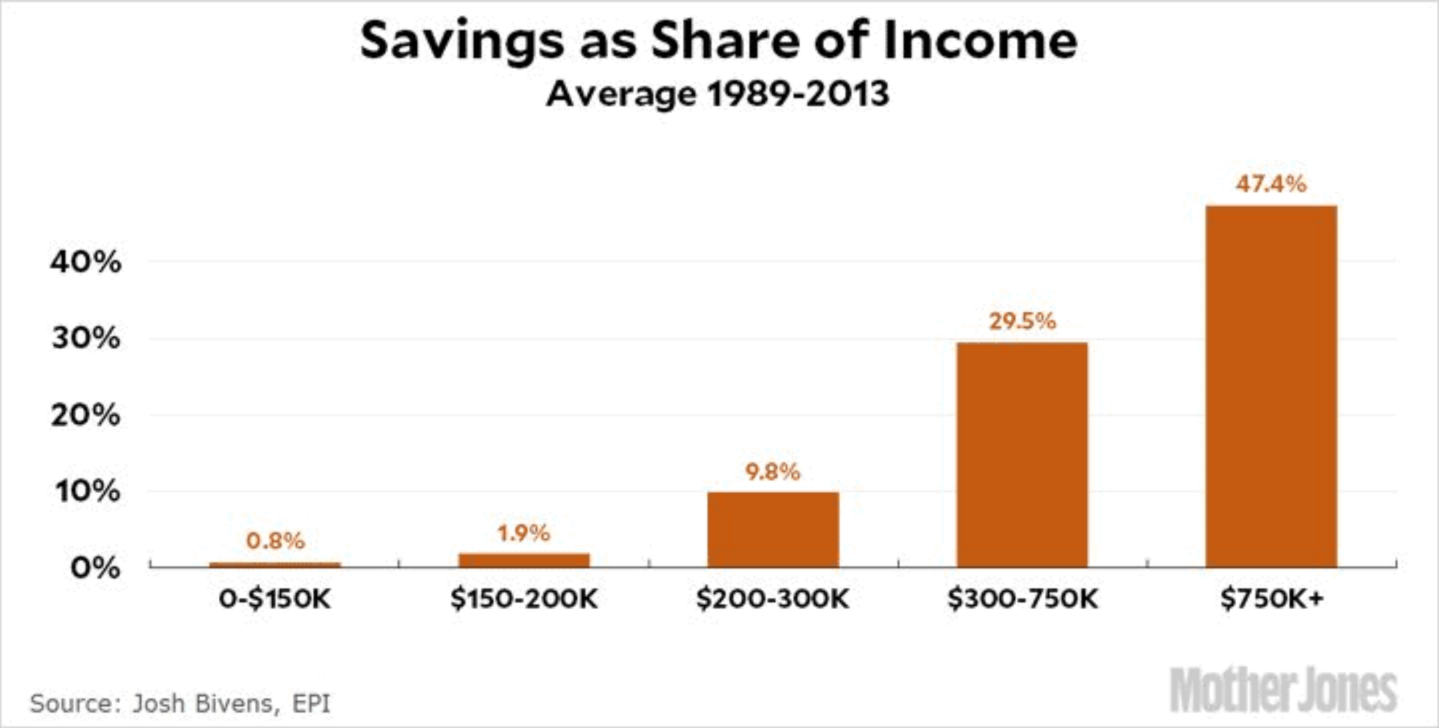
Burnish “human capital”

- Human capital = economic value of a worker’s knowledge and skills
- When we’re young, our human capital is by far our greatest asset
- Investing in growing human capital, especially early in one’s career, will likely pay for itself many times over
- How to invest: Additional education and training, maintaining good health, building and nurturing workplace relationships
- Better-quality human capital → Higher earnings → Higher savings

More income = more savings opportunities (duh)



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Create a safety net

- Obtain appropriate insurance coverage, including:
  - Property and casualty coverage
  - Disability
  - Life (if dependents)
- Build an emergency fund
  - Baseline: 3 to 6 months’ worth of living expenses
  - More if you’re sole earner, older, or have more specialized career

More on emergency funds: What

- Keep emergency savings liquid by using a bank money market, regular savings account, high-yield savings account
- Fine if the funds are in a few separate silos
- Avoid: Anything where there's a risk of loss or where you'll pay an exit penalty
  - Bond mutual funds (risk of loss)
  - Stocks (risk of loss)
  - Longer-term CDs (usually an exit penalty)

More on emergency funds: Where

- Savings, checking, or cash in a brokerage account
- Backup emergency fund vehicles
  - Roth IRA (Can withdraw *contributions* tax- and penalty-free)
  - Health savings account (for health-care expenses, but non-health-care expenses can also be reimbursed if you have receipts for health-care expenses you covered with non-HSA assets)

Manage debt with care

- Should paying off debt come before saving/investing?
- Use return on “investment” to light the way
- Balance debt paydown ROI with expected portfolio ROI
  - Helpful to think of debt paydown as an investment equal to your interest rate less any tax breaks you’re getting to hang onto it
  - Debt paydown = a safe “return” but you may be able to earn a higher safe return by investing!
- Remember: Debt paydown is a guaranteed “return”

Create a budget and set a savings target

- Two major ways to budget
  - Classic budgeting: Expense tracking→ set spending targets for each category and savings→more expense tracking
  - Reverse budgeting: Set savings target→automate contributions to savings→don't worry about where you're spending
- No single way to do it. What works for you?
- If going the classic route, apps and software can help:
  - Mint
  - You Need a Budget
  - Goodbudget

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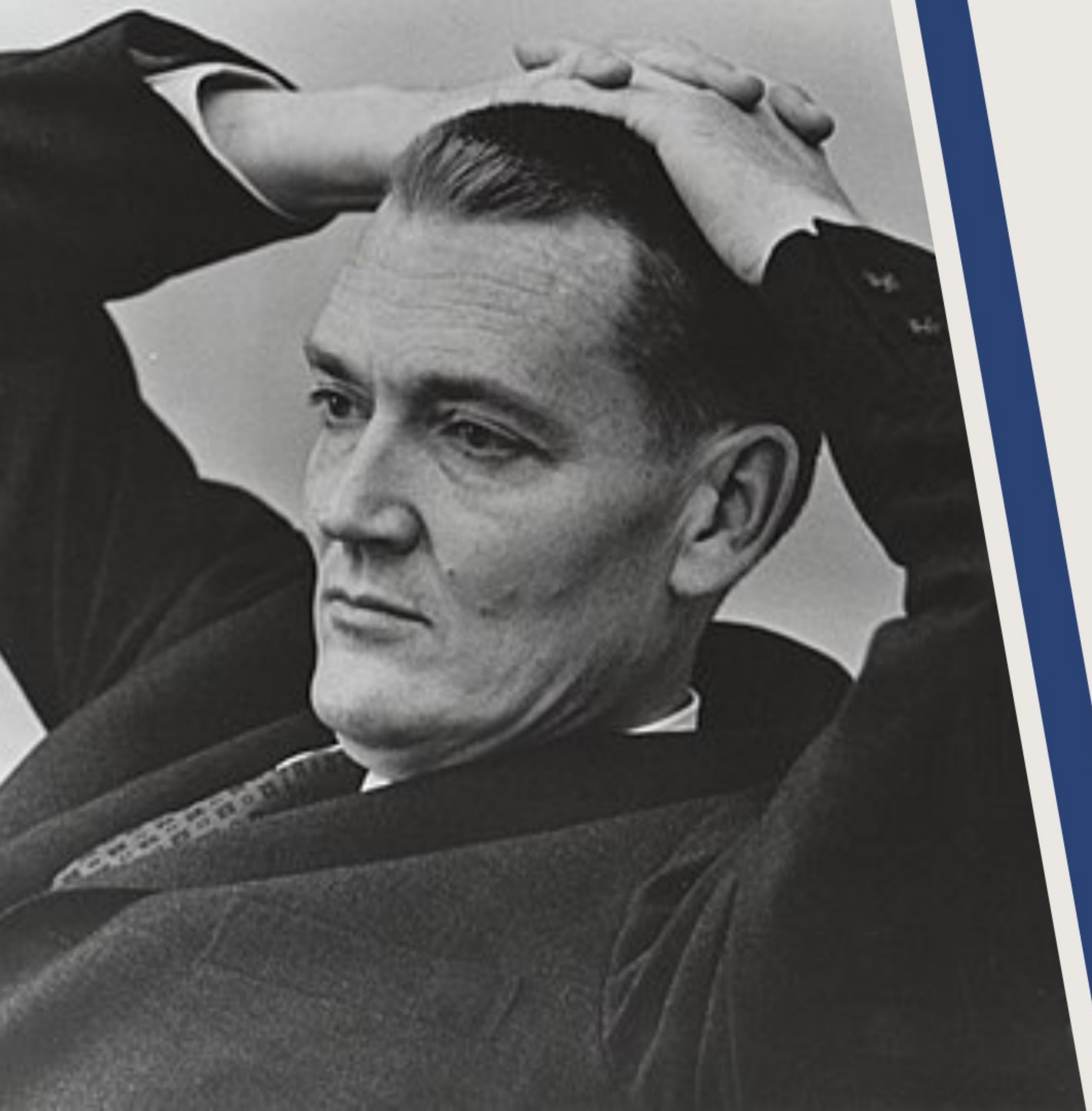

THE BASICS OF INVESTING

Allan Roth

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Introduction

- I need to borrow $1,000, and I promise to return it one year from today.

- Who will be the first person to lend "Honest Al" $1,000?

Two most important lessons in investing.

You want to be compensated for:

1. Taking risk
2. The time value of money

$1,000,000 coin flip bet

- Is betting $1,000,000 even money investing?
- Is betting $1,000,000 with you winning $1,020,000 tomorrow investing? Would you take the bet?
- Is one million $1 bets where you win $1.02 tomorrow investing? Would you take the bets?

Risk

You are taking on three types of risk:

1. Default risk
2. Interest rate risk
3. Liquidity risk

Q. Are risk and return always linked?

Three Questions

1. Why do people invest?

2. How do people invest?

3. How do people get investment advice?

Financial Versus Real Assets

- Essential Nature of Investment
  - Reduced current consumption
    - Pay less (Clark Howard)
  - Planned later consumption
- Real Assets
  - Assets used to produce goods and services
- Financial Assets
  - Claims on real assets (John Bogle)

Major Classes of Financial Assets or Securities

- Debt
  - Money market instruments
    - Bank certificates of deposit
  - Capital market instruments
    - Bonds
- Common stock
- Preferred stock
- Derivative securities (futures, options)

Stocks and Bonds

Stock

You are part owner of a corporation. You have upside and downside.

Bond

You lend money to a corporation (or government). You *generally* have no upside but have *some* downside protection.

The Investor's Portfolio

- Asset allocation
  - Choice among broad asset classes
- Security selection
  - Choice of which securities to hold within asset class

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Valuation

Why does Exxon Mobil have value?

- Dividends
- Cash flow

Why does Gold have value?

Why does Bitcoin have value?

Valuation

- **Which is riskier?**
  1. **A portfolio comprised of 100% ExxonMobil?**
  2. **A portfolio comprised of thousands of companies?**

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Most Valuable US Companies

1980

1. IBM
2. AT&T
3. Exxon
4. Standard Oil of Indiana
5. Schlumberger
6. Shell Oil
7. Mobil
8. Standard Oil of CA
9. Atlantic Richfield
10. GE

sources: ETFDB.com; assetdash.com

2020

1. Apple
2. Microsoft
3. Amazon
4. Alphabet
5 Facebook
6. Berkshire Hathaway
7. Walmart
8. Tesla
9. Visa, Inc.
10. Johnson & Johnson

source: Standard & Poor's

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Active Versus Passive Management

<u>Active Management</u>

- Finding undervalued securities
- Timing the market

<u>Passive Management</u>

- No attempt to find undervalued securities
- No attempt to time
- Holding an efficient portfolio

Finding Undervalued Stocks

- Arithmetic (10-2=8). Active vs. passive is a silly debate.
- How to be sure you will beat most investors in each asset class (10-.03 = 9.97).
- 4% of the stocks account for all of the stock market's gain versus cash.
- Magnificent Seven (0.2% accounted for all gains).

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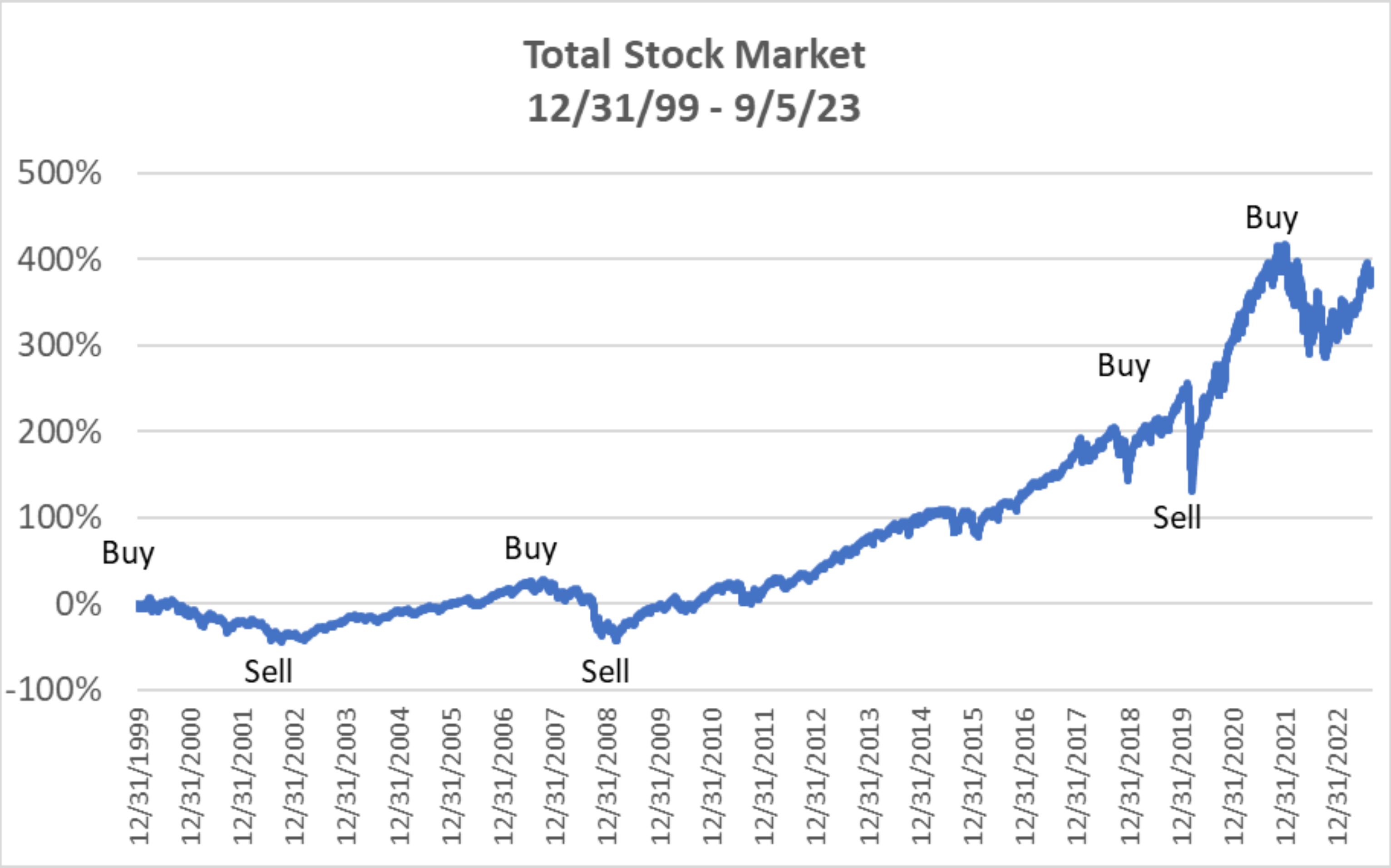
We time the market really poorly



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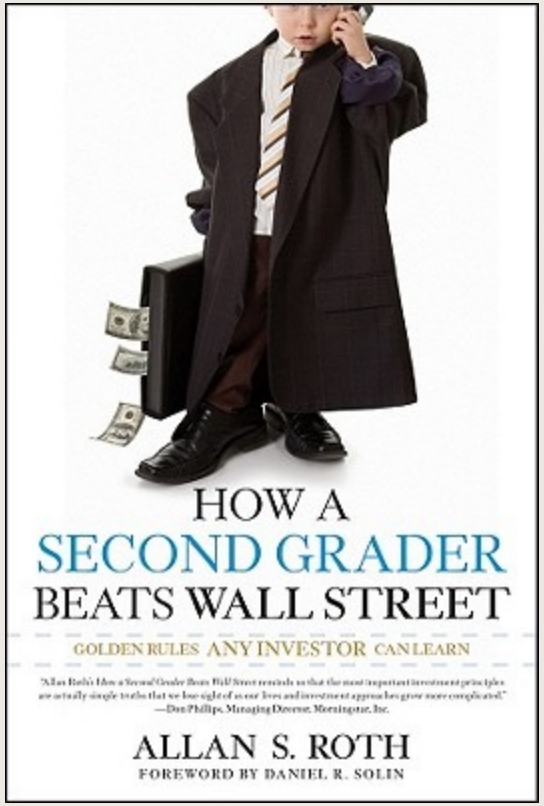
Conclusion

- Investing is simple (taxes aren't).
  - 2nd Grader vs. adults.
- Never take on uncompensated risk.
  - Own every stock in proportion to value (market capitalization).
  - Own the highest quality U.S gov't bonds or diversified corporate.
- Minimize expenses and emotions; maximize diversification and discipline.



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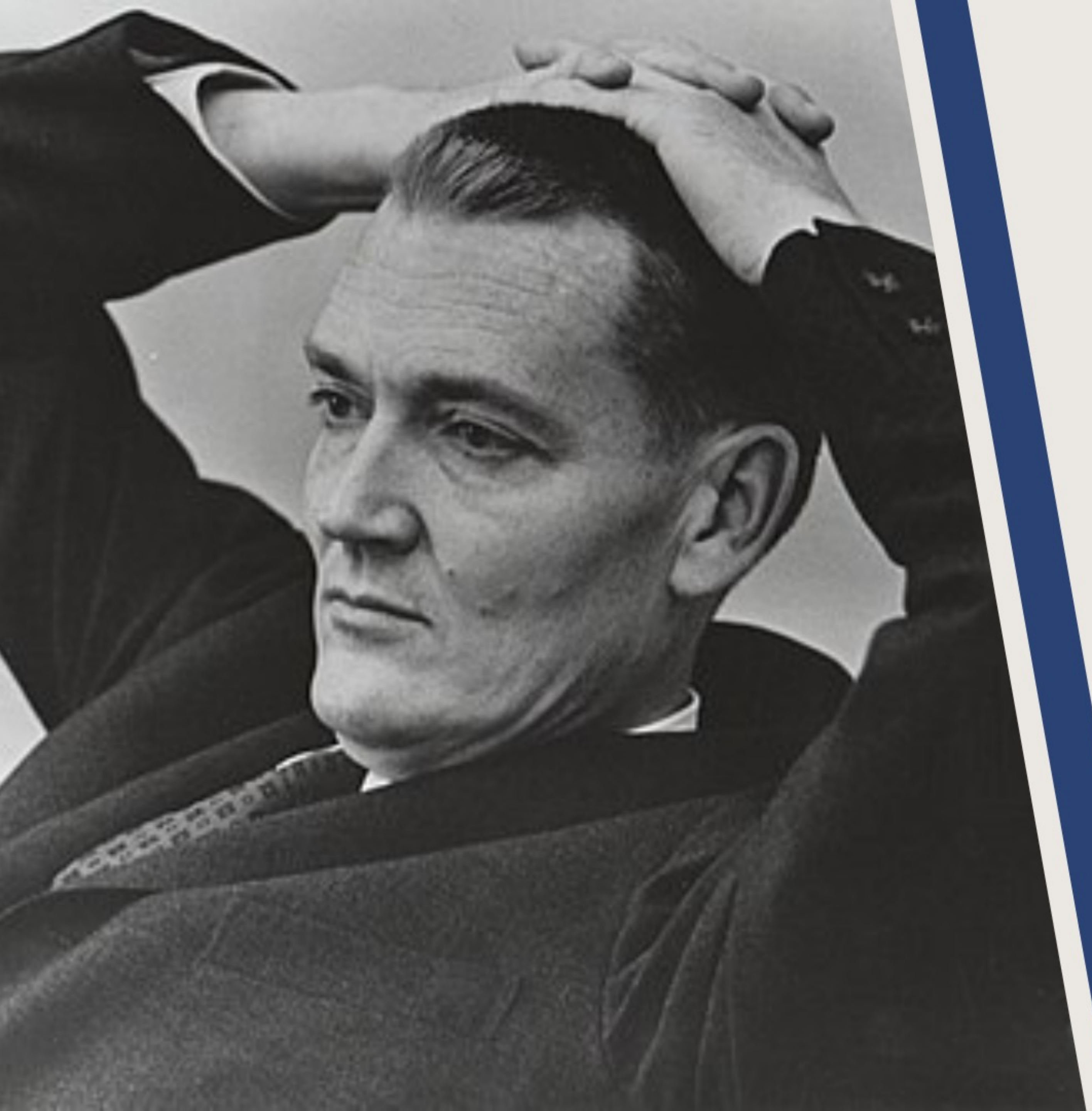

Investment Selection

Rick Ferri

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Publicly Available Investments

Income Producing

- Treasury bonds
- Corporate bonds
- Certificates of deposits
- Mortgages

Dividends and Growth

- US stocks
- International stocks
- Master LTD Partnerships
- Real Estate (rents)

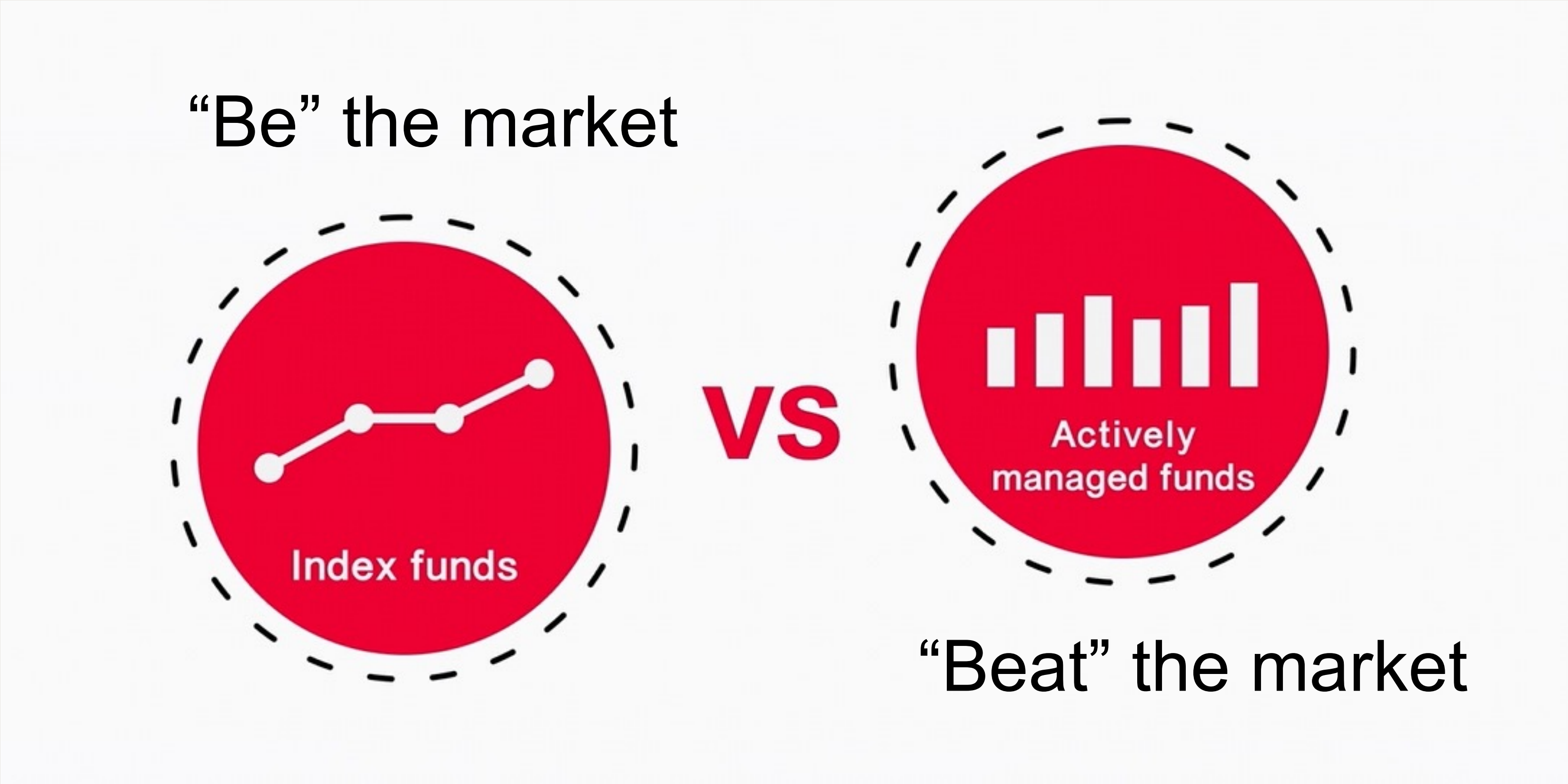
Price Change Only

- Commodities
- Precious metals
- Collectables
- Currencies, including cyber securities

Investment Vehicles

- Individual securities and physicals
  - Stocks (APPL, GOOG), bonds (Treasury, corporate, CDs), gold, Bitcoin, real estate
  - Mostly exchange traded, liquid, usually held at a broker or fund company (x-RE).
- Limited partnership
  - Private equity (PE), venture capital (VC), hedge funds, real estate syndications
  - Up to 500 accredited investors combining their money. Often illiquid plus high fees.
- Traditional Mutual funds
  - Unlimited number of investors of practically any size.
  - Liquidity at the end of the day at NAV. Fees are reasonable. Sometimes commission.
- Exchange-traded Funds (ETFs)
  - Mutual funds that trade on an exchange during the day
  - Often lower cost and more tax efficient than traditional funds

Index Funds versus Active Funds*



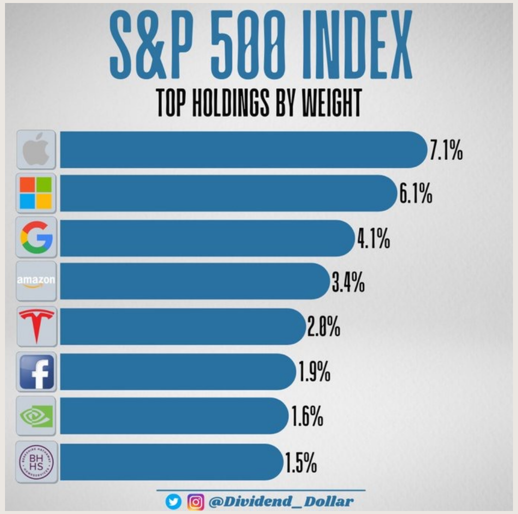
*Includes traditional mutual funds and ETFs

Markets, Indexes, and Index Funds

Public Offering
(primary market)

Stock Market
(secondary market)

Index
Provider



Index Fund
Provider

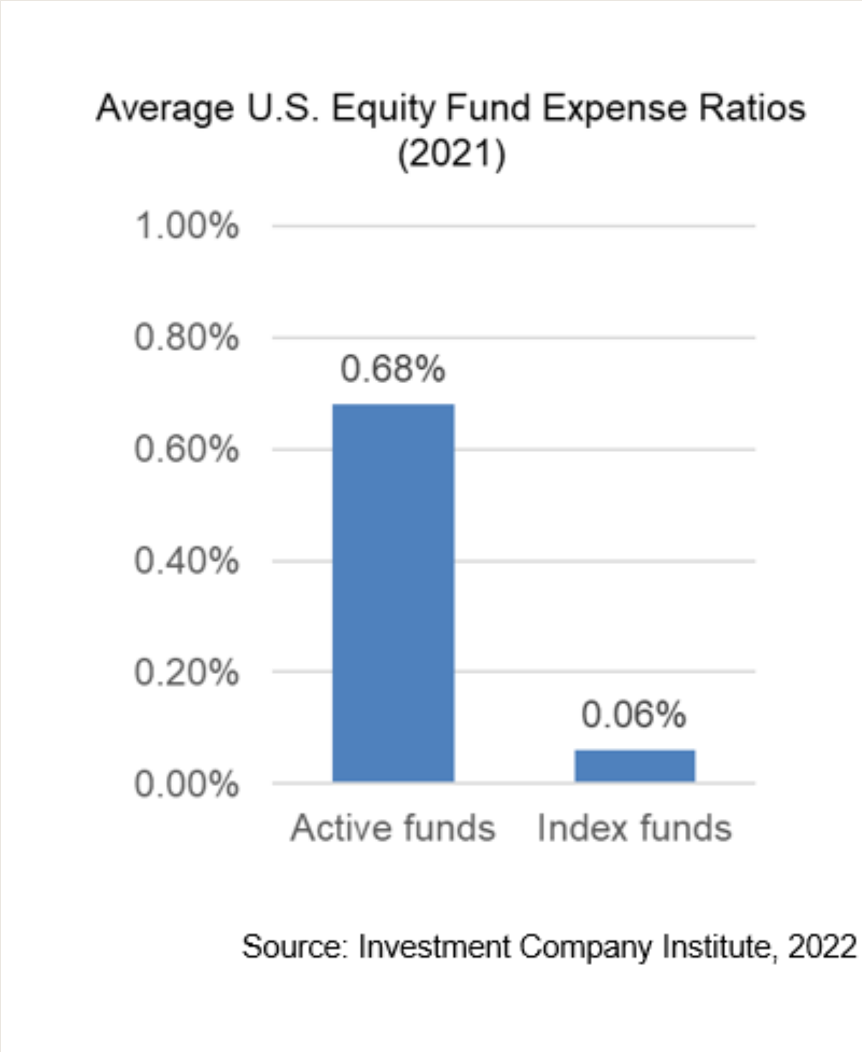
Vanguard 500 Index Fund

Index Funds Beat Active Funds Often

Investment	5 Years	10 Years	15 years	20 Years
US Large Cap Stocks	87%	86%	92%	94%
US Small Cap Stocks	56%	86%	89%	94%
International Stocks	82%	85%	85%	93%
Real Estate (REITS)	61%	65%	85%	89%
Government Bonds	96%	94%	81%	NA
Corporate Bonds	65%	63%	60%	NA
Municipal Bonds	89%	74%	70%	NA

Source: Mid-2023 S&P Dow Jones Indices SPIVA Scorecard

Index Funds have Lower Expenses



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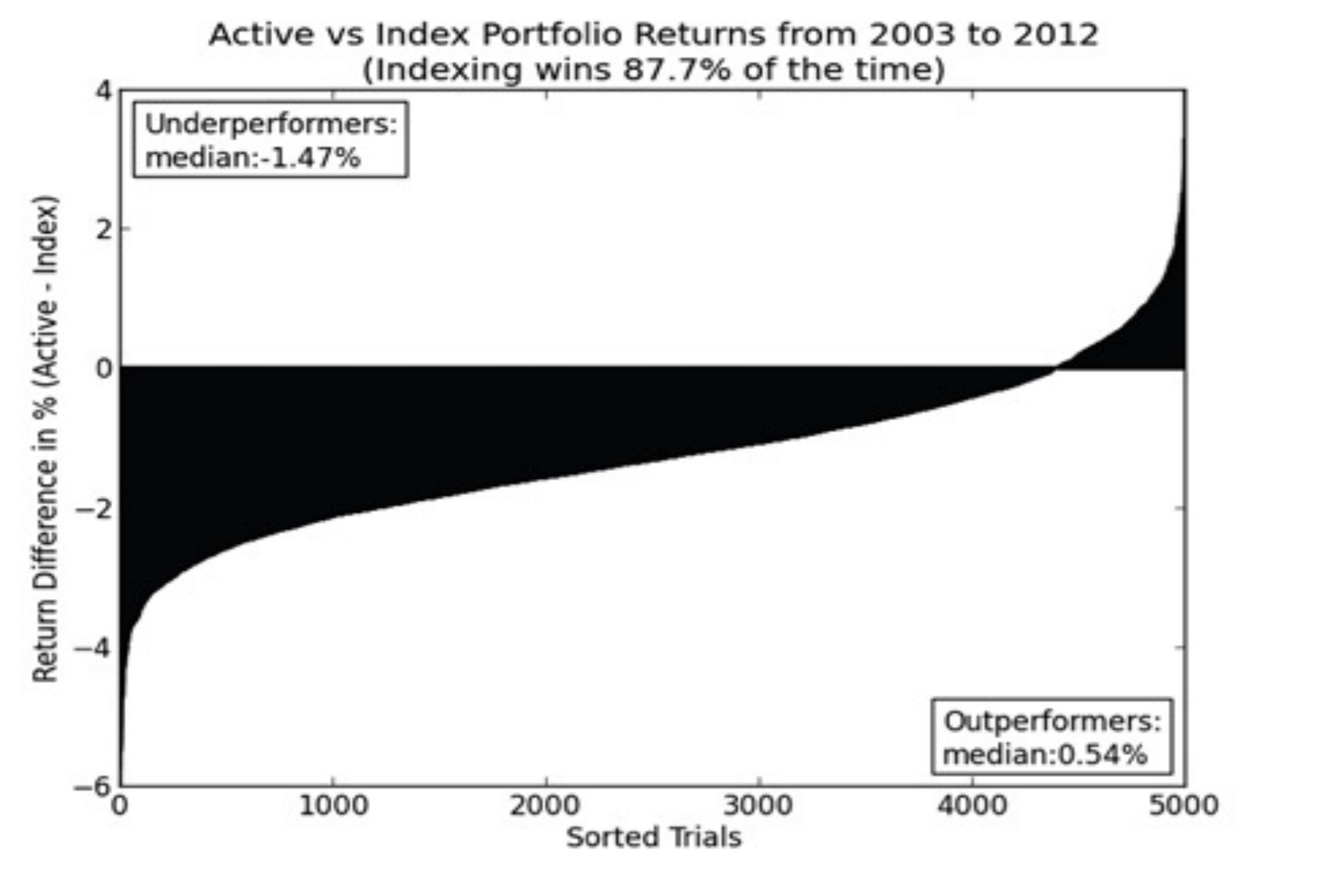
A Portfolio of All Index Funds Beats All Active Funds Most of the Time



A Case for Index Fund Portfolios, Richard Ferri, CFA, and Alex Benke, CFP, 2012

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The Bogleheads Investment Philosophy*

- Invest with simplicity
- Minimize costs and taxes
- Use index funds when possible
- Stay the course!

*Visit the Bogleheads Wiki for the complete Bogleheads® Investment Philosophy list

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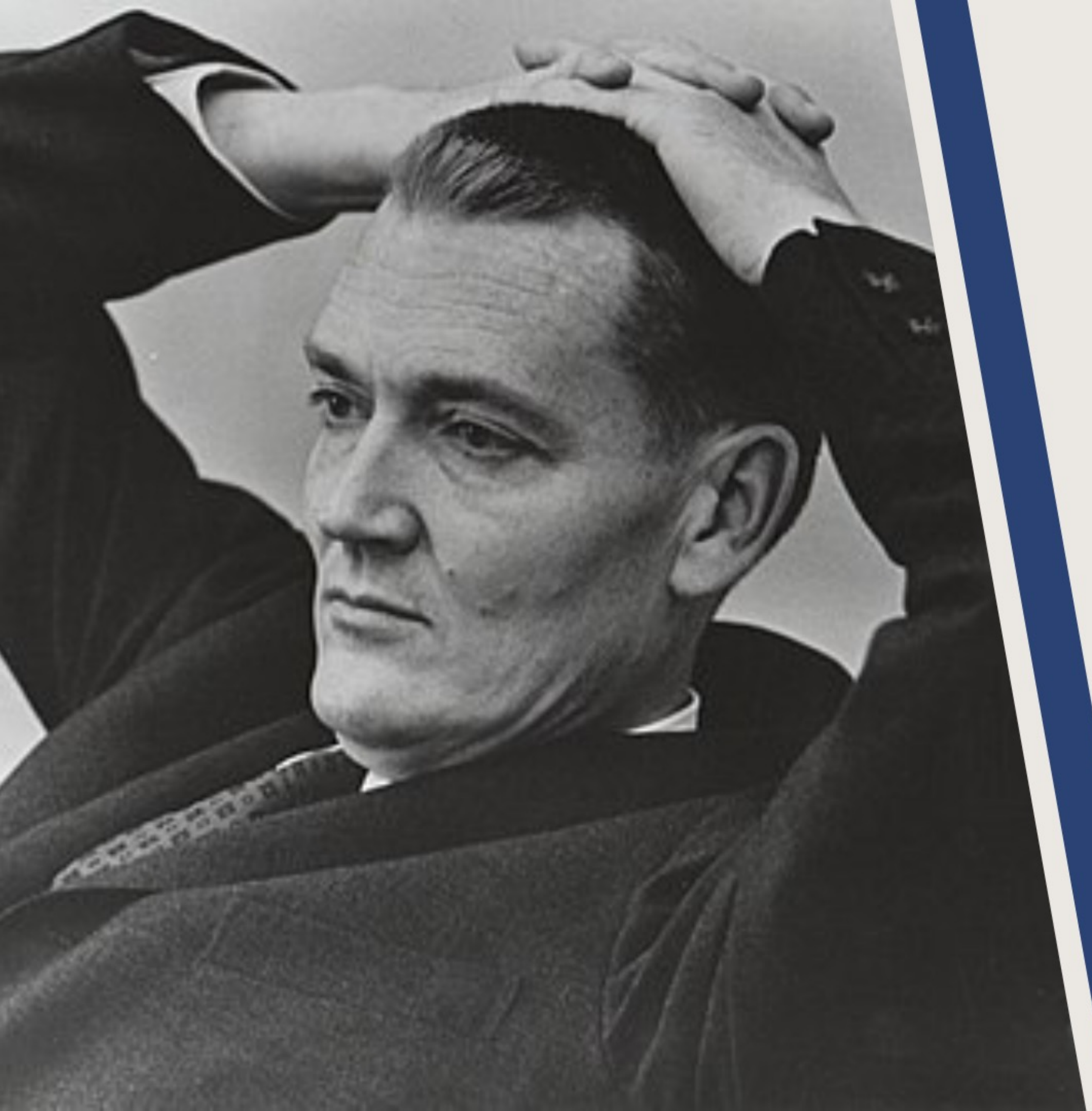

Thank You!

Rick Ferri

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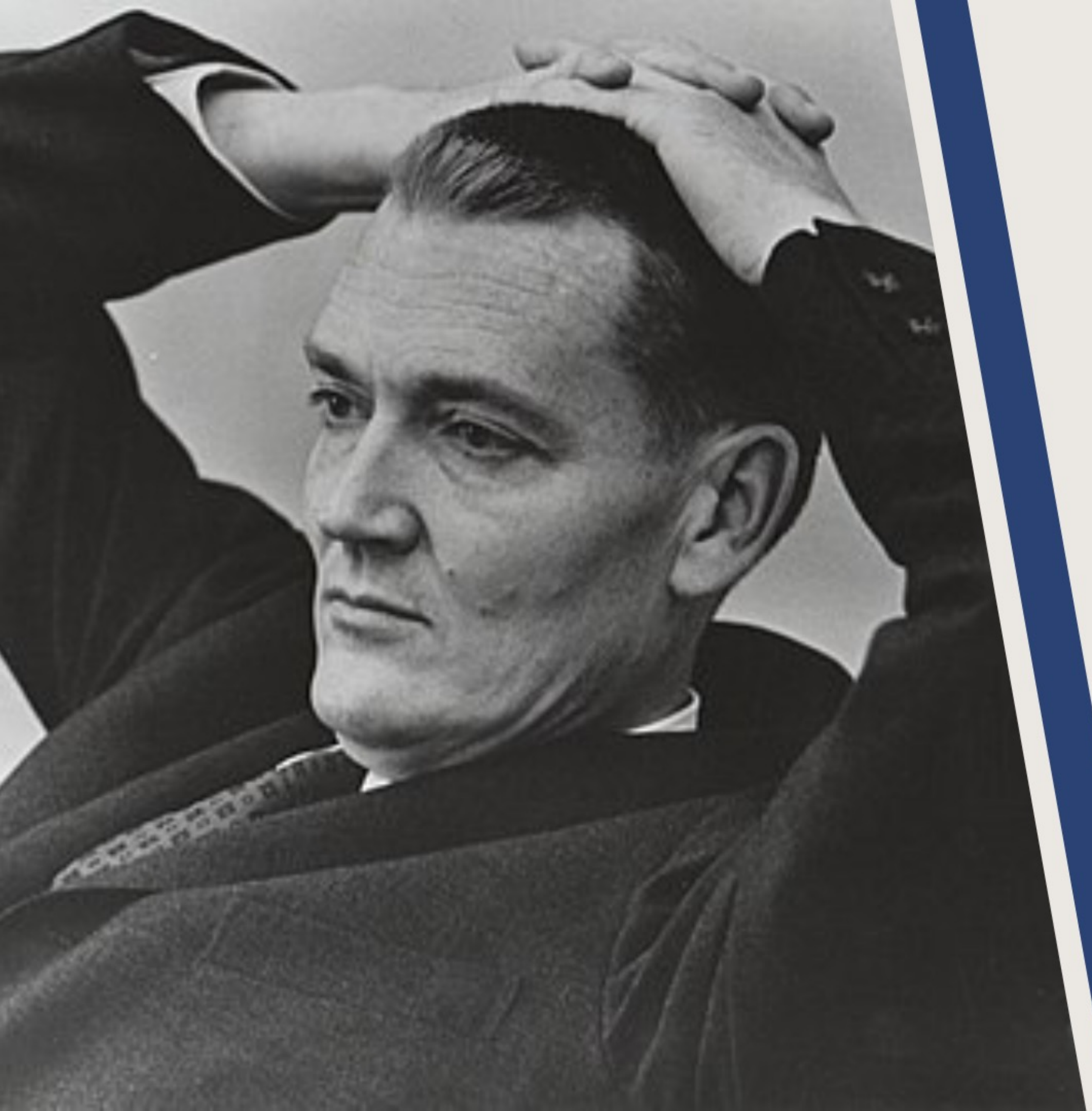

10 Minute Break 2:05-2:15

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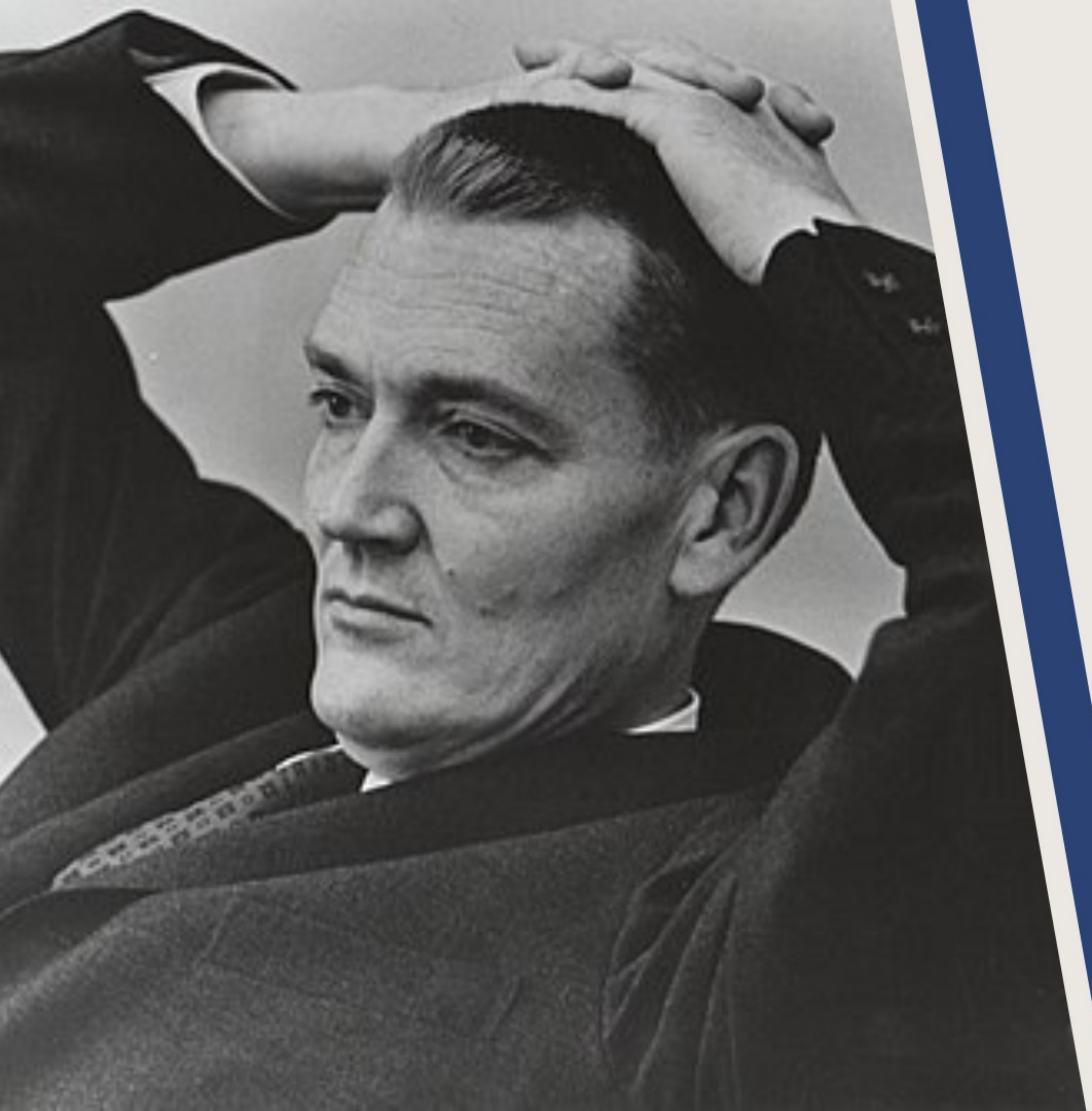

Tax-Advantaged Accounts

Mike Piper, CPA

https://michaelrpiper.com/

https://obliviousinvestor.com/

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Taxable Accounts

Interest: ordinary income tax rate

Qualified dividends: reduced tax rate: 0-20%

Short-term capital gains (holding period ≤ 1 year): ordinary income tax rate

Long-term capital gains (holding period > 1 year): reduced tax rate: 0-20%

“Taxable account” because returns are **taxable**.

Tax-Advantaged Accounts

IRA, 401(k), 403(b), 457, HSA, 529, etc.

No tax on interest each year.

No tax on dividends each year.

No tax on capital gains when selling.

These accounts grow more quickly!

Tax consequences for putting money into the account or taking money out.

Traditional IRAs

Can contribute up to lesser of:

- Earned income or
- $6,500 per year ($7,500 if age 50+).

Traditional IRAs

Contribution is deductible, if you do not have a workplace retirement plan.

If you do have a workplace retirement plan, there are income limits.

No tax on growth while money stays in the account.

Withdrawals (“distributions”) are taxable as income.

“Tax-deferred” (Tax savings early, more taxes later.)

10% penalty for early distributions (pre-59.5)

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Roth IRA

Contribution limit shared with traditional IRA. ($6,500 for 2023, $7,500 for people age 50+)

Ability to contribute phases out based on MAGI:

- $138,000 - $153,000 for singles and heads of household
- $218,000 - $228,000 if married filing jointly

Roth IRA

No deduction for contribution.

Account grows tax-free.

Contributions can come back out, at any time tax-free, penalty-free.

Distributions of earnings are tax-free if taken out after age 59.5 and you have had a Roth IRA for 5 years.

- (Sometimes 10% penalty and taxable as income if early.)

Traditional 401(k) and 403(b) Plans

Akin to a traditional IRA through your employer. (Deductible contributions, account grows tax-free, taxable distributions.)

$22,500 contribution limit ($30,000 if age 50+).

Some employers offer a “matching” contribution.

401(k): businesses

403(b): educational institutions and non-profits

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Roth 401(k) or Roth 403(b)

Contribution limit shared with traditional 401(k), 403(b) ($22,500 for 2023, $30,000 for people age 50+).

No deduction for contribution.

Account grows tax-free.

Distributions are tax-free if you are at least age 59.5 and your first Roth contribution to the plan was at least 5 years ago.

457(b) Plans

Same contribution limit as 401(k)or 403(b)

- $22,500 for 2023
- *Not* a shared limit with 401(k)/403(b).
- May (depending on plan) allow for special catch-up contributions.

457(b) Plans

If tax-deferred:

- Contributions are deductible.
- Account grows tax-free.
- Distributions generally taxable.
- No 10% penalty for early distributions.

If Roth:

- Contributions not deductible.
- Account grows tax-free.
- Distributions not taxable (if 59.5 & 5-year rule met)
- No 10% penalty for early distributions.

457(b) Plans
Governmental vs. Non-governmental

Governmental: assets “held in trust” for employees. (Not subject to employer’s creditors.)

Non-governmental: assets are subject to employer’s creditors.

529 Plans

Contributions are not deductible.

Account grows tax-free.

Distributions are tax-free if used for qualified education costs.

(Akin to Roth IRA, for college savings.)

Earnings are taxable and subject to 10% penalty if distribution is not used for qualified higher education costs.

Health Savings Account (HSA)

If you have a “high deductible” health insurance plan, you may be able to contribute to an HSA.

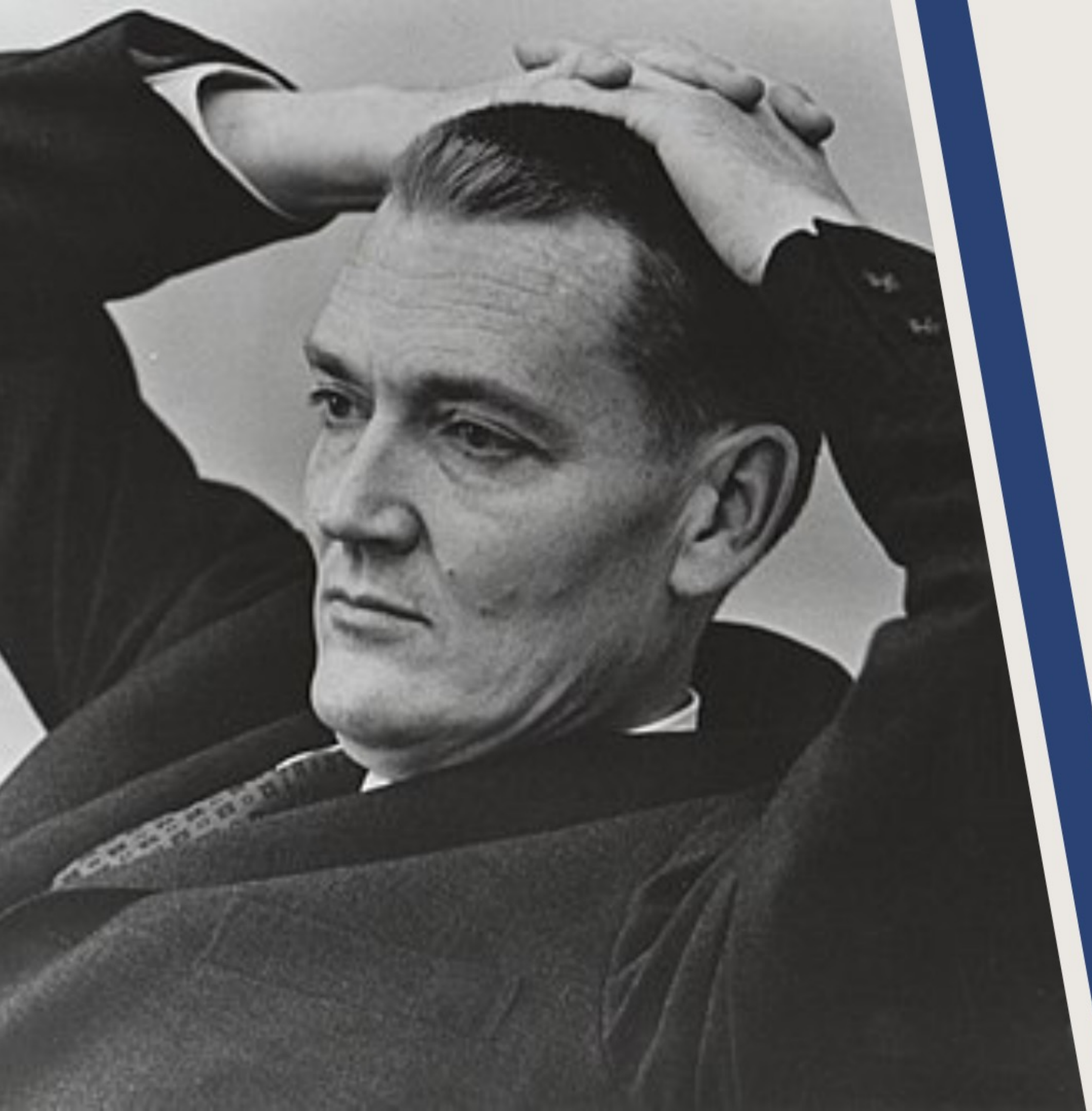
Contributions are deductible.

Account grows tax-free.

Distributions are tax-free if used for qualified medical expenses.*

“Triple tax-free!”

*Otherwise, taxable and 20% penalty. (No penalty if 65+)



Tax-Advantaged Accounts

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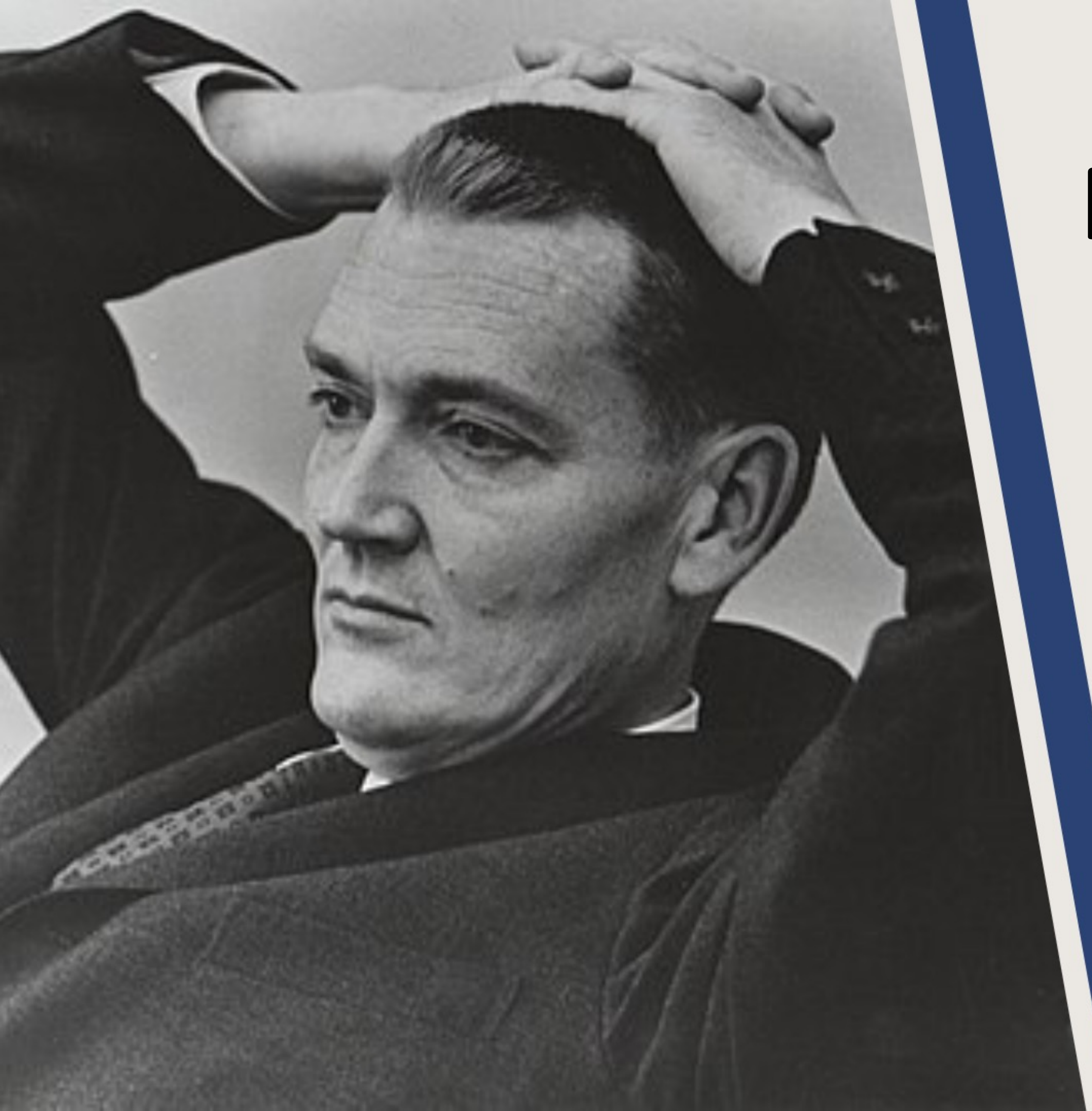

Factors to Consider When Setting an Asset Allocation

Christine Benz

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Finding the right asset allocation revolves around two key jobs

- Knowing your goals
- Knowing yourself
- Both are important!

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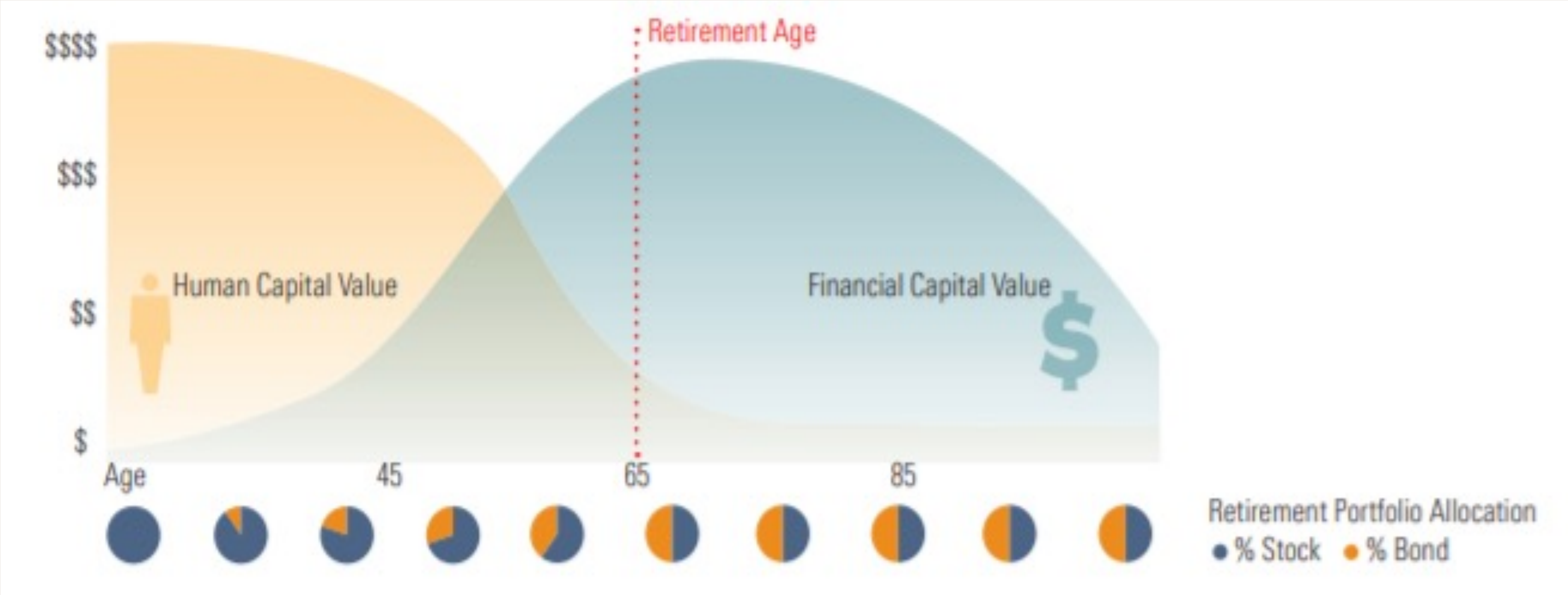
Knowing your goals determines risk capacity

- How much return can you expect and how much risk is reasonable to take given:
    - Time horizon to goal
        - More than 10 years: More equity-heavy portfolio
        - Shorter than 10 years: Mostly cash and bonds
    - Duration of goal
        - Funds will be spent quickly (e.g., college): Conservative at goal date
        - Spending will be drawn out (e.g., retirement): More aggressive at goal date
    - Flexibility that you have with that goal
        - 18-year-old's college matriculation: Limited flexibility!
        - Lake house purchase: Some flexibility

For retirement portfolios, risk capacity connects to human capital



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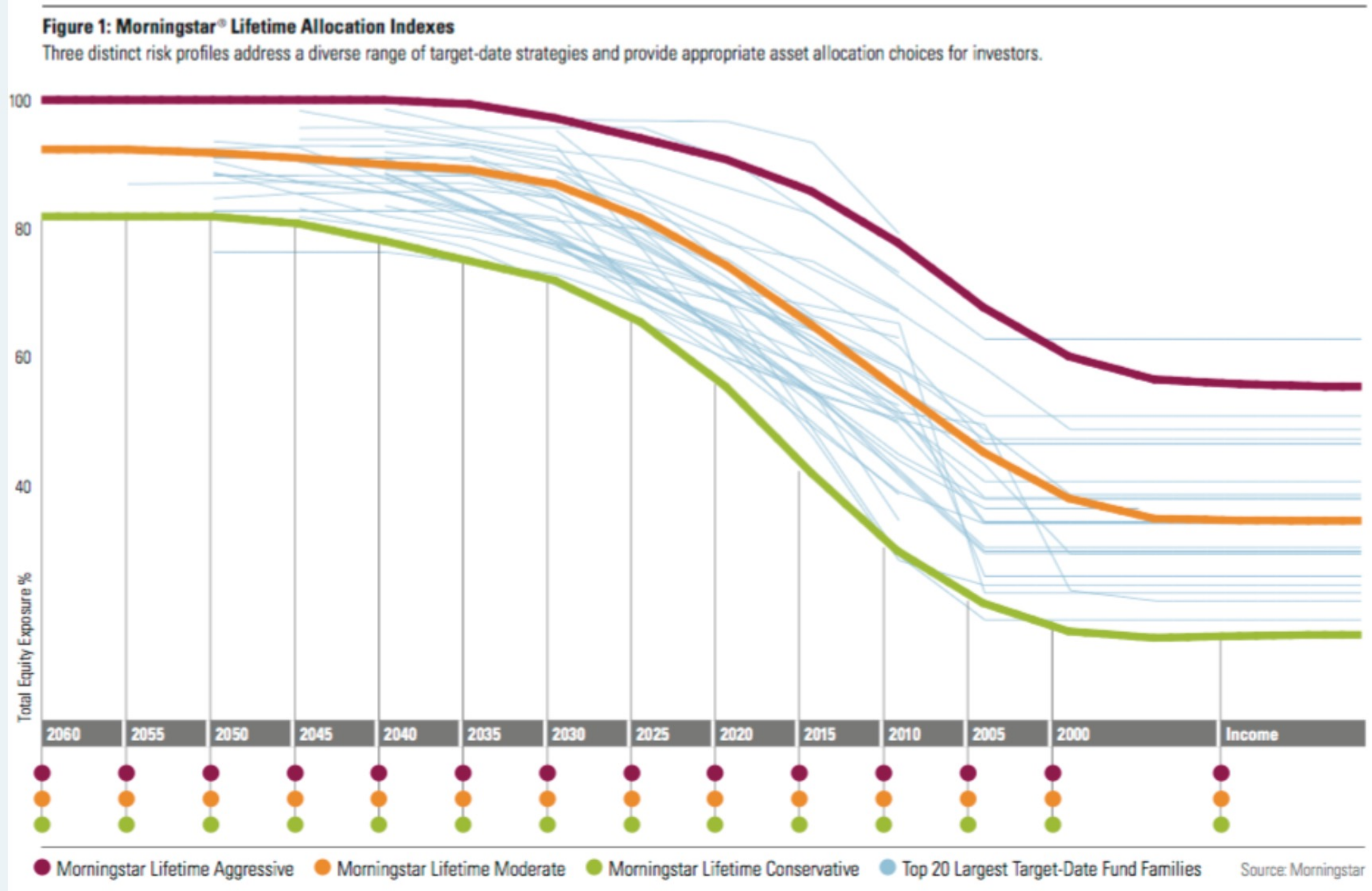
Knowing yourself determines risk tolerance

- How much return can you expect and how much risk is reasonable to take given:
  - Your willingness to put up with fluctuations in your portfolio
  - The likelihood that you could make changes to your portfolio at an inopportune time
- Risk capacity is derived by looking at data (investments' risk/reward characteristics)
- Risk tolerance is determined by understanding yourself

Risk capacity and risk tolerance need to work together



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Case Study 1: Mary, 68

- Mary was worried sick by the Global Financial Crisis, when her portfolio dropped 30%. She sold stocks and switched to cash.
- She has stayed in cash investments since 2008 and her portfolio has lost money on an inflation-adjusted basis over the past 15 years.
- Her risk capacity: Medium (she's already drawing on her portfolio but needs it to last)
- Her risk tolerance: Low
- The best allocation: Balanced cash, bond, and stock exposure

Case Study 2: Abby and Zach, 32

- Abby and Zach live in a one-bedroom apartment and have a second baby on the way.
- They’ve been saving toward a down payment on a home they’d like to buy within the next year.
- They rate their risk tolerance as high because they’re not fazed by volatility in their stock-heavy 401(k) plans.
- Their risk tolerance: High (they think :).
- Their risk capacity: Ultra-low!
- The best allocation: Very conservative.

Case Study 3: Jack and Ellen, 70 and 68

- They're newly retired.
- Jack was a college professor and has a generous pension with an annual inflation increase and survivor benefit; it covers most of their living expenses.
- They rate their risk tolerance as high because they've invested for many market cycles and their portfolio has always recovered.
- Their portfolio is primarily for their kids, grandkids, and charity.
- Their risk tolerance: High.
- Their risk capacity: High also.
- The best allocation: Aggressive/stock-heavy.

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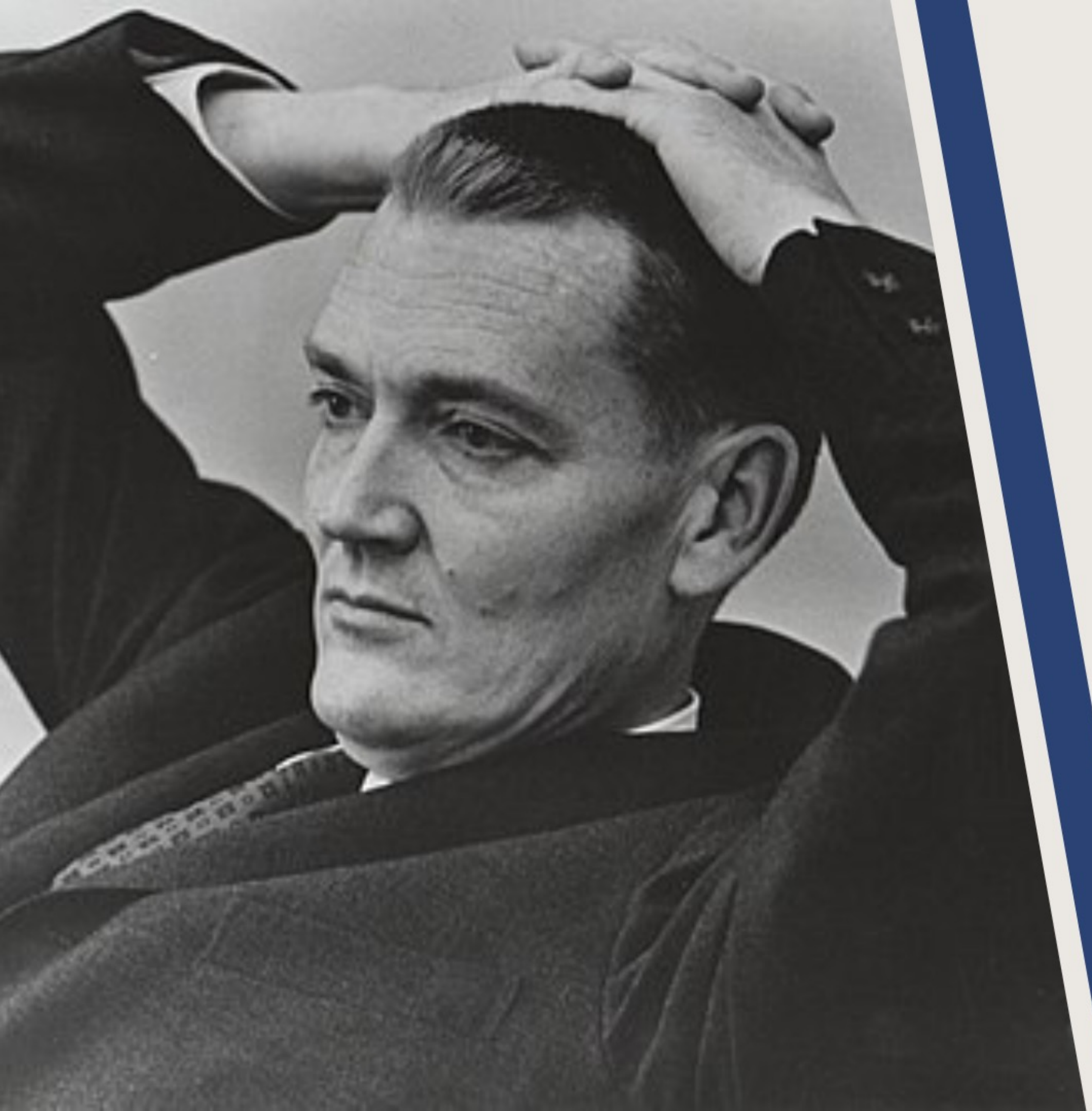

5 Minute Break 2:55-3:00

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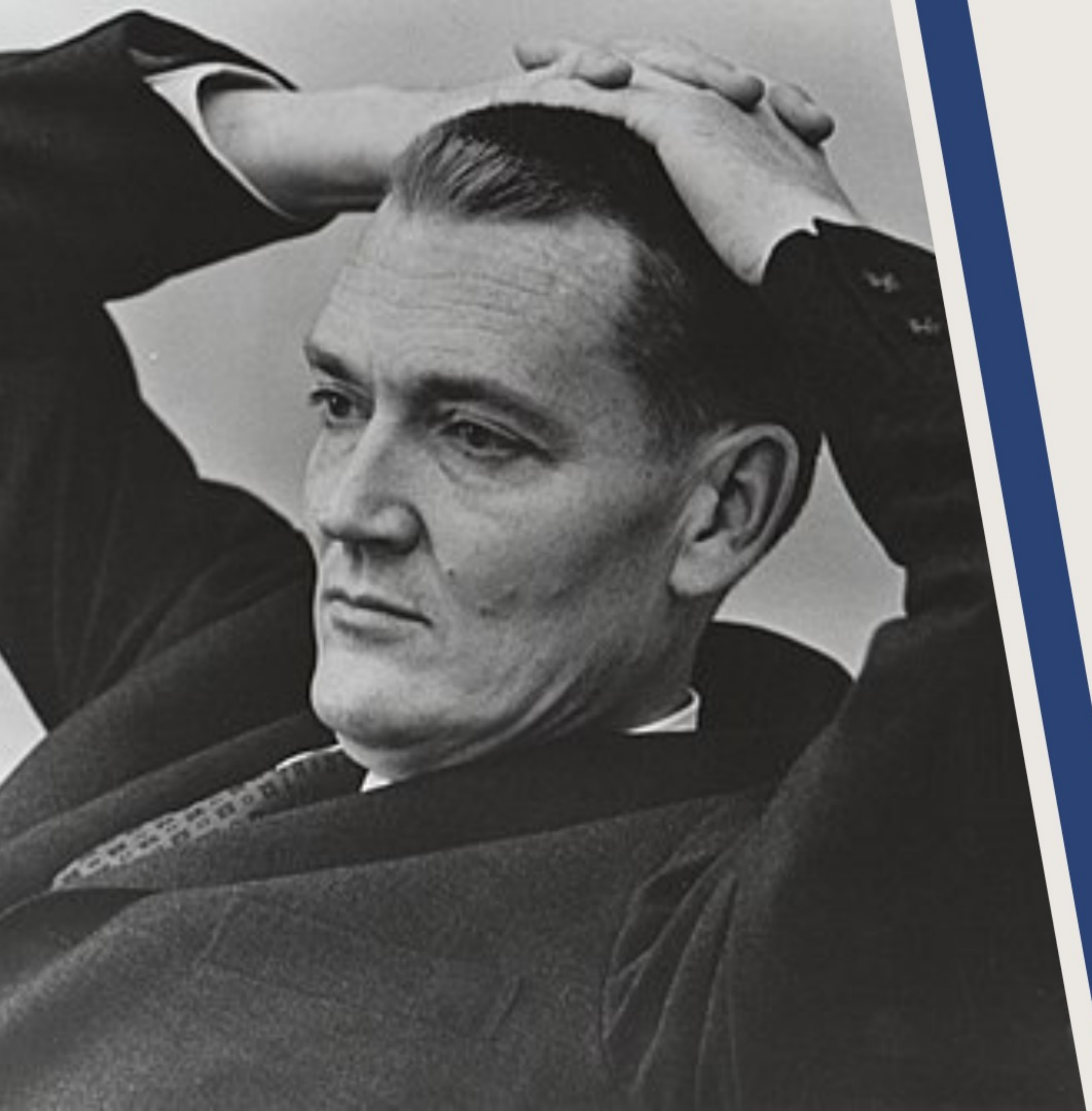

Example Portfolios: A Critique

2023 Bogleheads Conference

James M. Dahle, MD, FACEP

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Disclosures and Disclaimers

- I am not a financial advisor, accountant, or attorney
- I own and/or control The White Coat Investor, a for-profit company with hundreds of business relationships with financial companies
- Conflicts of interest are widespread but fully disclosed
- I won't be mentioning any specific companies in this talk (except Vanguard)

What We Are Going to Talk About

1. Some Principles to Consider When Building Portfolios
2. Reasonable Portfolios
3. Not Reasonable Portfolios

1
Principles of Portfolio Construction

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Avoid Extreme Portfolios

- You want a portfolio that is likely to do well in a wide range of potential future economic outcomes
- The perfect portfolio and even "the efficient frontier" can only be known retrospectively
- The goal is to find a "good enough" portfolio and stick with it.
- Static, regularly rebalanced, broadly diversified, low cost
- Pick a "reasonable" portfolio

Reasonable Portfolio Characteristics

1. > 50% in stocks, bonds, and real estate
2. 25%+ in risky assets (stocks, real estate etc.)
3. 20% or less in speculative investments
4. 20+ individual securities
5. No individual security or property is > 5% of portfolio
6. 3+ asset classes

What Really Matters in Investing

1. Adequate funding
2. A reasonable portfolio
3. Staying the course

2 Reasonable Portfolios

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Reasonable Portfolios #s 1 & 2

- 100% S&P 500 Index Fund OR
- 100% Total Stock Market Fund

- **Pros**: Ridiculously simple. Available in nearly every account. Hundreds to thousands of individual securities. Excellent long term track record. Easy to know your performance.
- **Cons:** Not so diversified: 1 asset class (large stocks), 1 country, No factors. Beware "lost decades."

Reasonable Portfolios # 3

- 33% Total Stock Market Fund
- 33% Total International Stock Market Fund
- 33% Total Bond Fund

- Pros: Lots of camaraderie on the Bogleheads forum. Broad stock "security diversification". 3 separate asset classes.
- Cons: No TIPS, no international bonds, no factors, no alternatives.

Reasonable Portfolios # 4

- 40% Total Stock Market Fund
- 20% Total International Stock Market Fund
- 20% Total Bond Fund
- 20% REIT Index Fund

- Pros: 4 separate asset classes. Closer to the “real economy”
- Cons: No TIPS, no international bonds, no factors, no alternatives. A bet on real estate outperformance.

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Reasonable Portfolios # 5, 6, 7

- 100% Total World Stock Market Fund (100/0) OR
- 100% Balanced Index Fund (60/40) OR
- 100% Tax Managed Balanced (50/50) Fund

- Pros: Very simple. 1 fund, automatically rebalancing.
- Cons: Only 2 asset classes. May be cheaper to roll your own. Not available in many employer retirement plans.

Reasonable Portfolios # 8-11

- 100% Life Strategy Aggressive Growth Fund OR
- 100% Life Strategy Moderate Growth Fund OR
- 100% Life Strategy Conservative Growth Fund OR
- 100% Life Strategy Income Fund

- Pros: 1 fund, automatically rebalancing. 3 asset classes, a 3 fund portfolio you don’t have to manage. Mike Piper will share your returns.
- Cons: Not available in all employer retirement plans. No factors or alternatives. Doesn’t adjust automatically as you age. Not great in taxable accounts.

Reasonable Portfolios # 12-23

- 100% Target Retirement 2060 Fund OR
- 100% Target Retirement 2055 Fund OR
- Etc. etc. etc. OR
- 100% Target Retirement Income Fund

- Pros: 1 fund, automatically rebalancing, automatically becomes less risky over time. Available in many retirement accounts.
- Cons: Not awesome in taxable accounts.

Reasonable Portfolio # 24

- 10% Vanguard 500 Index
- 10% Vanguard Value Index
- 10% Vanguard Small Cap Index
- 10% Vanguard Small Cap Value Index
- 10% Vanguard REIT Index
- 10% Vanguard Total International Index
- 40% Vanguard Total Bond Market Index
- Pros: Tilts to both real estate and factors
- Cons: Moderate complexity, relatively low international allocation, no TIPS, munis, or international bonds, 500 index over TSM?

Reasonable Portfolio # 25

- 25% Total Stock Market
- 15% Small Cap Value
- 15% Total International Stock Market
- 5% Small International
- 10% TIPS
- 10% Nominal bonds
- 20% Real estate (5% public, 10% private equity, 5% private debt)
- Pros: Tilts to both real estate and factors
- Cons: Moderate complexity, large bet on small value, real estate adds significant complexity

Reasonable Portfolio # 26

- 6% Vanguard 500 Index Fund
- 6% Vanguard Value Index Fund
- 6% Vanguard Small Value Index Fund
- 6% Vanguard REIT Index Fund
- 6% Total International Stock Market Index Fund
- 6% Vanguard International Value Fund
- 6% Vanguard International Small Cap Index Fund
- 6% An International Small Cap Value Fund
- 6% Bridgeway Ultra-Small Market Fund
- 6% Vanguard Emerging Markets Index Fund
- 40% Vanguard Short (or intermediate) Term Bond Index Fund
- Pros: Lots of tilts
- Cons: High complexity, 500 index over TSM, seems odd to have 40% of the portfolio in one fund when everything else is so sliced and diced

Reasonable Portfolio # 27

- 12% Vanguard 500 Index Fund
- 15% Vanguard Value Index Fund
- 3% Vanguard Small Cap Index Fund
- 9% Vanguard Small Cap Value Index Fund
- 6% Vanguard REIT Index Fund
- 1.8% Vanguard Precious Metals Fund
- 3% Vanguard European Stock Index Fund
- 3% Vanguard Pacific Stock Index Fund
- 3% Vanguard Emerging Markets Index Fund
- 4.2% Vanguard International Value Fund
- 24% Vanguard Short-term Corporate Bond Fund
- 16% TIPS
- Pros: Lots of tilts/factor investing, capturing rebalancing bonus internationally?
- Cons: High complexity, 500 index over TSM, Lots of sub 5% asset classes

Reasonable Portfolio # 28

- 30% US stocks
- 20% International stocks
- 10% TIPS
- 10% US Bonds
- 10% International Bonds
- 10% Real estate
- 5% Gold
- 5% Bitcoin
- Pros: Allows speculative assets without betting the farm
- Cons: No factor investing

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3
Unreasonable Portfolios

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Unreasonable Portfolio # 1

- 1/3 Vacant Land
- 1/3 Gold
- 1/3 Fine Art

- Pros: Hard to think of many outside of a rather apocalyptic world view
- Cons: 100% speculative, no earnings/dividends/interest/rents etc.

Unreasonable Portfolio # 2

- 1% Gold Mining Stocks (using an actively managed mutual fund with an expense ratio of 1.5%)
- 44% Gold Bullion
- 55% Treasury Bills (essentially cash)

- Pros: Might do fine in a massive downturn, low volatility given huge cash allocation
- Cons: Very unlikely to keep up with inflation, very speculative

Unreasonable Portfolio # 3

- 7.5% Commodities
- 7.5% Gold Mining Stocks
- 7.5% Emerging Market Stocks
- 15% “Rare Physical Assets”
- 5% “Hobby Trading Account” (primarily used to short miners, commodities, and stocks)
- 5% TIPS
- 52.5% Money Market Fund (cash)
- Pros: Permabears are right every now and then
- Cons: Very unlikely to keep up with inflation, very speculative, bizarre stock allocation

Unreasonable Portfolio # 4

- 25% Apple
- 25% Bitcoin
- 25% Cash
- 25% in your brother in law's small business
- Pros: Could be even worse
- Cons: Takes on uncompensated risk, way too much speculation in crypto, don't invest significant amounts with family and friends

Unreasonable Portfolio # 5

- 25% Stocks
- 25% Cash
- 25% Gold
- 25% Long term bonds
- Pros: Likely to do better than most portfolios in a depression
- Cons: Bets on less likely scenarios are too large, “triumph of the optimists”

Unreasonable Portfolio # 6

- 100% Real Estate
- 0% Stocks
- 0% Bonds
- 0% Cash
- Pros: Might work out okay
- Cons: One asset class, avoids thousands of history's most successful corporations, massively impacted by interest rate changes and real estate downturns

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Unreasonable Portfolio # 7

- 40% QQQ
- 10% Tesla
- 10% Apple
- 20% Vanguard Large Growth Stock Index
- 20% Cash
- Pros: Will do great during a tech boom
- Cons: False diversification, uncompensated risk

Unreasonable Portfolio # 8

- 25% Cash
- 25% Bonds
- 25% Gold
- 25% Whole life insurance
- Pros: Diversified, low volatility
- Cons: Unlikely to reach your financial goals due to low returns

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Reasonable Portfolio Characteristics

1. > 50% in stocks, bonds, and real estate
2. 25%+ in risky assets (stocks, real estate etc.)
3. 20% or less in speculative investments
4. 20+ individual securities
5. No individual security or property is > 5% of portfolio
6. 3+ asset classes

What Really Matters in Investing

1. Adequate funding
2. A reasonable portfolio
3. Staying the course

THANK YOU!

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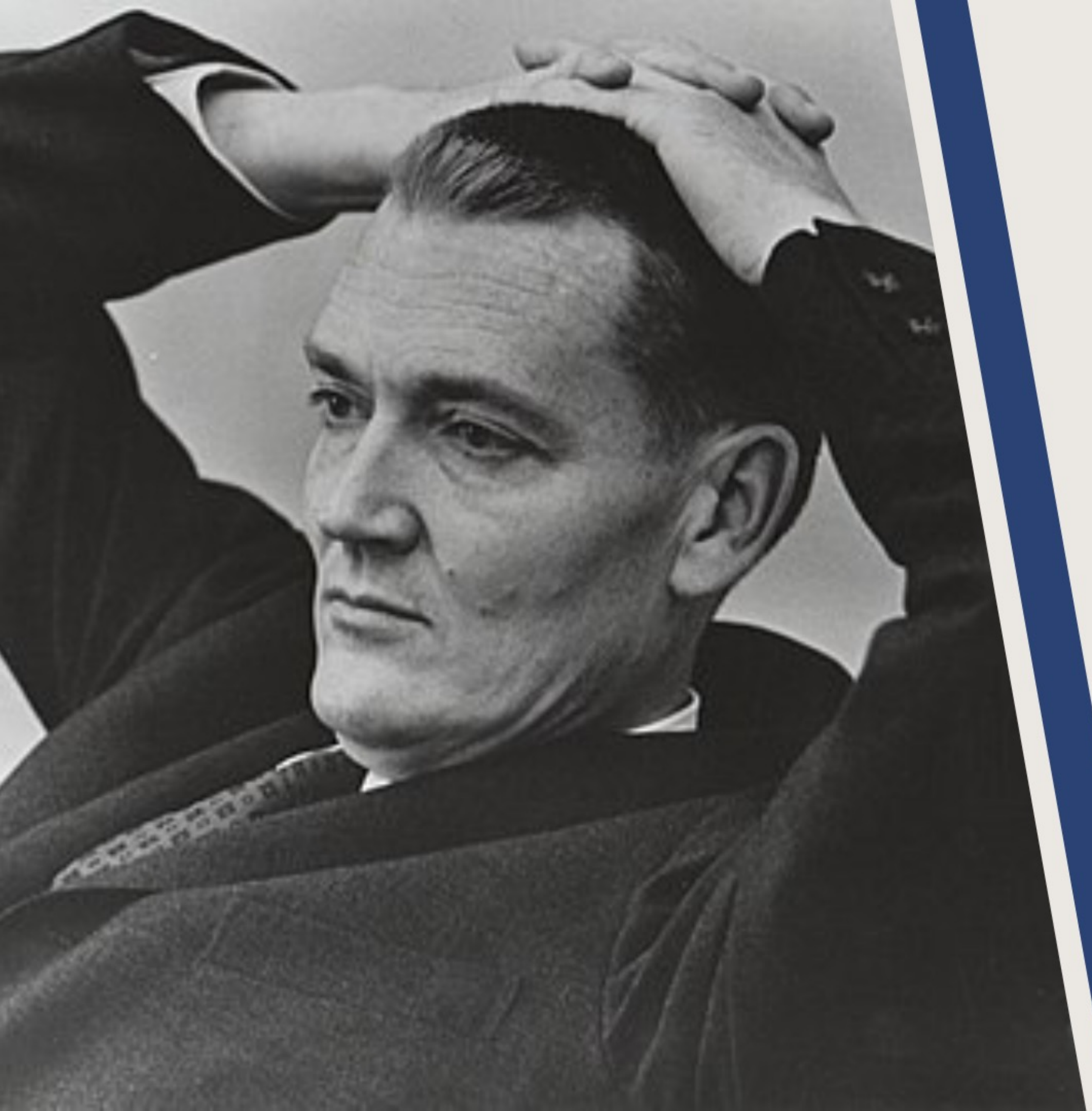

Tax-Efficient Portfolio Management

Mike Piper, CPA

https://michaelrpiper.com/

https://obliviousinvestor.com/

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Tax-Efficient Portfolio Management

1. Max out retirement accounts, if cash flow is sufficient.

2. Fill Roth accounts with highest-returning assets.

3. When investing in taxable accounts, use tax-efficient funds.

Tax-Efficient Portfolio Management

1. Max out retirement accounts, if cash flow is sufficient.

2. Fill Roth accounts with highest-returning assets.

3. When investing in taxable accounts, use tax-efficient funds.

Max Out Retirement Accounts

Maximum contribution each year to Roth IRA (or back-door Roth IRA).

Maximum contribution to 401(k), 403(b), or 457(b) if you have access to such a plan.

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Max Out Retirement Accounts

Why max out retirement accounts?

Taxable accounts incur "tax drag."

- Interest is taxable every year.
- Dividends taxable every year.
- Capital gains taxable upon sale.

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Max Out Retirement Accounts

Why max out retirement accounts?

Net result: taxable accounts have a lower rate of return than retirement accounts.

Even a small difference in return has a **big** impact over time. (Just like expense ratios.)

Max Out Retirement Accounts

Why max out retirement accounts?

Retirement accounts have no tax drag.

Actually receive the full rate of return.

Max Out Retirement Accounts

For those planning early retirement (before 59.5), does it still make sense to max out retirement accounts?

Yes, in most cases.

Max Out Retirement Accounts

In order to retire early, you have to save ***a lot*** per year – often more than the annual contribution limits.

So you'll have taxable assets anyway.

Max Out Retirement Accounts

Roth IRA – contributions come out tax-free, penalty-free at any age.

Roth 401(k)/403(b) after separation from service: rollover to Roth IRA.

Age-55 rule (traditional 401(k)/403(b))

Long list of other exceptions to 10% penalty.

Tax-Efficient Portfolio Management

1. Max out retirement accounts, if cash flow is sufficient.
2. Fill Roth accounts with highest-returning assets.
3. When investing in taxable accounts, use tax-efficient funds.

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Asset Location

After deciding your allocation, consider what goes where (asset **location**).

- Fill Roth accounts with highest-returning assets.
- Fill your taxable account with your most tax-efficient holdings.

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Highest-Returning Assets in Roth

Roth accounts grow tax-free.

Roth accounts (unlike tax-deferred) have no RMDs.

If you could choose to have one account-type grow most quickly, it should be Roth.

Tax-Efficient Portfolio Management

1. Max out retirement accounts, if cash flow is sufficient.

2. Fill Roth accounts with highest-returning assets.

3. When investing in taxable accounts, use tax-efficient funds.

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Tax-Efficiency in Taxable Accounts

Look for low portfolio turnover.

Turnover creates capital gain distributions.

Higher turnover means they're more likely to be short-term.

Tax-Efficiency in Taxable Accounts

Total stock market index fund/ETF: very tax-efficient

Actively managed stock fund with high turnover: tax-inefficient

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Tax-Efficiency in Taxable Accounts

Safer bonds = lower yields = more tax-efficient.

- Shorter-term bonds are more tax-efficient than longer-term bonds.
- Higher credit quality bonds are more tax-efficient than bonds with lower credit quality.

Tax-Efficiency in Taxable Accounts

Treasury bonds are tax-efficient due to lower yields.

Treasury bonds are also exempt from state income tax.

Municipal (“muni”) bonds are exempt from federal income tax.

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Tax-Efficiency in Taxable Accounts

Stocks or bonds in taxable?

Stock returns (dividends and capital gains) are often taxed at lower tax rates than bond returns (interest).

Things to Avoid in Taxable Accounts

"All-in-one" funds (e.g., target-date funds) *tend* to be tax-inefficient.

- They hold taxable corporate bonds, whereas Treasury bonds or munis would likely be better.
- They create an additional level of portfolio turnover as the "wrapper" fund sells underlying funds.

Things to Avoid in Taxable Accounts

Real estate investment trusts (REITs) are generally tax-inefficient.

- They typically have a higher dividend yield than other stocks.
- Those dividends are generally taxed at a higher rate than most other dividends.

Tax-Efficiency in Taxable Accounts

Tax-efficient:

- “Total stock market” index funds/ETFs
- Treasury bonds
- Muni bonds
- Shorter-term bonds

Tax-inefficient:

- Actively managed stock funds with high turnover
- High-yield bonds
- “All-in-one” funds
- REITs

Asset Location
(Tax-Efficient Placement)

Roth

- Stocks

Tax-deferred

- Stocks
- Bonds

Taxable

- Total stock market index funds/ETFs
- Treasury bonds
- Muni bonds

Bogleheads University: Tax-Efficient Portfolio Management

Mike Piper, CPA

https://michaelrpiper.com/

https://obliviousinvestor.com/

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Q&A With the Faculty

- Allan Roth
- Mike Piper
- Chriistine Benz
- Karen Damato moderating

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