

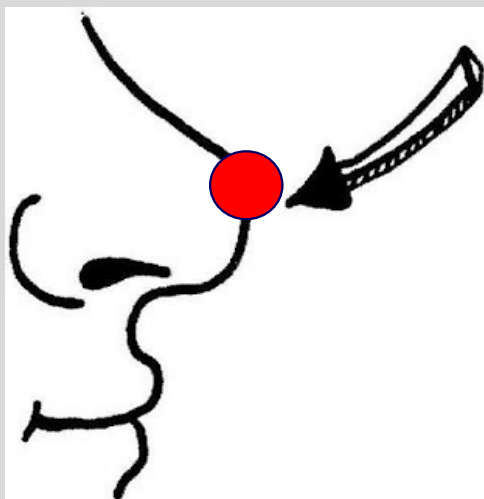
Investing for Successful Retirement

UD Osher – OLLI
Spring 2024

- **Rajeev A. Vaidya**
- **Ron Materniak**
- **Jane Roe-Fox**

Disclaimer in plain language

Disclaimer – in plain language:



Opinions are like noses, everyone has one !

You are going to see mine in this course !!

We are simply sharing our perspective.

This is not investment advice or recommendation.

Ron, Jane and I are not a financial advisors.

This course is for educational purposes only.

Form your own opinion, make your own investment decisions.

Your instructors

Instructors this semester

- Rajeev Vaidya
- Ron Materniak
- Jane Roe-Fox

Advisor

- Guy Werner

First Class – Feb. 7th

- Class Introduction
- Market update
- The Basics
 - What's different in investing in retirement?

Fall 2023– Class Feedback

<u>OLLI - Investing for Successful Retirement - Fall 2023</u>						
Course Evaluation Survey						
Stock Analysis Course	Strongly Agree	Agree	Neither agree or Disagree	Disagree	Strongly Disagree	Not applicable
	5	4	3	2	1	
Course is well organized	83%	17%				
Website materials are effective	75%	25%				
Instructor/s are knowledgeable	92%	8%				
Course objectives were clear	78%	23%				
Course objectives were achieved	67%	33%				
Course met my expectations	75%	23%	2%			
	Yes	No				
Did the learnings from the class have a positive impact on your investing?	100%	0%				

Class Composition

- 56 people registered
- 6 look new to me (10%)

Course Content

□ New content of current relevance to investor

- Bonds as an alternative to equities – Portfolio Allocation.
- More on ETFs – Basics and more.
- Portfolio Management – Simplification.
- Commodities relevant to green energy.
- Your input / suggestions are welcome – Subjects we don't cover annuities, taxes

More interaction

□ The basics

- Market updates
- Protecting capital and producing income and returns
- Investing ideas that are currently relevant

Goal – Learnings from the class have a positive impact on your investing as a retiree.

Need more diversity

- I am one investor with a view on markets
 - One investor does not make a market
- Looking to get more inputs
 - 2 external speakers confirmed
 - Jane will cover the topic on RMDs
 - Jump in – we have many experienced investors in the class.
Step up and speak to topics you can cover. Step up and speak to alternate views of the market.
- I will cover this class as long as I can
 - Are you interested in taking over in a few years?

Class processes / plans

- UD OLLI mailed link to all class participants
- Link is for a repeating meeting
 - Same link works for 11 weeks
- Password mailed to you in the welcome note from UD OLLI
 - Password does not change .. Same for the whole semester
- UD has a restricted policy on recording and sharing
 - Only if all participants agree
 - Only to be shared on an exception basis as needed.

Class processes / plans

- 11 week class.
 - *Spring break – March 27th – No Class*
- Draft Schedule posted on the class website.
 - Will change as we finalize external speakers and based on your input.
- **Class website**
 - <http://udel.edu/~diyinvst>
 - Class documents posted each week before class. Stay on the website till the end of the semester. No printed handouts in class. Do not share with people outside the class.
- Rajeev Vaidya – diyinvst@udel.edu

Survey

1. Opt out of getting class Emails from instructors
 - About 1 per week
 2. Agree to class being recorded and shared on an exception basis with class members who miss a class
- **Email survey**
 - All those saying No to #1, please send me an Email and I will take your name of the distribution list.
 - If we have objections on #2, we will not be able to record and share on an exception basis.

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Conference Board – Jan 22nd 2024

Despite a recent upswing in its 6-month growth rate, the US LEI continues to signal recession

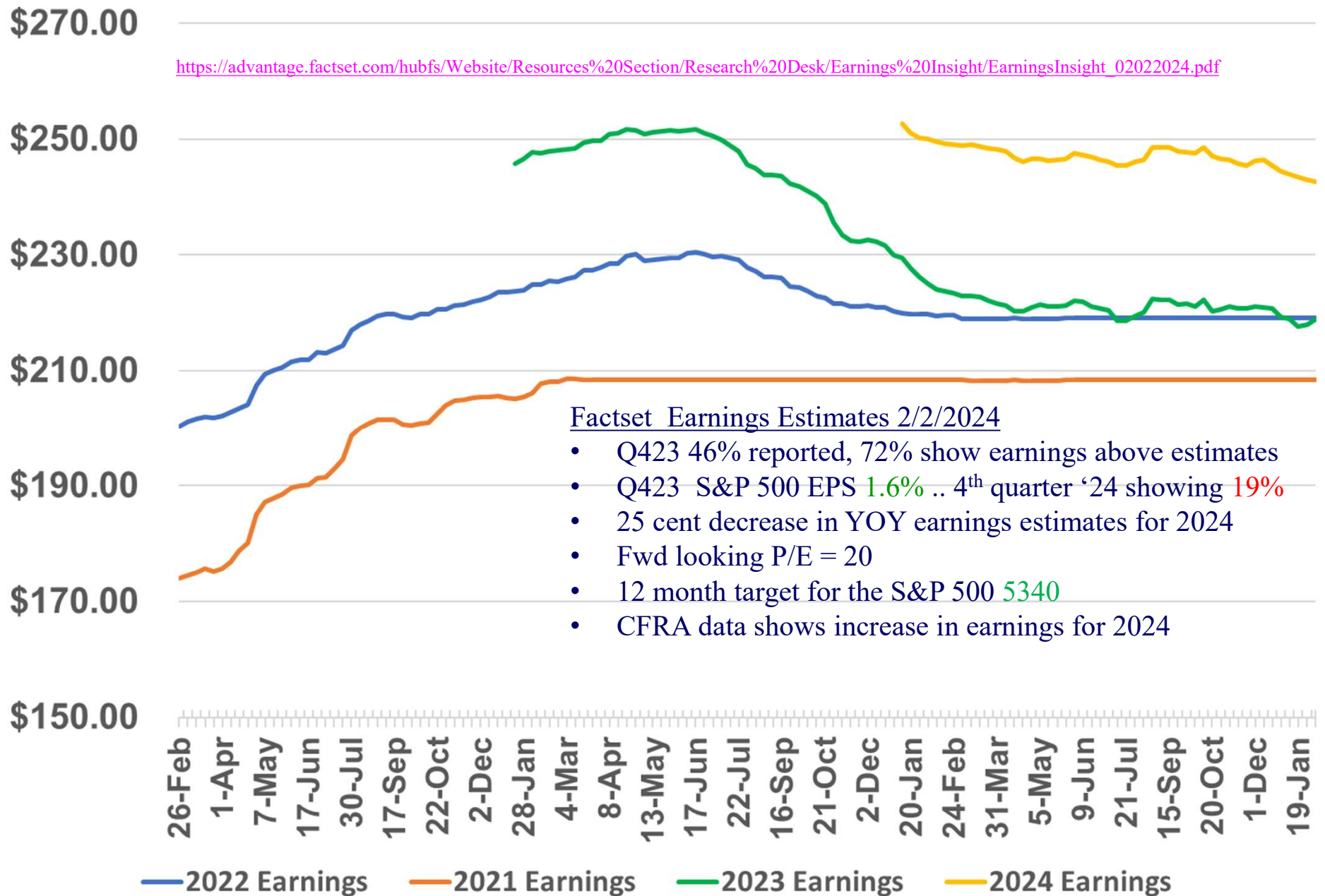


"The US LEI fell slightly in December, continuing to signal underlying weakness in the US economy," said Justyna Zabinska-La Monica, Senior Manager, Business Cycle Indicators, at The Conference Board. "Despite the overall decline, six out of ten leading indicators made positive contributions to the LEI in December. Nonetheless, these improvements were more than offset by weak conditions in manufacturing, the high interest-rate environment, and low consumer confidence. As the magnitude of monthly declines has lessened, the LEI's six-month and twelve-month growth rates have turned upward but remain negative, continuing to signal the risk of recession ahead. Overall, we expect GDP growth to turn negative in Q2 and Q3 of 2024 but begin to recover late in the year."

<https://www.conference-board.org/topics/us-leading-indicators>

Factset(R) - S&P 500 Calendar year earnings forecast

https://advantage.factset.com/hubfs/Website/Resources%20Section/Research%20Desk/Earnings%20Insight/EarningsInsight_02022024.pdf



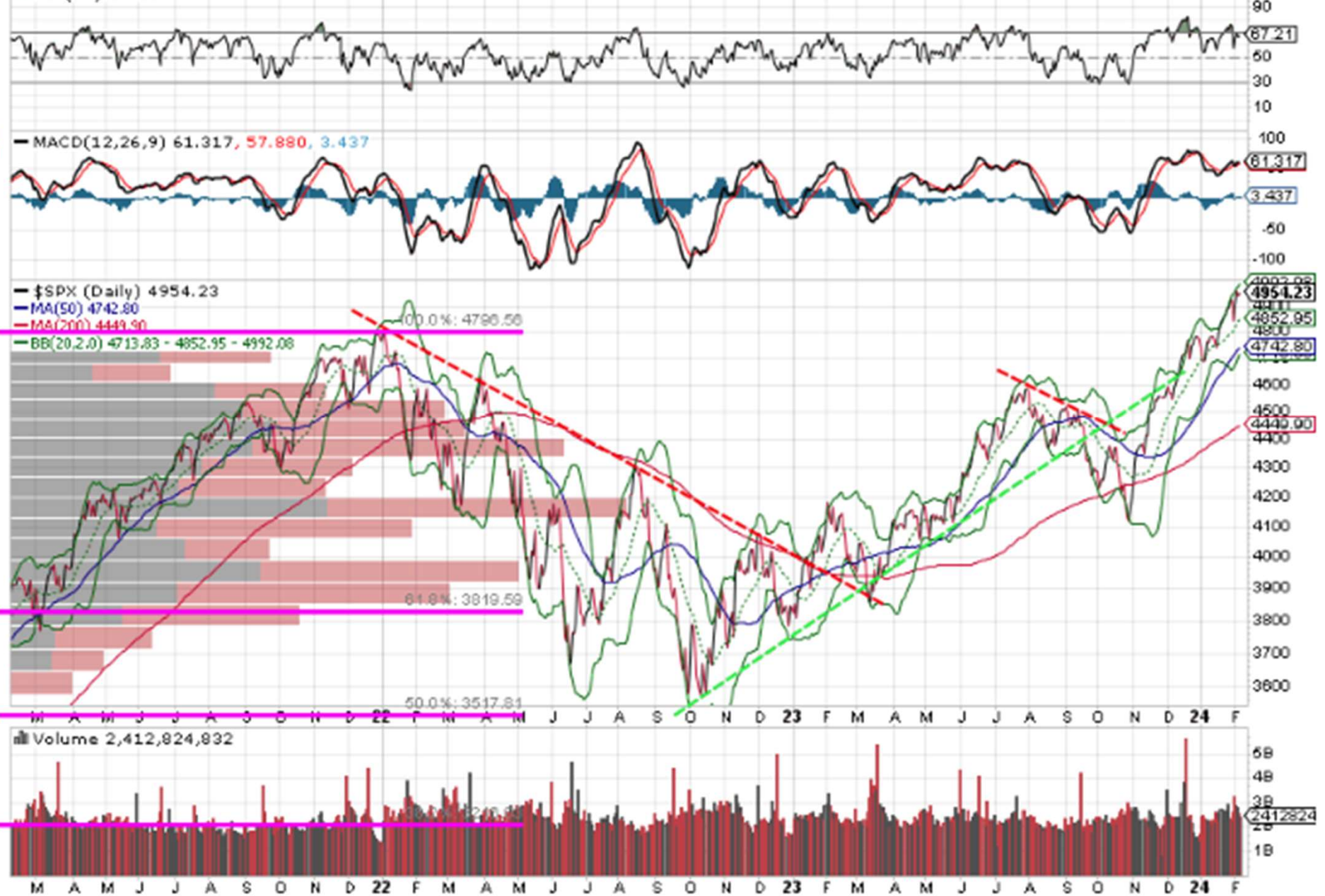
\$SPX S&P 500 Large Cap Index INDX

8-Feb-2024

Open 4950.16 High 4957.77 Low 4934.88 Close 4954.23 Volume 2.4B Chg +11.42 (+0.23%) ▲

© StockCharts.com

▲ RSI(14) 67.21



\$SPX S&P 500 Large Cap Index INDX

6-Feb-2024

Open 4950.16 High 4957.77 Low 4934.88 Close 4954.23 Volume 2.4B Chg +11.42 (+0.23%) ▲

© StockCharts.com

▲ RSI(14) 67.21

— MACD(12,26,9) 61.317, 57.880, 3.437

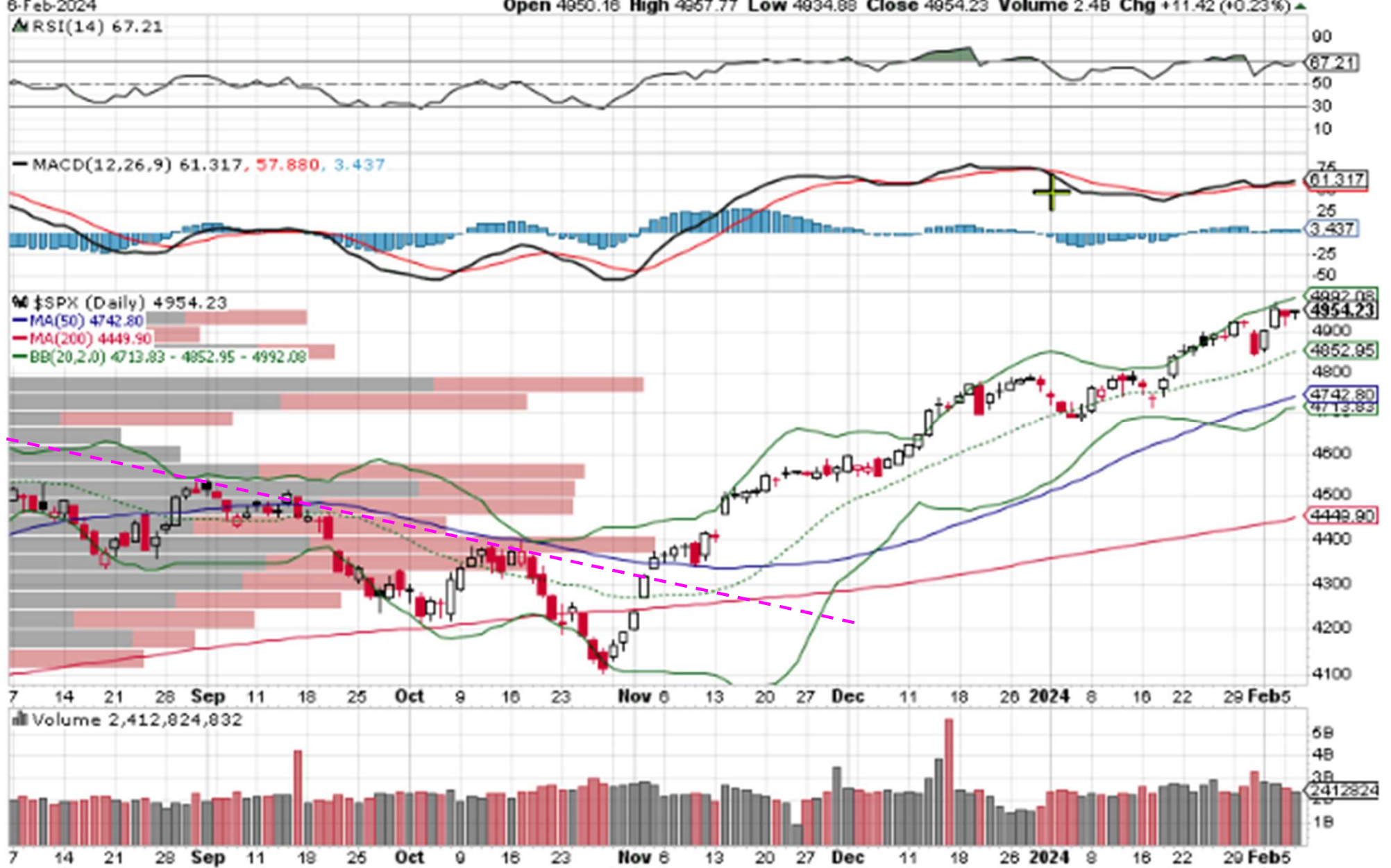
📊 \$SPX (Daily) 4954.23

— MA(50) 4742.80

— MA(200) 4449.90

— BB(20,2,0) 4713.83 - 4952.95 - 4992.08

📊 Volume 2,412,824,832



\$NYAD NYSE - Advance-Delay Issues INDEX

6-Feb-2024

© StockCharts.com

Open 1082.00 High 1082.00 Low 1082.00 Close 1082.00 Chg +1234.00 (+811.84%) ▲

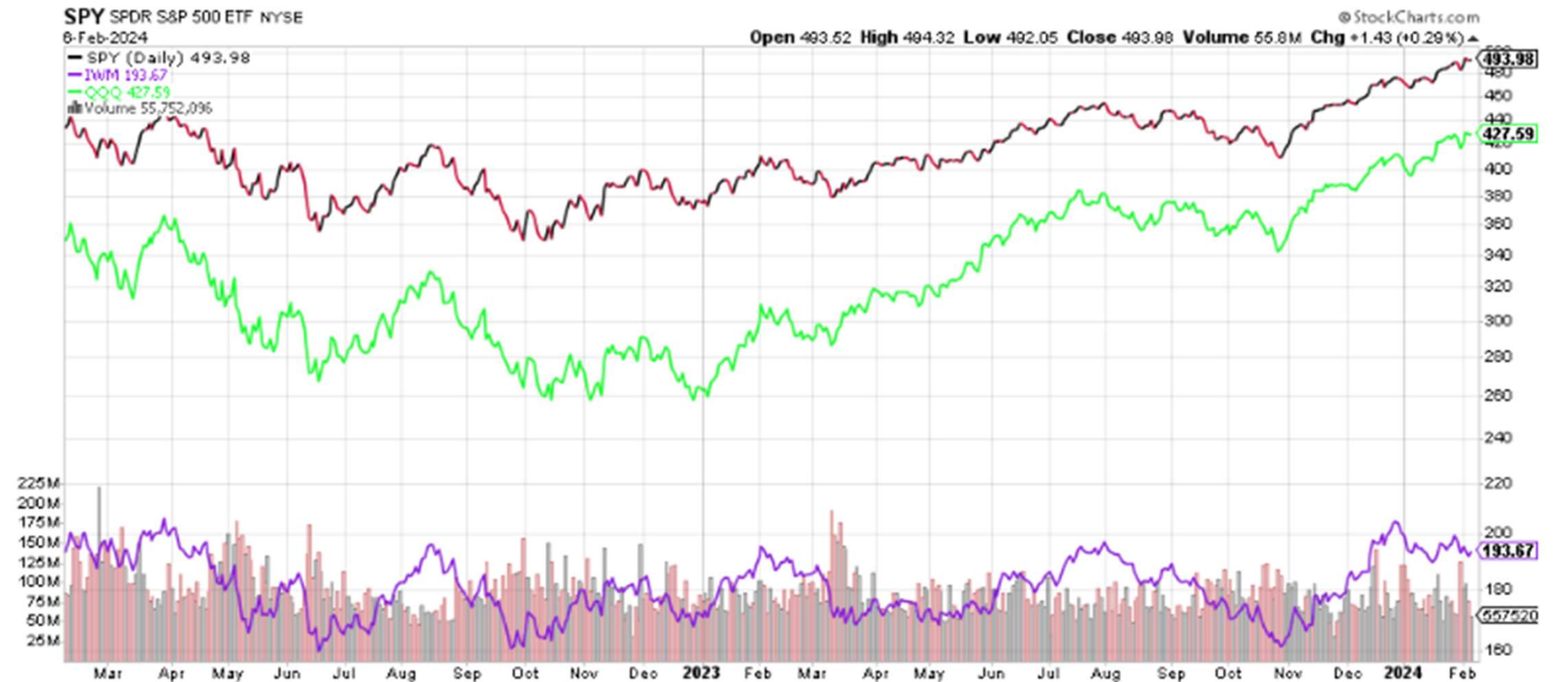
— \$NYAD Cumulative 1082.00
— MA(50) -1937.44



— \$SPX 4954.23



Market Breadth – another way



This is NOT investment advice

Weekly market direction

Prof. Guy Werner

Guy.werner@verizon.net

COLUMNS CD&E ARE FROM IBD AND ARE PROVIDED BY DAVE (IN THE NORTH) SMITH

ANIL PARIKH's TRIPLE SCREEN (52 W DAILY HIGH SHOWN IN GREEN 52 W LOW SHOWN IN RED)																
			DISTRIBUTION DAYS		S&P 500 TRIPLE SCREEN						NASDAQ TRIPLE SCREEN					
	DATE	MARKET PULSE (IBD)	S&P 500	NASDAQ	8-20 EMA	MACD	RSI	CLOSING	Δ	%CHANGE	8-20 EMA	MACD	RSI	CLOSING	Δ	%CHANGE
SAT	01/20/24	FOR THE WEEK							56	1.17%					338	2.26%
SUN	01/21/24	YTD							70	1.47%					299	1.99%
MON	01/22/24	CONFIRMED UP (80% -100%)	6	3	P	0	P	4,850	11	0.23%	P	P	P	15,360	50	0.33%
TUE	01/23/24	CONFIRMED UP (80% -100%)	6	3	P	0	P	4,864	14	0.29%	P	P	P	15,425	65	0.42%
WED	01/24/24	CONFIRMED UP (80% -100%)	7	1	P	P	P	4868	4	0.08%	P	P	P	15,481	56	0.36%
THUR	01/25/24	CONFIRMED UP (80% -100%)	7	1	P	P	P	4,894	26	0.53%	P	P	P	15,510	29	0.19%
FRI	01/26/24	CONFIRMED UP (80% -100%)	7	1	P	P	P	4,890	-4	-0.08%	P	P	P	15,455	-55	-0.35%
SAT	01/27/24	FOR THE WEEK							51	1.04%					145	0.94%
SUN	01/28/24	YTD							121	2.54%					444	2.96%
MON	01/29/24	CONFIRMED UP (80% -100%)	6	1	P	P	P	4,927	37	0.76%	P	P	P	15,628	173	1.12%
TUE	01/30/24	CONFIRMED UP (80% -100%)	6	1	P	P	P	4,924	-3	-0.06%	P	P	P	15,509	-119	-0.76%
WED	01/31/24	CONFIRMED UP (80% -100%)	7	2	P	P	P	4,845	-79	-1.60%	P	0	P	15,164	-345	-2.22%
THUR	02/01/24	CONFIRMED UP (80% -100%)	7	2	P	P	P	4,906	61	1.26%	P	P	P	15,361	197	1.30%
FRI	02/02/24	CONFIRMED UP (80% -100%)	6	2	P	P	P	4,958	52	1.06%	P	P	P	15,628	267	1.74%
SAT	02/03/24	FOR THE WEEK							68	1.39%					173	1.12%
SUN	02/04/24	FOR THE MONTH							113	2.33%					464	3.06%
SUN	02/04/24	YTD							189	3.96%					617	4.11%



https://drive.google.com/drive/folders/0B6Qc_gjpslXMclzQ245d2R1eTQ?resourcekey=0-5pWglNqaJPJ12L2qYurMWg



\$USD US Dollar - Cash Settle FOREX

6-Feb-2024

\$USD (Weekly) 104.07

MA(40) 103.44

Volume undef

Open 103.91 High 104.46 Low 103.84 Last 104.07 Chg +0.28 (+0.28%)

© StockCharts.com



A rise in the dollar
negative for Big tech
Positive for commodities

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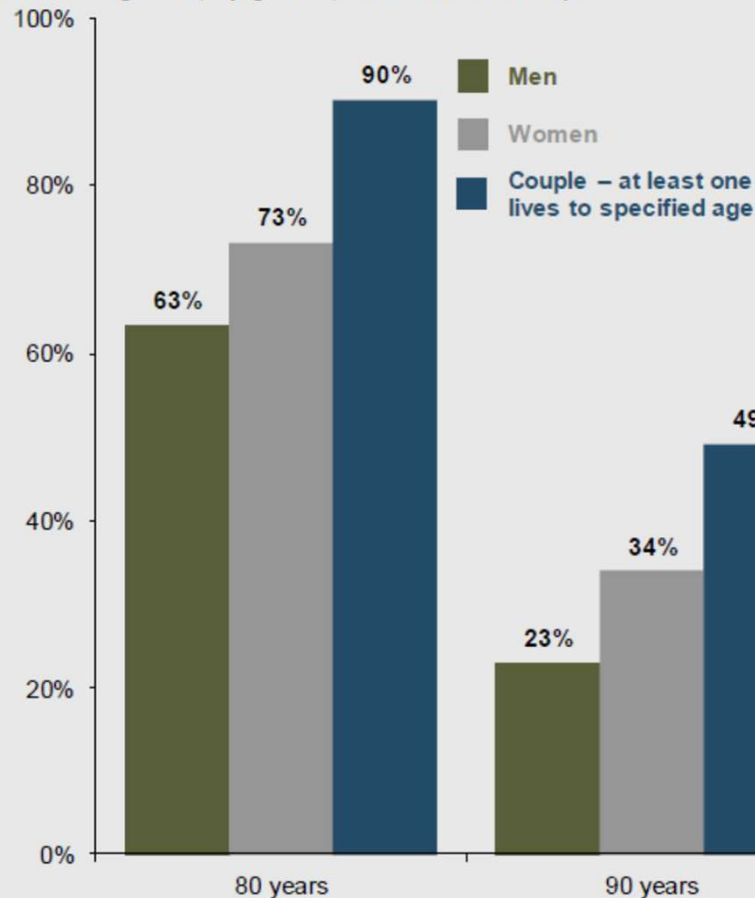
Investing in Retirement

- Prior to retirement – Accumulation phase
- After retirement
 - Protect and grow the investment portfolio
 - Use the portfolio to produce income for current expenses
 - Draw down the principal as needed and in a way that does not exhaust it prematurely.
- 3 unknowns
 - How long will we live?
 - How much will we need to spend?
 - What return will your portfolio earn at the risk you are willing to take?

Producing income from portfolio is relevant
Sequence of return risk is relevant

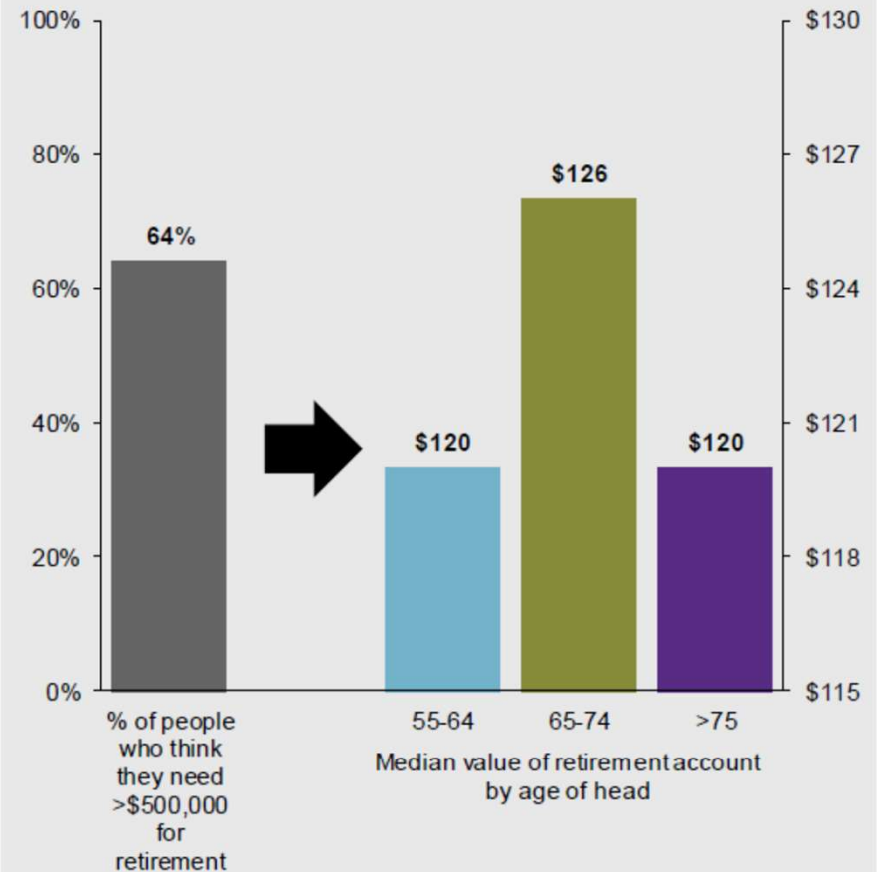
Probability of reaching ages 80 and 90

Persons aged 65, by gender, and combined couple



Retirement savings gap

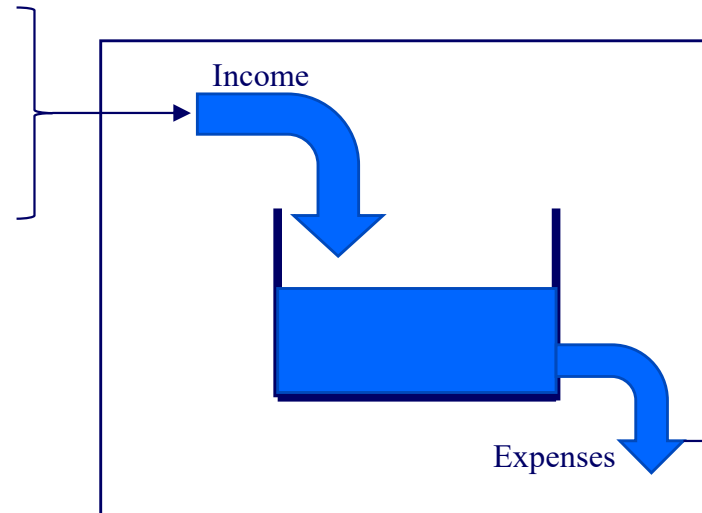
Anticipated amount needed vs. actual savings, thousands



Source: J.P. Morgan Asset Management; (Left) SSA 2016 Life Tables; (Right) 2017 Retirement Confidence Survey, Employee Benefit Research Institute and Greenwald & Associates; 2016 Survey of Consumer Finances, Federal Reserve. EBRI survey was conducted from January 6, 2017 to January 13, 2017 through online interviews with 1,671 individuals (1,082 workers and 589 retirees) ages 25 and older in the United States. Guide to the Markets – U.S. Data are as of August 31, 2019.

Does your income cover expenses ?

- Pensions
- Social Sec.
- Salaries
- Income and capital gains from taxable accounts



Essential Fixed Expenses

- Rent / Mortgage
- Medical Insurance
- Debt payments – Auto etc.

Essential Variable Expenses

- Taxes
- Food
- Transportation
- Out of Pocket Medical Expenses
- Household needs
- Communications – Phone, cable, web

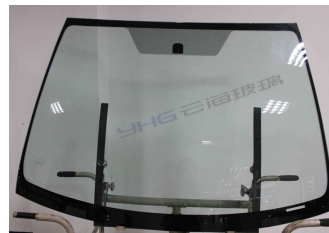
Discretionary Expenses

- Fun money
 - zero is not real / sustainable

Savings



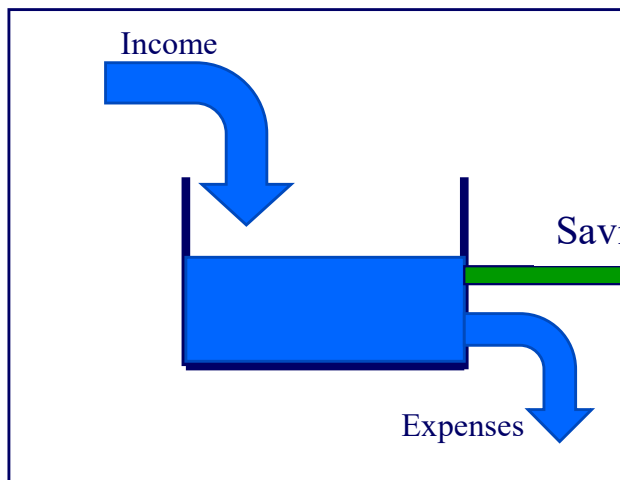
Yesterday & Today



Near Future

Adding to or drawing from assets ?

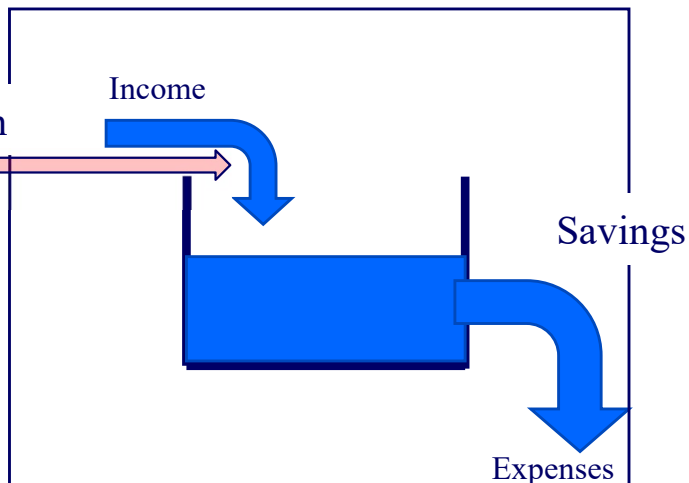
Income exceeds expenses



Expenses exceed income



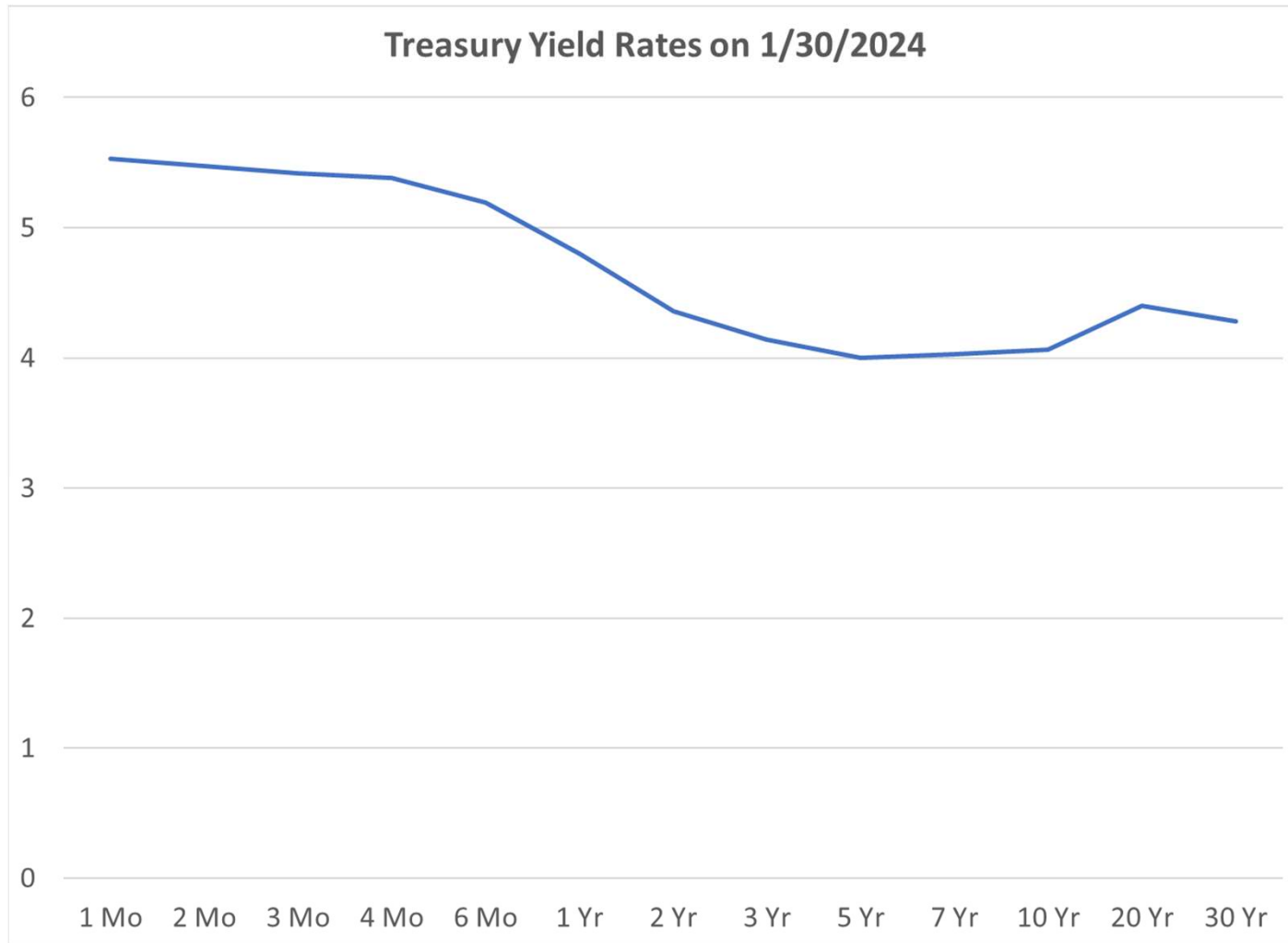
Drawdown



Why is income relevant

- Typical Portfolio drawdown recommendations – 4% per year.
 - Depends on your specific situation and the expected market returns
- If your portfolio produces income, you need to draw down less of the principal to meet your needs
 - Helps in a down market – you are forced to sell less.
 - Helps in a up market – you have more money growing.

Treasury Yield Rates



The big picture

Stock market since 1900

GTM - U.S. | 19

What, Me Worry?

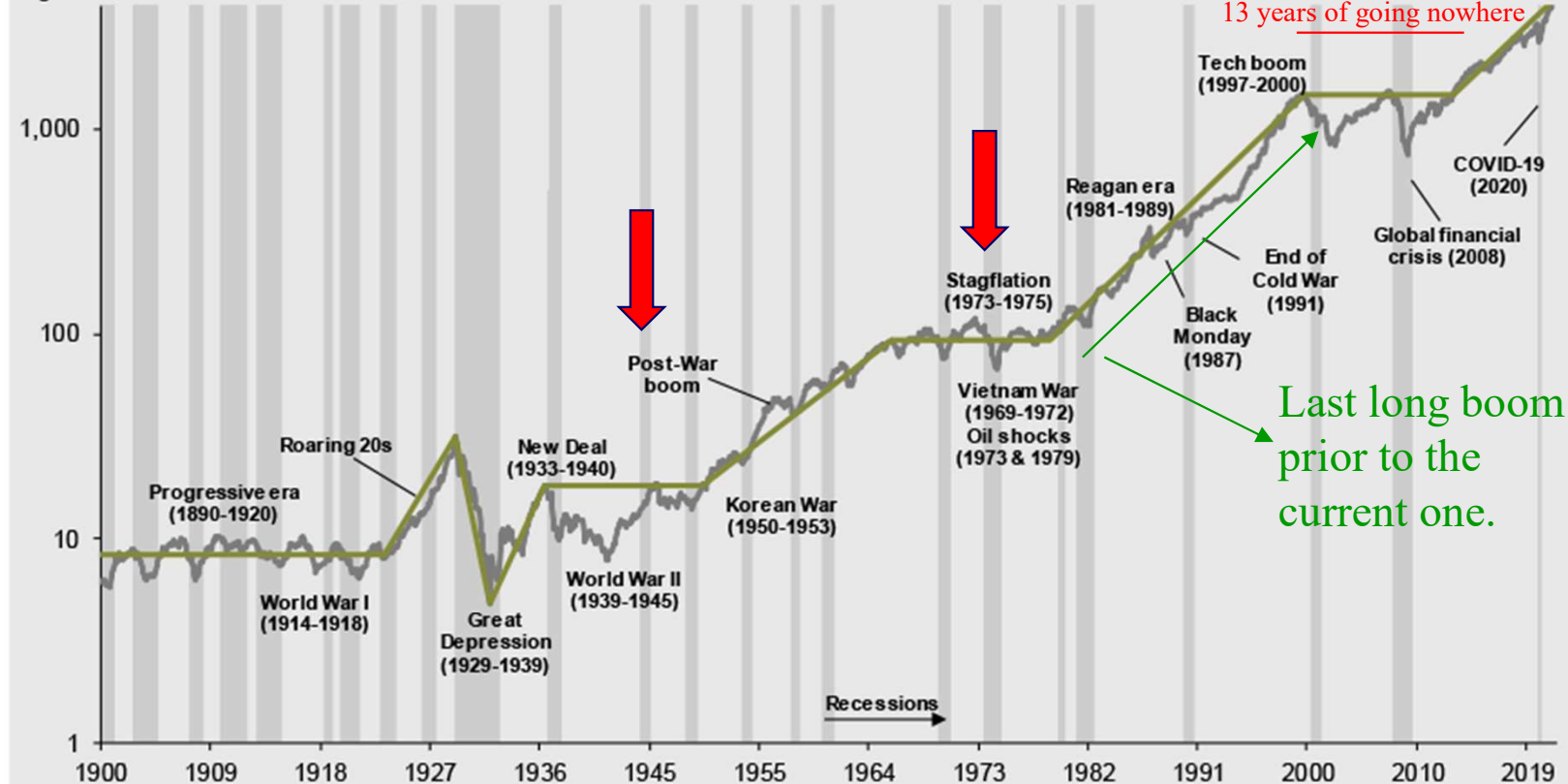


Mad Magazine

Equities

S&P Composite Index

Log scale, annual



Source: FactSet, NBER, Robert Shiller, J.P. Morgan Asset Management.

Data shown in log scale to best illustrate long-term index patterns. Past performance is not indicative of future returns. Chart is for illustrative purposes only.

Guide to the Markets – U.S. Data are as of August 31, 2021.

J.P.Morgan
Asset Management

\$SPX S&P 500 Large Cap Index: INDX

2-Feb-2024

\$SPX (Daily) 4958.61

Volume 2,765,689,600

© StockCharts.com

Open 4916.06 High 4975.29 Low 4907.99 Close 4958.61 Volume 2.8B Chg +52.42 (+1.07%) ▲

4958.61

4500

4250

4000

3750

3500

3250

3000

2750

2500

2250

2000

1750

1500

1250

1000

750

500

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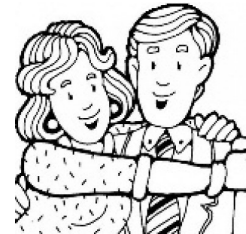
586B

Story of two couples

Mr. & Mrs. Blue



Mr. & Mrs. Green



- Each couple retires at 65 with a life expectancy of one surviving to 90
- Each has an IRA with \$500,000 invested in the S&P 500
- Each couple withdraws \$20,000 (4%) per year to help with expenses
- Mr. & Mrs. Green retire in 1990
- Mr. & Mrs. Blue retire in 2000

Two Very Different Retirements

Mr. & Mrs. Green

Year	Return	\$500,000
1990	-3.1%	\$464,700
1991	30.2%	\$585,179
1992	7.5%	\$609,009
1993	10.0%	\$649,727
1994	1.3%	\$638,368
1995	37.2%	\$855,841
1996	22.7%	\$1,029,946
1997	33.1%	\$1,350,858
1998	28.3%	\$1,713,691
1999	20.9%	\$2,051,681

Mr. & Mrs. Blue

Year	Return	\$500,000
2000	-9.0%	\$434,850
2001	-11.9%	\$363,320
2002	-22.0%	\$263,499
2003	28.4%	\$318,227
2004	10.7%	\$332,405
2005	4.8%	\$328,460
2006	15.6%	\$359,732
2007	5.5%	\$359,446
2008	-36.6%	\$208,068
2009	25.9%	\$242,041

Portfolio drops to half in the first 3 years

- Sequence of return
- Drawdown in down markets.

Both couples have 10-15 more years of retired life

The bond market

<https://fred.stlouisfed.org/series/DFE>



Federal Reserve policy direction

- Stop injecting liquidity (tapering)
- Raise rates



The Fed and interest rates

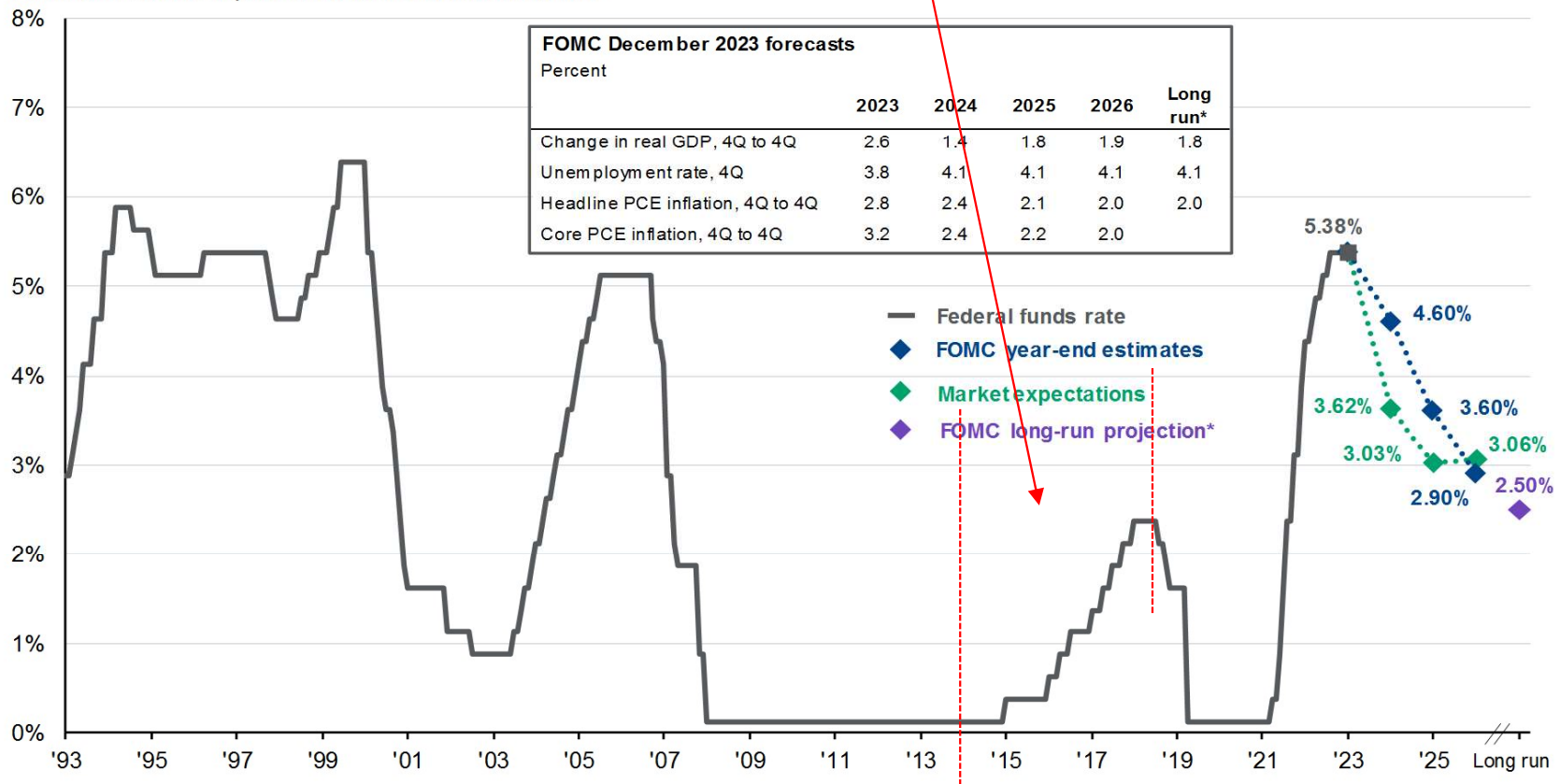
GTM

U.S.

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Federal funds rate expectations

FOMC and market expectations for the federal funds rate



Source: Bloomberg, FactSet, Federal Reserve, J.P. Morgan Asset Management.

Market expectations are based off of USD Overnight Index Swaps. *Long-run projections are the rates of growth, unemployment and inflation to which a policymaker expects the economy to converge over the next five to six years in absence of further shocks and under appropriate monetary policy. Forecasts are not a reliable indicator of future performance. Forecasts, projections and other forward-looking statements are based upon current beliefs and expectations. They are for illustrative purposes only and serve as an indication of what may occur. Given the inherent uncertainties and risks associated with forecasts, projections or other forward-looking statements, actual events, results or performance may differ materially from those reflected or contemplated. Guide to the Markets – U.S. Data are as of December 31, 2023.

J.P.Morgan
ASSET MANAGEMENT

Stocks do OK if economy stays strong and earnings rise.
Which bond funds did well in this period?



Asset class returns

GTM

U.S.

60

2009-2023		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Ann.	Vol.																
Large Cap	Small Cap	Fixed Income	EM Equity	REITs	REITs	REITs	Small Cap	REITs	REITs	Small Cap	EM Equity	Cash	Large Cap	Small Cap	REITs	Com dty.	Large Cap
14.0%	21.9%	5.2%	79.0%	27.9%	8.3%	19.7%	38.8%	28.0%	2.8%	21.3%	37.8%	1.8%	31.5%	20.0%	41.3%	16.1%	26.3%
Small Cap	REITs	Cash	High Yield	Small Cap	Fixed Income	High Yield	Large Cap	Large Cap	Large Cap	High Yield	DM Equity	Fixed Income	REITs	EM Equity	Large Cap	Cash	DM Equity
11.3%	21.2%	1.8%	59.4%	26.9%	7.8%	19.6%	32.4%	13.7%	1.4%	14.3%	25.6%	0.0%	28.7%	18.7%	28.7%	1.5%	18.9%
REITs	EM Equity	Asset Alloc.	DM Equity	EM Equity	High Yield	EM Equity	DM Equity	Fixed Income	Fixed Income	Large Cap	Large Cap	REITs	Small Cap	Large Cap	Com dty.	High Yield	Small Cap
10.9%	20.3%	-25.4%	32.5%	19.2%	3.1%	18.6%	23.3%	6.0%	0.5%	12.0%	21.8%	-4.0%	25.5%	18.4%	27.1%	-12.7%	16.9%
High Yield	DM Equity	High Yield	REITs	Com dty.	Large Cap	DM Equity	Asset Alloc.	Asset Alloc.	Cash	Com dty.	Small Cap	High Yield	DM Equity	Asset Alloc.	Small Cap	Fixed Income	Asset Alloc.
8.6%	18.4%	-26.9%	28.0%	16.8%	2.1%	17.9%	14.9%	5.2%	0.0%	11.8%	14.6%	-4.1%	22.7%	10.6%	14.8%	-13.0%	14.1%
Asset Alloc.	Com dty.	Small Cap	Small Cap	Large Cap	Cash	Small Cap	High Yield	Small Cap	DM Equity	EM Equity	Asset Alloc.	Large Cap	Asset Alloc.	DM Equity	Asset Alloc.	Asset Alloc.	High Yield
8.1%	16.6%	-33.8%	27.2%	15.1%	0.1%	16.3%	7.3%	4.9%	-0.4%	11.6%	14.6%	-4.4%	19.5%	8.3%	13.5%	-13.9%	14.0%
DM Equity	Large Cap	Com dty.	Large Cap	High Yield	Asset Alloc.	Large Cap	REITs	Cash	Asset Alloc.	REITs	High Yield	Asset Alloc.	EM Equity	Fixed Income	DM Equity	DM Equity	REITs
7.4%	16.1%	-35.6%	26.5%	14.8%	-0.7%	16.0%	2.9%	0.0%	-2.0%	8.6%	10.4%	-5.8%	18.9%	7.5%	11.8%	-14.0%	11.4%
EM Equity	High Yield	Large Cap	Asset Alloc.	Asset Alloc.	Small Cap	Asset Alloc.	Cash	High Yield	High Yield	Asset Alloc.	REITs	Small Cap	High Yield	High Yield	High Yield	Large Cap	EM Equity
6.9%	11.5%	-37.0%	25.0%	13.3%	-4.2%	12.2%	0.0%	0.0%	-2.7%	8.3%	8.7%	-11.0%	12.6%	7.0%	1.0%	-18.1%	10.3%
Fixed Income	Asset Alloc.	REITs	Com dty.	DM Equity	DM Equity	Fixed Income	Fixed Income	EM Equity	Small Cap	Fixed Income	Fixed Income	Com dty.	Fixed Income	Cash	Cash	EM Equity	Fixed Income
2.7%	11.5%	-37.7%	18.9%	8.2%	-11.7%	4.2%	-2.0%	-1.8%	-4.4%	2.6%	3.5%	-11.2%	8.7%	0.5%	0.0%	-19.7%	5.5%
Cash	Fixed Income	DM Equity	Fixed Income	Fixed Income	Com dty.	Cash	EM Equity	DM Equity	EM Equity	DM Equity	Com dty.	DM Equity	Com dty.	Com dty.	Fixed Income	Small Cap	Cash
0.8%	4.5%	-43.1%	5.9%	6.5%	-13.3%	0.1%	-2.3%	-4.5%	-14.6%	1.5%	1.7%	-13.4%	7.7%	-3.1%	-1.5%	-20.4%	5.1%
Com dty.	Cash	EM Equity	Cash	Cash	EM Equity	Com dty.	Com dty.	Com dty.	Com dty.	Cash	Cash	EM Equity	Cash	REITs	EM Equity	REITs	Com dty.
-0.2%	0.7%	-53.2%	0.1%	0.1%	-18.2%	-1.1%	-9.5%	-17.0%	-24.7%	0.3%	0.8%	-14.2%	2.2%	-5.1%	-2.2%	-24.9%	-7.9%

Source: Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor's, J.P. Morgan Asset Management.

Large cap: S&P 500, Small cap: Russell 2000, EM Equity: MSCI EME, DM Equity: MSCI EAFE, Comdty: Bloomberg Commodity Index, High Yield: Bloomberg Global HY Index, Fixed Income: Bloomberg US Aggregate, REITs: NAREIT Equity REIT Index, Cash: Bloomberg 1-3m Treasury. The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EME, 25% in the Bloomberg US Aggregate, 5% in the Bloomberg 1-3m Treasury, 5% in the Bloomberg Global High Yield Index, 5% in the Bloomberg Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. Annualized (Ann.) return and volatility (Vol.) represents period from 12/31/2007 to 12/31/2022. Please see disclosure page at end for index definitions. All data represents total return for stated period. The "Asset Allocation" portfolio is for illustrative purposes only. Past performance is not indicative of future returns.

Guide to the Markets - U.S. Data are as of December 31, 2023.

J.P.Morgan
ASSET MANAGEMENT

Second Class – Feb. 14th

- First External speaker.
 - Dr. Robert Fry – Robert Fry Economics LLC

- State of the US Economy
 - Recession, Recession wherefore thou?

Thanks !!

- Happy Investing !!

- **My EMail**

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 - <http://udel.edu/~diyinvst>