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Smart Investing in Real Life

Every chart, table, and cartoon from the book — in order, by chapter — plus the glossary and the websites the book mentions.

David A. Katz, CFA · Stephan J. Weinberger, CFA

81 figures across 32 chapters and sections

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Smart Investing in Real Life:

A Practical Guide to Building Wealth, Avoiding Costly Mistakes, and Staying the Course

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FIGURE 1.1

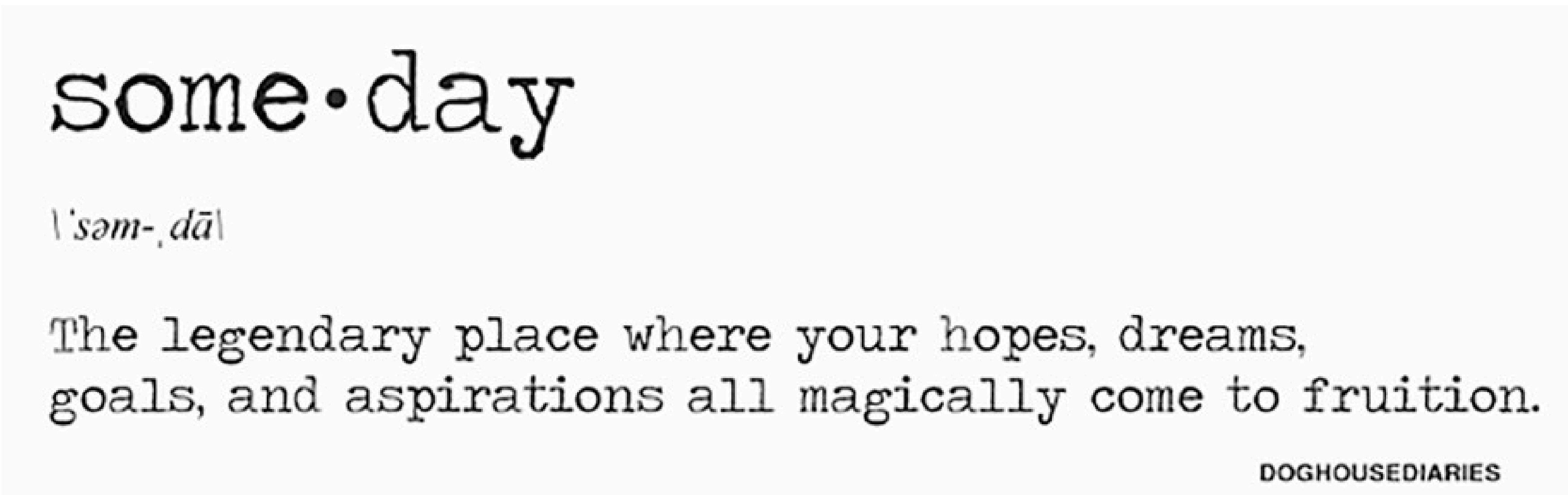

some·day
\ˈsəm-ˌdā\
The legendary place where your hopes, dreams, goals, and aspirations all magically come to fruition.
DOGHOUSEDIARIES

FIGURE 3.1

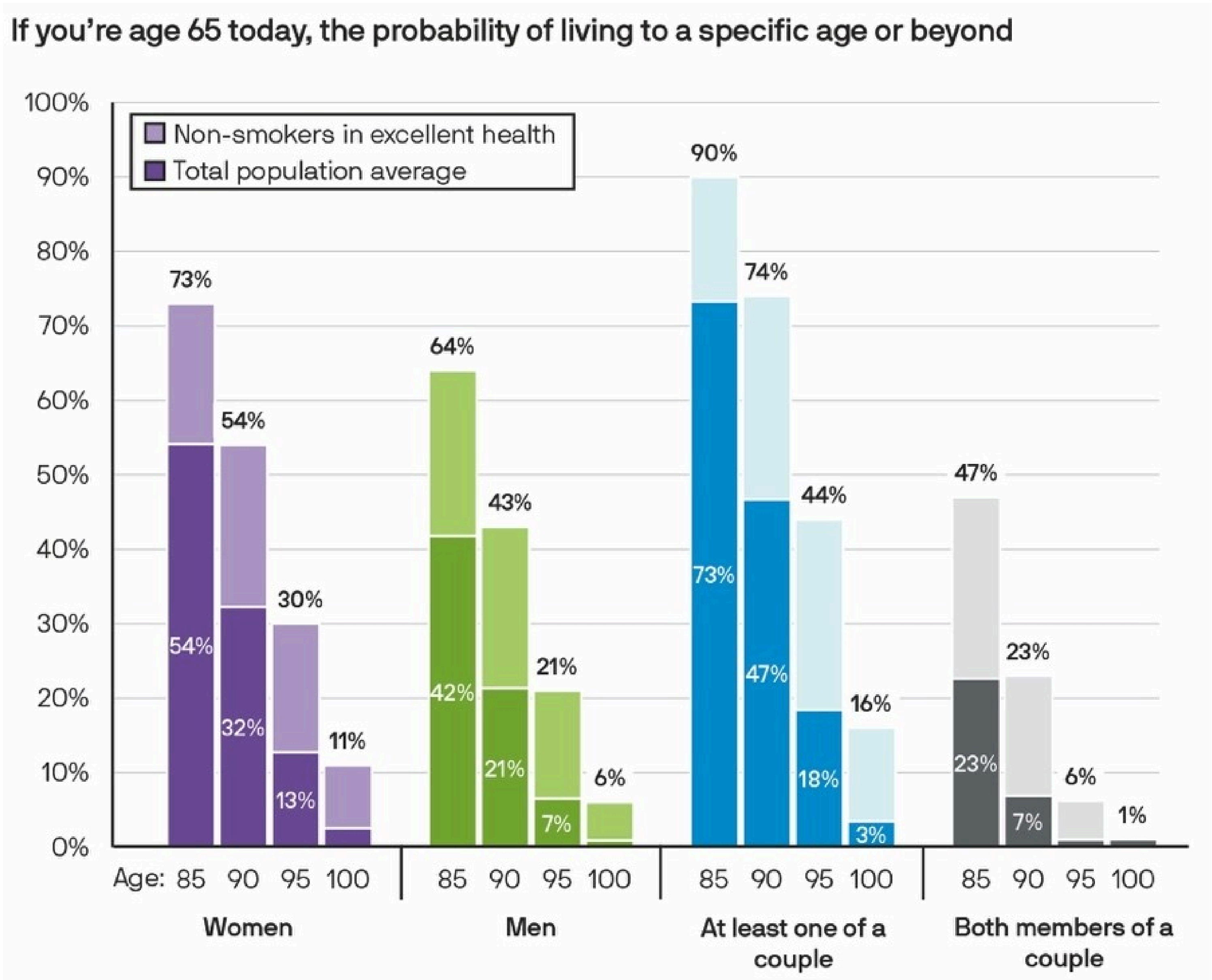

If you're age 65 today, the probability of living to a specific age or beyond
Non-smokers in excellent health
Total population average
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
73%
54%
54%
32%
30%
13%
11%
64%
42%
43%
21%
21%
7%
6%
90%
73%
74%
47%
44%
18%
16%
3%
47%
23%
23%
7%
6%
1%
Age: 85 90 95 100
85 90 95 100
85 90 95 100
85 90 95 100
Women
Men
At least one of a couple
Both members of a couple

FIGURE 4.1

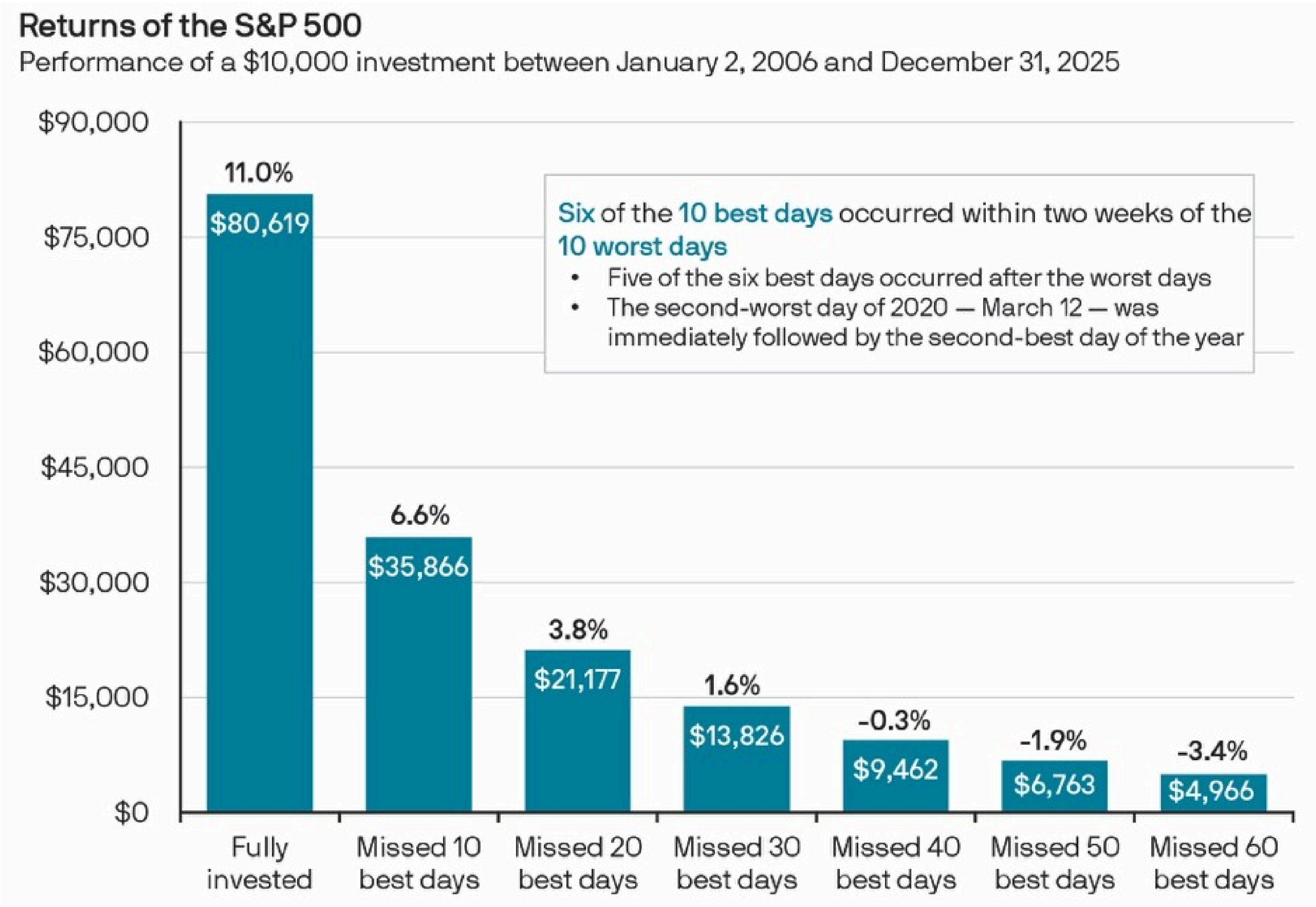
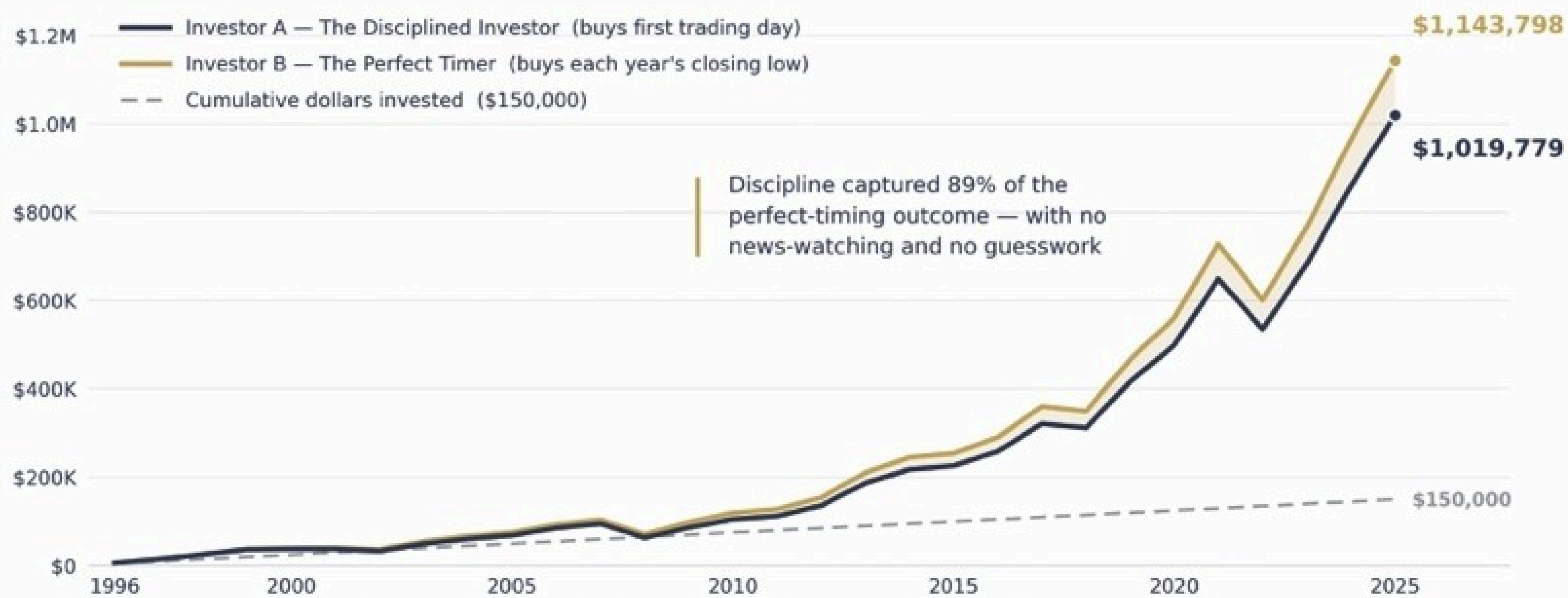

Returns of the S&P 500
Performance of a $10,000 investment between January 2, 2006 and December 31, 2025
$90,000
$75,000
$60,000
$45,000
$30,000
$15,000
$0
11.0%
$80,619
6.6%
$35,866
3.8%
$21,177
1.6%
$13,826
-0.3%
$9,462
-1.9%
$6,763
-3.4%
$4,966
Fully invested
Missed 10 best days
Missed 20 best days
Missed 30 best days
Missed 40 best days
Missed 50 best days
Missed 60 best days
Six of the 10 best days occurred within two weeks of the 10 worst days
• Five of the six best days occurred after the worst days
• The second-worst day of 2020 — March 12 — was immediately followed by the second-best day of the year

FIGURE 4.2

Two Investors. Same Index. Same Dollars. Same 30 Years.

$5,000 invested every year in the S&P 500 (total return), January 1, 1996 – December 31, 2025



Make a plan. Don't try to time the market. Let compounding do the work.

Investor B's entry point — the exact closing low of every calendar year, thirty years running — has never been achieved by any investor and never will be. S&P 500 annual total returns (dividends reinvested); contributions made on the first trading day of each year. Illustrative; excludes taxes, fees and transaction costs.

FIGURE 4.3

Geopolitical/Military Events	S&P 500 Index Price Return (%)				
		Annualized			
Event (Start Date)	3 Months Later	1 Year Later	3 Years Later	5 Years Later	10 Years Later
Germany Invades France (May 1940)	**-15.3**	**-22.0**	**-0.9**	4.1	4.2
Pearl Harbor Attack (December 1941)	**-12.4**	0.4	11.7	9.5	9.6
Korean War (June 1950)	1.5	11.2	8.1	16.4	11.7
Cuban Missile Crisis (October 1962)	17.4	32.0	18.3	11.4	7.0
US Bombs Cambodia (April 1970)	**-4.6**	27.1	9.4	0.9	2.6
Arab Oil Embargo (October 1973)	**-13.2**	**-36.2**	**-2.9**	**-1.4**	4.4
Iranian Hostage Crisis (November 1979)	11.6	25.9	11.4	10.3	12.7

Geopolitical/Military Events	S&P 500 Index Price Return (%)				
Event (Start Date)		Annualized			
	3 Months Later	1 Year Later	3 Years Later	5 Years Later	10 Years Later
USSR Invades Afghanistan (December 1979)	**-8.8**	26.2	9.1	9.0	12.4
Beirut Bombing (October 1983)	**-0.7**	0.7	13.0	11.3	10.8
US Invades Grenada (November 1983)	**-1.1**	0.7	12.8	11.2	10.8
US Bombs Libya (April 1986)	**-0.5**	19.9	8.3	9.9	10.5
Invasion of Panama (December 1989)	**-2.9**	**-6.9**	7.5	5.6	15.0
Iraq Invades Kuwait (August 1990)	**-10.5**	10.2	8.6	9.7	15.1
Operation Desert Storm (January 1991)	21.5	32.3	14.5	14.0	15.4
Gorbachev Coup (August 1991)	**-1.8**	9.3	6.3	11.5	11.9
World Trade Center Bombing (February 1993)	1.5	5.4	13.7	18.7	6.5
9/11 Terrorist Attacks (September 2001)	2.5	**-16.7**	0.9	3.5	0.6
Iraq War (March 2003)	15.6	27.0	14.3	8.2	5.9
Russia Invades Georgia (August 2008)	**-34.3**	**-22.3**	**-4.7**	5.5	8.1
Russia Invades Crimea (March 2014)	3.9	10.7	8.0	7.9	10.6
Russia Invades Ukraine (February 2022)	**-13.0**	**-11.0**	9.5		
Hamas Attacks Israel (October 2023)	9.7	33.6			

Geopolitical/Military Events	S&P 500 Index Price Return (%)				
		Annualized			
Event (Start Date)	3 Months Later	1 Year Later	3 Years Later	5 Years Later	10 Years Later
Israel Attacks Iran's Nuclear Facilities (June 2025)	8.9	22.9			
US and Israel Attack Iran (February 2026)[5]	10.5				
Median	**-0.6**	10.2	9.1	9.6	10.5
% Positive	**46%**	**74%**	**86%**	**95%**	**100%**

Source: Hartford Funds, Military Conflicts May Rattle Markets, But Not for Long (2026). Underlying data: Morningstar, Ned Davis Research, and Hartford Funds, as of 12/31/25.[6]

Past performance does not guarantee future results. Indices are unmanaged and not available for direct investment. Data shown is for the S&P 500 Price Index, a market capitalization-weighted price index composed of 500 widely held common stocks and does not include the reinvestment of dividend payments.

Data Sources: Morningstar, Ned Davis Research, and Hartford Funds, 3/26.

FIGURE 4.4

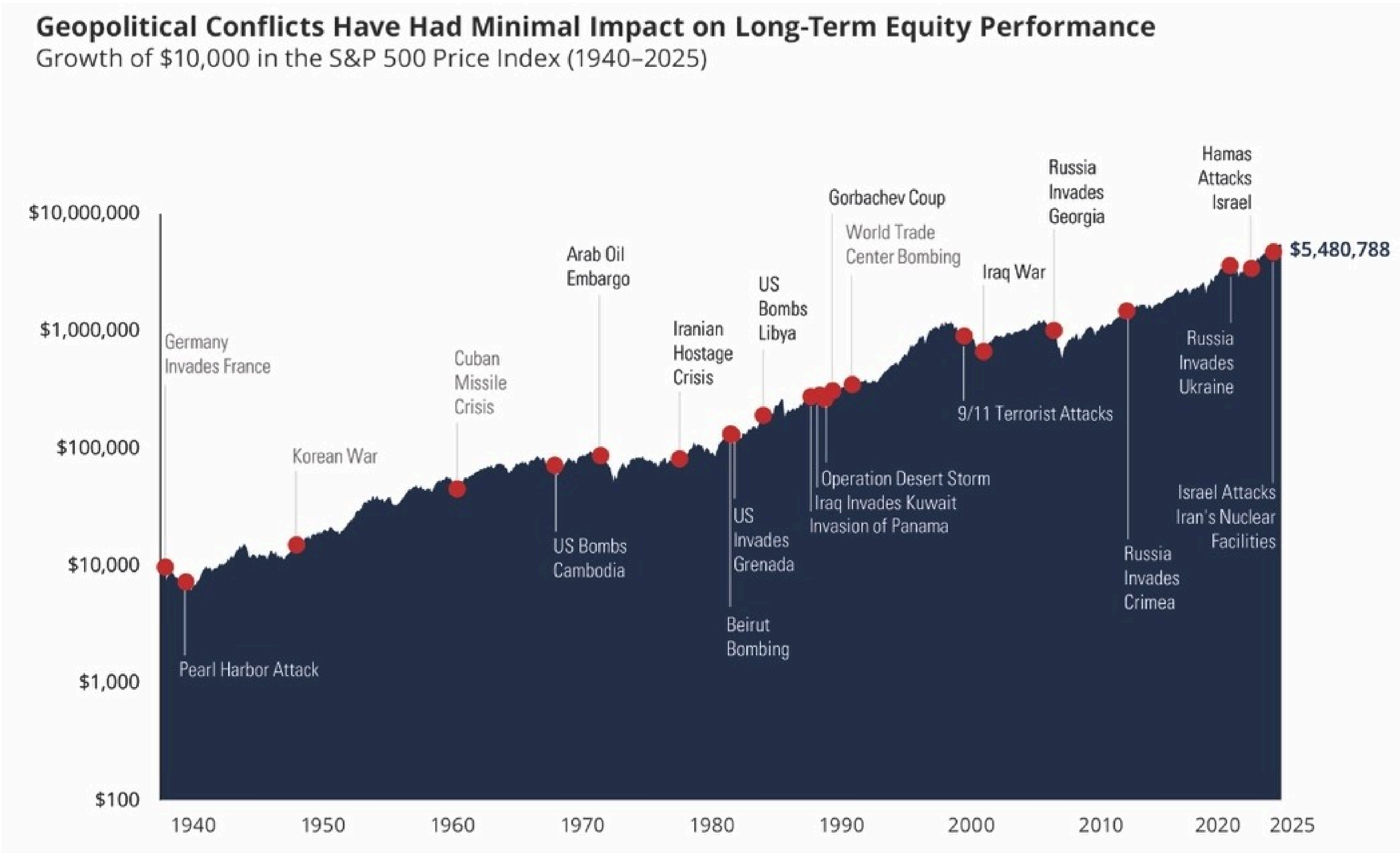

Geopolitical Conflicts Have Had Minimal Impact on Long-Term Equity Performance
Growth of $10,000 in the S&P 500 Price Index (1940–2025)
$10,000,000
$1,000,000
$100,000
$10,000
$1,000
$100
1940
1950
1960
1970
1980
1990
2000
2010
2020
2025
$5,480,788
Germany Invades France
Pearl Harbor Attack
Korean War
Cuban Missile Crisis
US Bombs Cambodia
Arab Oil Embargo
Iranian Hostage Crisis
US Invades Grenada
Beirut Bombing
US Bombs Libya
Gorbachev Coup
World Trade Center Bombing
Operation Desert Storm
Iraq Invades Kuwait
Invasion of Panama
9/11 Terrorist Attacks
Iraq War
Russia Invades Georgia
Russia Invades Crimea
Russia Invades Ukraine
Hamas Attacks Israel
Israel Attacks Iran's Nuclear Facilities

FIGURE 4.5

"Up a hundred and sixteen points! If only we'd had the foresight to invest ten minutes ago."

FIGURE 5.1

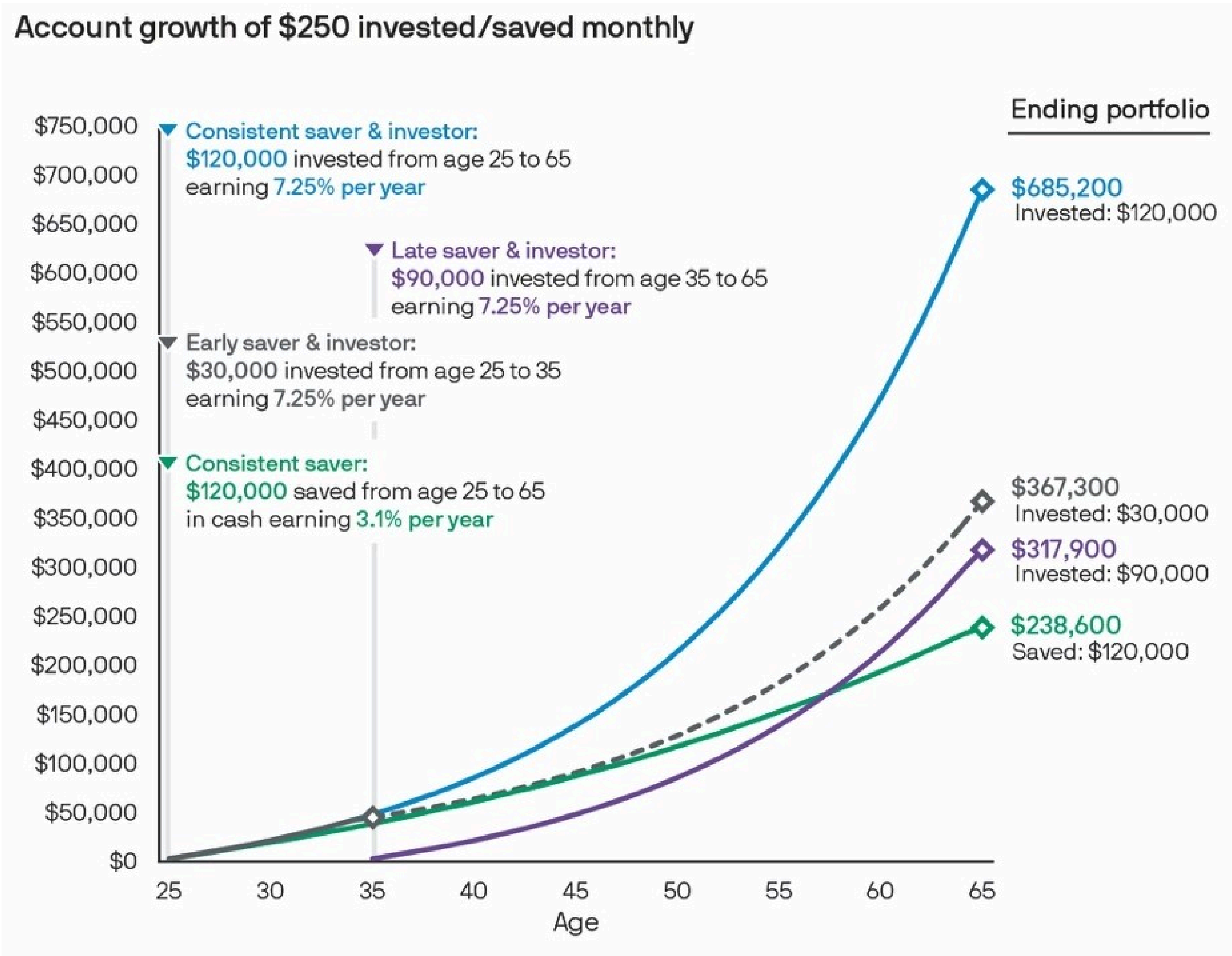

Account growth of $250 invested/saved monthly
Consistent saver & investor:
$120,000 invested from age 25 to 65
earning 7.25% per year
Late saver & investor:
$90,000 invested from age 35 to 65
earning 7.25% per year
Early saver & investor:
$30,000 invested from age 25 to 35
earning 7.25% per year
Consistent saver:
$120,000 saved from age 25 to 65
in cash earning 3.1% per year
Ending portfolio
$685,200
Invested: $120,000
$367,300
Invested: $30,000
$317,900
Invested: $90,000
$238,600
Saved: $120,000
$750,000
$700,000
$650,000
$600,000
$550,000
$500,000
$450,000
$400,000
$350,000
$300,000
$250,000
$200,000
$150,000
$100,000
$50,000
$0
25
30
35
40
45
50
55
60
65
Age

FIGURE 5.2

Future Value of $1,000 invested (annual compounding)

Years	5% Return	7% Return	10% Return	12% Return
5	$1,276	$1,403	$1,611	$1,762
10	$1,629	$1,967	$2,594	$3,106
15	$2,079	$2,759	$4,177	$5,474
20	$2,653	$3,870	$6,727	$9,646
25	$3,386	$5,427	$10,835	$17,000
30	$4,322	$7,612	$17,450	$29,960

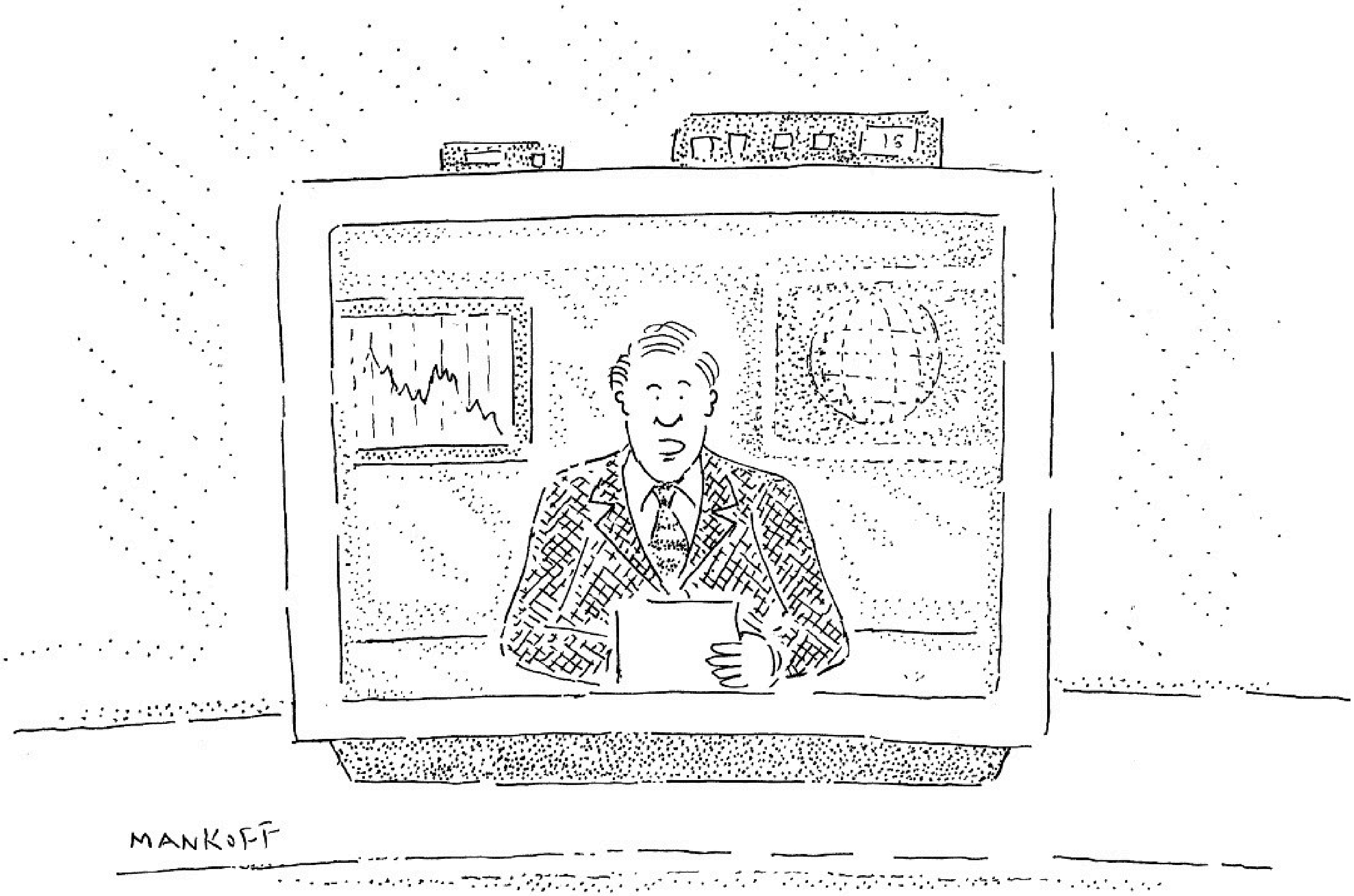
FIGURE 6.1

Cumulative Price Change by Category — Jan 2000 to Dec 2025

Category	Cumulative Increase	Avg Annualized Rate
Hospital Services	281%	5.28%
Tuition and Fees	196%	4.27%
Childcare	158%	3.71%
Healthcare (Overall)	130%	3.26%
Housing	111%	2.92%
All U.S. Items (Headline CPI)	92%	2.54%

Source: Bureau of Labor Statistics (CPI-U)

FIGURE 7.1



"Bad news on Wall Street today, as the bottom fell out of the market, the sides collapsed, and the top blew away."

FIGURE 7.2

Investment Period	% of Time Stocks Were Positive
1-Year Periods	~75%
5-Year Periods	~87%
10-Year Periods	~94%
20-Year Periods	100%

Source: NYU Stern School of Business / S&P 500 data

FIGURE 7.3

Major S&P 500 Declines—and Their Recoveries

Date Range	Event	S&P 500 Decline (Peak-to-Trough)	Recovery Time
Sep 1929–Jul 1932	Great Depression (Wall Street Crash)	~86–89%	~25 years (until Nov 1954)
Mar 1937–Apr 1942	"Roosevelt Recession" 1937–1938 and early stages of WWII	~50–60%	~5 years
Jan 1973–Oct 1974	OPEC Oil Embargo, Vietnam War, Watergate	~48%	~6 years (until Jul 1980)
Aug 1980–Aug 1982	Stagflation (High inflation/interest rates)	~27%	Rapid recovery
Oct 1987–Dec 1987	1987 Market Crash (Includes Black Monday)	~33%	~19 months
Mar 2000–Oct 2002	Dot-com Bubble Burst	~49%	~7 years (until May 2007)
Oct 2007–Mar 2009	Global Financial Crisis (Subprime mortgages)	~55%	~5 years (until Mar 2013)
Feb 2020–Mar 2020	COVID-19 Pandemic	~34%	Within 5 Months.

Date Range	Event	S&P 500 Decline (Peak-to-Trough)	Recovery Time
Jan 2022–Oct 2022	Interest Rate Hikes, Russia Invades Ukraine, FTX Collapse	-24.5%	Recovered in ~1 year 3 months
Feb 2025–Apr 2025	Global Tariff announcements	-19%	Recovered in less than 3 months

FIGURE 7.4

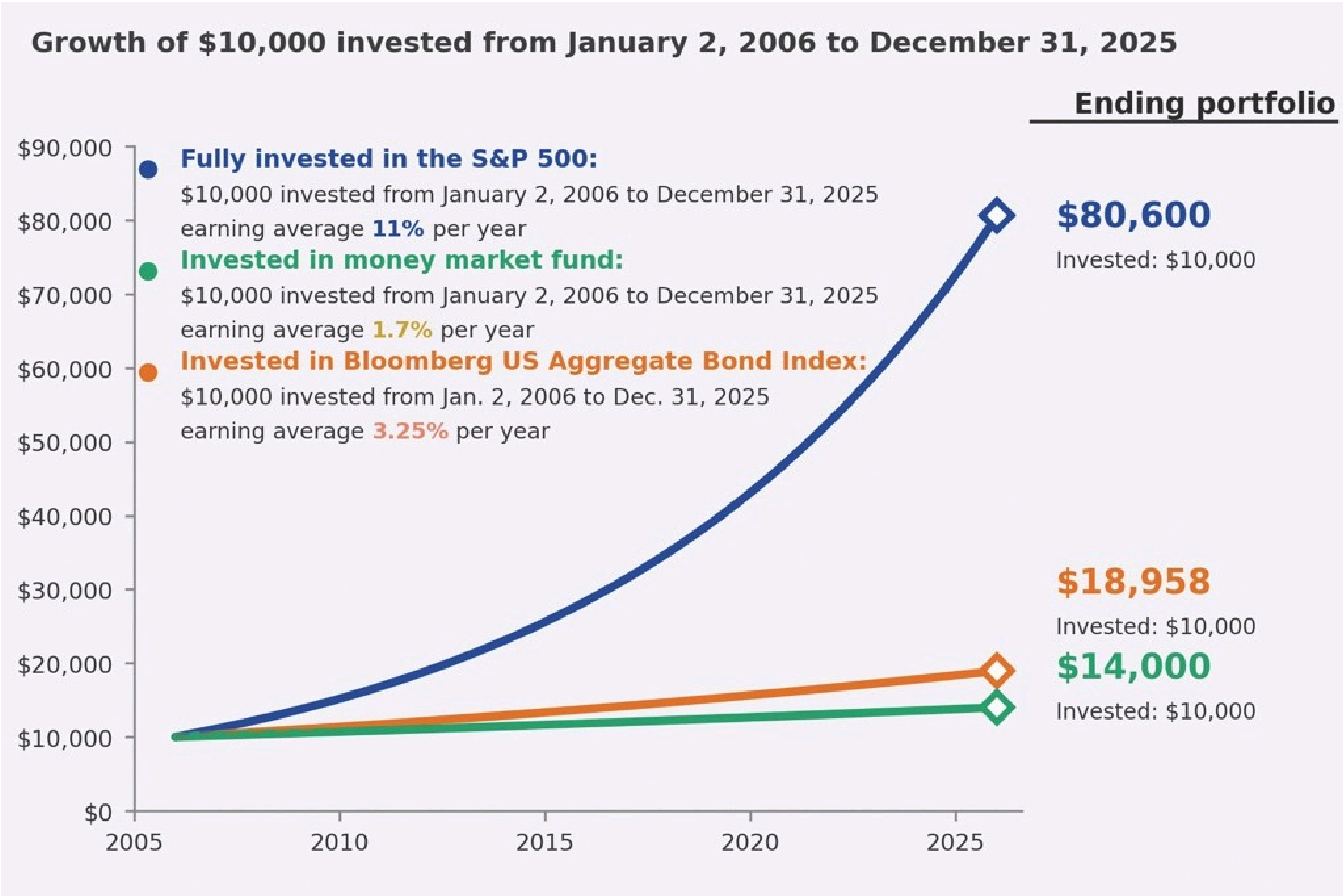

Growth of $10,000 invested from January 2, 2006 to December 31, 2025
Ending portfolio
Fully invested in the S&P 500:
$10,000 invested from January 2, 2006 to December 31, 2025
earning average 11% per year
Invested in money market fund:
$10,000 invested from January 2, 2006 to December 31, 2025
earning average 1.7% per year
Invested in Bloomberg US Aggregate Bond Index:
$10,000 invested from Jan. 2, 2006 to Dec. 31, 2025
earning average 3.25% per year
$80,600
Invested: $10,000
$18,958
Invested: $10,000
$14,000
Invested: $10,000
$90,000
$80,000
$70,000
$60,000
$50,000
$40,000
$30,000
$20,000
$10,000
$0
2005
2010
2015
2020
2025

FIGURE 7.5

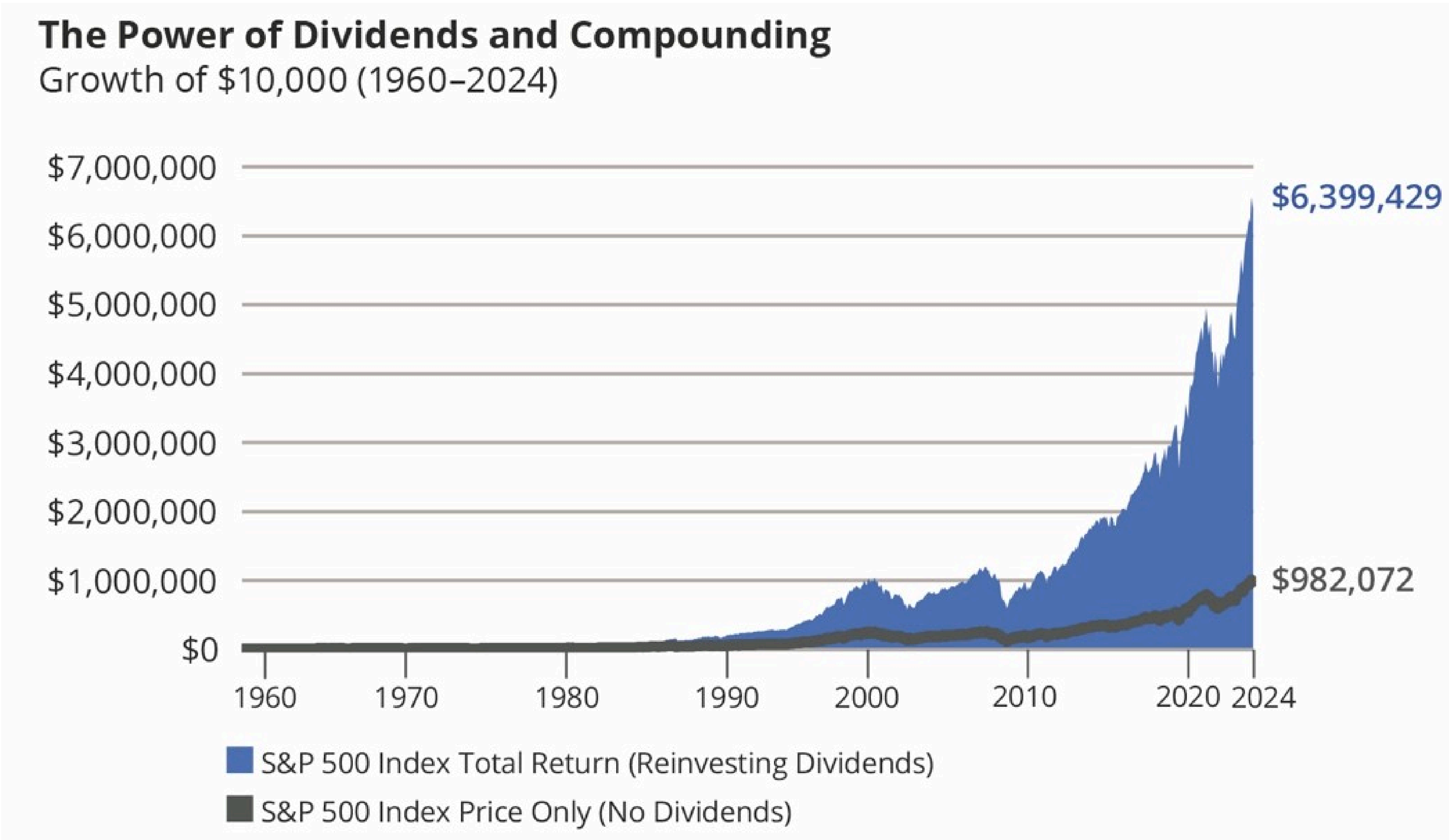

The Power of Dividends and Compounding
Growth of $10,000 (1960–2024)
$7,000,000
$6,000,000
$5,000,000
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$0
$6,399,429
$982,072
1960
1970
1980
1990
2000
2010
2020
2024
S&P 500 Index Total Return (Reinvesting Dividends)
S&P 500 Index Price Only (No Dividends)

FIGURE 7.6

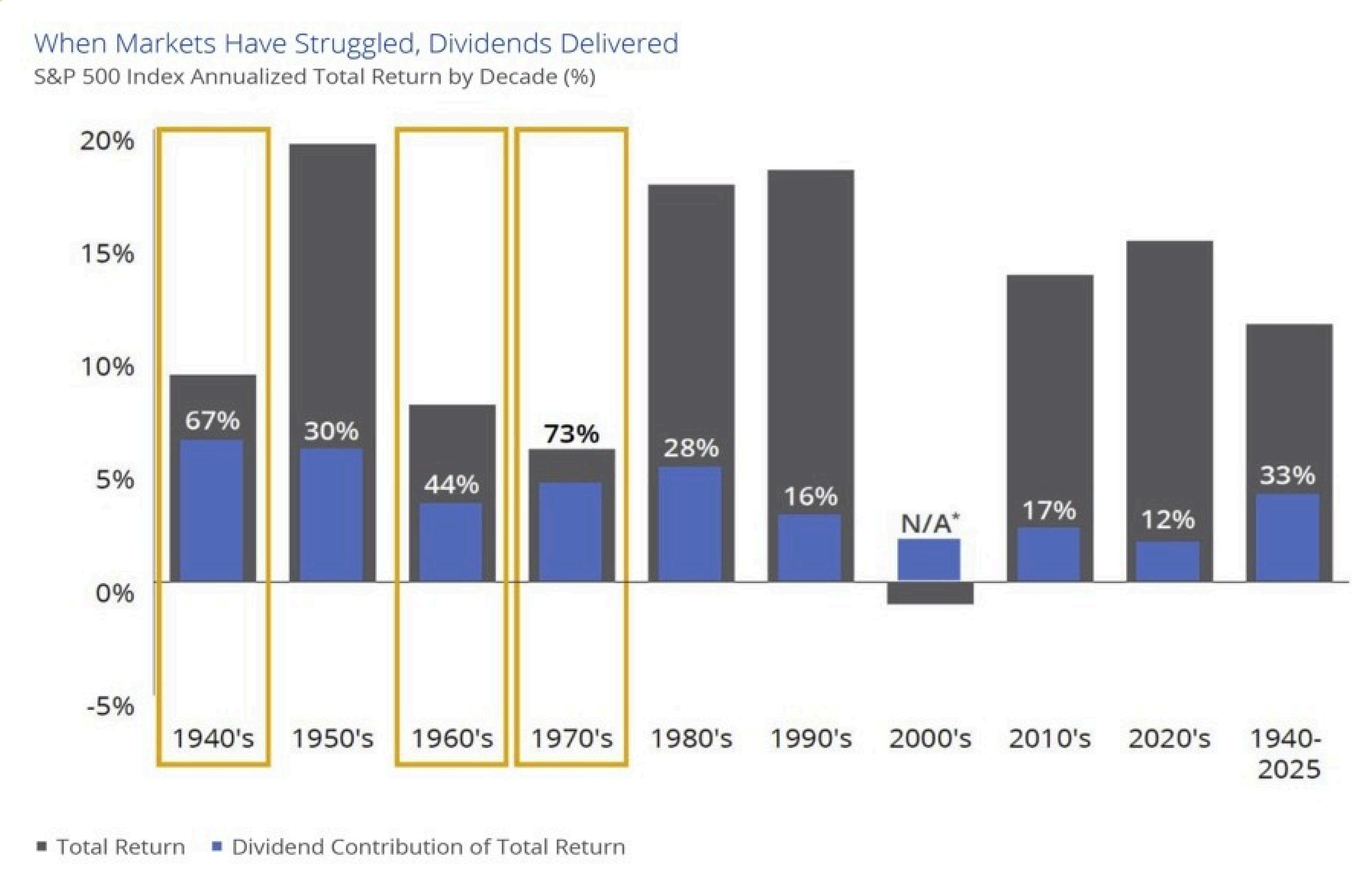

When Markets Have Struggled, Dividends Delivered
S&P 500 Index Annualized Total Return by Decade (%)
20%
15%
10%
5%
0%
-5%
67%
30%
44%
73%
28%
16%
N/A*
17%
12%
33%
1940's
1950's
1960's
1970's
1980's
1990's
2000's
2010's
2020's
1940-2025
Total Return
Dividend Contribution of Total Return

FIGURE 8.1

Bonds vs. Stocks: Key Differences

Feature	Stocks	Bonds
Ownership	Partial ownership of a company	You are a creditor to a company or government
Returns	Capital gains + dividends	Fixed interest payments
Short-Term Risk	Higher volatility	Lower (especially gov't and short-term bonds)
Long-Term Risk	Declines as time horizon increases	Year-to-year volatility low, but risk of lagging inflation is higher
Return Potential	Higher	Lower
Priority in Bankruptcy	Paid last	Paid first (before stockholders)

FIGURE 8.2

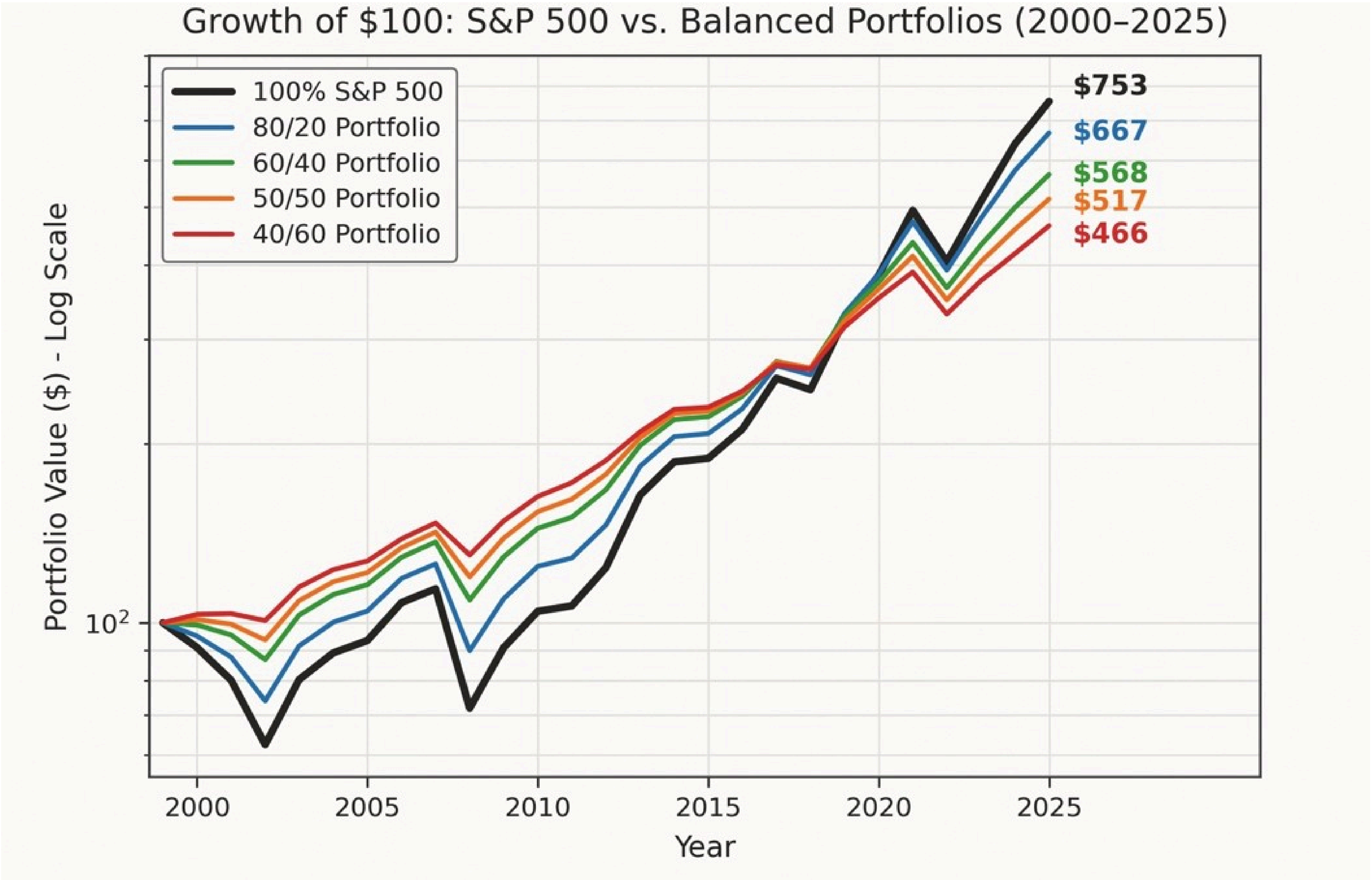

Growth of $100: S&P 500 vs. Balanced Portfolios (2000–2025)
100% S&P 500
80/20 Portfolio
60/40 Portfolio
50/50 Portfolio
40/60 Portfolio
$753
$667
$568
$517
$466
Portfolio Value ($) - Log Scale
10²
2000
2005
2010
2015
2020
2025
Year

FIGURE 10.1

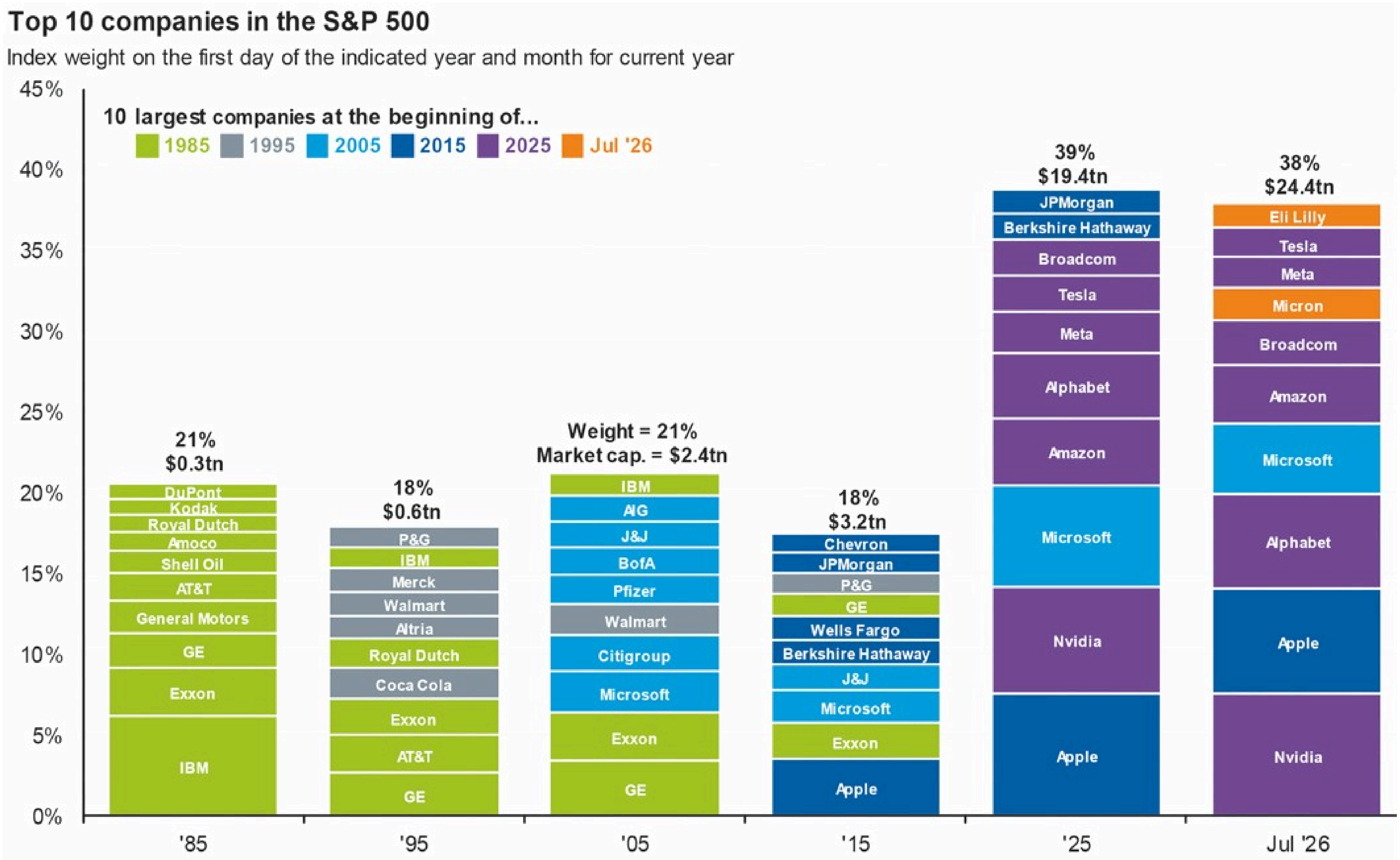

Top 10 companies in the S&P 500
Index weight on the first day of the indicated year and month for current year
10 largest companies at the beginning of...
1985 1995 2005 2015 2025 Jul '26
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
21%
$0.3tn
DuPont
Kodak
Royal Dutch
Amoco
Shell Oil
AT&T
General Motors
GE
Exxon
IBM
18%
$0.6tn
P&G
IBM
Merck
Walmart
Altria
Royal Dutch
Coca Cola
Exxon
AT&T
GE
Weight = 21%
Market cap. = $2.4tn
IBM
AIG
J&J
BofA
Pfizer
Walmart
Citigroup
Microsoft
Exxon
GE
18%
$3.2tn
Chevron
JPMorgan
P&G
GE
Wells Fargo
Berkshire Hathaway
J&J
Microsoft
Exxon
Apple
39%
$19.4tn
JPMorgan
Berkshire Hathaway
Broadcom
Tesla
Meta
Alphabet
Amazon
Microsoft
Nvidia
Apple
38%
$24.4tn
Eli Lilly
Tesla
Meta
Micron
Broadcom
Amazon
Microsoft
Alphabet
Apple
Nvidia
'85
'95
'05
'15
'25
Jul '26

FIGURE 10.2

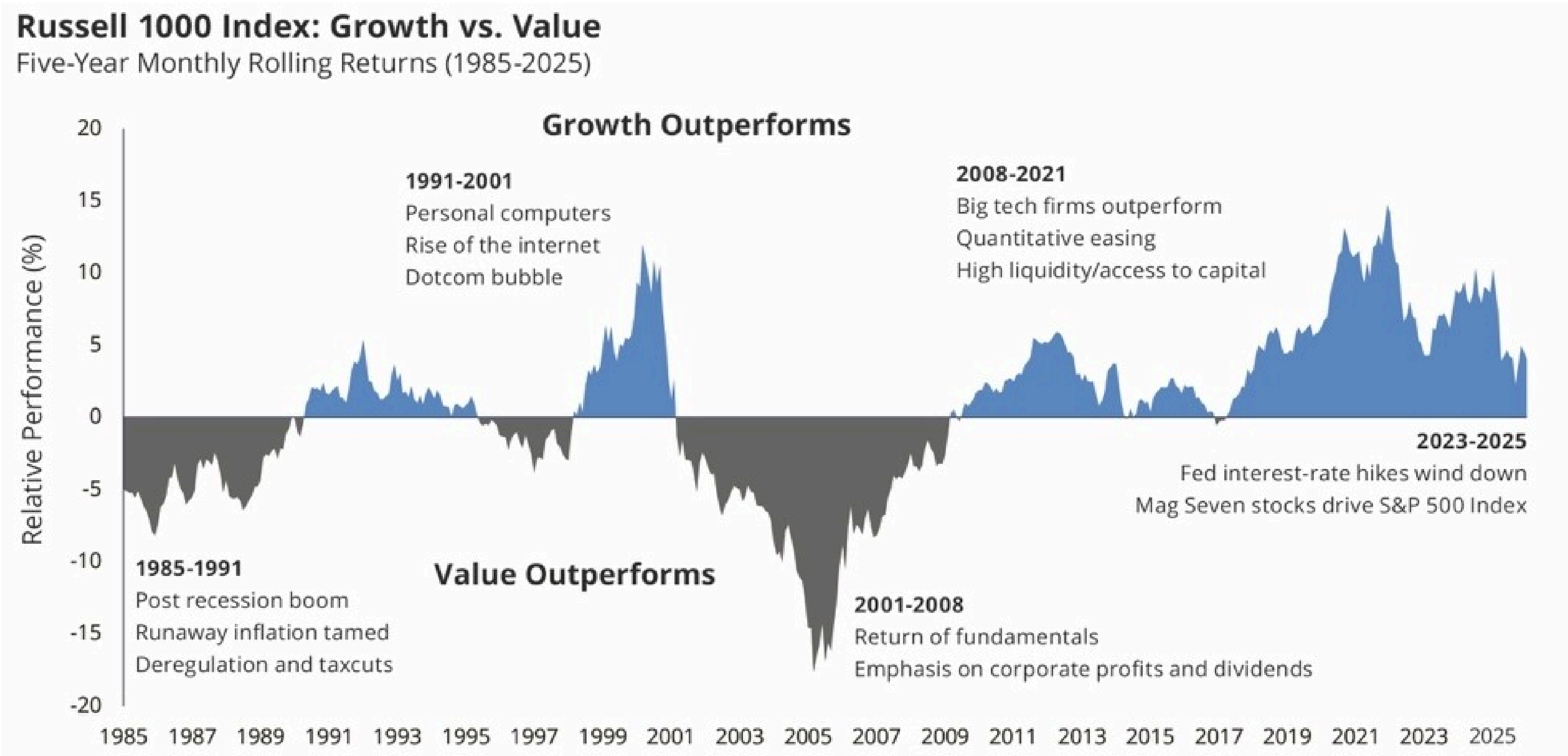

Russell 1000 Index: Growth vs. Value
Five-Year Monthly Rolling Returns (1985-2025)
Growth Outperforms
Value Outperforms
Relative Performance (%)
20
15
10
5
0
-5
-10
-15
-20
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023
2025
1991-2001
Personal computers
Rise of the internet
Dotcom bubble
2008-2021
Big tech firms outperform
Quantitative easing
High liquidity/access to capital
2023-2025
Fed interest-rate hikes wind down
Mag Seven stocks drive S&P 500 Index
1985-1991
Post recession boom
Runaway inflation tamed
Deregulation and taxcuts
2001-2008
Return of fundamentals
Emphasis on corporate profits and dividends

FIGURE 12.1

Category	Market Cap Range (approximate)
Large Cap	$10 billion and above
Mid Cap	$2 billion to $10 billion
Small Cap	$250 million to $2 billion
Micro Cap	Below $250 million

FIGURE 13.1

U.S. vs. International Stocks–Leadership Cycles (1950–2025)

Time Period	Market Leader	Notes
1950–1970	U.S. Stocks	Post-war boom, dollar dominance, strong U.S. innovation
1971–1989	International Stocks	Japanese & European resurgence, falling dollar, global growth
1990–2009	Mixed (Int'l led 2000s)	1990s = U.S. tech boom; 2000s = emerging markets surge
2010–2021	U.S. Stocks	Dominance of Big Tech, strong dollar, S&P 500 strength

FIGURE 13.1 · CONTINUED

Time Period	Market Leader	Notes
2022–2025	Early signs of rotation	EM/Europe begin closing valuation gap, U.S. growth moderates

FIGURE 13.2

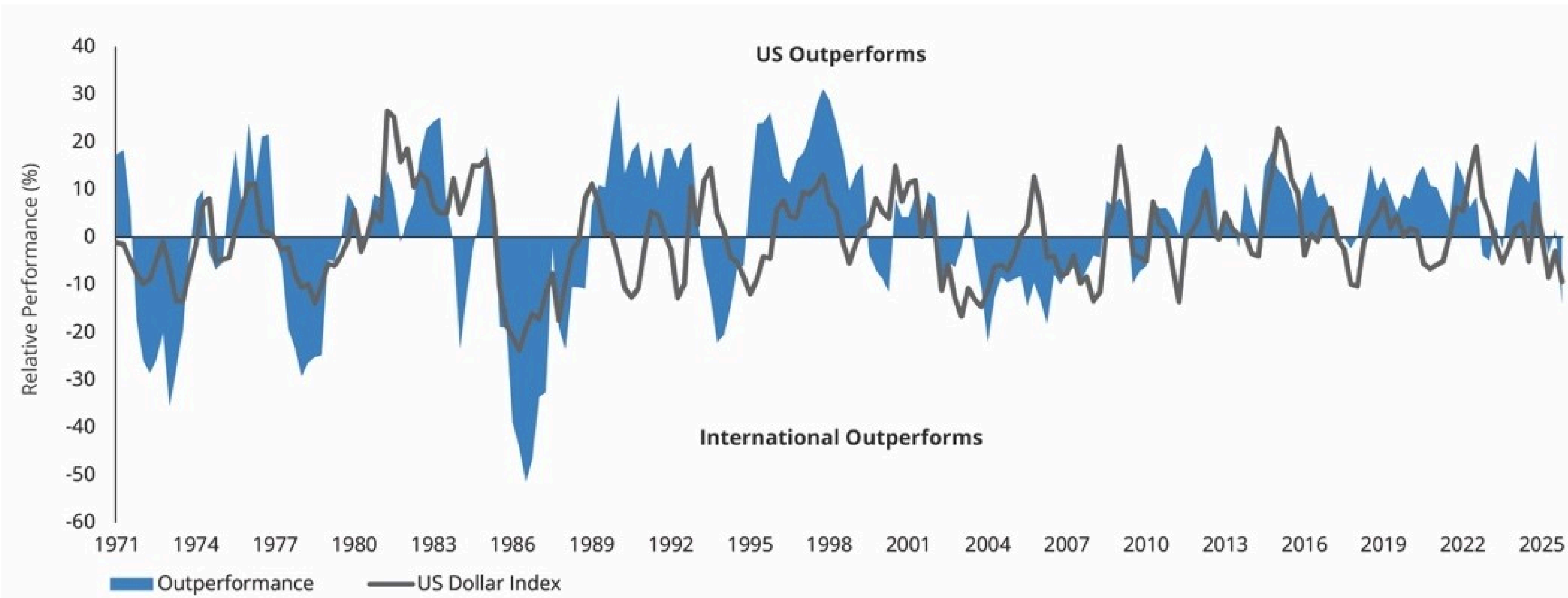

US Outperforms
International Outperforms
Relative Performance (%)
40
30
20
10
0
-10
-20
-30
-40
-50
-60
1971
1974
1977
1980
1983
1986
1989
1992
1995
1998
2001
2004
2007
2010
2013
2016
2019
2022
2025
Outperformance
US Dollar Index

FIGURE 14.1

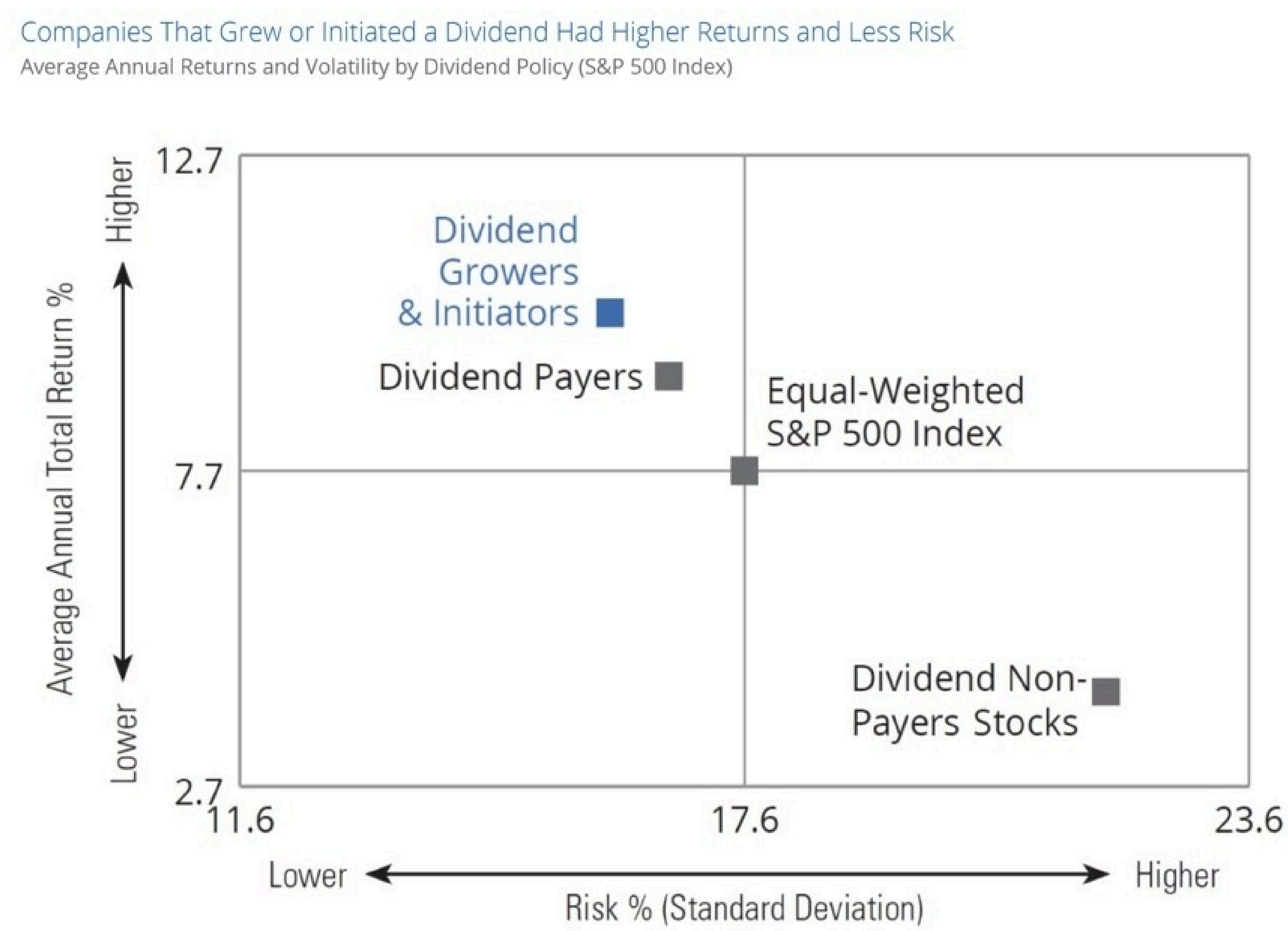

Companies That Grew or Initiated a Dividend Had Higher Returns and Less Risk
Average Annual Returns and Volatility by Dividend Policy (S&P 500 Index)
Average Annual Total Return %
Higher
Lower
12.7
7.7
2.7
11.6
17.6
23.6
Dividend Growers & Initiators
Dividend Payers
Equal-Weighted S&P 500 Index
Dividend Non-Payers Stocks
Lower
Higher
Risk % (Standard Deviation)

FIGURE 14.2

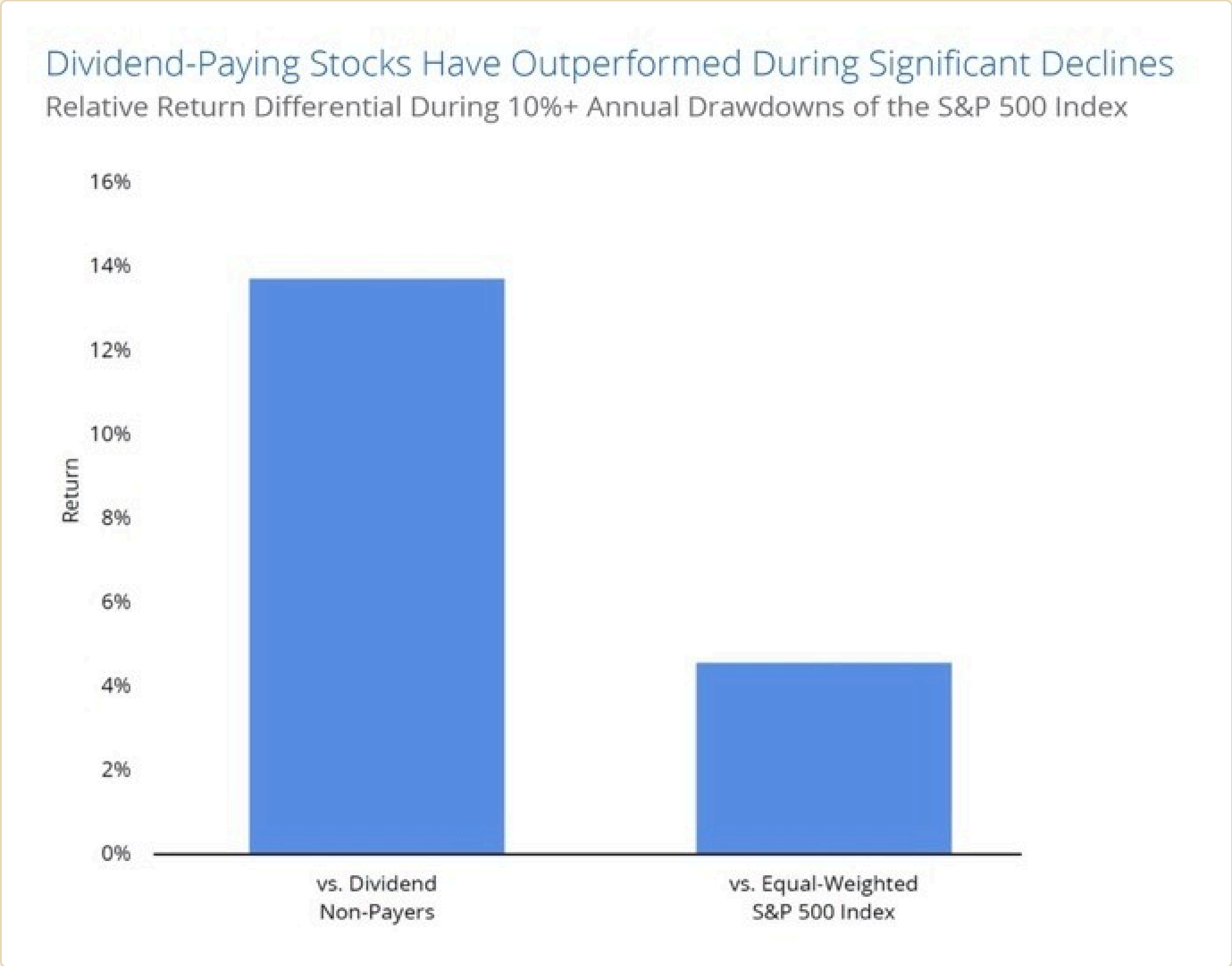

Dividend-Paying Stocks Have Outperformed During Significant Declines
Relative Return Differential During 10%+ Annual Drawdowns of the S&P 500 Index
16%
14%
12%
10%
8%
6%
4%
2%
0%
Return
vs. Dividend Non-Payers
vs. Equal-Weighted S&P 500 Index

FIGURE 14.3

Bonds vs. Dividend Stocks: The Retirement Showdown

Feature	Bonds	Dividend Stocks
Starting income	Fixed	Variable (but often higher)
Income growth	None	5–7% annually (typical)
Inflation protection	Poor	Moderate to strong
Principal volatility	Low (held to maturity)	Moderate (market-based)
Long-term return potential	Low to moderate	Moderate to high

FIGURE 15.1

	Initial Amount ($)	Final Amount ($)	Total Return (%)	Annualized (%)
Couch Potato (Scott Burns)	$1	$42.97	4,197.20%	9.50%

FIGURE 15.2

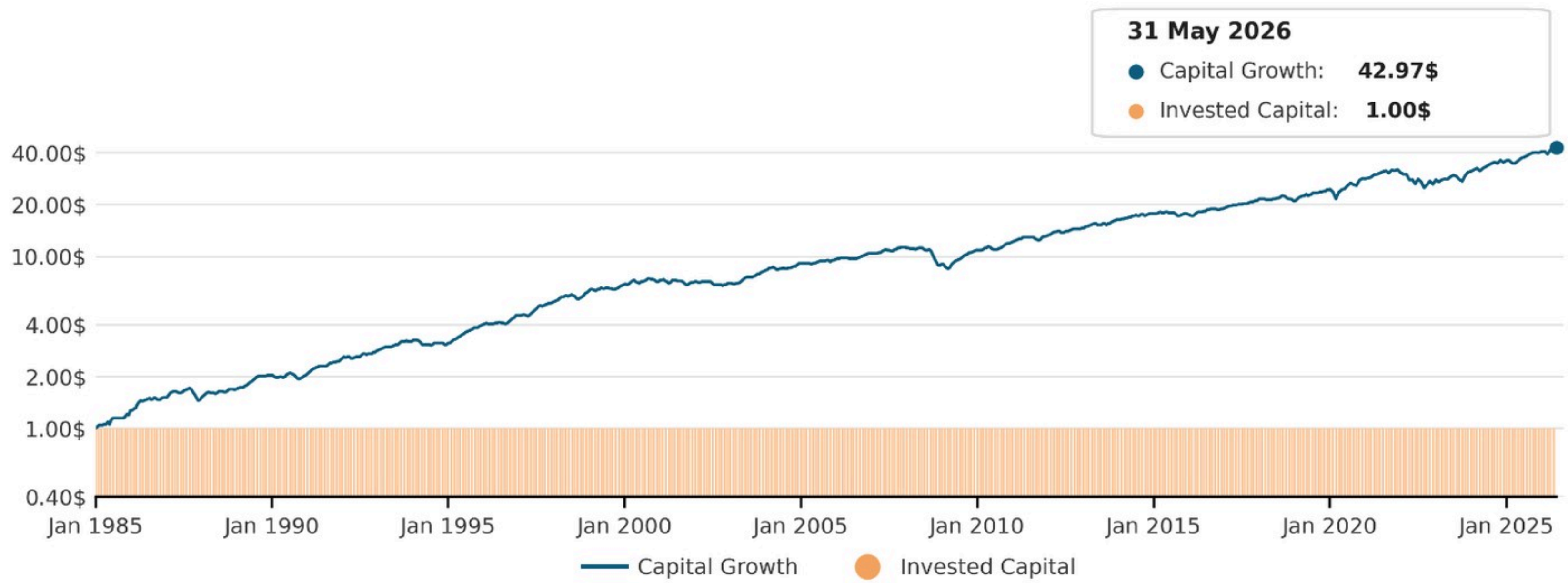

31 May 2026
Capital Growth: 42.97$
Invested Capital: 1.00$
40.00$
20.00$
10.00$
4.00$
2.00$
1.00$
0.40$
Jan 1985
Jan 1990
Jan 1995
Jan 2000
Jan 2005
Jan 2010
Jan 2015
Jan 2020
Jan 2025
Capital Growth
Invested Capital

FIGURE 15.3

	YTD (5M)	1M	6M	1Y	5Y	10Y	30Y	MAX (~41Y)
Investment Return	6.58	2.74	6.25	16.89	6.97	8.92	8.11	9.50
U.S. Inflation-Adjusted Return	4.54	2.74	3.89	12.74	2.49	5.40	5.42	6.51

FIGURE 16.1

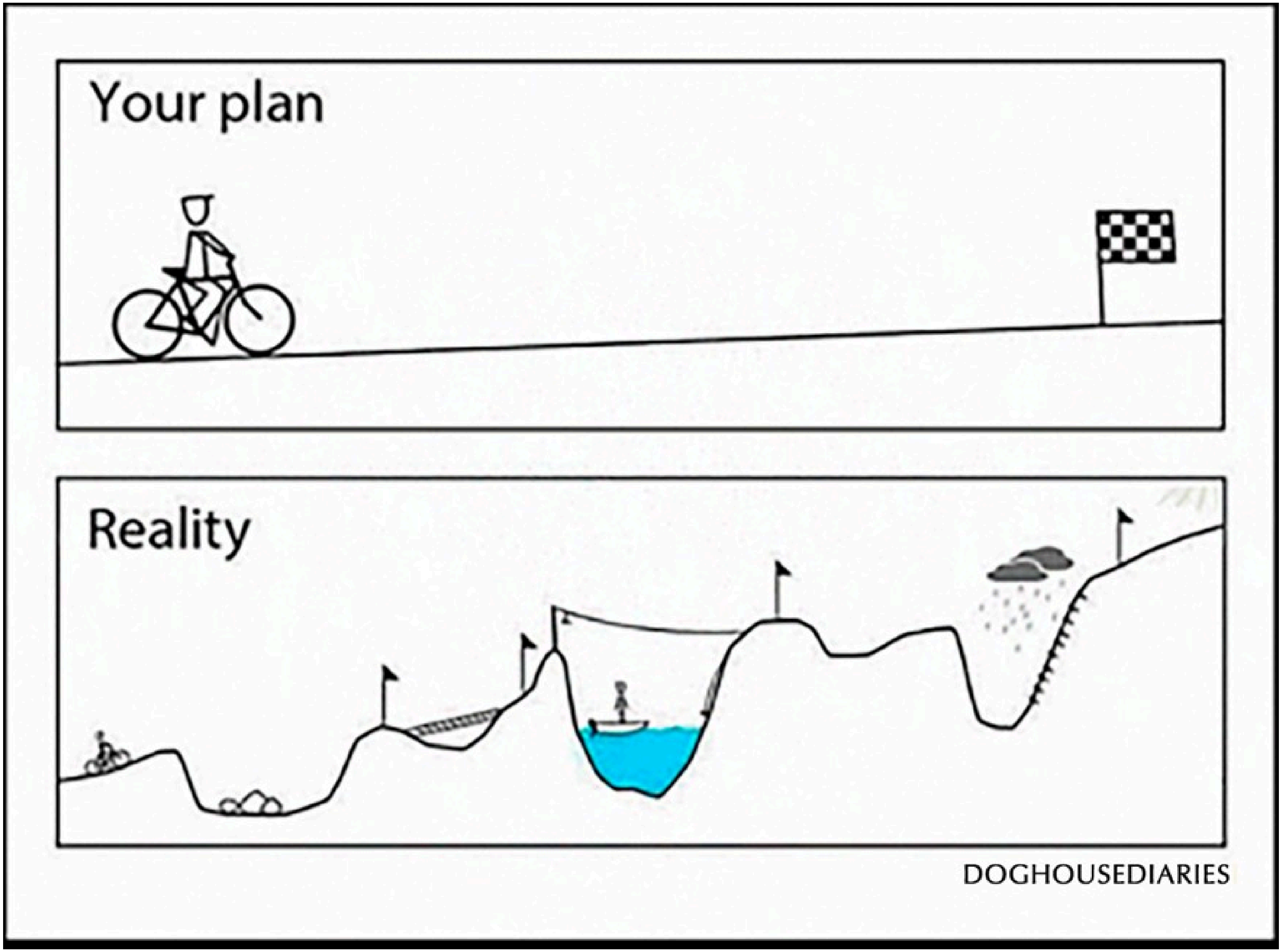


FIGURE 18.1

Feature	Mutual Fund	ETF
Trading	Once per day (after close)	Intraday, like a stock
Pricing	End-of-day NAV	Market price (can vary slightly)
Minimum investment	Often $1,000+	As low as one share
Transparency	Periodic holdings disclosure	Usually daily holdings
Tax Efficiency	Often distributes capital gains annually—even if you did not sell—resulting in a tax bill whether you like it or not.	Typically avoids realizing gains through in-kind redemptions. You likely won't pay capital gains until you sell your position. (A significant advantage.)
Fees	Often higher	Generally lower

FIGURE 18.2

Investment Type	Annual Fee	Value After 30 Years	Total Cost of Fees	Difference vs. ETF
Low-Cost ETF	0.05%	$750,626	~$10,599	—
Index Mutual Fund	0.30%	$699,733	~$61,492	-$50,893
Active Mutual Fund	1.00%	$574,349	~$186,876	-$176,277

FIGURE 19.1

FIGURE 19.2

Asset Class	ETF Example (Ticker)	Allocation
Dividend Stock Fund	VYM or SCHD or SDY	20%
Large Cap Core	VOO	12%
International Stocks	VEA	8%
Short-Term Corp Bonds	VCSH / IGSB	40%
Intermediate Corp Bonds	SPIB	20%

FIGURE 19.3

Asset Class	ETF Example (Ticker)	Allocation
Large Cap Equity	VOO, VTV and IWF, VYM	39%
Small & Mid Cap	VO and IJR	9%
International Stocks	VEA, VWO	12%
Short-Term Corp Bonds	VCSH / IGSB	27%
Intermediate Corp Bonds	SPIB	13%

Asset Class	ETF Example (Ticker)	Allocation
Large Cap Equity	VOO, VTV and IWF, VYM	55%–65%
Small & Mid Cap	VO and IJR	10%–15%
International Stocks	VEA, VWO	15%–20%
Short-Term Corp Bonds	VCSH / IGSB	0–20%

FIGURE 20.1

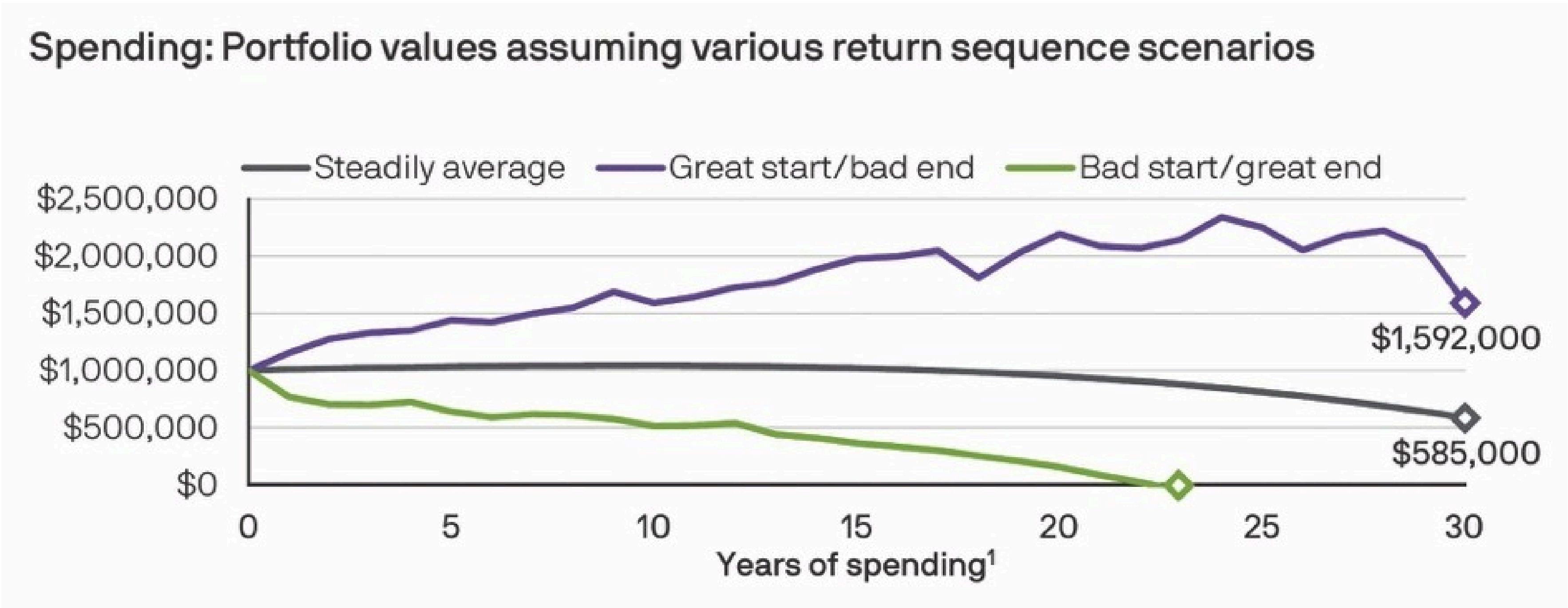

Spending: Portfolio values assuming various return sequence scenarios
Steadily average
Great start/bad end
Bad start/great end
$2,500,000
$2,000,000
$1,500,000
$1,000,000
$500,000
$0
$1,592,000
$585,000
0
5
10
15
20
25
30
Years of spending[1]

FIGURE 20.2

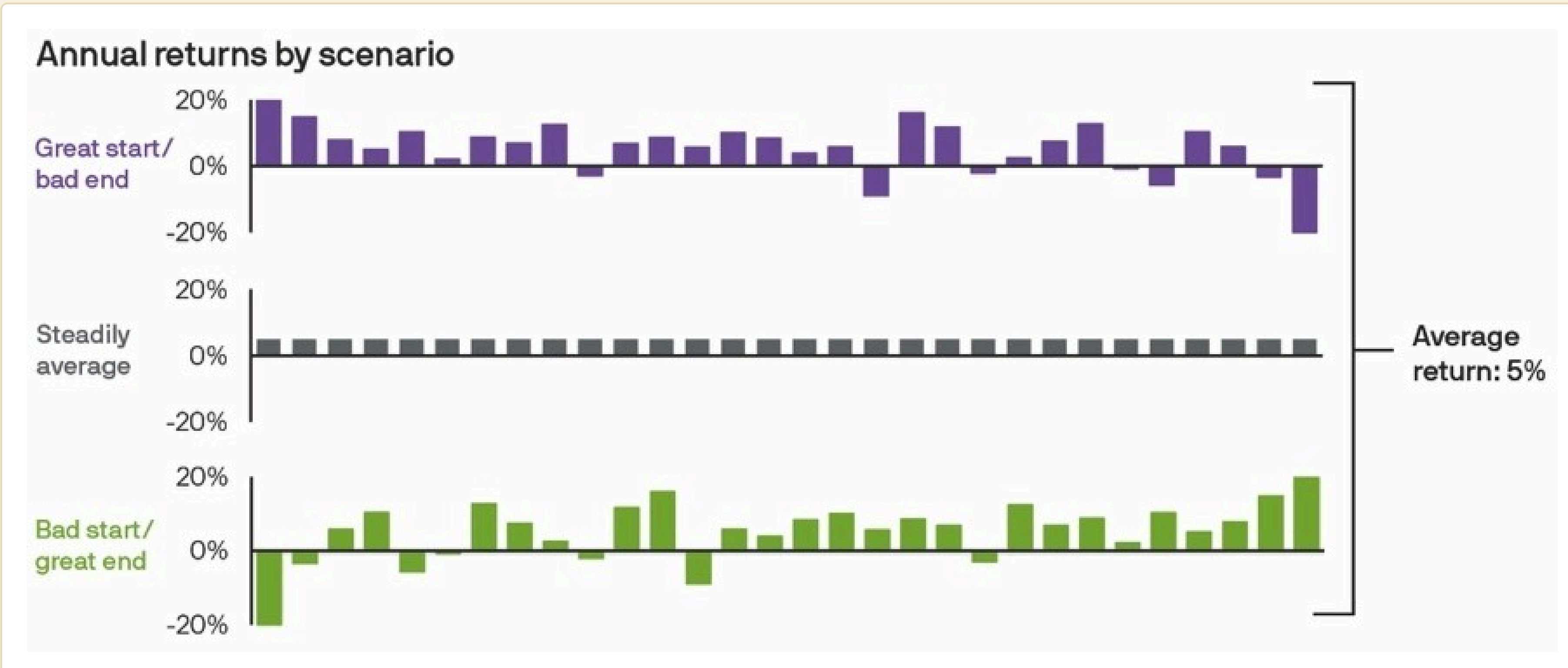

Annual returns by scenario
20%
Great start/
bad end
0%
-20%
20%
Steadily
average
0%
-20%
20%
Bad start/
great end
0%
-20%
Average
return: 5%

FIGURE 22.1

"News that a meteor would destroy the earth in 48 hours sent the stock market sharply lower today, before it rebounded on rumors that the discount rate would be cut again."

FIGURE 22.2

Market Event	Max Decline	Recovery Timeline	% Gain 1 Year After Bottom
Black Monday (1987)	-33%	2 years	+23%
Tech Crash (2000–2002)	-49%	7 years	+33%
Financial Crisis (2007–2009)	-55%	4.5 years	+68%
COVID Crash (2020)	-34%	5 months	+75%

FIGURE 22.3


Missing the Market's Best Days in 2025 Was Costly
S&P 500 Index Average Annual Total Returns
17.88%
57% Decrease
7.64%
76% Decrease
4.23%
91% Decrease
1.67%
103% Decrease
-0.46%
Fully Invested
Missing the Best Day
Missing the Two Best Days
Missing the Three Best Days
Missing the Four Best Days
Past performance does not guarantee future results. For illustrative purposes only. Investors cannot invest directly in indices. Data Sources: Ned Davis Research, Morningstar, and Hartford Funds, 1/26.

FIGURE 22.4


AND HERE'S TED WITH HIS, ALWAYS ACCURATE, POST-MARKET PREDICTIONS.
BUSINESS NEWS
Dave Carpenter

FIGURE 23.1

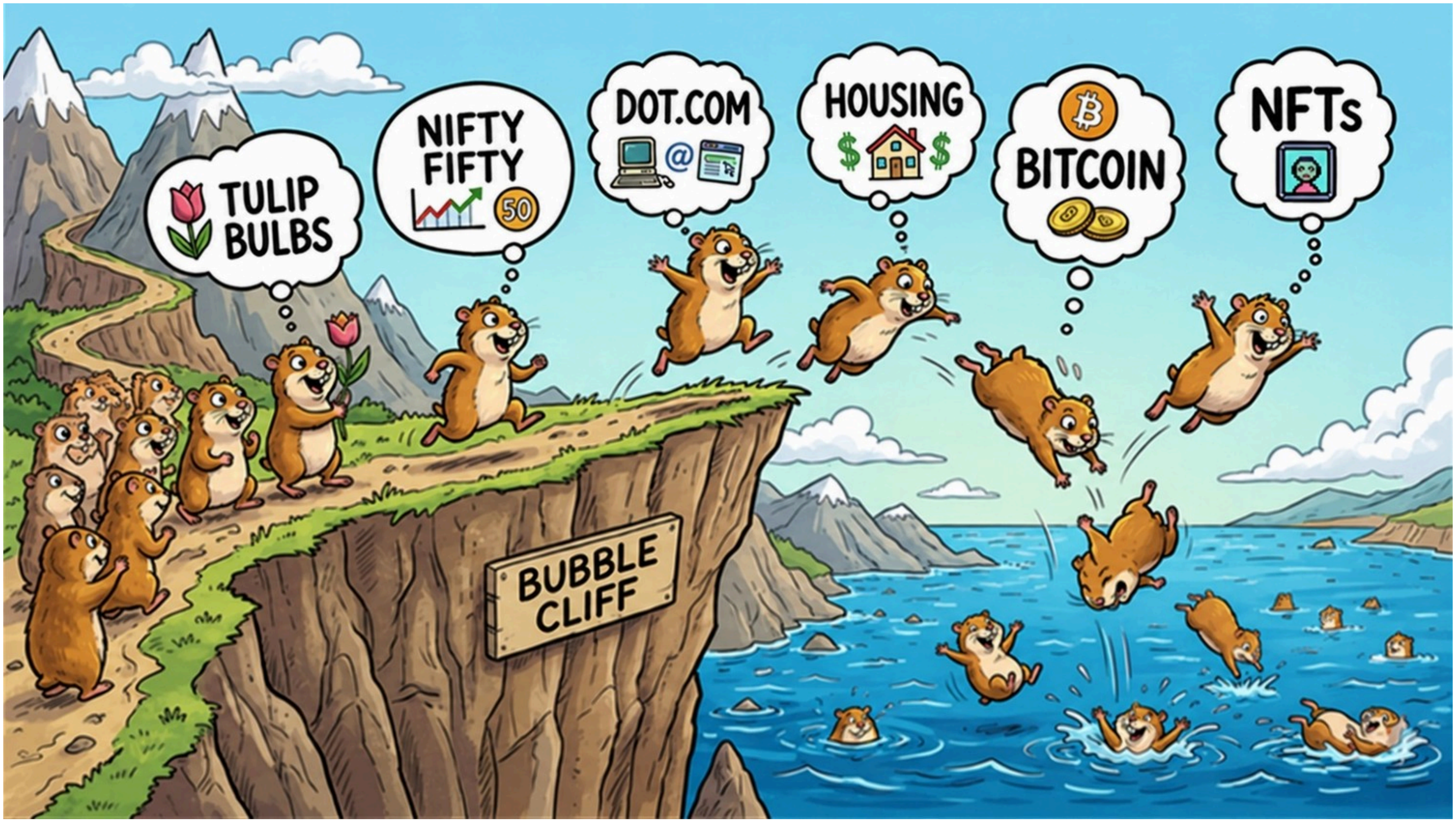

TULIP BULBS
NIFTY FIFTY
50
DOT.COM
@
HOUSING
$
$
BITCOIN
NFTs
BUBBLE CLIFF

FIGURE 23.2

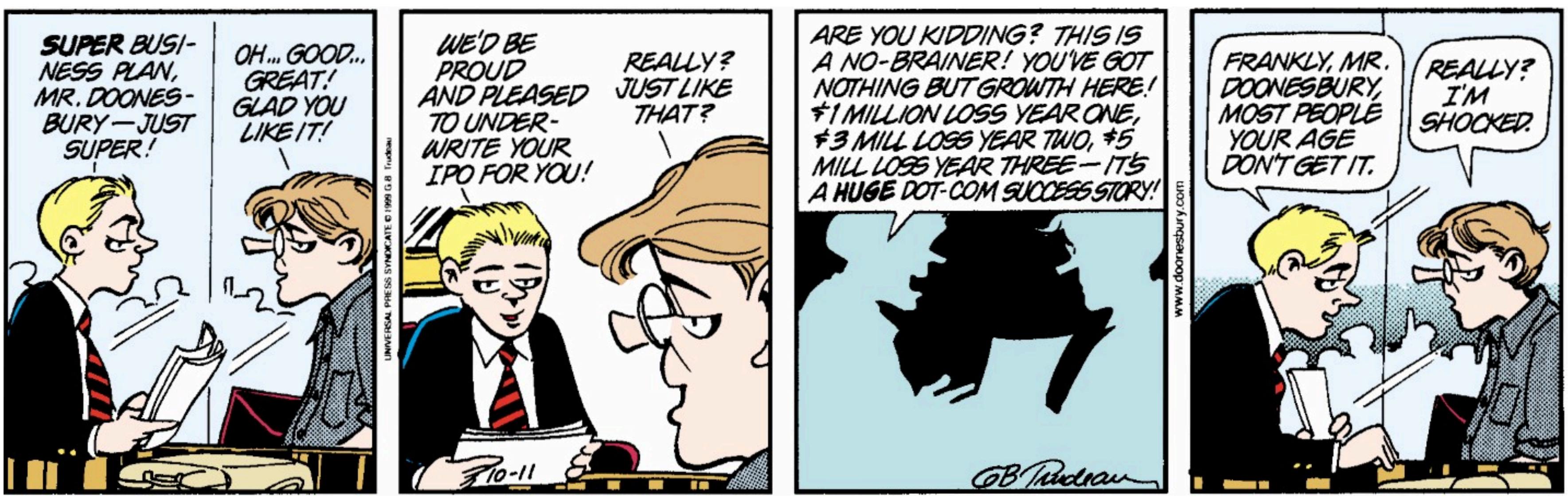

SUPER BUSINESS PLAN, MR. DOONESBURY — JUST SUPER!
OH... GOOD... GREAT! GLAD YOU LIKE IT!
UNIVERSAL PRESS SYNDICATE © 1999 G.B. Trudeau
WE'D BE PROUD AND PLEASED TO UNDERWRITE YOUR IPO FOR YOU!
REALLY? JUST LIKE THAT?
10-11
ARE YOU KIDDING? THIS IS A NO-BRAINER! YOU'VE GOT NOTHING BUT GROWTH HERE! $1 MILLION LOSS YEAR ONE, $3 MILL LOSS YEAR TWO, $5 MILL LOSS YEAR THREE — IT'S A HUGE DOT-COM SUCCESS STORY!
GB Trudeau
www.doonesbury.com
FRANKLY, MR. DOONESBURY, MOST PEOPLE YOUR AGE DON'T GET IT.
REALLY? I'M SHOCKED.

FIGURE 23.3

Common Bubble Trait	Description
"This time it's different"	Rationalizations for irrational prices
Overconfidence	Everyone believes they will get out in time
Celebrity or media hype	Endorsements, headlines, and social proof
Easy money & loose regulation	Little friction to invest; no oversight
Dismissal of risk	Investors stop asking "what could go wrong?"
Herd behavior	Fear of missing out replaces critical thinking
Narrative over fundamentals	Hype, not earnings or cash flow, drives decisions

FIGURE 23.4

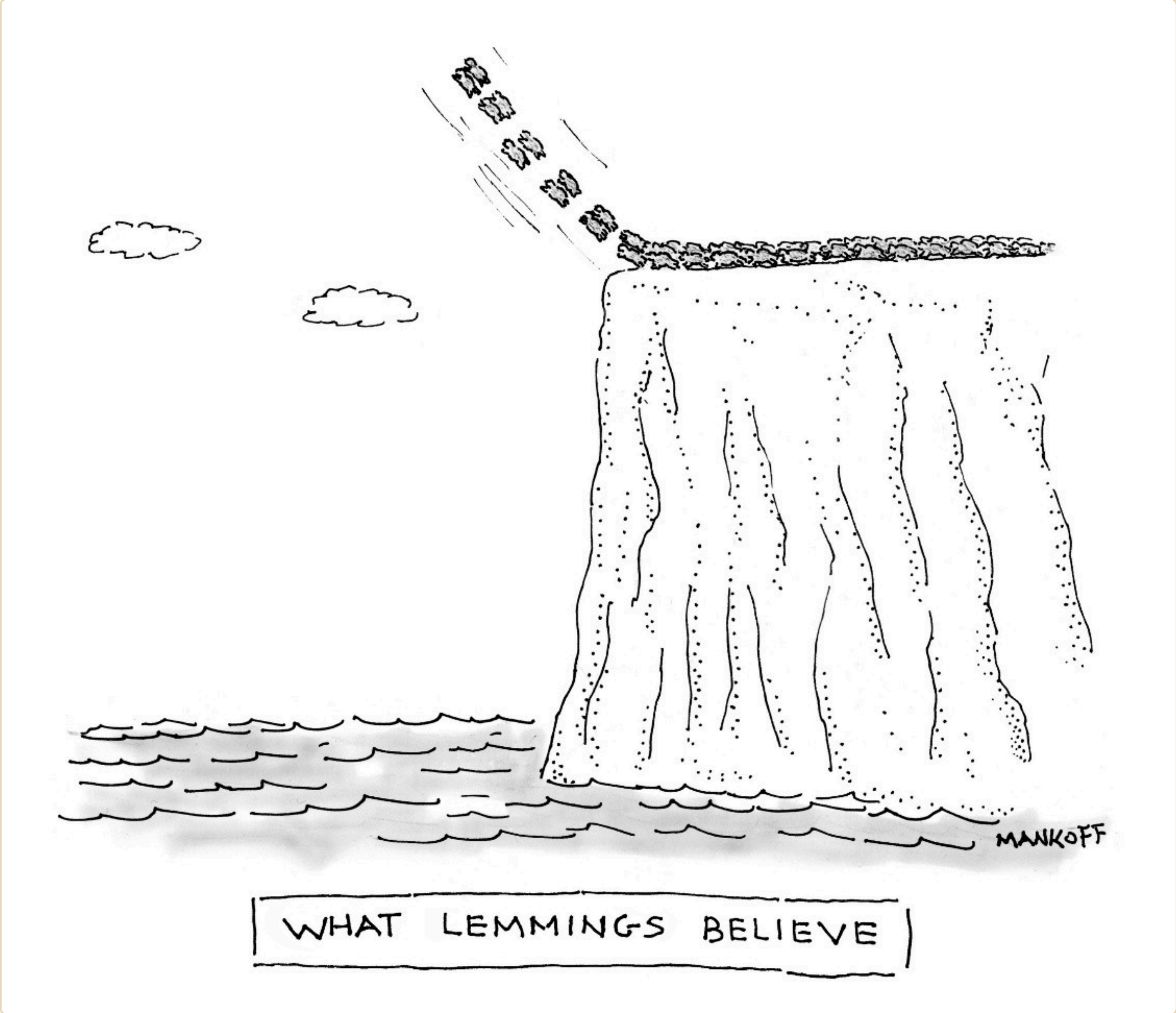


FIGURE 24.1

"Oh, I'm really sorry. I just placed three million with some broker who called five minutes ago."

FIGURE 25.1

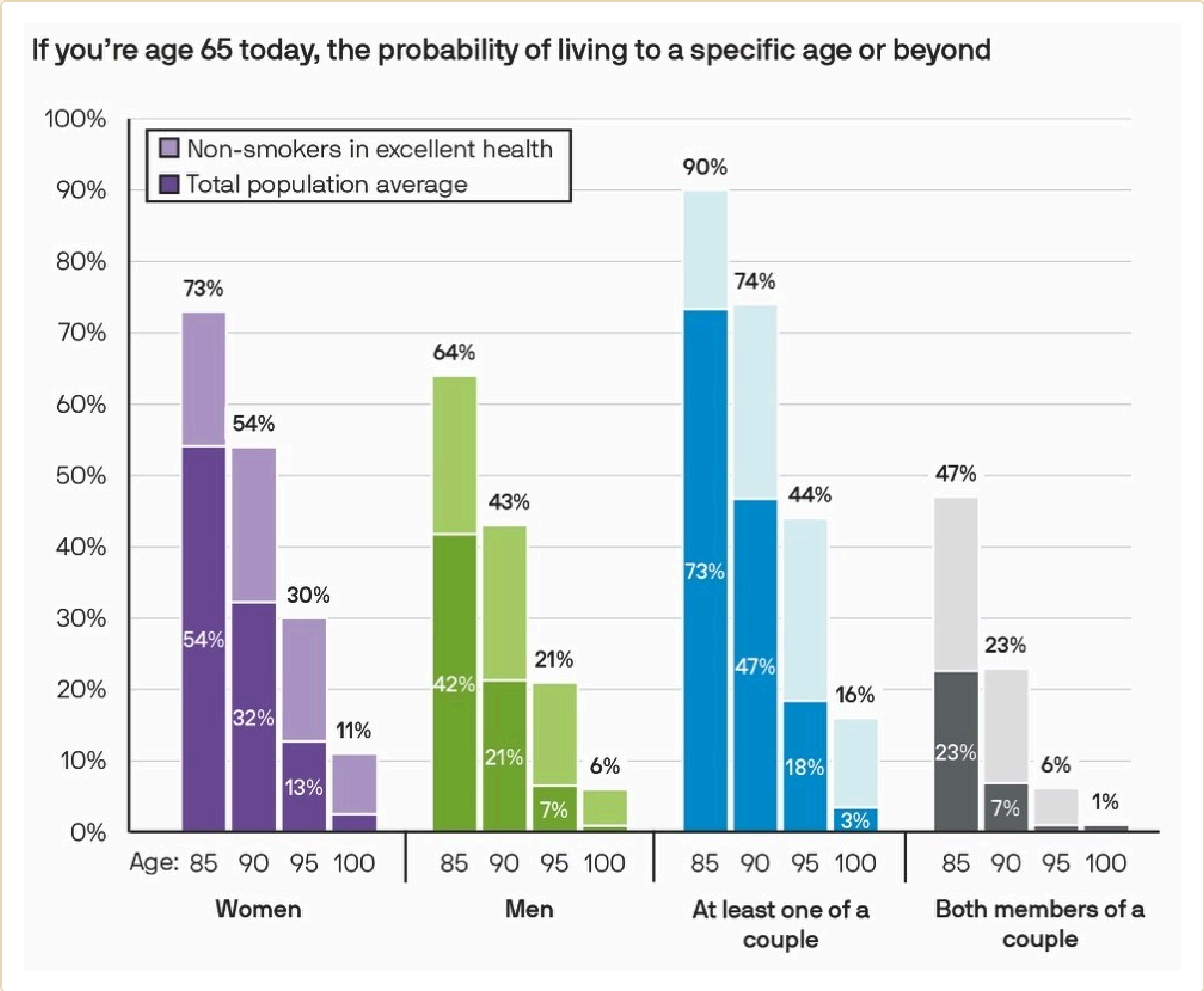
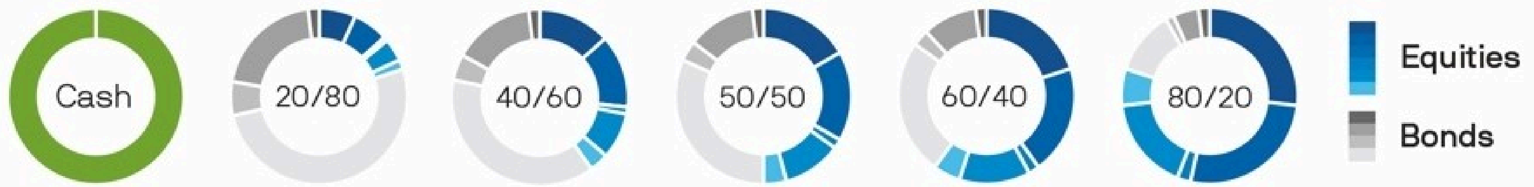

If you're age 65 today, the probability of living to a specific age or beyond
Non-smokers in excellent health
Total population average
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
73%
54%
54%
32%
30%
13%
11%
64%
42%
43%
21%
21%
7%
6%
90%
73%
74%
47%
44%
18%
16%
3%
47%
23%
23%
7%
6%
1%
Age: 85 90 95 100
Women
85 90 95 100
Men
85 90 95 100
At least one of a couple
85 90 95 100
Both members of a couple

FIGURE 25.2

Likelihood of success after 35 years in retirement

Various initial withdrawal rates and diversified asset allocations



Initial withdrawal rate	Cash	20/80	40/60	50/50	60/40	80/20
1%	95-100	95-100	95-100	95-100	95-100	95-100
2%	95-100	95-100	95-100	95-100	95-100	95-100
3%	95-100	95-100	95-100	95-100	95-100	95-100
4%	0-5	85-90	90-95	90-95	90-95	85-90
5%	0-5	45-50	60-65	65-70	65-70	70-75
6%	0-5	10-15	25-30	35-40	40-45	50-55
7%	0-5	0-5	10-15	15-20	20-25	30-35
8%	0-5	0-5	0-5	5-10	10-15	20-25
9%	0-5	0-5	0-5	0-5	5-10	10-15
10%	0-5	0-5	0-5	0-5	0-5	5-10

High Confidence

Medium Confidence

Low Confidence

FIGURE 25.3

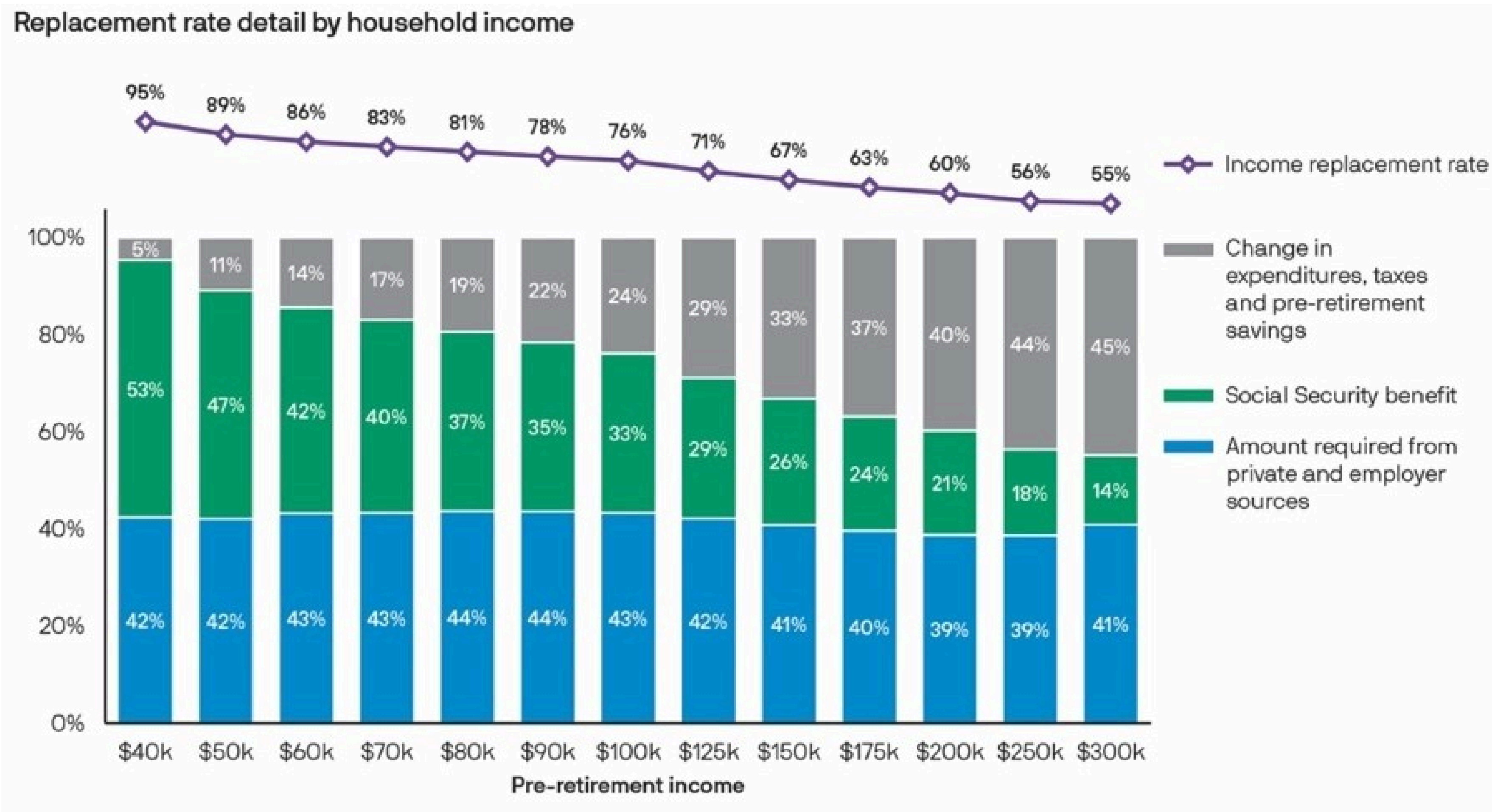

Replacement rate detail by household income
95%
89%
86%
83%
81%
78%
76%
71%
67%
63%
60%
56%
55%
Income replacement rate
Change in expenditures, taxes and pre-retirement savings
Social Security benefit
Amount required from private and employer sources
100%
80%
60%
40%
20%
0%
5%
11%
14%
17%
19%
22%
24%
29%
33%
37%
40%
44%
45%
53%
47%
42%
40%
37%
35%
33%
29%
26%
24%
21%
18%
14%
42%
42%
43%
43%
44%
44%
43%
42%
41%
40%
39%
39%
41%
$40k
$50k
$60k
$70k
$80k
$90k
$100k
$125k
$150k
$175k
$200k
$250k
$300k
Pre-retirement income

FIGURE 25.4

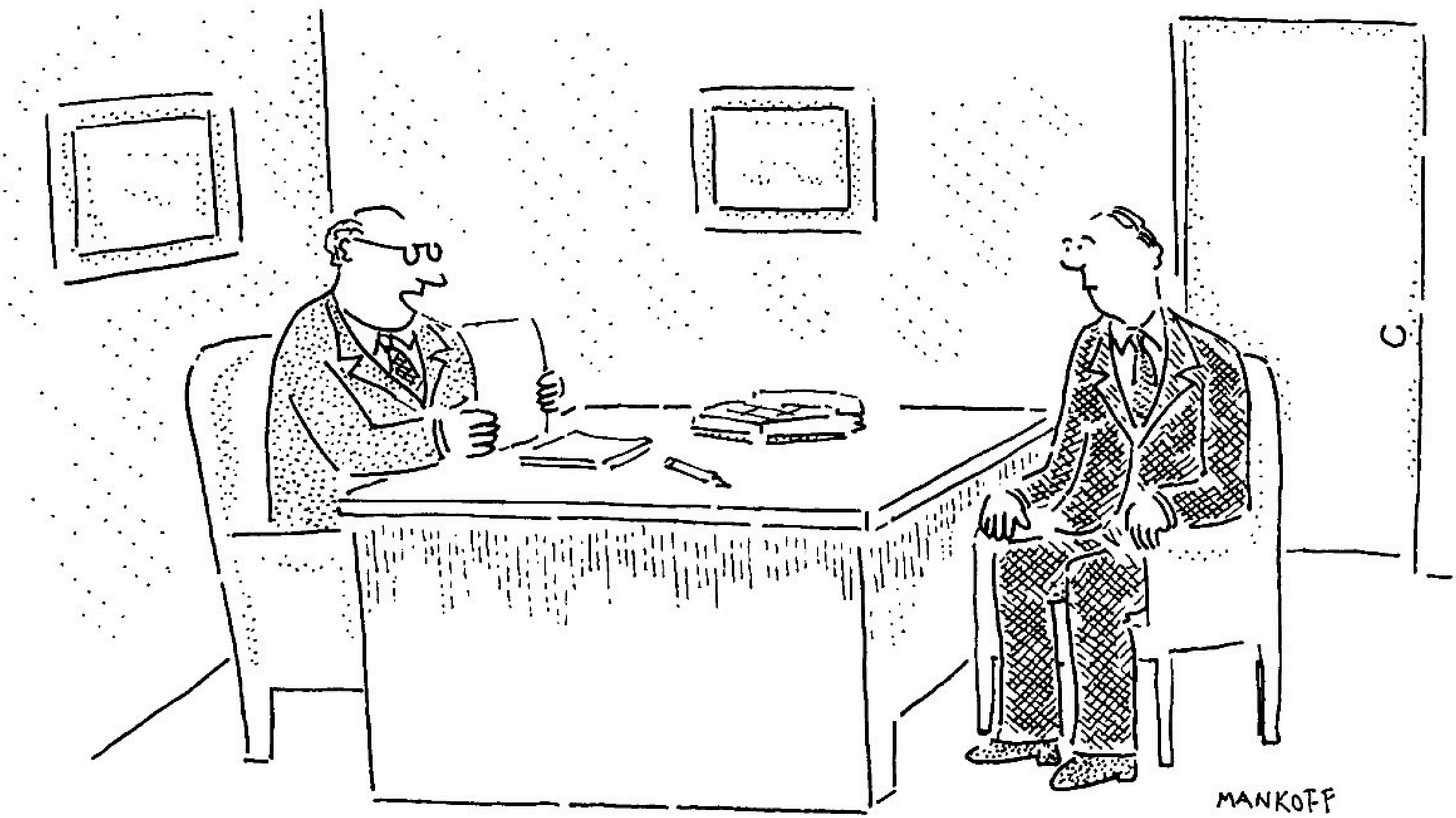
Current age	Current household income $30k	$40k	$50k	$60k	$70k	$80k	$90k
25	5k	15k	15k	25k	30k	35k	40k
30	15	30	40	50	60	75	85
35	30	55	70	90	105	125	140
40	50	80	105	135	160	190	215
45	75	120	150	190	230	265	300
50	100	160	200	255	305	355	400
55	130	200	260	325	385	450	510
60	160	245	315	395	470	550	620
65	190	295	380	480	565	660	750

Current age	Current household income $100k	$125k	$150k	$175k	$200k	$250k	$300k
25	See note						
30	10k	10k	5k	< 5k	< 5k	< 5k	30k
35	85	100	110	115	120	155	245
40	180	215	245	270	295	375	525
45	295	360	415	465	515	655	875
50	430	530	615	690	775	980	1,290
55	585	720	840	950	1,065	1,345	1,750
60	745	910	1,065	1,210	1,360	1,720	2,225
65	925	1,140	1,335	1,515	1,710	2,155	2,780

FIGURE 26.1

"And to think if I hadn't been home having dinner I might have missed this wonderful investment opportunity."

FIGURE 26.2



"I gotta tell ya, these embezzlement convictions raise a red flag."

FIGURE 27.1

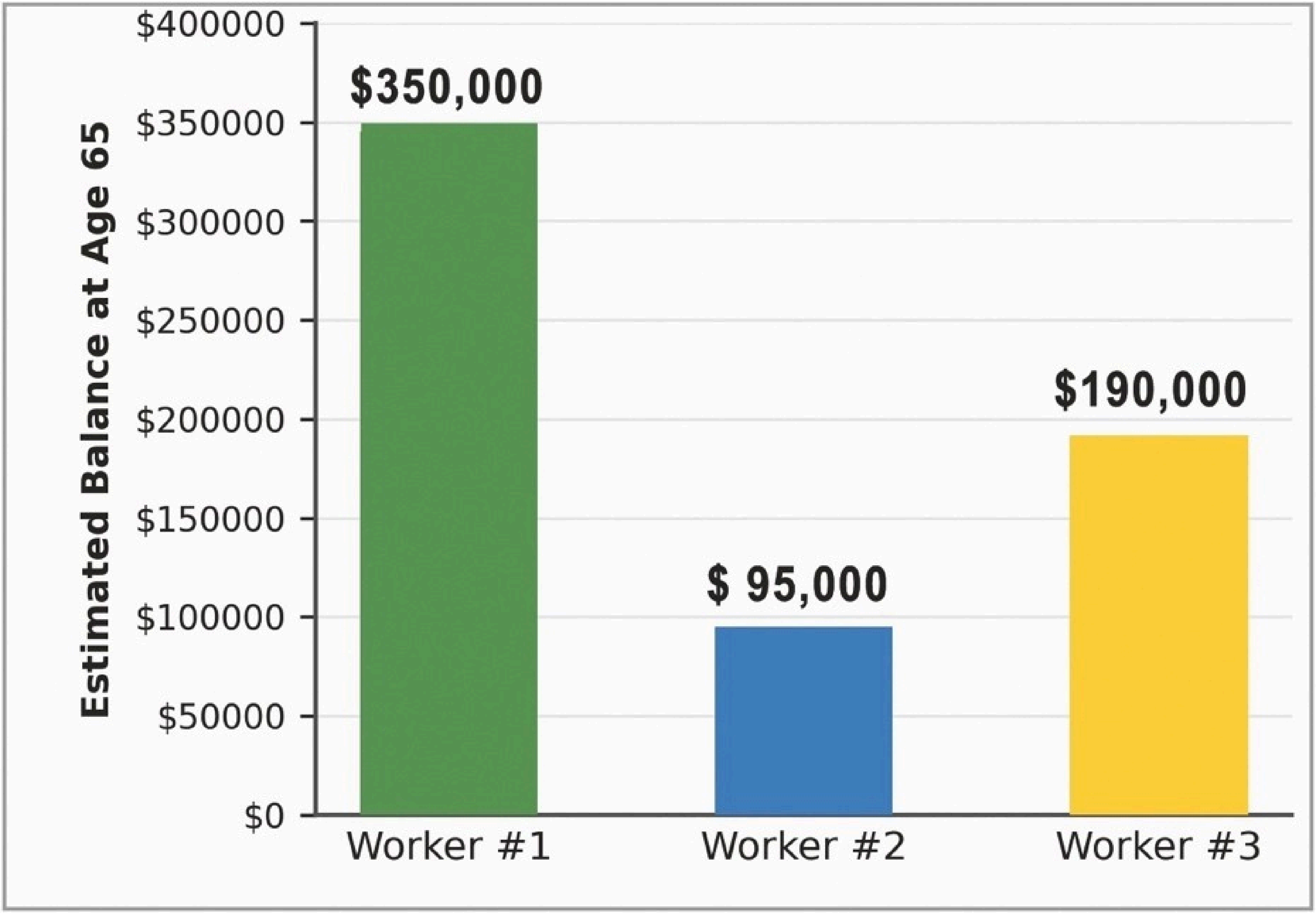

Estimated Balance at Age 65
$400000
$350000
$300000
$250000
$200000
$150000
$100000
$50000
$0
$350,000
$ 95,000
$190,000
Worker #1
Worker #2
Worker #3

FIGURE 27.2

Worker	Start Age	Annual Contrib.	Years Contrib.	Total Contrib.	Est. Balance at 65 (7.75%)
Worker #1	30	$2,000	35	$70,000	≈ $350,000
Worker #2	45	$2,000	20	$40,000	≈ $95,000
Worker #3	45	$4,000	20	$80,000	≈ $190,000

FIGURE 27.3

Feature	Traditional IRA/401(k)	Roth IRA/401(k)
Contributions	Pre-tax	After-tax
Tax Deduction Now?	Yes. IRA deductions phase out if covered by a workplace plan.	No
Tax on Withdrawals?	Yes. Taxed as ordinary income.	No, if withdrawals are qualified.
Income Limits to Contribute?	No. Income limits apply to deductibility. Anyone with earned income can contribute.	Yes, for Roth IRA. No income limits for Roth 401(k).
RMDs Required?	Yes. Starting at age 73 or 75 depending on birth year.	No. Eliminated for Roth 401(k)s starting in 2024.

FIGURE 27.4

Question	Yes / No
Am I currently in a lower tax bracket than I will be in retirement?	Yes / No
Do I have non-IRA cash to pay the conversion taxes?	Yes / No
Am I more than 5 years from needing the money?	Yes / No
Do I want to reduce future RMDs from my Traditional IRA?	Yes / No
Would I benefit from tax-free withdrawals later in life?	Yes / No
Do I want to leave tax-free assets to heirs?	Yes / No
Will this year's conversion keep me in a reasonable tax bracket?	Yes / No

FIGURE 29.1


SOCIAL SECURITY
MEDICARE
OFFICE
NOW HIRING:
Ph.D. IN THEORETICAL
MATHEMATICS TO
EXPLAIN THE
MEDICARE DRUG
OPTIONS
SCHWADRON

FIGURE 29.2

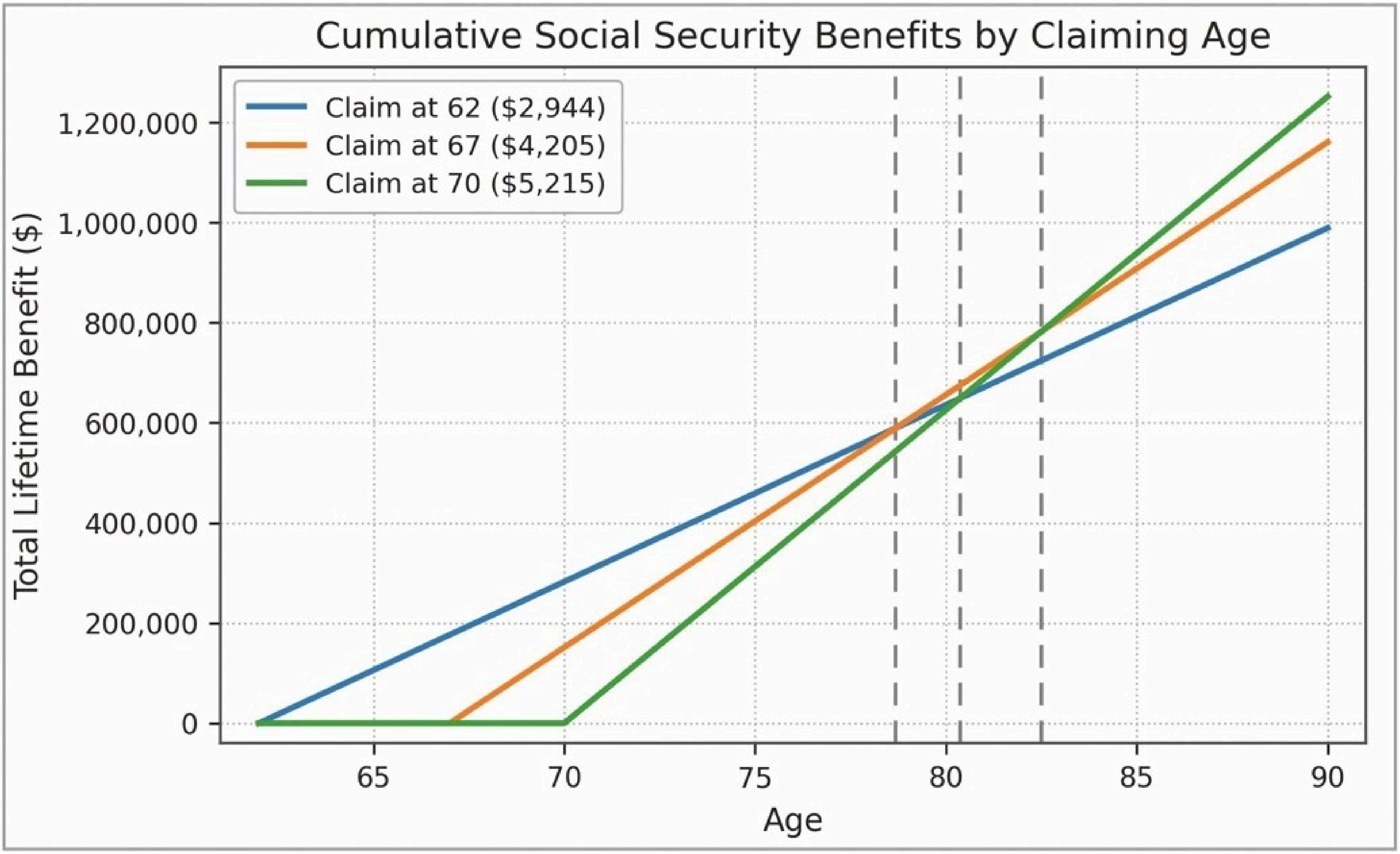

Cumulative Social Security Benefits by Claiming Age
Claim at 62 ($2,944)
Claim at 67 ($4,205)
Claim at 70 ($5,215)
Total Lifetime Benefit ($)
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
65
70
75
80
85
90
Age

FIGURE 30.1

FIGURE 30.2

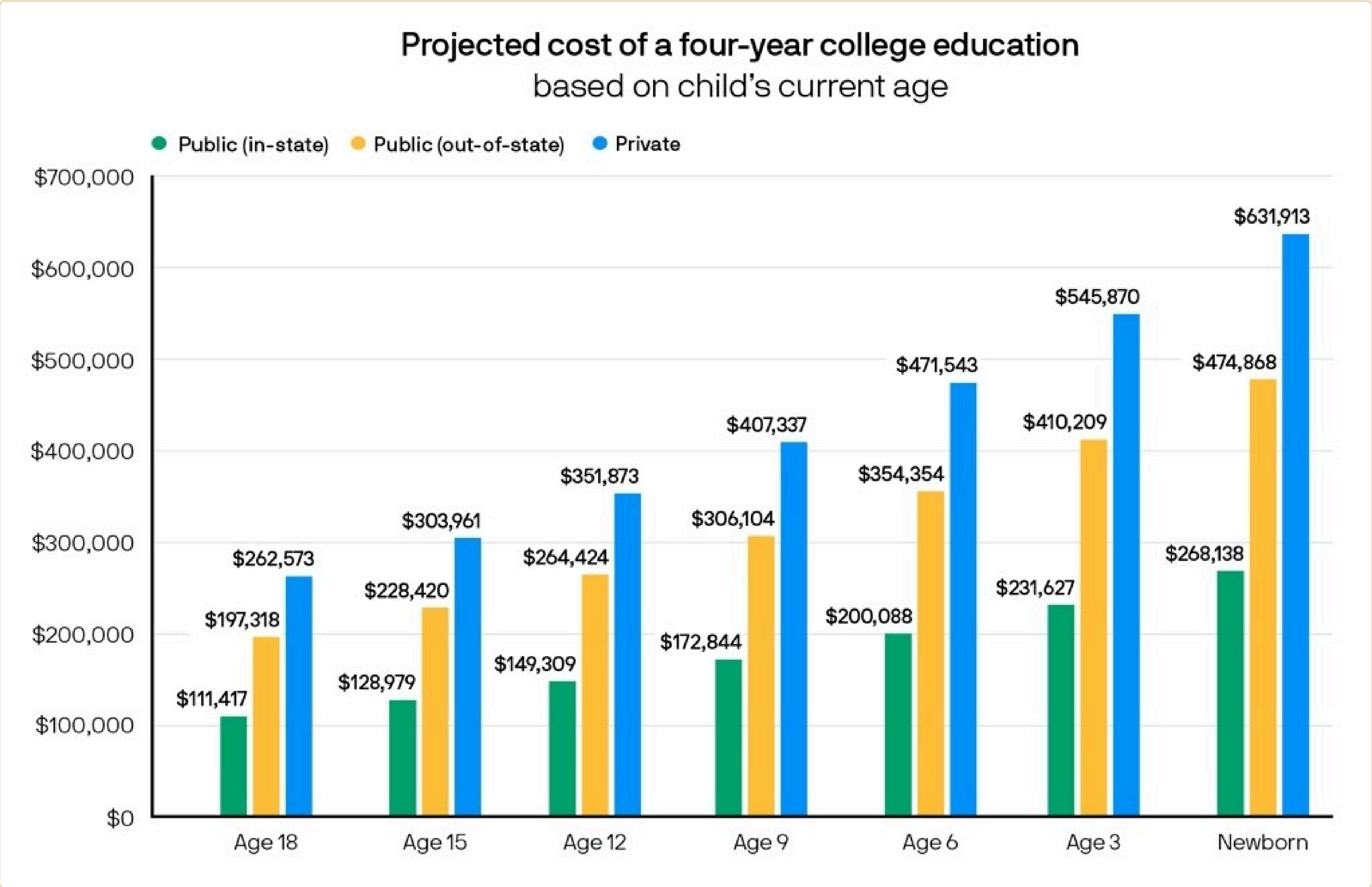

Projected cost of a four-year college education
based on child's current age
Public (in-state)
Public (out-of-state)
Private
$700,000
$600,000
$500,000
$400,000
$300,000
$200,000
$100,000
$0
$111,417
$197,318
$262,573
$128,979
$228,420
$303,961
$149,309
$264,424
$351,873
$172,844
$306,104
$407,337
$200,088
$354,354
$471,543
$231,627
$410,209
$545,870
$268,138
$474,868
$631,913
Age 18
Age 15
Age 12
Age 9
Age 6
Age 3
Newborn

FIGURE 30.3

Feature	529 Plan	Roth IRA	Outright Gifts / Tuition Payments
Designed for education	Yes	No	No
Tax treatment going in	Often state-deductible	Not deductible	No deduction
Tax treatment coming out	Tax-free for education	Earnings may be taxable	No tax benefit
Contribution limits	Very high	Low	Annual limits
Impact on financial aid	Generally favorable	Often unfavorable	Often unfavorable
Flexibility if plans change	High	High	Low
Best role	Primary education vehicle	Backup only	Supplemental

FIGURE 30.4

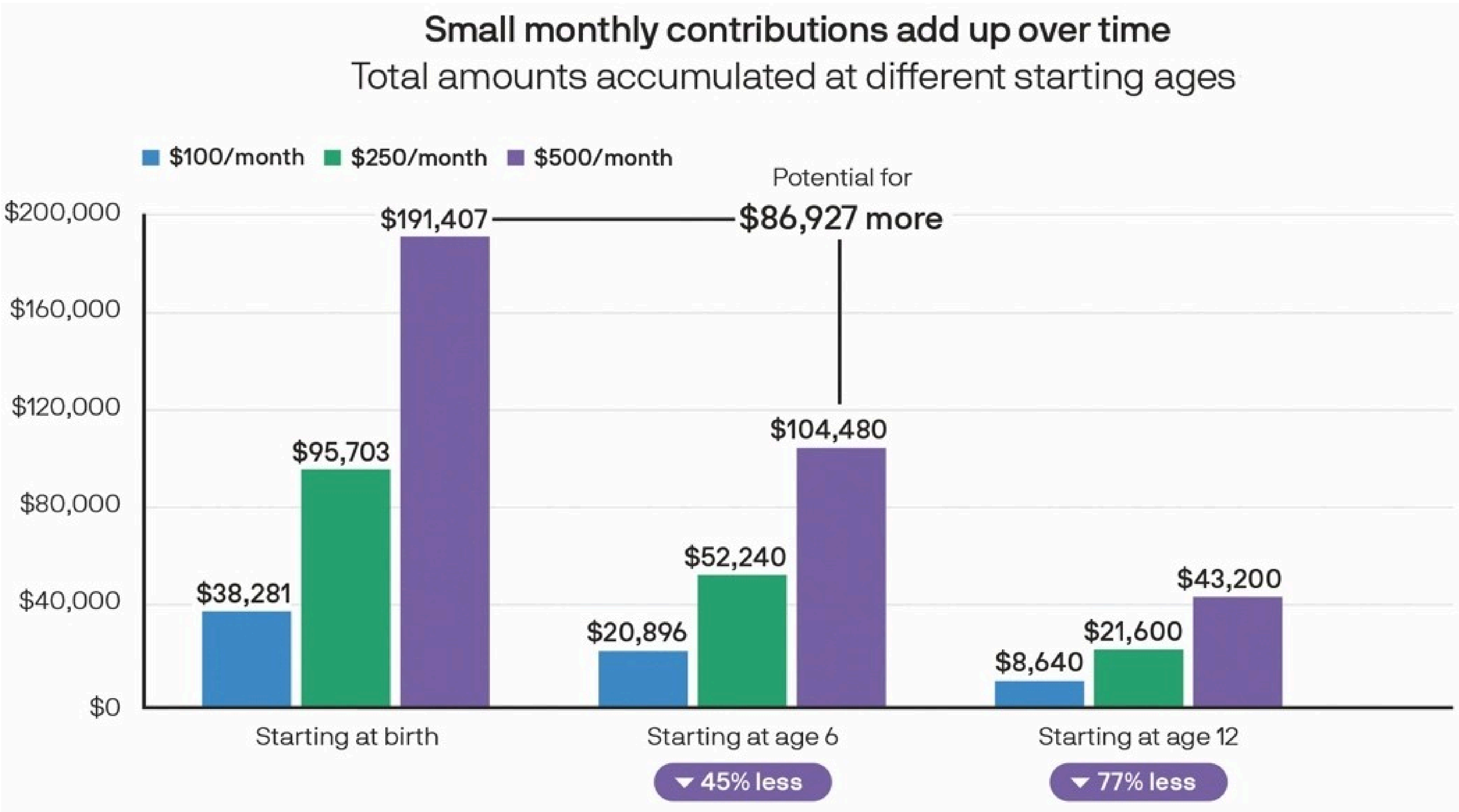

Small monthly contributions add up over time
Total amounts accumulated at different starting ages
$100/month
$250/month
$500/month
Potential for
$86,927 more
$200,000
$160,000
$120,000
$80,000
$40,000
$0
$191,407
$95,703
$38,281
$104,480
$52,240
$20,896
$43,200
$21,600
$8,640
Starting at birth
Starting at age 6
45% less
Starting at age 12
77% less

FIGURE 30.5

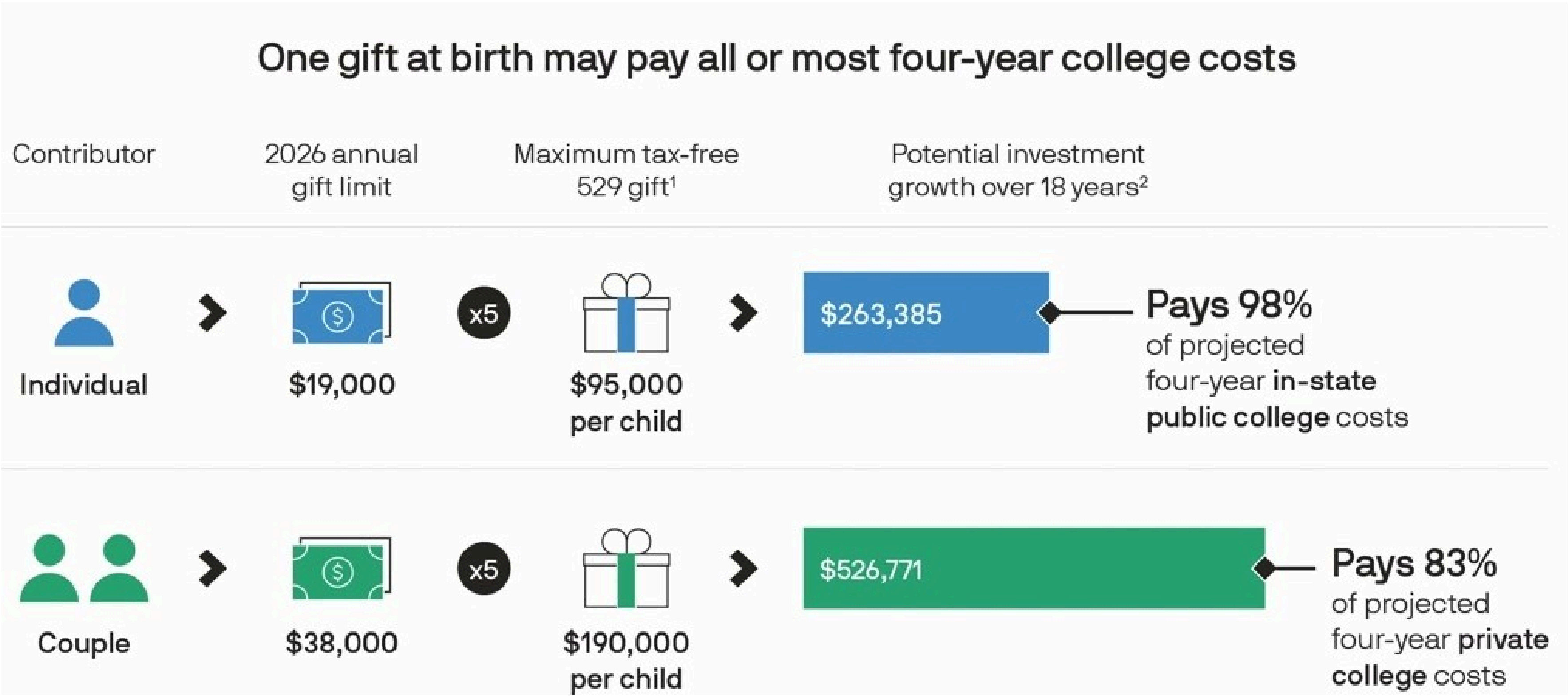
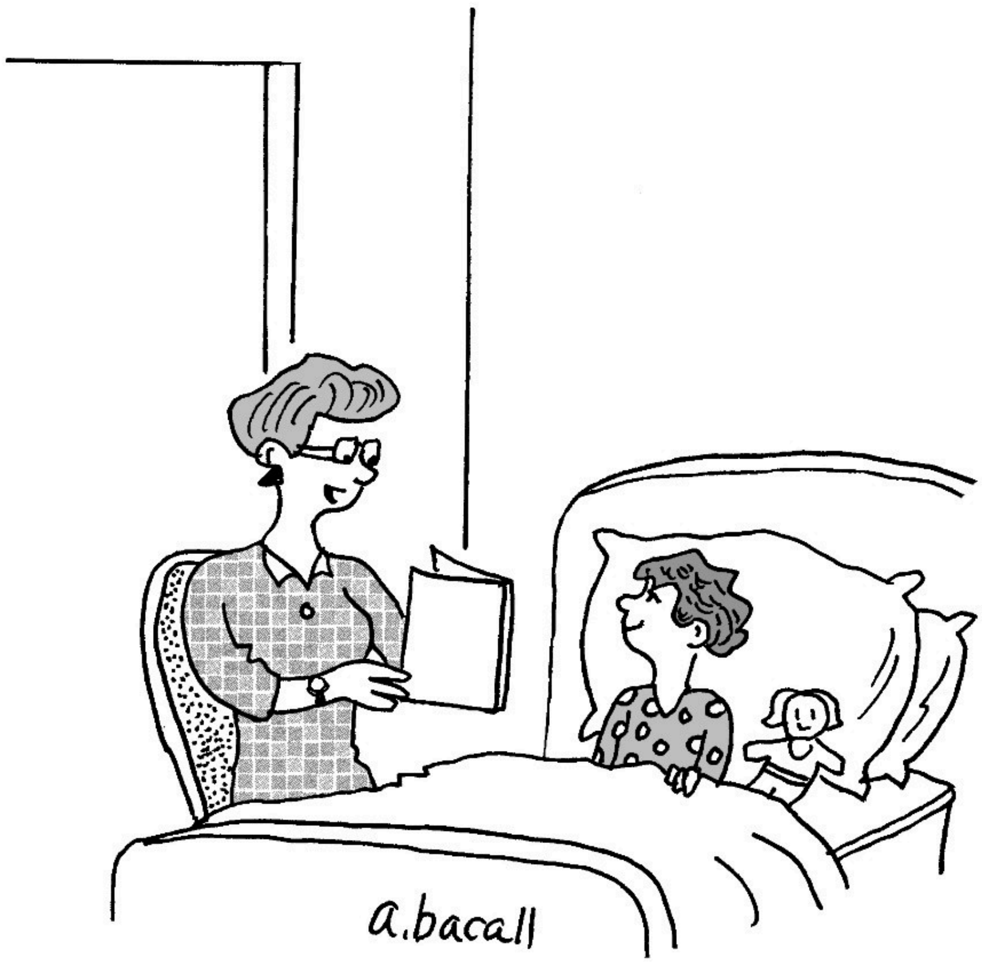

One gift at birth may pay all or most four-year college costs
Contributor
2026 annual gift limit
Maximum tax-free 529 gift[1]
Potential investment growth over 18 years[2]
Individual
$19,000
x5
$95,000 per child
$263,385
Pays 98% of projected four-year in-state public college costs
Couple
$38,000
x5
$190,000 per child
$526,771
Pays 83% of projected four-year private college costs

FIGURE 30.6

"Graduates, faculty, parents, creditors . . ."

FIGURE 31.1



"The princess lived happily ever after on her dividends from her investment portfolio."

FIGURE 31.2

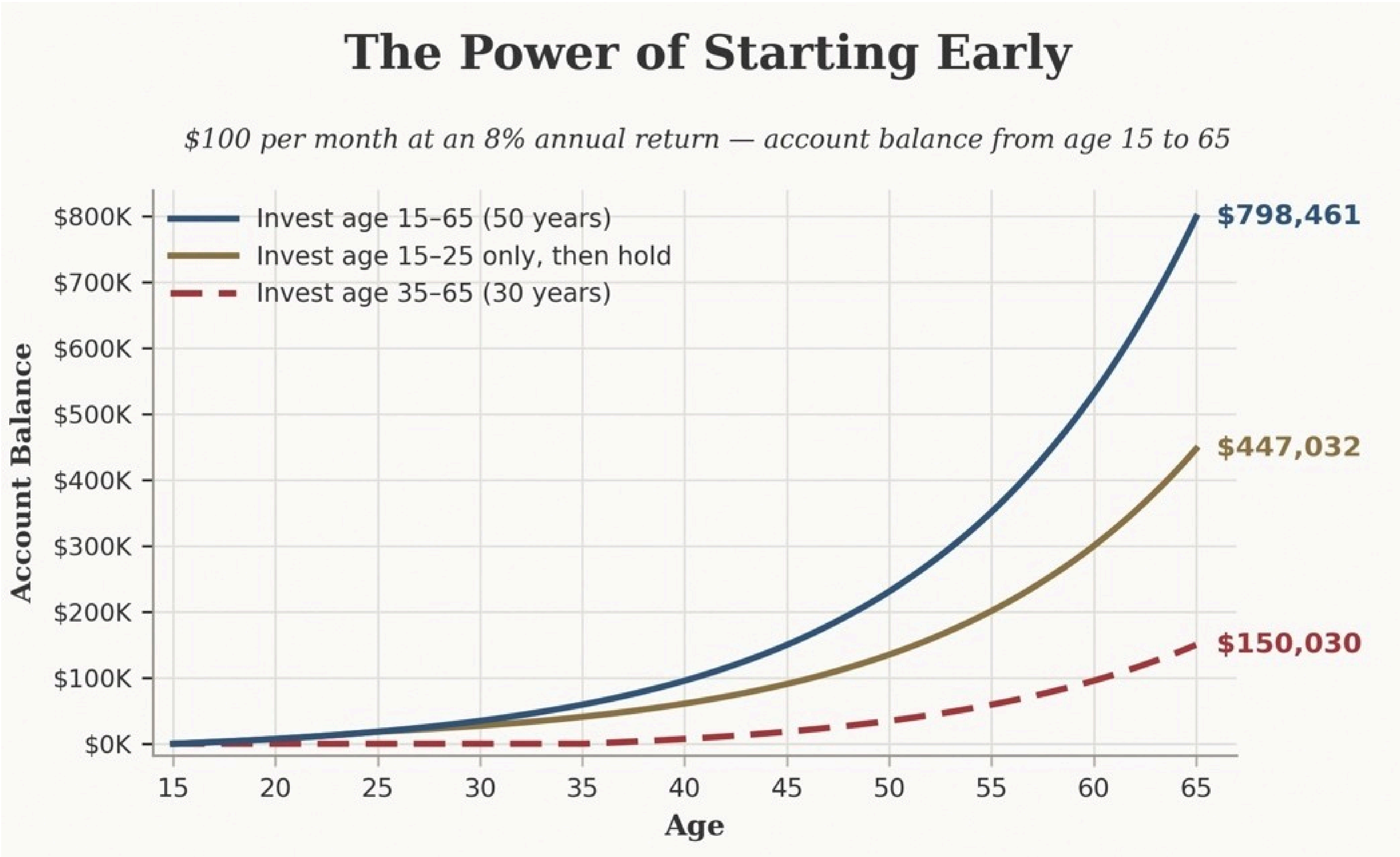

The Power of Starting Early
$100 per month at an 8% annual return — account balance from age 15 to 65
Invest age 15–65 (50 years)
Invest age 15–25 only, then hold
Invest age 35–65 (30 years)
$798,461
$447,032
$150,030
Account Balance
$800K
$700K
$600K
$500K
$400K
$300K
$200K
$100K
$0K
15
20
25
30
35
40
45
50
55
60
65
Age

FIGURE 31.3

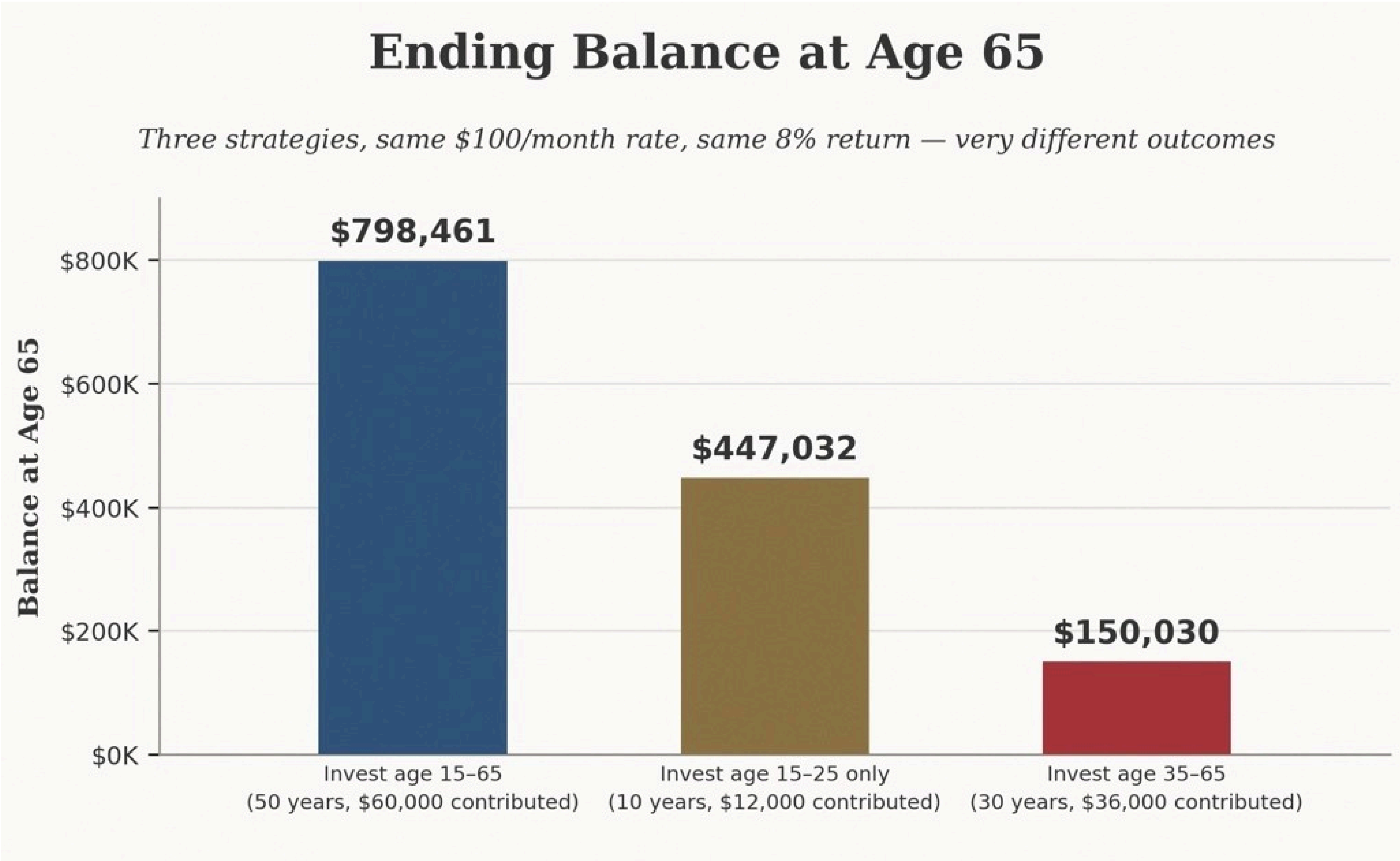
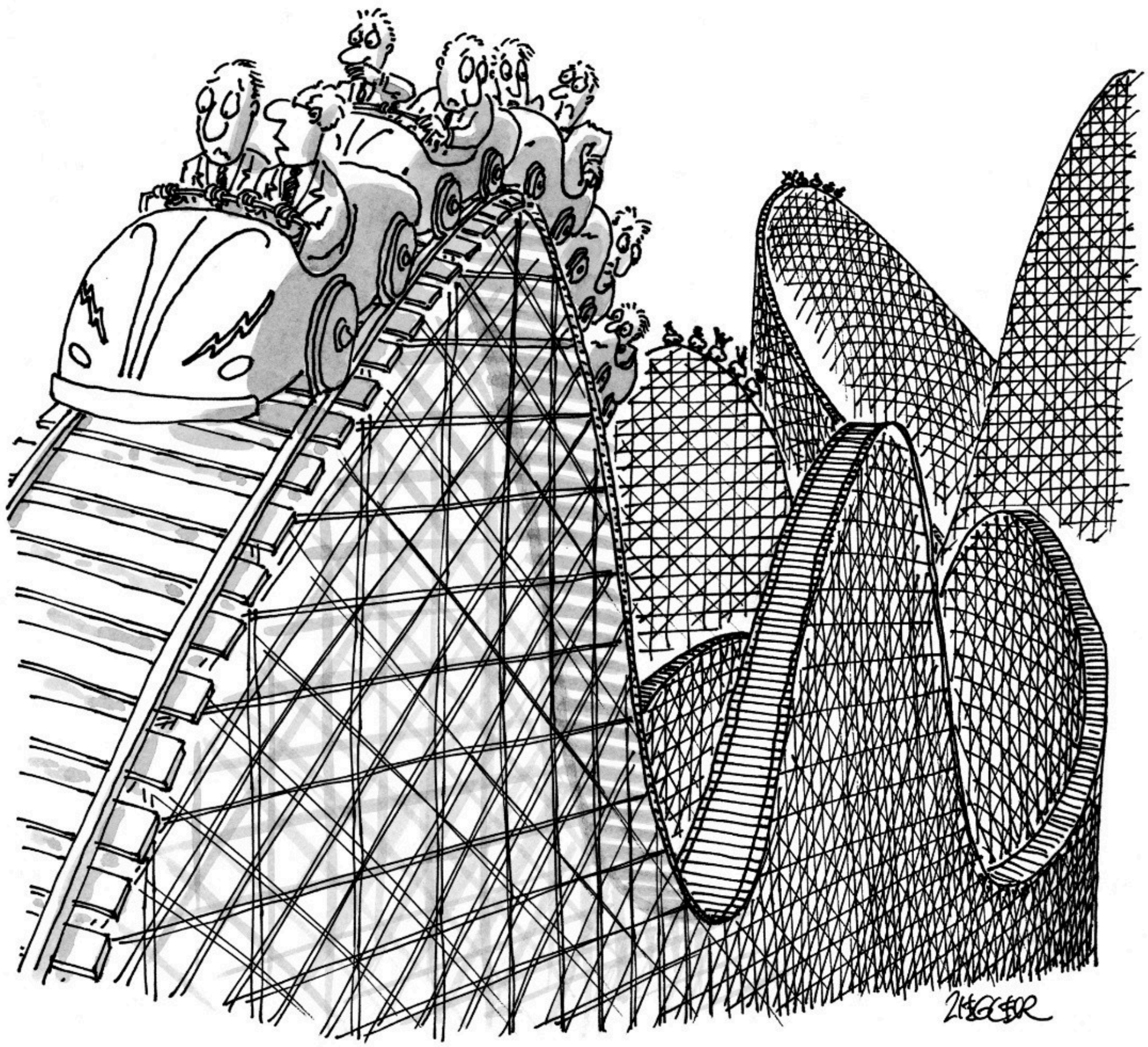

Ending Balance at Age 65
Three strategies, same $100/month rate, same 8% return — very different outcomes
Balance at Age 65
$800K
$600K
$400K
$200K
$0K
$798,461
$447,032
$150,030
Invest age 15–65
(50 years, $60,000 contributed)
Invest age 15–25 only
(10 years, $12,000 contributed)
Invest age 35–65
(30 years, $36,000 contributed)

FIGURE 32.1



"Dow Jonesy enough for you?"

FIGURE 32.2

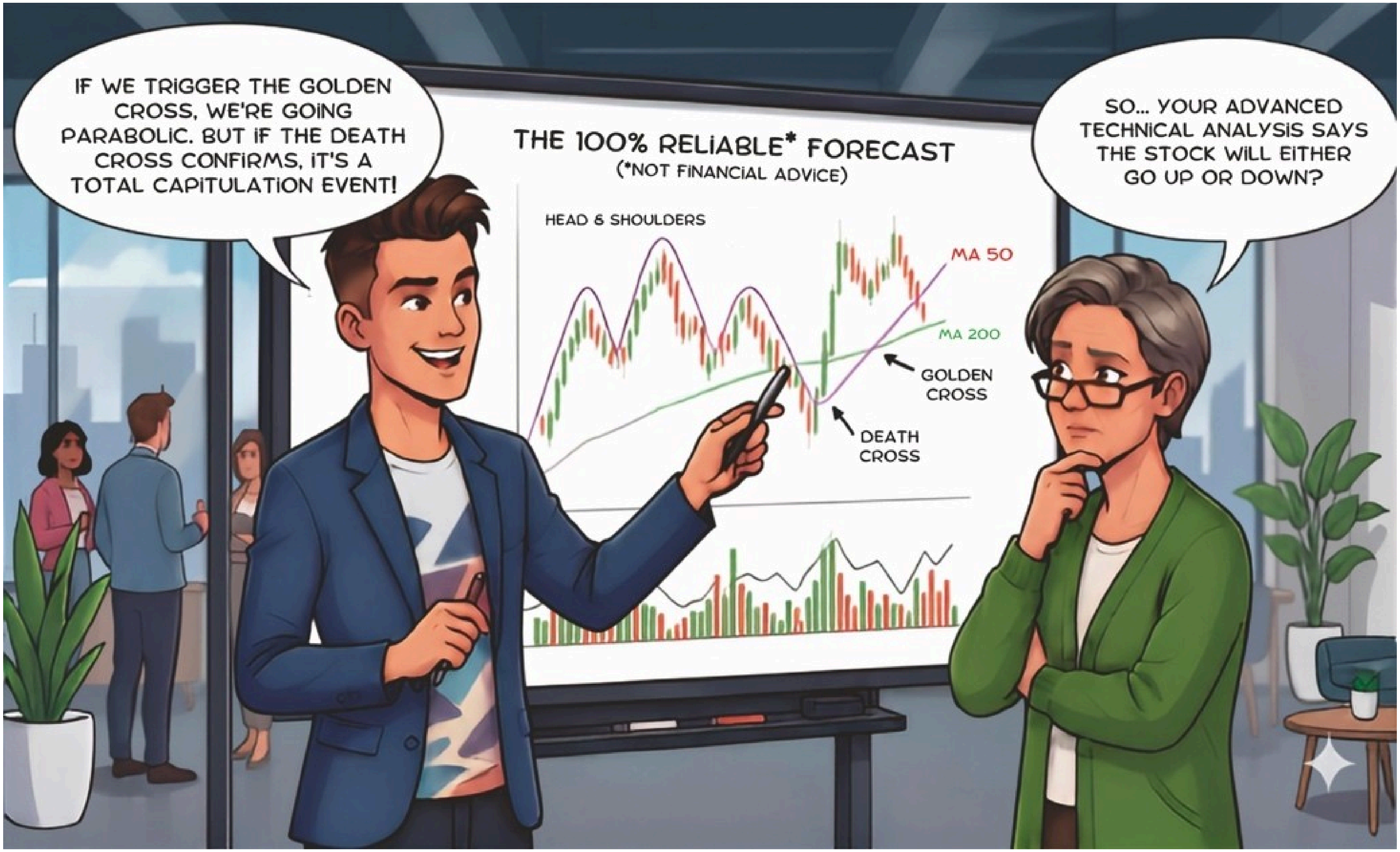

IF WE TRIGGER THE GOLDEN CROSS, WE'RE GOING PARABOLIC. BUT IF THE DEATH CROSS CONFIRMS, IT'S A TOTAL CAPITULATION EVENT!
THE 100% RELIABLE* FORECAST
(*NOT FINANCIAL ADVICE)
HEAD & SHOULDERS
MA 50
MA 200
GOLDEN CROSS
DEATH CROSS
SO... YOUR ADVANCED TECHNICAL ANALYSIS SAYS THE STOCK WILL EITHER GO UP OR DOWN?

FIGURE 32.3

You sold there? Looking at the chart, you can plainly see you <u>should</u> have sold up here.

FIGURE 34.1

"Number two, step forward and say, 'You can't lose if you invest in this stock.'"

FIGURE 34.2

"Haven't I seen this 'once in a lifetime' investment opportunity before?"

"Dear Sir: You're probably asking yourself, 'Why do I need another credit card?'"

FIGURE 35.2

Category	Monthly	Annual	Notes / Where You Can Adjust
INCOME (Household Gross: $180,000—Joe $90,000 + Myriam $90,000)			
Gross salary (combined)	$15,000	$180,000	*Two earners; budget what you actually take home, not what you gross.*
–Federal income tax (~13% effective)	-$1,950	-$23,400	*Withheld from paycheck.*
–State & local tax (~5%)	-$750	-$9,000	*Varies widely by state.*
–FICA / Medicare (7.65%)	-$1,148	-$13,770	*Mandatory payroll tax.*
–401(k) contributions (10% of gross)	-$1,500	-$18,000	*Pay yourself first. Capture every dollar of employer match.*
–Health insurance premiums	-$417	-$5,000	*Often deducted pre-tax.*
Net take-home pay	**$9,235**	**$110,830**	*This is the number to build your budget around.*
SAVINGS—PAY YOURSELF FIRST			

Category	Monthly	Annual	Notes / Where You Can Adjust
Emergency fund / brokerage savings	**$833**	**$10,000**	*Goal: $10,000/year on top of the 401(k). Auto-transfer on payday so it never hits checking.*
ESSENTIAL EXPENSES (Needs)			
Housing—Mortgage P&I (4.25%)	$2,200	$26,400	*Good debt at this rate—locked-in, tax-advantaged. Do not rush to pay down.*
Property tax & homeowners' insurance	$750	$9,000	*Often escrowed with mortgage.*
Utilities (electric, gas, water, internet)	$350	$4,200	*Bundle internet/phone; review annually.*
Groceries	$1,300	$15,600	*$300/week for a family of five is reasonable; meal-planning trims 10–15%.*
Auto—Car payment (financed vehicle)	$425	$5,100	*One car financed, one paid off. Drive each car 8–10 years to maximize value.*
Auto—Insurance (2 cars)	$200	$2,400	*Re-shop every 2 years; raise deductibles if you have an emergency fund.*
Auto—Gas & maintenance	$300	$3,600	*Includes oil changes, tires, registration.*
Childcare / after-school	$600	$7,200	*Often the second-biggest expense line after housing for young families.*
Student loan payment (5%, $10K balance)	$200	$2,400	*Modest rate—pay the minimum, prioritize the credit card instead.*
Credit card minimum (22% APR, $8K balance)	$200	$2,400	*BAD DEBT. See Debt Payoff Plan below—attack this aggressively.*
Essential subtotal	**$6,525**	**$78,300**	
DISCRETIONARY EXPENSES (Wants)			
Dining out (2x/week, ~$80 each)	$640	$7,680	*Biggest discretionary line. Cutting to 1x/week saves ~$320/month = $3,840/year.*

FIGURE 35.2 · CONTINUED

Category	Monthly	Annual	Notes / Where You Can Adjust
Streaming & subscriptions	$75	$900	*Audit annually—most families pay for 2–3 services they don't use.*
Kid activities (karate + dance)	$200	$2,400	*Worth it—pick 1–2 activities your child loves rather than overscheduling.*
Family vacations (2 trips)	$1,250	$15,000	*Substantial. Trading one big trip for a road trip saves $5,000–7,000.*
Clothing & personal care	$300	$3,600	*Includes haircuts, gym, kids' clothes (kids outgrow fast).*
Gifts, entertainment, miscellaneous	$250	$3,000	*Birthdays, holidays, date nights, the unexpected.*
Discretionary subtotal	**$2,715**	**$32,580**	
THE BOTTOM LINE			
Net take-home	**$9,235**	**$110,830**	
Less: Savings goal	**-$833**	**-$10,000**	
Less: Essential expenses	**-$6,525**	**-$78,300**	
Less: Discretionary expenses	**-$2,715**	**-$32,580**	
Shortfall	**-$838**	**-$10,050**	*The Parkers break even on what they spend—but there is nothing left to fund the $10,000 savings goal. That gap is the problem, and the credit card balance is the symptom.*

FIGURE 35.3

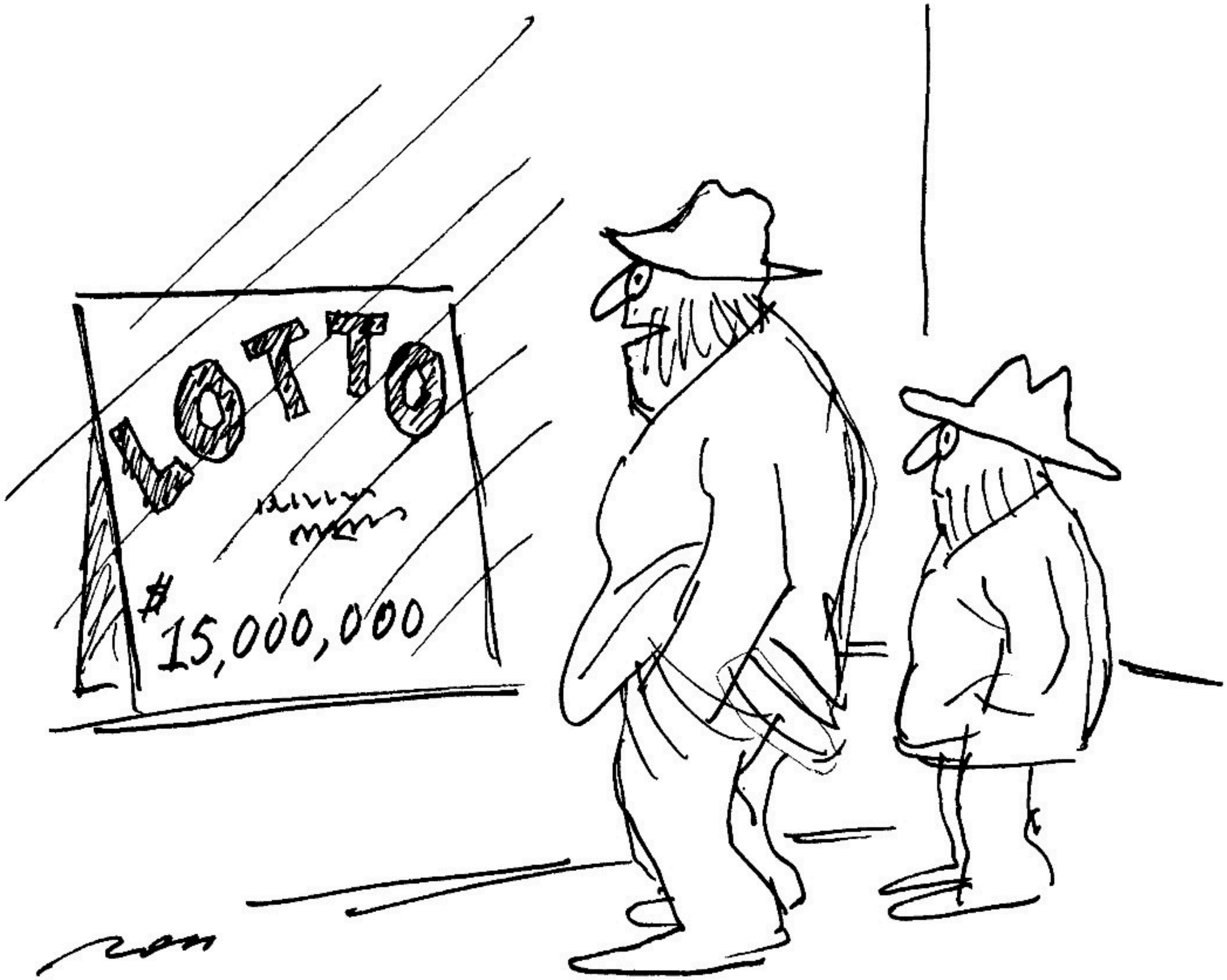
Where the Parkers Can Cut—Without Feeling Deprived

Action	Annual Savings	Why It Works
Dine out 1x/week instead of 2x	**$3,840**	*Keeps the experience without the cost. Cook one of the meals you'd normally order in.*
Take one big vacation instead of two; replace the second with a road trip	**$6,000**	*Memories aren't priced by airfare. The Parkers still get a second getaway.*
Audit and cancel 2 unused subscriptions	**$360**	*Most households are paying for services they no longer use.*
Re-shop auto insurance and raise deductible to $1,000	**$480**	*Once you have an emergency fund, a higher deductible is virtually free money.*
Pay off $8,000 credit card balance with a 0% balance-transfer card or aggressive payoff plan	**$1,760**	*22% APR is the single most destructive line on this page. Eliminate it first.*
TOTAL FREED UP	**$12,440**	*Enough to close the $10,050 shortfall—which fully funds the $10,000 savings goal on top of the $18,000 already going into the 401(k)—with roughly $2,400 left over as a cushion.*

FIGURE B1.1

"Your mother called to remind you to diversify."

FIGURE B2.1



"Winning is crucial to my retirement plans."

FIGURE B3.1

"Please, do go on about modern financial theory —but with someone else."

FIGURE A.1

Ticker	Full Name	Investment Class
U.S. EQUITY		
VOO	Vanguard S&P 500 ETF	Large Cap Core (S&P 500)
VTI	Vanguard Total Stock Market ETF	Total U.S. Stock Market
SCHB	Schwab U.S. Broad Market ETF	Total U.S. Stock Market
ITOT	iShares Core S&P Total U.S. Stock Market ETF	Total U.S. Stock Market
VTV	Vanguard Value ETF	Large Cap Value
IWF	iShares Russell 1000® Growth ETF	Large Cap Growth
VYM	Vanguard High Dividend Yield ETF	Large Cap Dividend / Value

Ticker	Full Name	Investment Class
SCHD	Schwab U.S. Dividend Equity ETF	Dividend Growth
SDY	SPDR S&P Dividend ETF	Dividend Aristocrats
VO	Vanguard Mid-Cap ETF	Mid Cap
IJR	iShares Core S&P Small-Cap ETF	Small Cap
INTERNATIONAL EQUITY		
VXUS	Vanguard Total International Stock ETF	Total International (Developed + Emerging)
IXUS	iShares Core MSCI Total International Stock ETF	Total International (Developed + Emerging)
VEA	Vanguard FTSE Developed Markets ETF	International Developed Markets
VWO	Vanguard FTSE Emerging Markets ETF	Emerging Markets
IEMG	iShares Core MSCI Emerging Markets ETF	Emerging Markets
FIXED INCOME		
JPST	JPMorgan Ultra-Short Income ETF	Ultra-Short Term Bond
VCSH	Vanguard Short-Term Corporate Bond ETF	Short-Term Corporate Bond

Ticker	Full Name	Investment Class
IGSB	iShares 1–5 Year Investment Grade Corporate Bond ETF	Short-Term Corporate Bond
SPIB	SPDR Portfolio Intermediate Term Corporate Bond ETF	Intermediate-Term Corporate Bond
BND	Vanguard Total Bond Market ETF	Intermediate-Term Aggregate Bond
AGG	iShares Core U.S. Aggregate Bond ETF	Intermediate-Term Aggregate Bond

Websites Mentioned in the Book

FINRA BrokerCheck
brokercheck.finra.org

A free tool created by FINRA (the Financial Industry Regulatory Authority) to research the background and experience of financial advisors and firms.

Chapter 26 · book page 168

NAPFA
NAPFA.org

National Association of Personal Financial Advisors. Use it to find fee-only, fiduciary advisors; most offer a free initial consultation.

Chapter 26 · book pages 168–169

XY Planning Network
XYPlanningNetwork.com

Fee-only, fiduciary advisors — "great for Gen X/Y investors."

Chapter 26 · book pages 168–169

Fee-Only Network
FeeOnlyNetwork.com

Fee-only, fiduciary advisors.

Chapter 26 · book pages 168–169

Savingforcollege.com
Savingforcollege.com

A list of states providing tax benefits for 529 contributions.

Chapter 30 · book page 202

Every field has its own vocabulary, and finance is no exception. Unfamiliar terms and shorthand should never create mystery or leave you confused. The definitions in this glossary are written in plain English, without assuming any background in finance. Our goal is to ensure you fully understand what you are reading, removing the guesswork from your financial decisions. The glossary is alphabetical for quick reference. Where a term is discussed at greater length in the book, we point you directly to the relevant chapter.

Numbers

4% Rule — A guideline for retirement spending: withdraw about 4% of your savings in the first year, then raise that dollar amount with inflation each year—not 4% of the balance annually. Measured against every 30-year stretch of market history, a balanced stock-and-bond portfolio following this rule has had a high likelihood of never running out of money, and in most periods finished with more than it started with. It depends on owning a meaningful amount of stock. A useful starting point for a conversation, not a promise. (See Chapter 25.)

401(k) — A retirement savings plan offered through your employer. Money comes out of your paycheck before income taxes are taken (or after taxes, in a Roth 401(k)), grows without being taxed each year, and in many plans the employer adds a matching contribution. (See Chapter 27.)

403(b) — The same basic idea as a 401(k), offered by schools, hospitals, churches, and other nonprofit employers. (See Chapter 27.)

529 Plan — A savings account designed for education costs. The money grows without being taxed, and withdrawals are tax-free when used for qualified education expenses. (See Chapter 30.)

A

Active Management — An approach in which a professional manager chooses individual investments in an attempt to do better than the market or to meet a client's specific long-term financial objectives. It costs more than passive management, and results vary widely from manager to manager. (See Chapter 17.)

Alternative Investments — A catch-all label for anything outside of stocks, bonds, and cash—private equity, hedge funds, collectibles, crowdfunded real estate, and the like. They are frequently hard to sell, hard to value, and expensive to own. (See Chapter 24 and Bonus Chapter 1.)

Annuity — A contract with an insurance company that pays you income, usually in retirement. Some are simple and straightforward. Many are layered with fees, optional riders, and penalties for taking your money out early. (See Chapter 24.)

Asset — Anything you own that has value: cash, investments, a home, a business.

Asset Allocation — How you divide your money among stocks, bonds, and cash. This single decision does more to shape how your portfolio behaves than any individual investment you make. (See Chapters 15 and 19.)

Asset Class — A group of investments that tend to behave in similar ways—stocks, bonds, cash, and real estate are the major ones. (See Chapter 6.)

B

Bear Market — By long-standing market convention, roughly a decline of 20% or more from a recent high. Bear markets are frightening but normal, and every one in U.S. history has eventually been followed by a recovery to new highs. (See Chapters 4 and 23.)

Beneficiary — The person or organization you name to receive an account or insurance policy when you die. On accounts that carry one, the beneficiary designation controls—it overrides what your will says—which is why these need to be reviewed periodically. (See Chapter 33.)

Beta — A measure of how sensitive an investment has been relative to the movements of a benchmark, usually the overall stock market as measured by the S&P 500®. The market is set at 1.0; something with a beta above 1.0 has swung more, below 1.0 less. Beta measures price movement, not the risk of a permanent loss. (See Chapter 20.)

Bond — A loan you make to a government or a company. In exchange, they pay you interest for a set period and repay the face value at maturity—provided the borrower remains able to pay. (See Chapter 8.)

Brokerage Account — An account at a brokerage firm that lets you buy and sell investments. Unless it is a retirement account, it carries no special tax treatment—see Taxable Account.

Bucket Strategy — A way of organizing retirement savings into short-, medium-, and long-term pools, so that near-term spending is not exposed to market swings. (See Chapter 25.)

Bull Market — A sustained stretch of rising prices. By the convention that mirrors a bear market, a new bull market is dated from a gain of 20% or more off a recent low.

Buy and Hold — Owning investments for years and letting them compound, rather than trading in and out of them. (See Chapter 32.)

C

Capital Gain (or Capital Loss) — The profit or loss you have when you sell an investment for more—or less—than you paid for it. On investments you own directly, it only counts for tax purposes once you actually sell. Mutual funds work differently: when the fund manager sells holdings at a profit during the year, the fund passes those gains through to you, and in a taxable account you owe tax on them even if you sold nothing and simply held your shares.

Cash Equivalents — Holdings that are very safe and can be turned into cash almost immediately: bank savings, money market funds, and Treasury bills. (See Chapter 16.)

Catch-Up Contribution — An extra amount older savers are permitted to put into retirement accounts each year, above the normal limit. (See Chapter 27.)

Certificate of Deposit (CD) — A bank deposit that pays a fixed interest rate for a fixed period. Taking the money out early usually costs you a penalty.

Compounding — Earning returns on your returns. It is slow and unimpressive at first, then remarkable—which is why starting early matters more than almost anything else. (See Chapter 5.)

Confirmation Bias — The very human tendency to look for information that agrees with what you already believe and to discount anything that does not. (See Chapter 21.)

Correction — A decline of roughly 10% or more, but less than 20%, in a market or an investment. Past that point it is generally called a bear market. Corrections are common and usually short-lived.

Correlation — How closely two investments move in relation to one another. A correlation of +1.0 means they move in lockstep, –1.0 means they move in opposite directions, and 0 means there is no consistent relationship between them. Diversification does its work whenever holdings are less than perfectly correlated—and the lower the correlation, the greater the benefit. (See Chapter 20.)

Cost Basis — What you paid for an investment, adjusted over time for items such as reinvested dividends and returns of capital. It is the number used to calculate your taxable gain when you sell, which is why good records are worth keeping.

Cryptocurrency — A digital currency, such as Bitcoin, that is not backed by any government and does not produce earnings, interest, or dividends. Its price is set entirely by what the next buyer is willing to pay. (See Bonus Chapter 1.)

Custodial Account (UTMA/UGMA) — An investment account an adult manages on behalf of a minor. The money legally belongs to the child from the moment it is contributed; what changes at the age set by state law is that the child takes full control of it. (See Chapters 30 and 31.)

D

Diversification — Spreading your money across many companies, industries, and asset classes so that no single bad outcome can sink you. (See Chapters 9 and 15.)

Dividend — A portion of a company's profits paid out to its shareholders, usually every three months. (See Chapter 14.)

Dividend Yield — The annual dividend divided by the share price, shown as a percentage. A stock paying $2 a year at a price of $50 has a 4% yield. (See Chapter 14.)

Dollar-Cost Averaging — Investing a set amount of money on a set schedule, no matter what prices are doing. You automatically buy more shares when prices are low and fewer when they are high—and you take emotion out of the decision. (See Chapter 3.)

Dow Jones Industrial Average (the "Dow") — An index of 30 large, well-known U.S. companies, and the figure most often quoted in the news. Unlike the S&P 500®, it is weighted by share price rather than by company size, so a stock with a high share price moves the Dow more than a far larger company whose shares happen to trade at a lower price. That quirk makes it a narrower and less representative measure of the market than its fame suggests.

Duration — A measure of how sensitive a bond is to interest rate changes, expressed in years. As a rough rule, a bond with a duration of five years will move roughly 5% in the opposite direction for every one-percentage-point change in rates. It is an approximation, and it is least reliable for very large rate moves. (See Chapter 8.)

E

Earnings Per Share (EPS) — A company's profit divided by its number of shares. It is the "earnings" half of the price-to-earnings ratio. (See Chapter 10.)

Emergency Fund — Cash set aside for life's surprises, typically two to six months of living expenses. Its real job is to keep you from having to sell investments at a bad moment. (See Chapter 16.)

Employer Match — Money your employer contributes to your retirement plan when you contribute your own. It is part of your compensation, and not claiming it is leaving pay on the table. (See Chapter 27.)

Equity — Ownership. Stocks are equities. The equity in your home is what it is worth minus what you still owe on it. (See Chapter 7.)

ETF (Exchange-Traded Fund) — A basket of investments that trades on an exchange like a single stock. Most broad-market ETFs are low-cost, tax-efficient, and easy to buy and sell—but “ETF” describes the wrapper, not the contents. Narrow, actively managed, and leveraged ETFs can be expensive and thinly traded, so check the expense ratio before you buy. (See Chapter 18.)

Executor — The person you name in your will to carry out your instructions and settle your estate. (See Chapter 33.)

Expense Ratio — The annual percentage a mutual fund or ETF charges to run itself. An expense ratio of 0.05% costs $5 a year on every $10,000 invested; a fund charging 1.00% costs $100 a year on that same $10,000. Small differences compound into large ones. (See Chapters 17 and 18.)

F

FDIC Insurance — Federal government insurance that protects bank deposits up to a set limit per depositor, per insured bank, for each category of account ownership—so a couple holding both individual and joint accounts at one bank is covered for more than the headline figure. It covers deposits such as checking, savings, and CDs. It does not cover investments, including money market mutual funds, even when you buy them at a bank. (See Chapter 16.)

Federal Reserve (the “Fed”) — The central bank of the United States. Among other duties, it sets short-term interest rate policy, which ripples through markets and the economy.

Fee-Based Advisor — An advisor who charges a fee but may also earn commissions on the products they recommend. The name sounds almost identical to fee-only and is used freely in marketing, but the two are not the same: fee-based leaves the commission conflict in place. The question worth asking is whether any part of the advisor’s pay depends on which products you end up buying. (See Chapter 26.)

Fee-Only Advisor — An advisor paid solely by clients rather than by commissions on products sold. This removes one of the biggest conflicts of interest in the business—and it is not the same as fee-based, despite how alike the two sound. (See Chapter 26.)

Fiduciary — Someone legally required to put your interests ahead of their own. It is a fair question to ask any advisor—and to ask for the answer in writing. (See Chapter 26.)

Full Retirement Age (FRA) — The age at which you qualify for your full Social Security benefit—age 67 for anyone born in 1960 or later. Claiming earlier permanently reduces the benefit; waiting past it increases the benefit, with those increases stopping at age 70. (See Chapter 29.)

G

Growth Stock — Shares of a company expected to grow its sales and profits faster than average. Investors usually pay a higher price for that expected growth. (See Chapter 10.)

H

Healthcare Proxy — A document naming someone to make medical decisions for you if you cannot make them yourself. (See Chapter 33.)

Health Savings Account (HSA) — An account available to people covered by an HSA-qualified high-deductible health plan who also meet a few other conditions, such as not being enrolled in Medicare. Contributions reduce your taxes, the money grows untaxed, and withdrawals for qualified medical costs are tax-free—a rare triple advantage. (See Chapter 28.)

Hedge Fund — A private investment fund open to a limited group of investors. High fees, limited transparency, and restrictions on getting your money back are the norm. (See Chapter 24.)

High-Deductible Health Plan — A health insurance plan with a higher deductible and lower premiums. Only plans meeting the IRS definition are HSA-qualified, and enrolling in one is necessary—but not by itself sufficient—to contribute to an HSA. (See Chapter 28.)

High-Yield Bond ("Junk Bond") — A bond rated below investment grade, paying higher interest to compensate for a greater chance that it will not be repaid. (See Chapter 8.)

I

Index — A published list of investments used to measure how a market is doing. The S&P 500® is an index that tracks 500 large U.S. companies. (See Chapter 11.)

Index Fund — A fund built to match an index, usually by owning everything in it—though some funds, particularly in bonds, hold a representative sample instead. There is no manager trying to outguess the market, so costs are generally low. (See Chapter 17.)

Inflation — The rise in prices over time, which quietly reduces what your money can buy. It is the main reason holding only cash is not actually safe over a lifetime. (See Chapter 6.)

International and Emerging Markets — Stocks of companies based outside the United States. Developed markets are countries with mature, well-regulated, and easily traded financial markets—Japan, the United Kingdom, Germany, and Canada, for example. Emerging markets are countries whose economies are growing but whose financial markets are less developed, less liquid, and less accessible to outside investors, with greater political and currency risk— China, India, Brazil, and Mexico among them. Emerging markets can offer real opportunity, but faster economic growth has not reliably translated into higher stock returns. (See Chapter 13.)

Investment-Grade Bond — A bond rated BBB-/Baa3 or higher by the major credit rating agencies—strong enough to be considered relatively safe, though never risk-free. (See Chapter 8.)

IPO (Initial Public Offering) — The first time a company sells its shares to the public.

IRA (Individual Retirement Account) — A retirement account you open on your own rather than through an employer. In a traditional IRA you may be able to deduct contributions now and pay taxes when you withdraw; whether that deduction is available depends on your income and on whether you or your spouse is covered by a workplace plan. A Roth IRA works in the opposite order: you contribute money you have already paid taxes on, and qualified withdrawals in retirement come out entirely tax-free. In both, the money grows without being taxed each year, so nothing is lost to taxes along the way. (See Chapter 27.)

L

Large-Cap — The largest publicly traded companies, generally those worth $10 billion or more. (See Chapter 12.)

Leverage — Using borrowed money to increase your exposure to an investment. It magnifies gains and losses alike, and losses arrive faster—in some arrangements you can lose more than you put in. (See Bonus Chapter 1.)

Leveraged and Inverse ETFs — ETFs built to deliver two or three times a market's daily move, or the opposite of it. Because they reset every day, compounding causes their results over longer periods to diverge—sometimes sharply—from a simple multiple of the market they track. They are trading tools, not investments to hold. (See Chapter 18 and Bonus Chapter 1.)

Liquidity — How quickly and easily you can turn an investment into cash at a fair price. Liquidity matters most at exactly the moment you need it. (See Chapter 24.)

Loss Aversion — The well-documented finding that losses hurt roughly twice as much as equivalent gains feel good. It is a leading reason investors sell at market bottoms. (See Chapter 21.)

M

Margin — Borrowing money from your brokerage firm to buy investments, using the investments themselves as collateral. If they fall far enough, the firm issues a margin call—and if you cannot meet it, the firm can sell your holdings at the worst possible time, without asking.

Market Capitalization — A company's total market value: the share price multiplied by the number of shares outstanding. (See Chapter 12.)

Market Timing — Trying to buy just before markets rise and sell just before they fall. It requires being right twice, repeatedly, and very few people are able to execute it successfully over time. (See Chapters 22 and 32.)

Maturity — The date on which a bond is scheduled to repay its face value. If you bought at a premium or a discount, that is not the same as the amount you paid. (See Chapter 8.)

Medicare — Federal health insurance, available at age 65 and also to certain younger people with disabilities or specific conditions. Premiums for higher-income retirees are increased through a surcharge known as IRMAA, which applies to both Part B and Part D and is based on your tax return from two years earlier. (See Chapter 29.)

Micro-Cap — The smallest publicly traded companies, generally worth under $250 million. (See Chapter 12.)

Mid-Cap — Medium-sized companies, generally worth between $2 billion and $10 billion. (See Chapter 12.)

Money Market Fund — A mutual fund that holds very short-term, high-quality debt. It is generally used as a place to park cash. Because it is a fund and not a bank deposit, it is not FDIC-insured—which is what separates it from a bank money market account, despite the similar name. (See Chapter 16.)

Monte Carlo Simulation — A planning tool that runs thousands of possible market scenarios to show how well a retirement plan holds up across a range of outcomes rather than a single average one. (See Chapter 19.)

Mr. Market — Benjamin Graham's image of the market as an emotional business partner who turns up every day offering to buy your shares or sell you his, at a price that swings with his mood. Warren Buffett popularized the idea and drew the lesson from it: Mr. Market is there to serve you, not to instruct you. You are free to deal with him when his price is attractive and to ignore him entirely when it is not. (See Chapter 10.)

Municipal Bond — A bond issued by a state, city, or other local government, usually to pay for public projects such as schools, roads, and water systems. The interest is generally free from federal income tax, and often from state tax as well if you live in the state that issued it. Because of that tax break, municipal bonds pay lower stated interest than comparable taxable bonds, so the number that matters when comparing them is the after-tax yield rather than the headline rate. They are most useful in a taxable account and of little benefit inside an IRA or 401(k).

Mutual Fund — A pooled investment fund whose price is set once a day, after the market closes. (See Chapter 17.)

N

Nasdaq Composite — A market index made up of companies listed on the Nasdaq exchange, weighted heavily toward technology.

Net Worth — Everything you own minus everything you owe. It is the single clearest snapshot of where you stand financially. (See Chapter 2.)

Non-Traded REIT — A REIT whose shares do not trade on an exchange. Valuations are infrequent, and redemptions are typically limited to a set window and capped—so getting your money out can take far longer than you expect. (See Chapter 24.)

P

Passive Investing — Owning a fund that tracks an index instead of paying someone to select investments. (See Chapter 17.)

Portfolio — All of your investments considered together as one whole. (See Chapter 15.)

Power of Attorney — A document authorizing someone you trust to handle your financial and legal affairs. An ordinary power of attorney ends if you become incapacitated; a durable power of attorney is the one that continues through incapacity, which is usually the whole point of having it. (See Chapter 33.)

Price-to-Earnings (P/E) Ratio — A company's share price divided by its earnings per share—a quick way to gauge how much you are paying for each dollar of a company's profit. Stocks carry high P/Es when investors expect rapid earnings growth or view the business as unusually durable, which is common among technology companies and premium consumer brands. Low P/Es cluster in slower-growing, more cyclical, or more heavily regulated industries such as energy, autos, banks, and traditional retailers. A high P/E requires the expected growth to actually arrive; a low one can signal either a bargain or a business in real trouble. (See Chapter 10.)

Principal — The original amount you invested or borrowed, separate from any interest or growth. (See Chapter 8.)

Private Equity and Private Credit — Investments in companies or loans that are not publicly traded. They are illiquid, difficult to value independently, and carry high fees. (See Chapter 24.)

Probate — The court process that oversees settling an estate—validating the will if there is one, and applying state law if there is not. It can be slow and is a matter of public record; some assets can be arranged to bypass it. (See Chapter 33.)

R

Rebalancing — Periodically returning your portfolio to its target mix. In practice it means trimming what has gone up and adding to what has lagged—the opposite of what instinct suggests. In a taxable account you can often do much of the work by steering new contributions and dividends toward whatever is underweighted, instead of selling. (See Chapter 19.)

Recency Bias — The assumption that whatever has happened lately will keep happening. It makes tops feel safe and bottoms feel hopeless. (See Chapter 21.)

Recession — A meaningful, broad-based decline in economic activity lasting more than a few months.

Regulation Best Interest (Reg BI) — The SEC rule that, since 2020, governs what a broker must do when recommending a security or an account type to a retail customer. The recommendation has to be in your best interest, and the firm cannot put its own interests ahead of yours. It is a meaningfully higher bar than the old suitability standard, though still not the same as the continuing duty a fiduciary owes you. (See Chapters 24 and 26.)

REIT (Real Estate Investment Trust) — A company that owns—or in some cases finances—income-producing real estate and is required by law to pay out at least 90% of its taxable income to shareholders. It gives you real estate exposure without becoming a landlord. (See Chapter 9.)

Required Minimum Distribution (RMD) — The amount the government requires you to withdraw each year from traditional IRAs and most other tax-deferred retirement accounts once you reach the age set by law. Roth IRAs have never required them during the owner's lifetime, and Roth accounts inside workplace plans no longer do either. (See Chapter 27.)

Reverse Mortgage — A loan that lets homeowners aged 62 or older borrow against their home equity, repaid when the last borrower dies, sells, or moves out for good. You remain responsible for property taxes, insurance, and upkeep— falling behind on any of them can trigger foreclosure. Fees are high and the products are complex, and they are frequently promoted through celebrity-endorsed marketing. (See Chapter 24.)

Revocable and Irrevocable Trusts — A revocable trust can be changed or undone during your lifetime; an irrevocable trust generally cannot, but may offer greater tax and creditor protection. (See Chapter 33.)

Risk Tolerance — How much of a decline you can live through without abandoning your plan. It is as much an emotional question as a financial one. (See Chapter 19.)

Roth Conversion — Moving money from a traditional retirement account into a Roth, paying the tax now on any amount that has not already been taxed, so that future growth and qualified withdrawals are tax-free. (See Chapter 27.)

Roth IRA and Roth 401(k) — Retirement accounts funded with money you have already paid taxes on. In exchange, the growth and qualified withdrawals come out completely tax-free. (See Chapter 27.)

Rule of 72 — A quick mental shortcut: divide 72 by your expected annual return to estimate how many years it takes your money to double. At 8%, that is about nine years. (See Chapter 5.)

S

Sector — A slice of the economy, such as technology, health care, energy, or financials.

Sequence-of-Returns Risk — The risk that poor market returns early in retirement, combined with withdrawals, do damage that later good years cannot fully repair. (See Chapter 20.)

Share — One unit of ownership in a company. (See Chapter 7.)

Small-Cap — Companies generally worth between $250 million and $2 billion. They offer more growth potential and a bumpier ride along the way. (See Chapter 12.)

Social Security — The federal program funded by payroll taxes that pays retirement benefits, and also disability and survivor benefits. The age at which you claim—anywhere from 62 to 70—permanently changes the size of your monthly check. (See Chapter 29.)

S&P 500® — An index of 500 leading U.S. companies, selected by a committee and weighted by market value—so the largest holdings carry far more influence on the result than the smallest. It is the most common shorthand for “the market.” (See Chapter 11.)

Speculation — Betting on a price movement rather than investing in something that produces earnings, interest, or rent. (See Bonus Chapter 1.)

Spousal and Survivor Benefits — Social Security benefits available to a spouse based on the other spouse’s earnings record, and to a widow or widower after that spouse dies. (See Chapter 29.)

Standard Deviation — A statistical measure of how widely an investment’s returns have varied around their average. Higher numbers mean a bumpier ride. (See Chapter 20.)

Step-Up in Basis — When investments pass to heirs at death, the cost basis generally resets to the fair market value on that date, which can erase a large built-up taxable gain. It works in both directions: an asset that has fallen steps down, and the unrealized loss goes with it. (See Chapters 3 and 33.)

Stock — An ownership interest in a real business. Each unit of ownership is called a share, so if you buy 10 shares you become one of the company’s owners— usually a very small one. When the business becomes more valuable your shares may be worth more than you paid, and some companies pay out part of their profits as dividends. The reverse is equally true: if the company performs poorly, or investors become less willing to own it, the price can fall and you can lose money. Shares of publicly traded companies are bought and sold on an exchange such as the New York Stock Exchange or Nasdaq. Private companies issue stock as well, but it is held by founders, employees, and selected investors, and is far harder to buy or sell. When we refer to buying stock, we mean shares of a publicly traded company. (See Chapter 7.)

Structured Note — A product built by a bank whose payoff depends on a formula tied to a market. Upside is often limited, any downside protection is conditional, fees are embedded rather than billed, and selling before maturity is difficult. You are also relying on the issuing bank’s credit: if the issuer fails, the note can be worth very little no matter how the market performed. (See Chapter 24.)

Suitability Standard — The older, lower legal bar that governed broker recommendations: a recommendation only had to be suitable for you, not the best available option. For recommendations to retail customers it has largely been superseded by Regulation Best Interest, but the underlying lesson still holds—not everyone who gives you advice is required to act as a fiduciary. (See Chapters 24 and 26.)

Surrender Charge — A penalty for withdrawing money early from an annuity. The schedules vary widely, commonly running several years and sometimes ten or more, with the charge declining over time. (See Chapter 24.)

T

Target-Date Fund — An all-in-one fund that automatically shifts toward more conservative holdings as a chosen retirement year approaches. (See Chapter 27.)

Taxable Account — An ordinary brokerage account with no special tax treatment. Dividends, interest, and gains you realize are taxed in the year they occur, at rates that depend on the type of income and on how long you held the investment. (See Chapter 27.)

Tax-Deferred — Money that grows without being taxed each year; taxes come due when you withdraw. Traditional 401(k)s and IRAs work this way. (See Chapter 27.)

Tax-Free — Money that is never taxed on the way out, provided the rules are followed. Roth accounts, HSAs used for qualified medical costs, and 529 plans used for qualified education expenses all qualify. (See Chapters 27, 28, and 30.)

Time Horizon — How long it will be before you need the money. It is the most powerful advantage most investors have, and the most commonly underused. (See Chapter 4.)

Total Return — Everything an investment earns you: the change in price plus dividends or interest, assuming they are reinvested. It is the honest number to judge results by. (See Chapter 14.)

Treasury Securities — Debt issued by the U.S. government. Bills mature in under a year, notes in two to ten years, and bonds in twenty to thirty. (See Chapter 8.)

Trust — A legal arrangement—created by a document called a trust agreement— in which a person (the grantor or settlor) transfers ownership of assets to a trustee, who holds and manages them for the benefit of someone else (the beneficiary). Unlike a will, which is a set of instructions that takes effect at death, a trust holds title to property and can operate during your lifetime. It is widely used in estate planning to control how and when assets are distributed. (See Chapter 33.)

Turnover — How much of a fund's holdings are bought and sold in a year. High turnover generally means higher trading costs and, in a taxable account, larger taxable distributions. (See Chapter 17.)

V

Valuation — What an investment is worth based on its earnings, assets, or cash flow—and therefore whether the price being asked for it is reasonable. (See Chapter 10.)

Value Stock — Shares of a company trading at a lower price relative to its earnings, assets, or dividends than the market average. (See Chapter 10.)

Volatility — How much an investment's price bounces around. Volatility is discomfort; it is not the same thing as the risk of permanently losing your money. (See Chapter 20.)

W

Will — The legal document that directs who receives your property and nominates a guardian for your minor children, subject to the court's approval. Assets that carry their own beneficiary designation pass outside of it. Without one, state law decides. (See Chapter 33.)

Withdrawal Rate — The percentage of your savings you take out each year in retirement. Getting this roughly right matters more than picking the perfect investments. (See Chapter 25.)

Y

Yield — The income an investment pays over a year, expressed as a percentage of its price. For bonds the more useful figure is usually yield to maturity, which also accounts for any premium or discount to face value and the time left until maturity. (See Chapter 14.)

Tax, retirement, and estate-planning rules change over time and can vary from state to state. These definitions are here to help you understand what you are reading—they are not tax or legal advice for your particular situation.