5 Must-Knows about In-Retirement Spending

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Morningstar Overview

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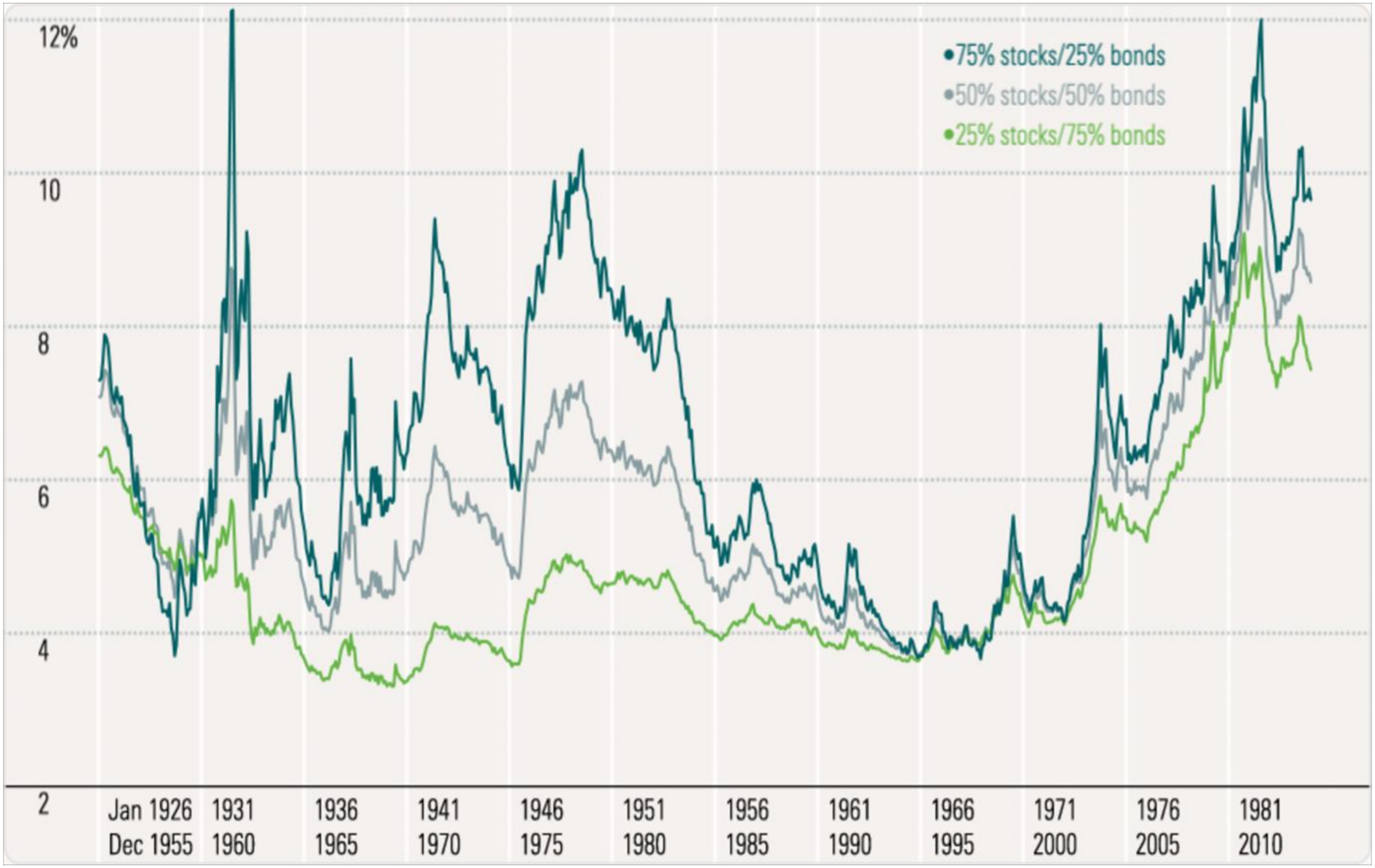
  - Financial advisors
  - Institutional investors
- Provide research on:
  - Mutual funds and ETFs, separate accounts, CITs
  - 529s, HSAs
  - Bonds/credit ratings
  - Private securities (venture capital, private equity) (PitchBook)
  - Sustainable/ESG investing
  - Portfolio construction, financial planning, retirement

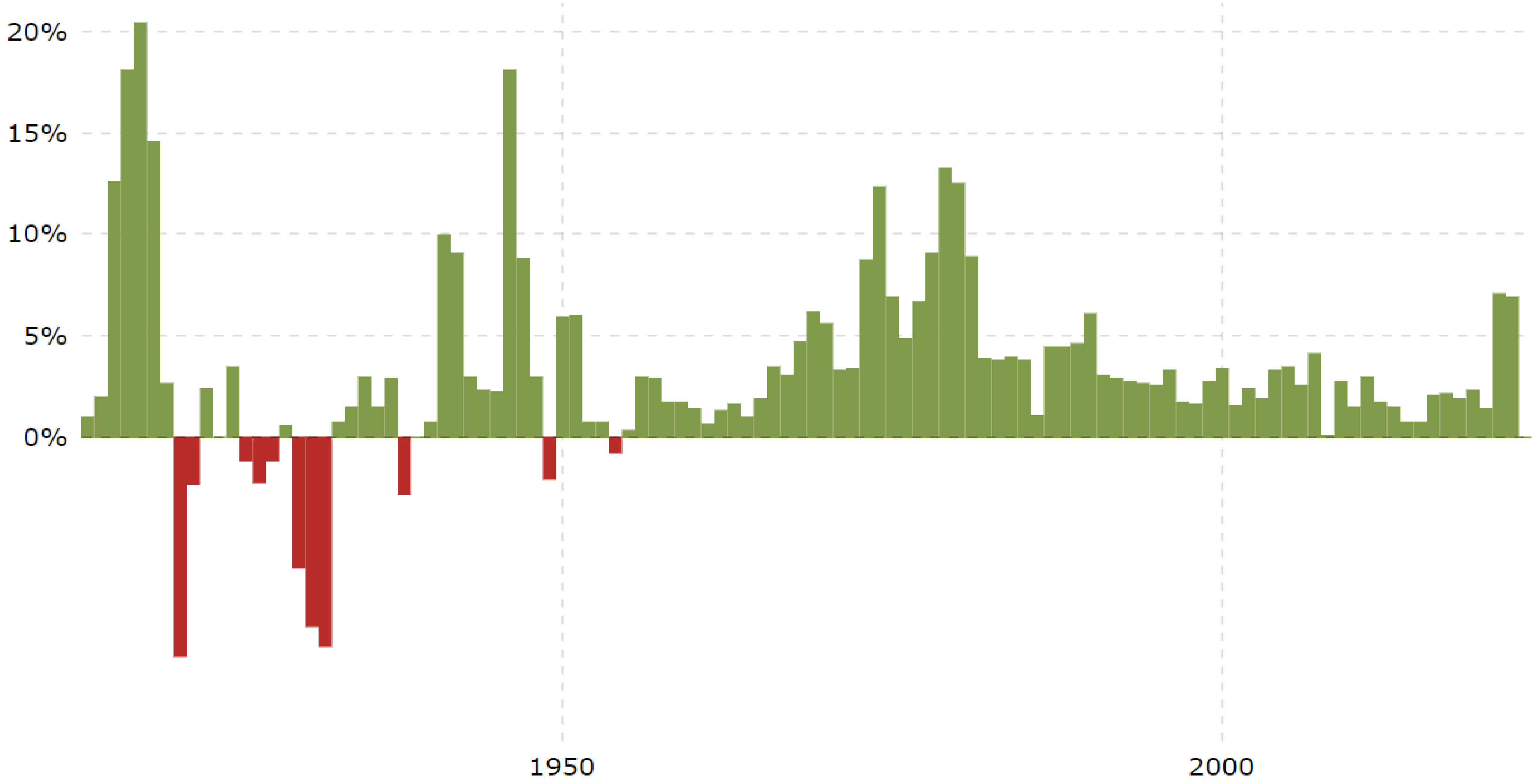
Presentation Roadmap

- Why the “safe withdrawal rate” problem is such a hard one
- 5 key lessons from the research on withdrawal rates
  - Beginning market conditions matter a lot
  - Asset allocation is important
  - Inflation is a force to be reckoned with
  - Retirees’ own spending is apt to be variable over the life cycle
  - Variable withdrawal approaches can enlarge starting and lifetime withdrawal rates

Market conditions are tough to predict



Inflation is also difficult to foresee



Source: Macrotrends.net https://www.macrotrends.net/2497/historical-inflation-rate-by-year

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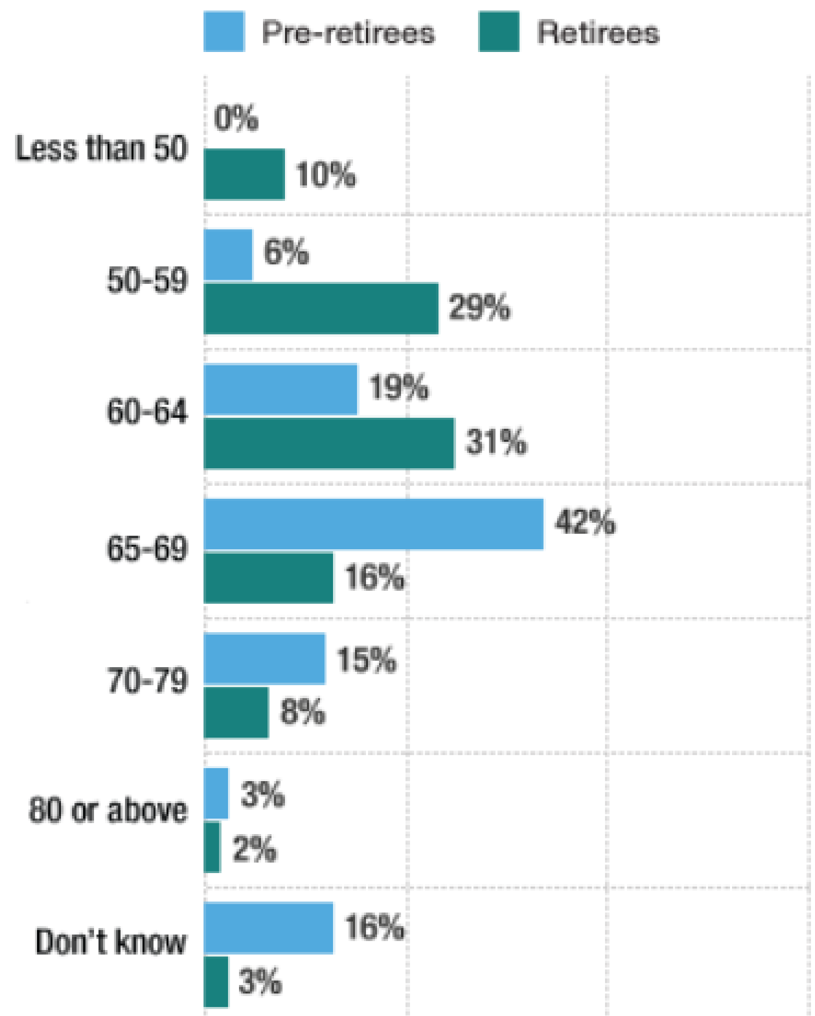
Even setting a retirement date is hard!



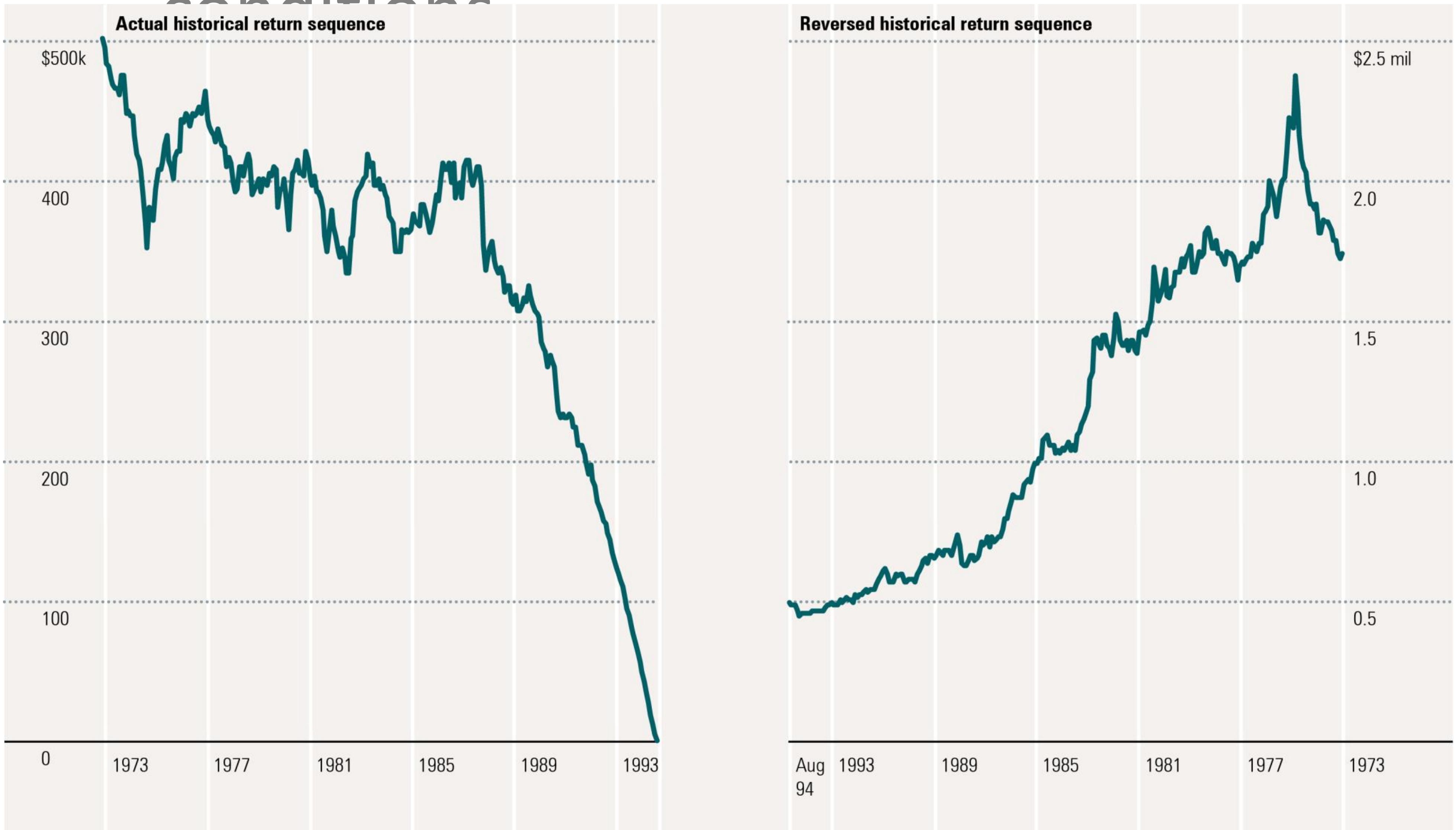
Survey: NPR, The Robert Wood Johnson Foundation, Harvard School of Public Health

The wild cards are stacking up

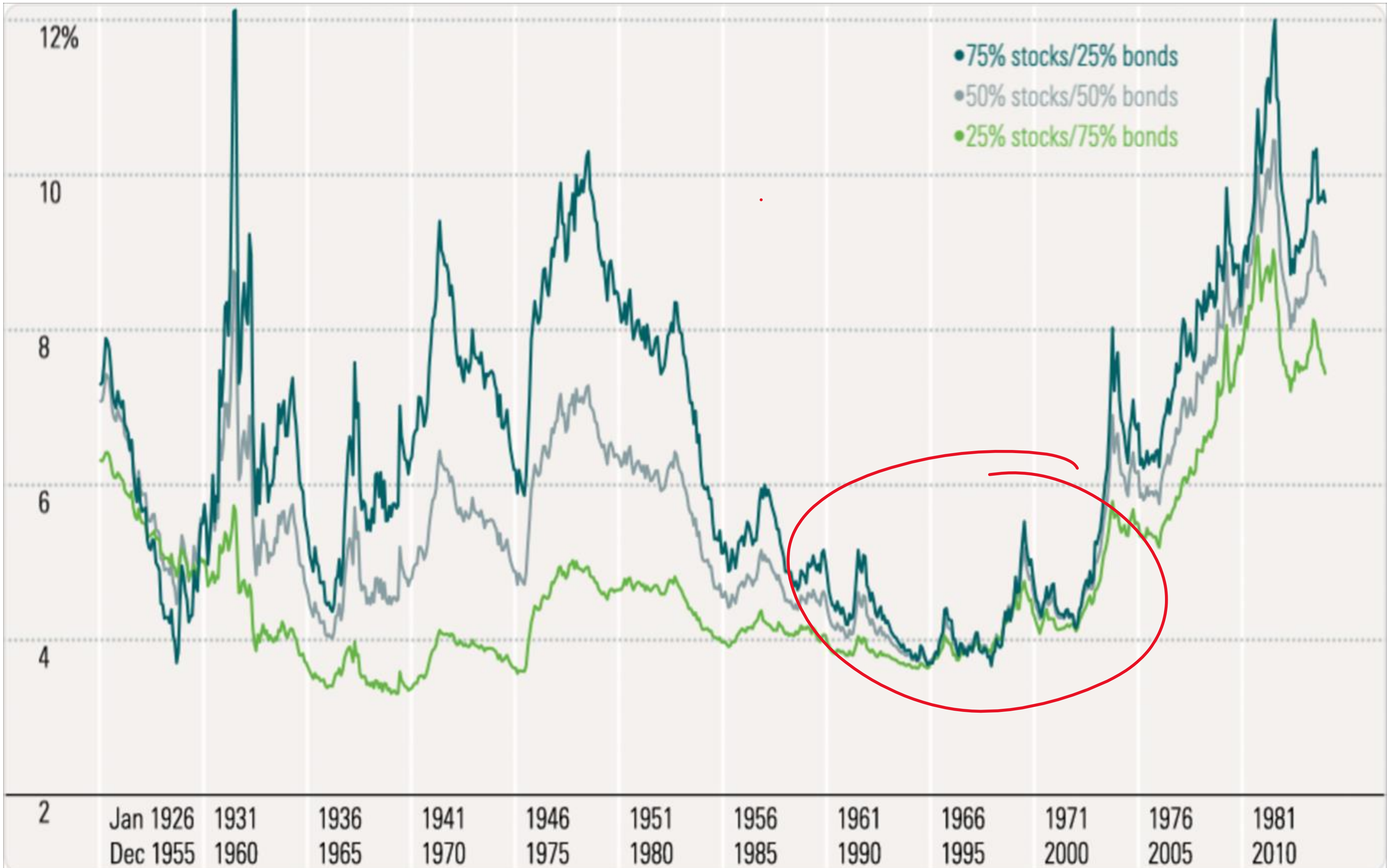
- Stock and bond market returns
- Inflation
- The retirement date
- Retiree's own spending patterns (e.g., long-term care costs)
- LIFE EXPECTANCY

What should investors know and do about safe withdrawal rates?

Lesson 1: Pay attention to starting conditions



The "right" withdrawal rate? It depends



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Gauging withdrawal conditions: A dashboard

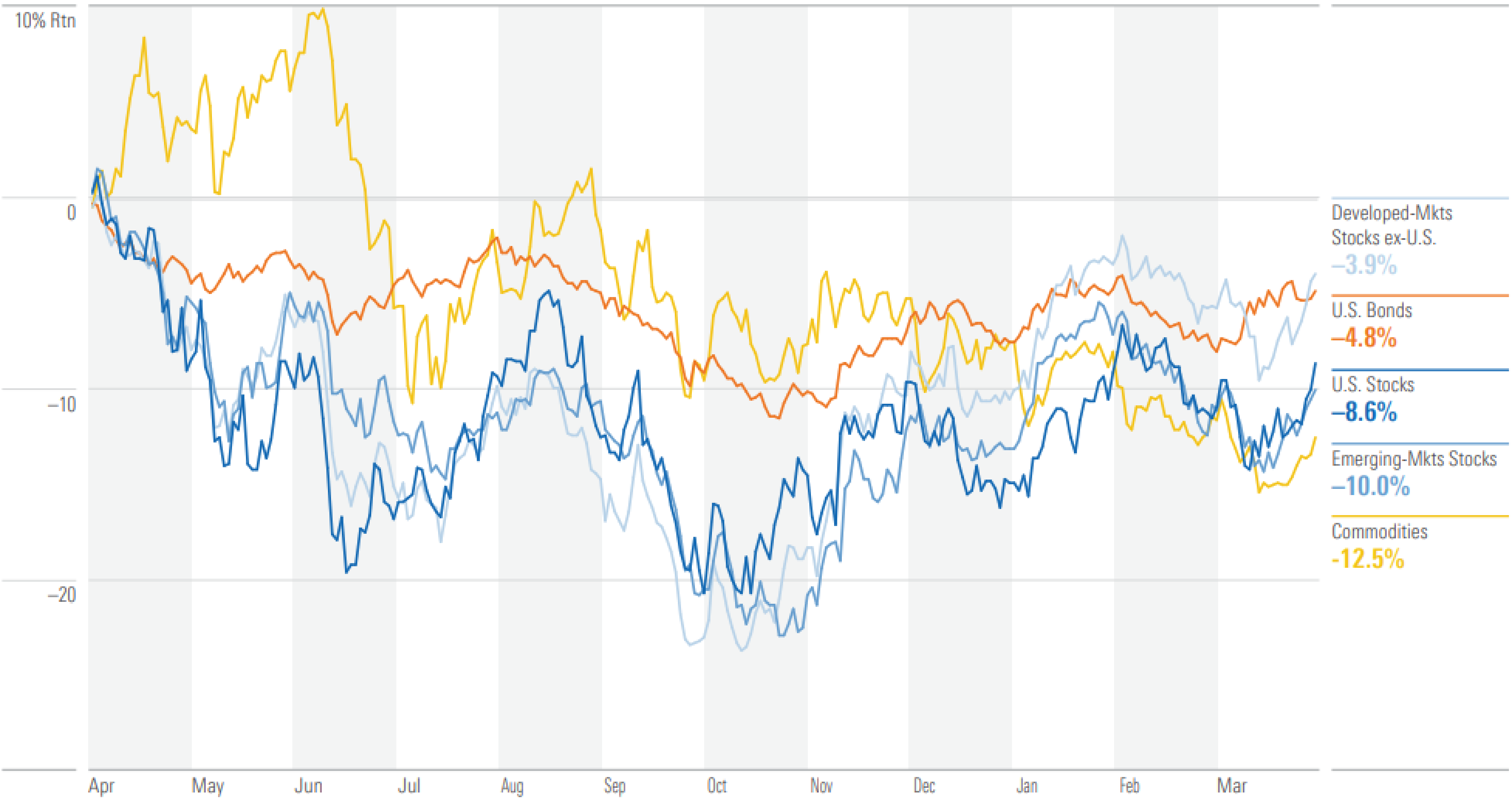
Ideal conditions for starting withdrawals

- Low equity valuations (sell into appreciating market environment)
- Decent cash and bond yields (creates safe cash flows)
- Low inflation (helps preserve purchasing power on portfolio cash flows)

Poor conditions for starting withdrawals

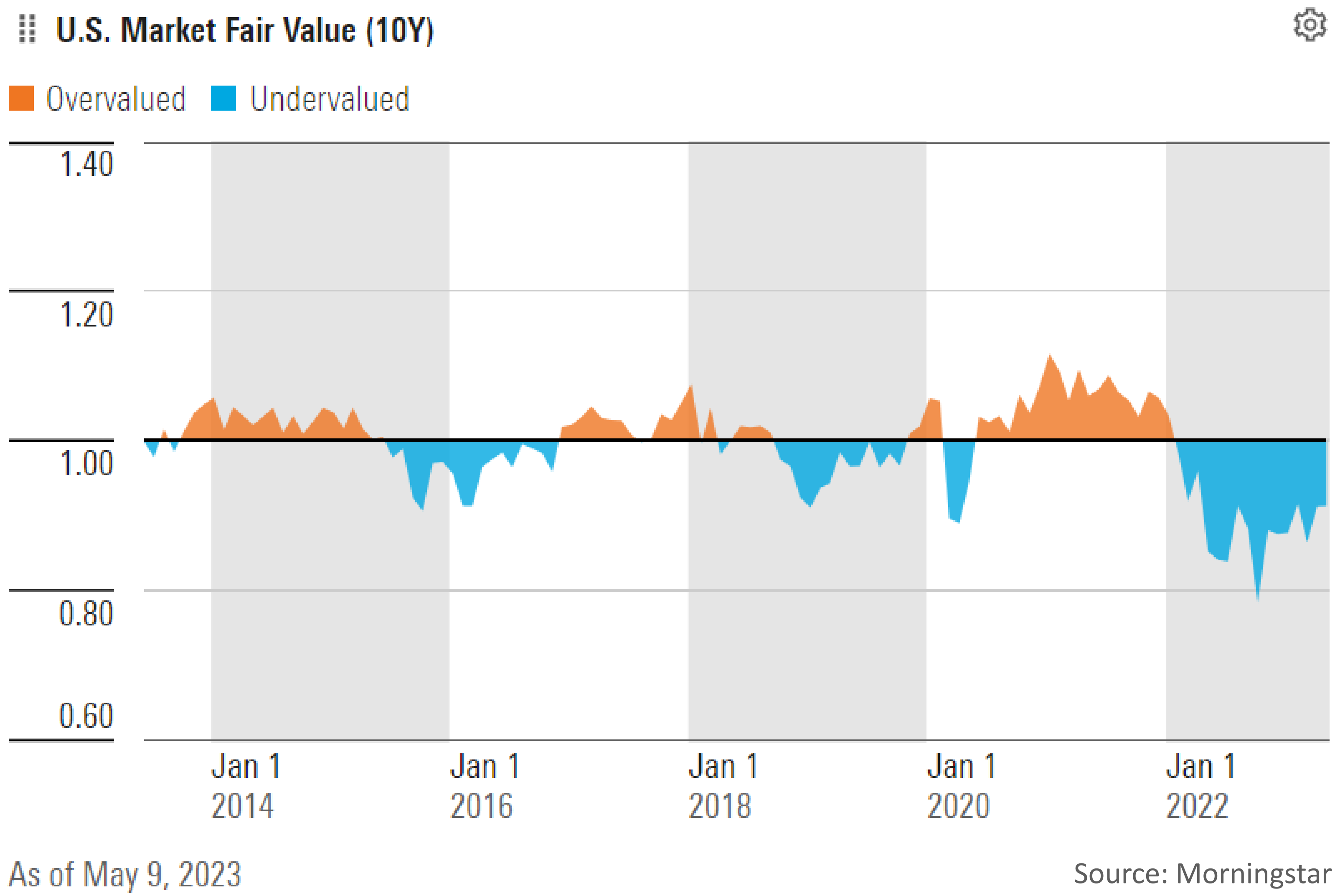
- High equity valuations (sell into declining market environment)
- Low cash and bond yields (meager safe cash flows)
- High inflation (reduces purchasing power of portfolio cash flows)

2022: A harbinger of better things?



Source: Morningstar Markets Observer. Trailing 12-mo return through 3/31/23.

Equity valuations: Improved



Source: Morningstar Investor.
P/FV for global coverage list.

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Undervaluation across the style box

U.S. Equity Style Boxes

Size	Total Mkt –9.1	**Style** Value	Blend	Growth
		–17.6	–5.5	–6.6
Large	–5.6	–14.0	–1.2	–4.9
Mid	–12.3	–18.3	–9.8	–8.8
Small	–23.5	–31.1	–19.7	–19.6

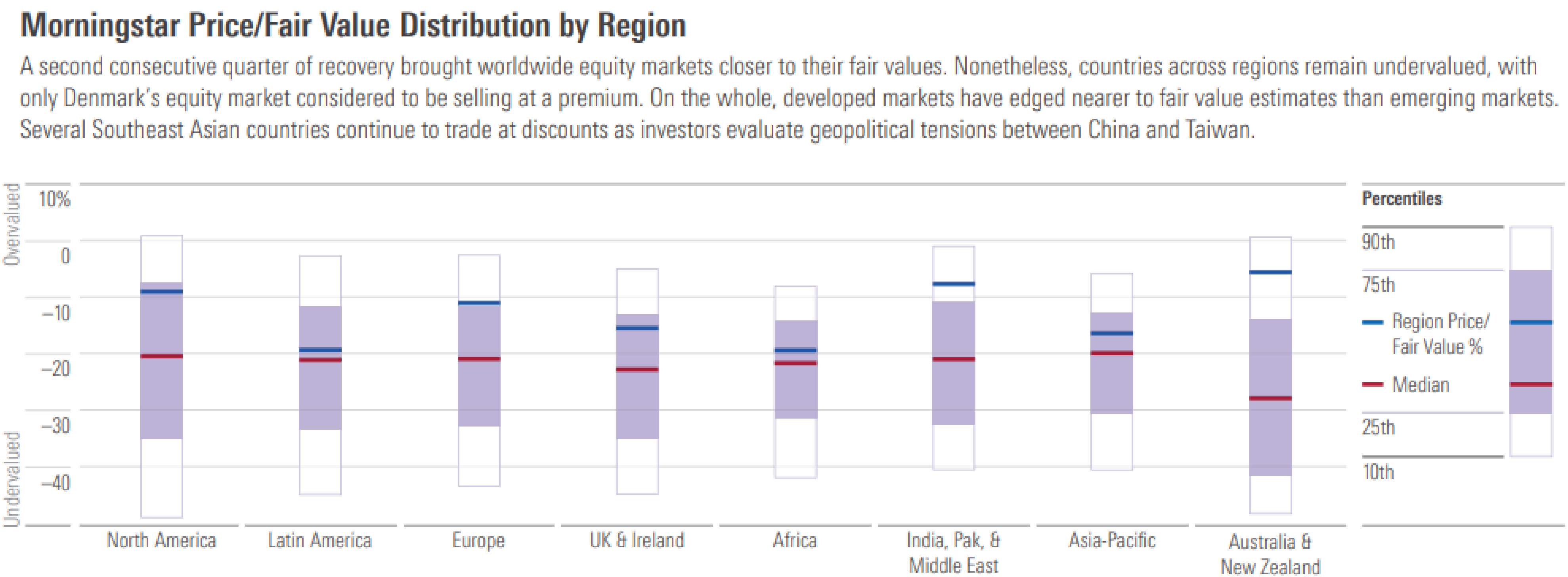
Overvalued (%)
- >10.1
- 5.1 to 10

Fairly Valued (%)
- 0.1 to 5
- 0
- –0.1 to –5

Undervalued (%)
- –5.1 to –10
- <–10.1

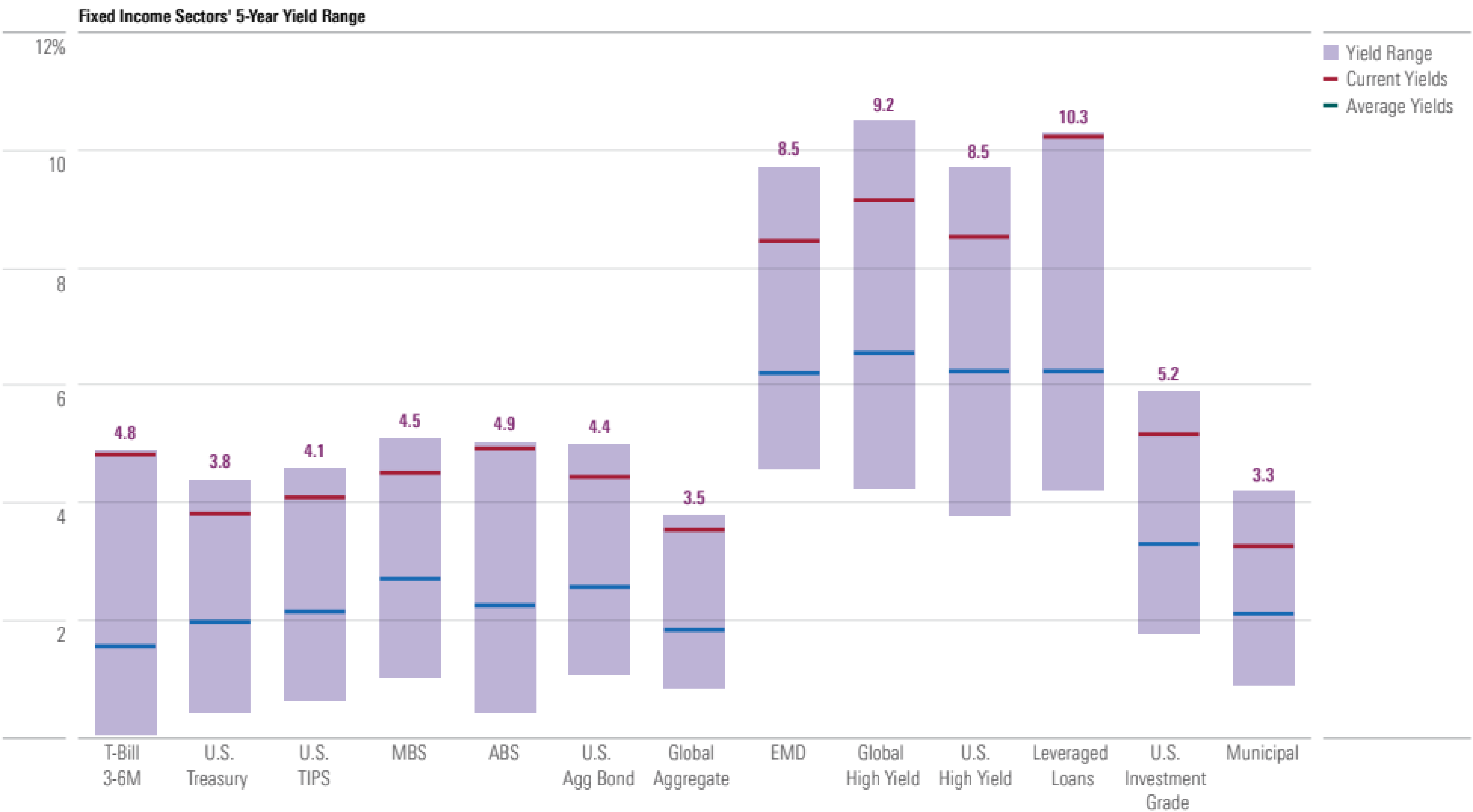
Source: Morningstar Markets Observer. Data as of 3/31/23.

And across the globe



Source: Morningstar Markets Observer. Data as of 3/31/23.

Bond yields are also looking MUCH better



Source: Morningstar Markets Observer. Data as of 3/31/23.

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Outlook for stocks, bonds has improved

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Better expected stock/bond returns lift starting safe withdrawal rates

- 3.3%: 2020 starting safe withdrawal amount
- 3.8%: 2022 starting safe withdrawal amount

Assumptions:

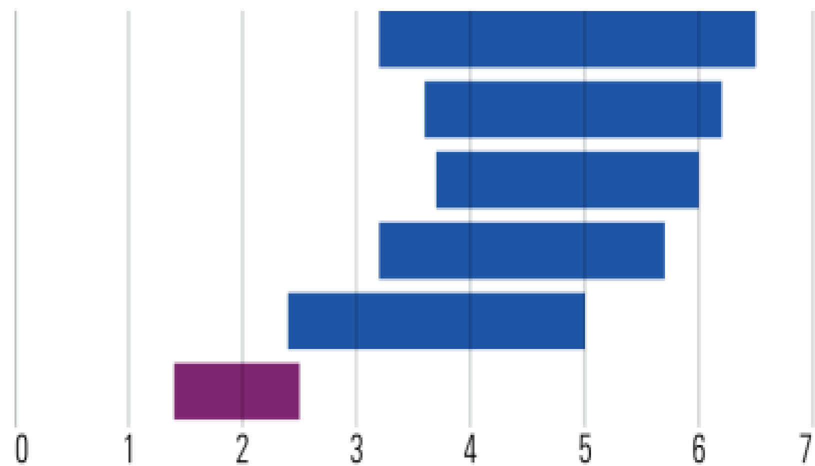
- Fixed real withdrawals
  - 3.8% of portfolio in year 1:
    - $38,000 on $1 mil. portfolio in year 1
    - $39,140 in year 2 (assuming 3% inflation rate)
- Balanced stock/bond portfolio
- 90% success rate

Lesson 2: Maintain a balanced portfolio.

Exhibit 3 Highest and Lowest Starting Safe Withdrawal Rates, by Asset Allocation

(Rolling 30-Year Time Horizon, Starting From 1930 Through 1990, 90% Success Rate)

	Safe Withdrawal Rates	
Asset Allocation	Lowest	Highest
100% Stocks	3.2	6.5
75% Stocks, 25% Bonds	3.6	6.2
50% Stocks, 50% Bonds	3.7	6.0
25% Stocks, 75% Bonds	3.2	5.7
100% Bonds	2.4	5.0
Mattress	**1.4**	**2.5**



Source: Morningstar Direct. Data as of 12/31/2019.

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Higher yields point toward value of balance

Stock Weighting	10 Years	15 Years	20 Years	25 Years	30 Years	35 Years	40 Years
100%	8.5	5.9	4.7	3.9	3.5	3.3	3.1
90%	8.7	6.1	4.9	4	3.6	3.3	3.1
80%	8.9	6.2	4.9	4.1	3.7	3.3	3.1
70%	9.1	6.3	5.1	4.2	3.7	3.4	3.2
60%	9.3	6.5	5.2	4.3	3.8	3.4	3.2
50%	9.5	6.6	5.2	4.3	3.8	3.4	3.2
40%	9.6	6.7	5.3	4.4	3.8	3.4	3.2
30%	9.7	6.7	5.3	4.3	3.8	3.4	3.1
20%	9.7	6.7	5.2	4.3	3.7	3.3	3
10%	9.7	6.6	5.1	4.1	3.5	3.1	2.8
0%	9.4	6.4	4.8	3.9	3.3	2.9	2.6

Assumptions: Fixed real withdrawal system, 90% success rate.

Stock returns are higher, but more variable

	Projected Asset Class and Portfolio Returns		
		Expected Return %	Standard Deviation %
		(Arithmetic)	(Annual)
Equities	Large Growth U.S. Stocks	9.65	19.06
	Large Value U.S. Stocks	8.96	15.81
	Small Growth U.S. Stocks	10.58	24.71
	Small Value U.S. Stocks	12.4	20.6
	Foreign Stocks	10	18.32
Bonds	U.S Investment Grade Bond	4.51	5.39
	Foreign Bond	5.12	9.03
Cash	U.S. Treasury Bill	2.69	1.74

Bucket approach provides balance

Bucket 1

For: Years 1 and 2

Holds: Cash

Goal: Fund Near-Term Living Expenses

Bucket 2

For: Years 3-10

Holds: Bonds, Balanced Funds

Goal: Income production, stability, inflation protection

Bucket 3

For: Years 11 and beyond

Holds: Stock

Goal: Growth

Sample in-retirement bucket portfolio

Retirees Spending $60,000/Year from Portfolio

Bucket 1: Liquidity Portfolio for Years 1 and 2: $120,000
$120,000 in CDs, money market accounts/funds, other cash

Bucket 2: Intermediate Portfolio for Years 3-10: $480,000
$100,000 in Vanguard Short-Term Bond ETF BSV
$150,000 in Vanguard Short-Term Inflation-Protected Securities VTIP
$230,000 in Vanguard Total Bond Market BND

Bucket 3: Growth Portfolio for Years 11 and Beyond: $900,000
$350,000 in Vanguard Dividend Appreciation VIG
$225,000 in Vanguard Total Stock Market Index VTI
$250,000 in Vanguard FTSE All-World ex-US VEU
$75,000 in Vanguard High-Yield Corporate VWEHX

But buckets 1 & 2 carry a substantial opportunity cost

- Other “buffer” assets could reduce need to maintain ongoing stake in low-returning assets (Wade Pfau)
  - Standby reverse mortgage
  - Life insurance cash value
  - Annuities
- Alternatively, “bucketed” retiree could simply not fully replenish buckets 1 and 2 once depleted
- Retirees with tighter plans might shrink buckets 1 and 2 as a % of total portfolio (5 years v. 10?)

Lesson 3: Protect against inflation

“If there’s a 10% inflation rate in the first year of retirement and then it gets back to normal afterward, every future year of spending has been impacted by that first-year inflation rate.” —Wade Pfau

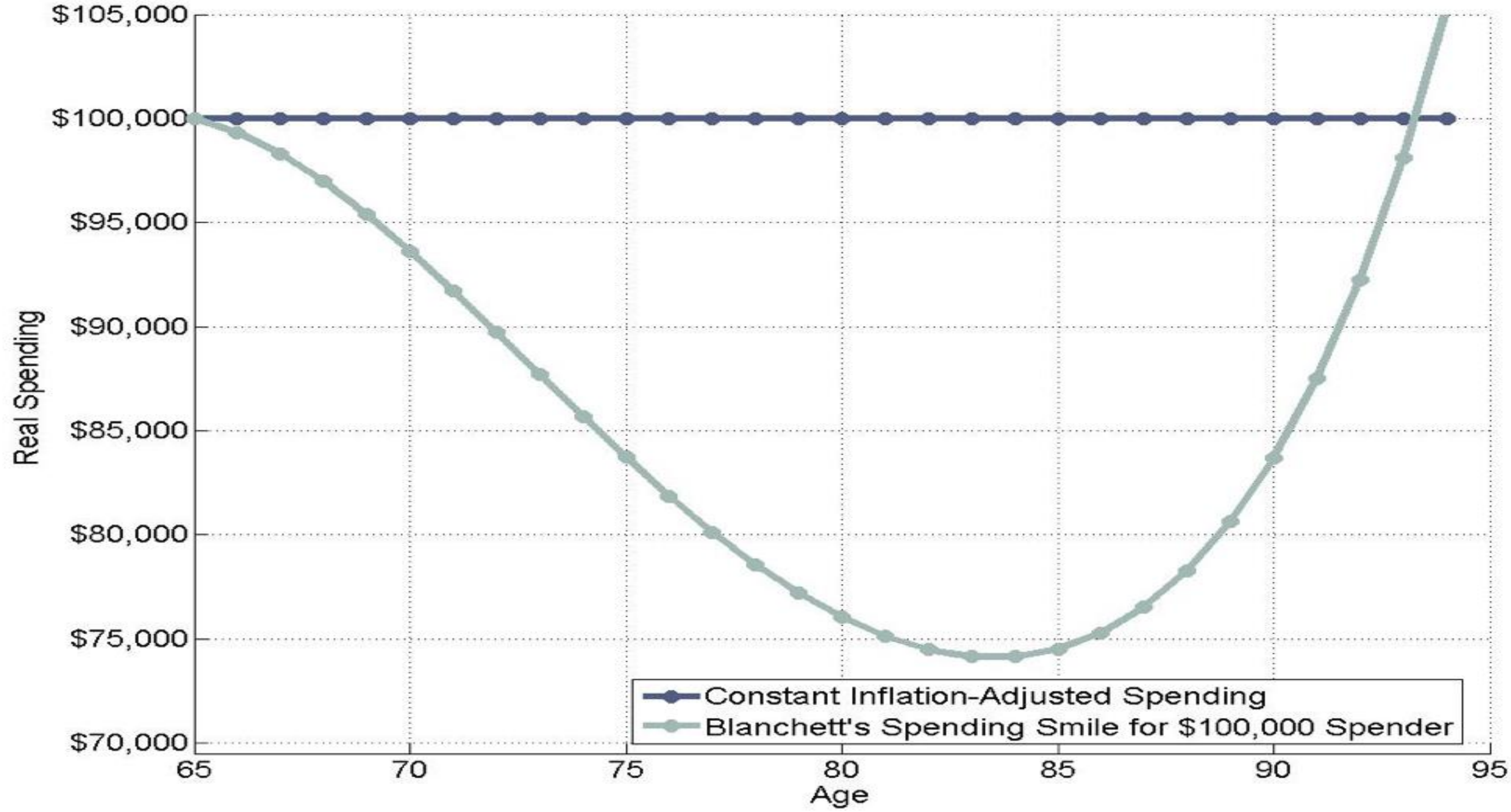
Why inflation can be a big deal in retirement

- Inflation is a factor for all of us, but it's especially negative for retirees because:
  - If high inflation occurs early in retirement, it builds upon itself
  - The categories that older adults tend to spend more on may be inflating more quickly than the general inflation rate
  - The portion of their portfolios that they're withdrawing is not automatically inflation-adjusted (in contrast with our paychecks and Social Security)
  - Inflation is the natural enemy of anything with a fixed payout:
    - Nominal (non-inflation-adjusted) bonds
    - Fixed annuities
  - More conservative portfolios have lower return potential, so inflation takes a bigger bite in percentage terms

Inflation *protection* a harder problem

- At the portfolio level:
  - Treasury Inflation-Protected Securities, I-Bonds
  - Stocks: Best long-run shot at beating inflation
- At the plan level:
  - Delaying Social Security: Enhanced return is also inflation-adjusted
  - Factoring inflation into portfolio-spending plan

Lesson 4: Factor in lifestyle considerations



Source: Retirementresearcher.com.

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Pattern calls into question withdrawal rate conventions

- Much of the research assumes fixed real expenditures
  - 4% of a $1 mil. portfolio in year 1: $40,000
  - Year 2 withdrawal (assuming 3% inflation): $41,200

- David Blanchett found that actual retiree spending tended to decline in the middle to later years of retirement, before trending up later in life

Takeaways for spending rates

- Retirees’ starting withdrawal rates could be higher to factor in lower spending later on (even if they encounter higher spending later in life)
- Retirees’ expenditures, on average, increase by 1 percentage point *less* than the inflation rate
- Factor in personal situation, especially status of long-term care coverage

Is 4% actually 4.3%?

Portfolio Weighting %	Method: Fixed Real	10% Reduction	Forgo Inflation	Guardrails	RMD	Inflation Haircut
Equity Portfolio						
100	3.5	3.8	4.1	**5.2**	4.4	3.9
90	3.6	3.8	4.1	**5.3**	4.4	4.0
80	3.7	3.9	4.2	**5.5**	4.4	4.1
70	3.7	4.0	4.3	**5.5**	4.4	4.2
60	3.8	4.0	4.3	**5.4**	4.4	4.3
50	3.8	4.0	4.4	**5.3**	4.4	4.3
40	3.8	4.0	4.3	**5.2**	4.4	4.3
30	3.8	3.9	4.2	**5.0**	4.4	4.3
20	3.7	3.8	4.1	**4.7**	4.4	4.2
10	3.5	3.7	3.9	**4.5**	4.4	4.0
0	3.3	3.4	3.7	**4.3**	4.4	3.7

Source: Morningstar.

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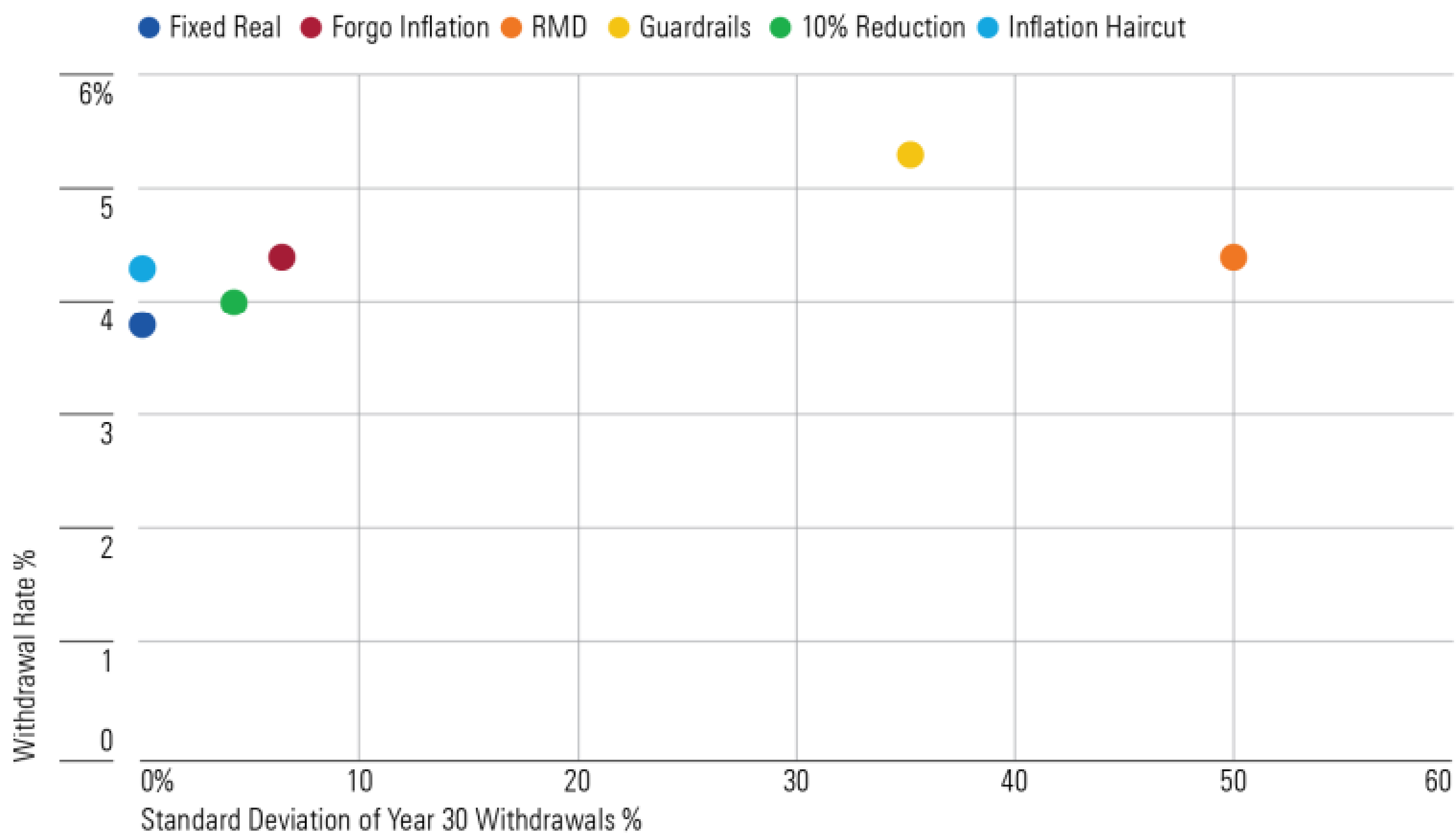
Lesson 5: Consider a variable strategy

- In contrast with fixed real spending systems, variable systems change up withdrawals based on how portfolio behaves
- Simple variable system: Fixed % each year…trade-off is huge cash-flow volatility
- Refinements:
  - RMD-type method
  - “Guardrails” (Jonathan Guyton and William Klinger)
  - Forgoing inflation adjustment following losing portfolio year

Variable methods entail trade-offs

Exhibit 1 Safe Withdrawal % and Volatility (Standard Deviation) of Cash Flows for Balanced Portfolios Over a 30-Year Period, 90% Success Rate



Source: Morningstar.

Lifetime withdrawals are higher

Exhibit 10 30-Year Lifetime Withdrawal % by Withdrawal Method and Asset Allocation, 90% Success Rate

	Method					
Portfolio Weighting %	Fixed Real	10% Reduction	Forgo Inflation	Guardrails	RMD	Inflation Haircut
Equity Portfolio						
100	3.5	3.6	3.7	6.3	**8.1**	3.4
90	3.6	3.6	3.7	5.9	**7.3**	3.5
80	3.7	3.7	3.8	5.6	**6.8**	3.6
70	3.7	3.8	3.9	5.3	**6.3**	3.7
60	3.8	3.8	3.9	5.0	**5.9**	3.7
50	3.8	3.9	4.0	4.8	**5.4**	3.7
40	3.8	3.9	4.0	4.5	**5.1**	3.7
30	3.8	3.8	3.9	4.3	**4.7**	3.7
20	3.7	3.7	3.8	4.1	**4.4**	3.7
10	3.5	3.6	3.7	3.9	**4.1**	3.5
0	3.3	3.3	3.5	3.7	**3.9**	3.2

Source: Morningstar.

But paydays are more volatile

Exhibit 11 Year 30 Cash Flow Standard Deviation % by Withdrawal Method and Asset Allocation, 90% Success Rate

	Method					
Portfolio Weighting %	Fixed Real	10% Reduction	Forgo Inflation	Guardrails	RMD	Inflation Haircut
Equity Portfolio						
100	**0.0**	8.0	7.0	88.2	99.7	**0.0**
90	**0.0**	8.0	7.0	79.2	88.1	**0.0**
80	**0.0**	7.9	7.0	68.6	77.6	**0.0**
70	**0.0**	7.6	6.9	57.3	67.8	**0.0**
60	**0.0**	7.3	6.7	45.8	58.5	**0.0**
50	**0.0**	6.9	6.4	35.2	50.0	**0.0**
40	**0.0**	6.4	6.3	26.6	42.3	**0.0**
30	**0.0**	5.9	5.9	20.7	35.6	**0.0**
20	**0.0**	5.5	5.7	17.5	30.5	**0.0**
10	**0.0**	5.5	5.7	16.3	27.4	**0.0**
0	**0.0**	6.2	6.1	17.6	27.3	**0.0**

Source: Morningstar.

And ending balances are lower

Exhibit 12 Median Ending Value at Year 30 ($Mil) by Withdrawal Method and Asset Allocation, 90% Success Rate

Portfolio Weighting %	Method: Fixed Real	10% Reduction	Forgo Inflation	Guardrails	RMD	Inflation Haircut
Equity Portfolio						
100	**5.0**	4.8	4.6	2.1	0.4	4.9
90	**4.0**	4.0	3.7	1.7	0.3	4.0
80	3.4	3.4	3.1	1.4	0.3	**3.5**
70	**3.0**	2.8	2.6	1.2	0.3	2.8
60	2.3	**2.3**	2.0	1.0	0.3	2.3
50	**1.9**	1.8	1.6	0.8	0.2	1.9
40	**1.5**	1.4	1.2	0.7	0.2	1.5
30	**1.1**	1.2	1.0	0.6	0.2	1.1
20	**0.9**	0.9	0.7	0.5	0.2	0.9
10	**0.8**	0.7	0.6	0.4	0.1	0.7
0	0.4	0.7	0.5	0.4	0.1	**0.6**

Source: Morningstar.

To Review

- Lesson 1: Starting conditions matter (and they're not bad today!)
- Lesson 2: Maintain a balanced portfolio (30%-70% equities)
- Lesson 3: Defend income streams against inflation
- Lesson 4: Consider your personal spending pattern
- Lesson 5: Be flexible if you can afford to

Questions/comments

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- Weekly podcast I co-host w/Jeff Ptak: “The Long View”