

Investing for Successful Retirement

UD Osher – OLLI

Spring 2025

□ **Rajeev A. Vaidya**

□ **Ron Materniak**

Your instructors

Instructors this semester

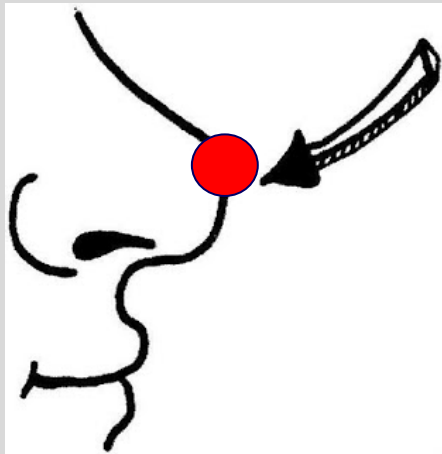
- Rajeev Vaidya
- Ron Materniak

Advisor

- Guy Werner

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, and I are not a financial advisors.

This course is for educational purposes only.

Form your own opinion, make your own investment decisions.

Class processes - RECORDING

- UD has a restricted policy on recording and sharing
 - Only if all participants agree
 - Only to be shared with REGISTERED class participants on an exception basis as needed.
 - To request a link to a class recording, send an email to ron.materniak@verizon.net

- WE WILL START RECORDING THIS FIRST CLASS NOW
 - Unless anyone does not agree.
 - **Please speak up if you do NOT want to be recorded.**

First Class – Feb. 5th

- Class Introduction
- Market Update
- This Week's Topic
 - What's different in investing in retirement?

Spring 2024 – Class Feedback

OLLI - Investing for Successful Retirement - Fall 2024

69 in class 47 participated in the feedback

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	91%	6%			2%	
Website materials are effective	85%	13%				
Instructor/s are knowledgeable	98%	2%				
Course objectives were clear	91%	9%				
Course objectives were achieved	89%	11%				
Course met my expectations	85%	13%			2%	
	Yes	No				
Did the learnings from the class have a positive impact on your investing?	98%	2%				

One person

Class Composition

- 84 people registered
- Approx. 21 look new (25%)

Course Content

□ Typical Class

- Market updates (15-20 min)
- Weekly Topic (45 min) generally focused on:
 - Protecting capital and producing income and returns
 - Investing ideas that are currently relevant
- Time for Questions (10 min)

□ New content of current relevance to the investor

- Bonds as an alternative to equities – Portfolio Allocation.
- ETFs – Basics and more. **More class participant interaction**
- AI (Artificial Intelligence) – Investing opportunity. **interaction**
- The world is short of electricity !! – Investing Opportunities.
- Your input / suggestions are welcome – Subjects we don't cover = annuities, taxes

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

Class processes / plans

- olli-online mailed a class Zoom link to all registered participants
- The Link is for a repeating meeting
 - Same link works for 11 weeks
- Password was mailed to you in the welcome note from olli-online
 - Password does not change .. Same for the whole semester
- Please put your name (vs “computer”) in Zoom so we know who you are when asking questions.

Class processes / plans

- 11 week class.
 - Draft Schedule for first four classes is posted on the class website.
 - Will change as we finalize second external speaker and based on your input.
- **Class website**
 - <http://udel.edu/~diyinvst>
 - Class documents are posted each week before class. Stay on the website till the end of the semester. Do not share with people outside the class.
- Rajeev Vaidya – diyinvst@udel.edu

Class Emails

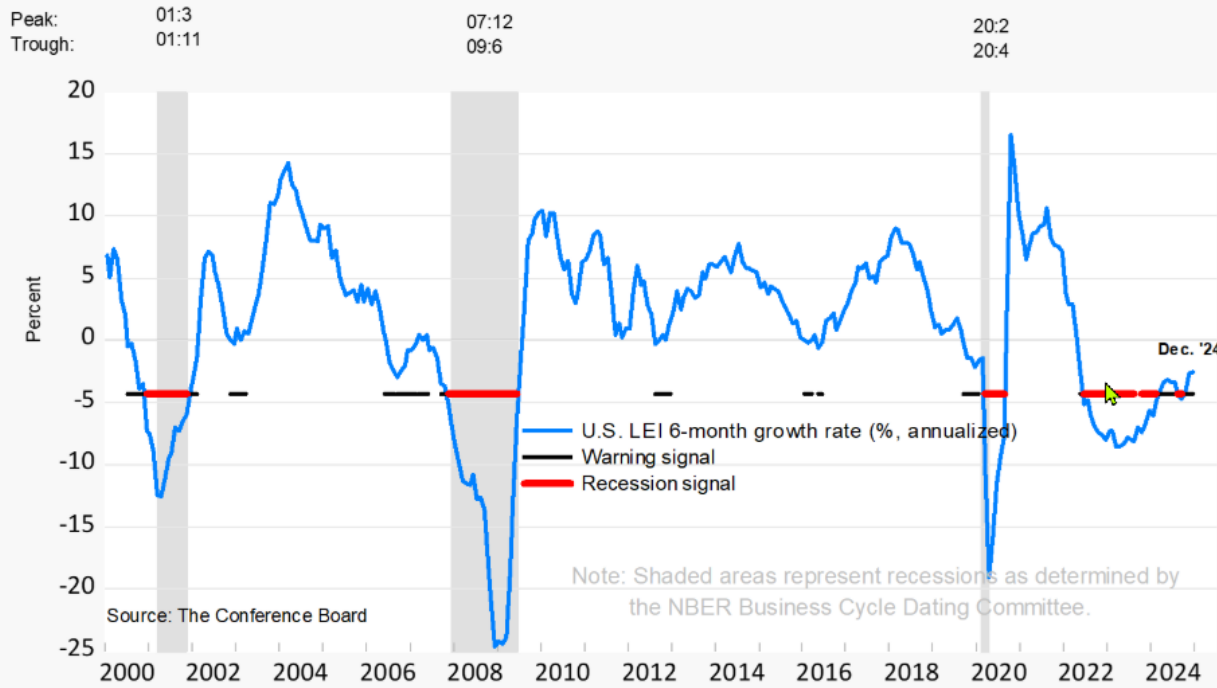
- ❑ Generally, Rajeev will send ONE email per week to class participants.
- ❑ The email will be sent a day or two before class, letting you know that charts have been posted to the website.
- ❑ If you do **NOT** want to receive these emails, please send an email to diyinvst@udel.edu and we will remove you from the distribution list.

First Class – Feb 5th

- Class Introduction
- Market update
- Weekly Topic
 - What's different in investing in retirement?

Conference Board – Jan 2025

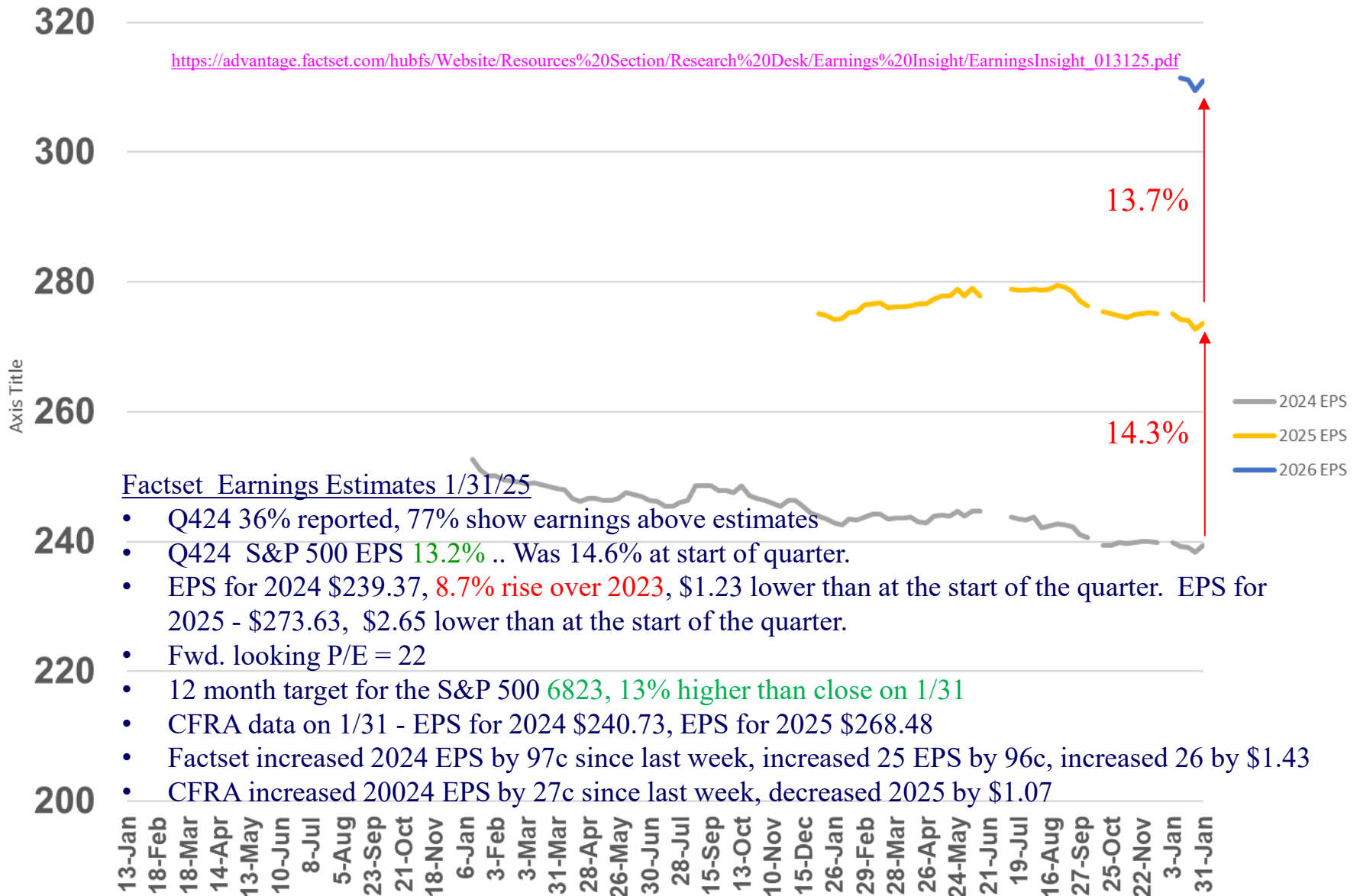
The LEI is no longer signalling a risk of recession



“The Index fell slightly in December failing to sustain November’s increase,” said Justyna Zabinska-La Monica, Senior Manager, Business Cycle Indicators, at The Conference Board. “Low consumer confidence about future business conditions, still relatively weak manufacturing orders, an increase in initial claims for unemployment, and a decline in building permits contributed to the decline. Still, half of the 10 components of the index contributed positively in December. Moreover, the LEI’s six-month and twelve-month growth rates were less negative, signaling fewer headwinds to US economic activity ahead. **Nonetheless, we expect growth momentum to remain strong to start the year and US real GDP to expand by 2.3% in 2025.**”

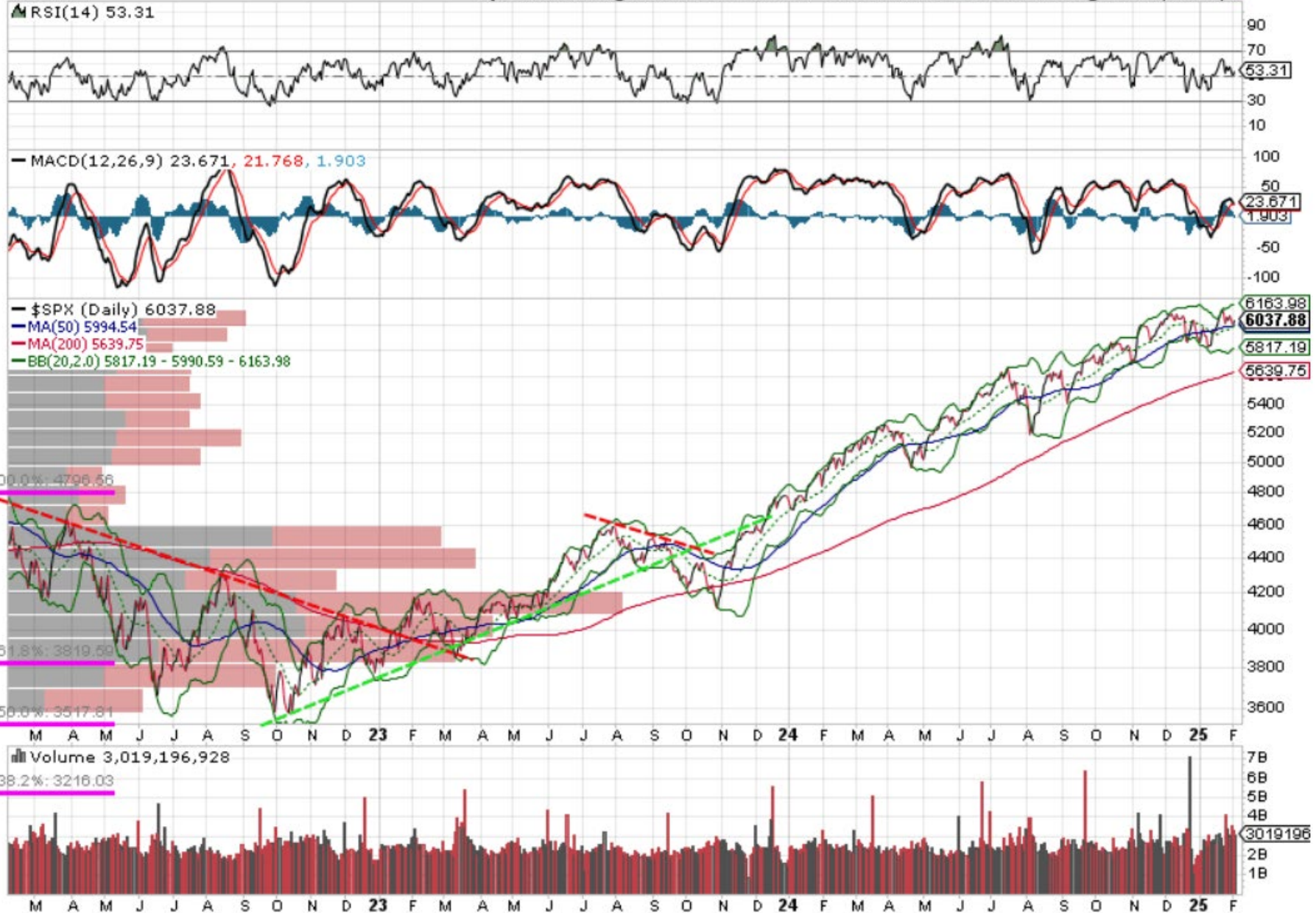
<https://www.conference-board.org/topics/us-leading-indicators>

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



4 Feb-2025

Open 5998.14 High 6042.48 Low 5990.87 Close 6037.88 Volume 3.0B Chg +43.31 (+0.72%) ▲

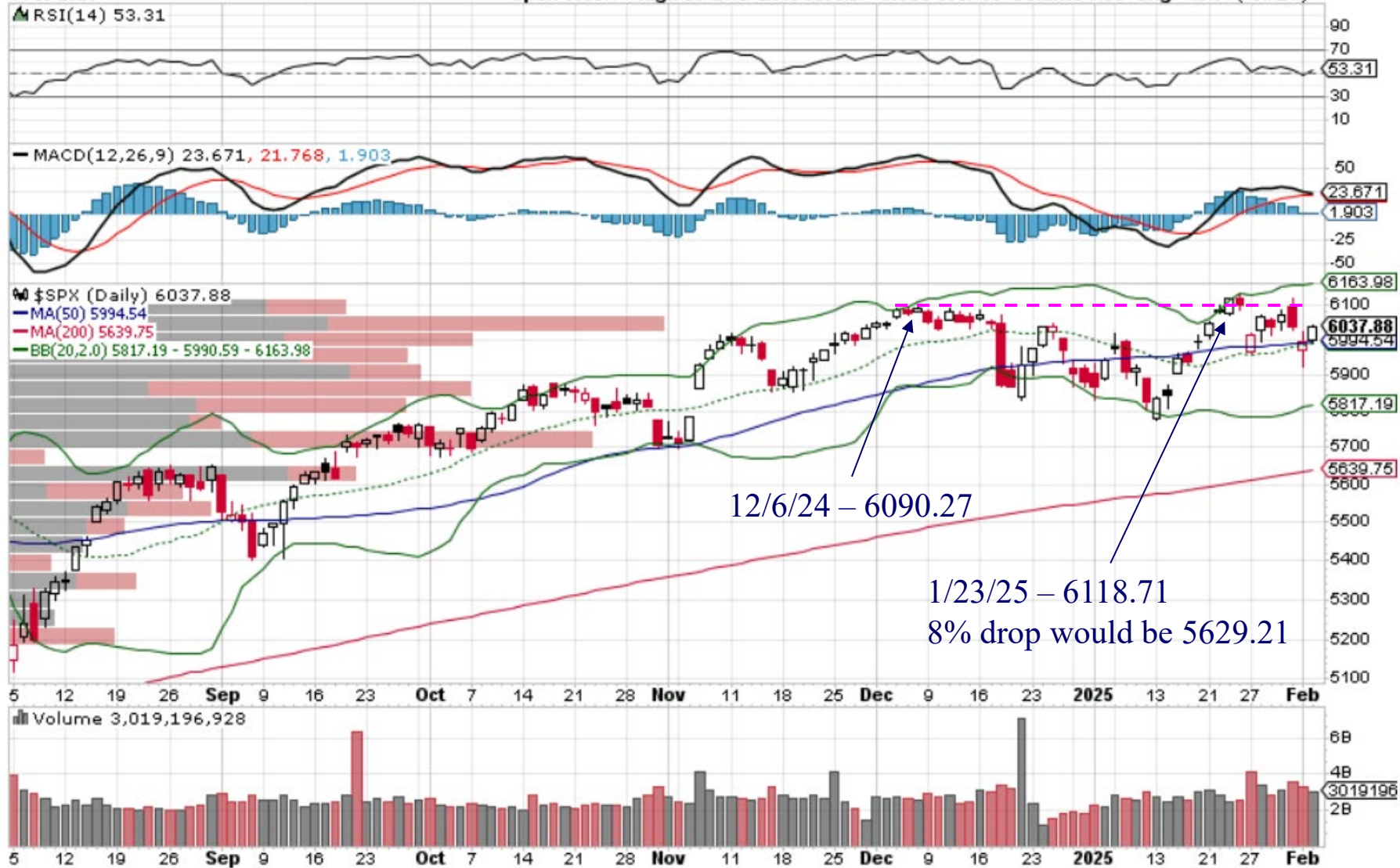


\$SPX S&P 500 Large Cap Index INDX

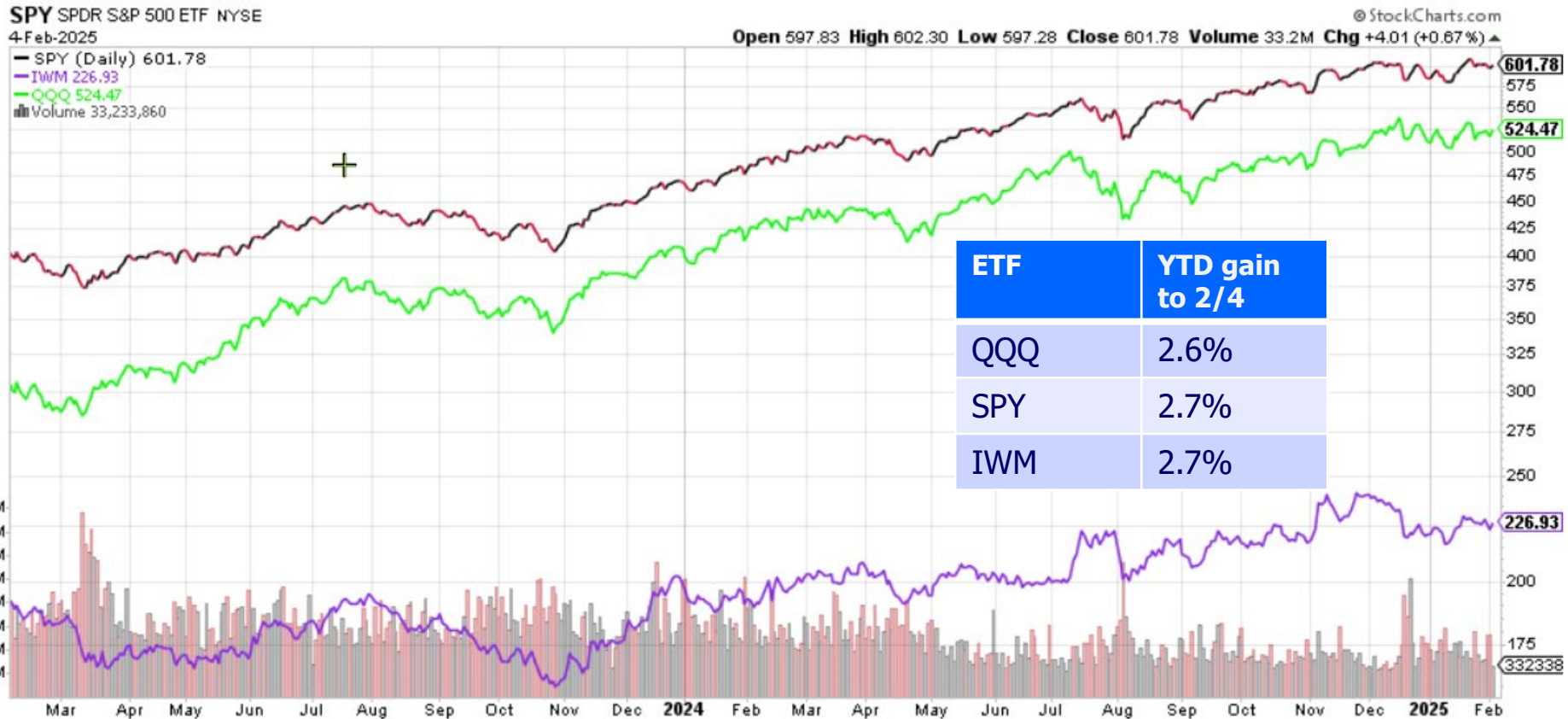
4 Feb-2025

Open 5998.14 High 6042.48 Low 5990.87 Close 6037.88 Volume 3.0B Chg +43.31 (+0.72%) ▲

© StockCharts.com



Market Breadth – another way



\$NYAD NYSE - Advance-Decline Issues INDEX

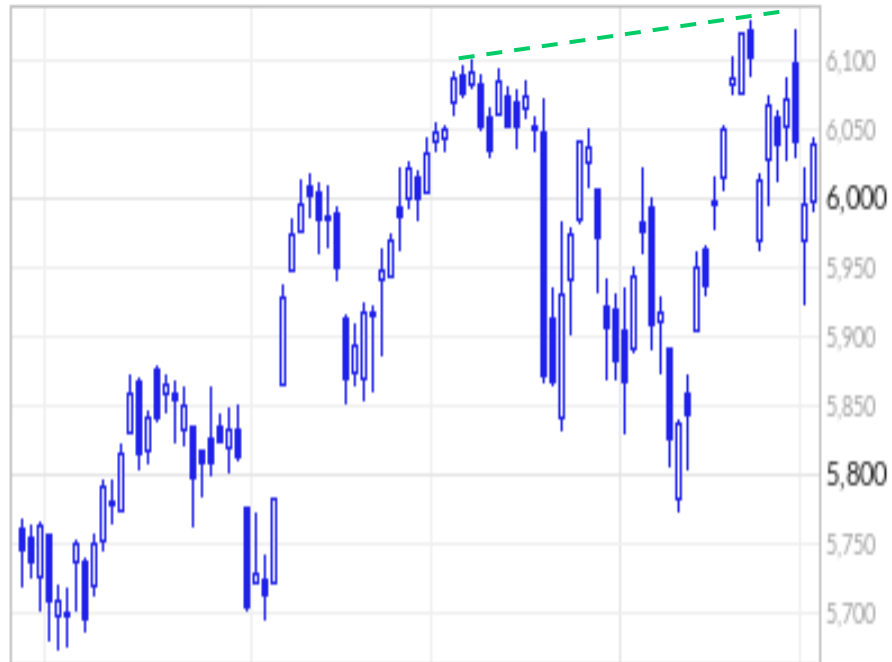
4 Feb-2025

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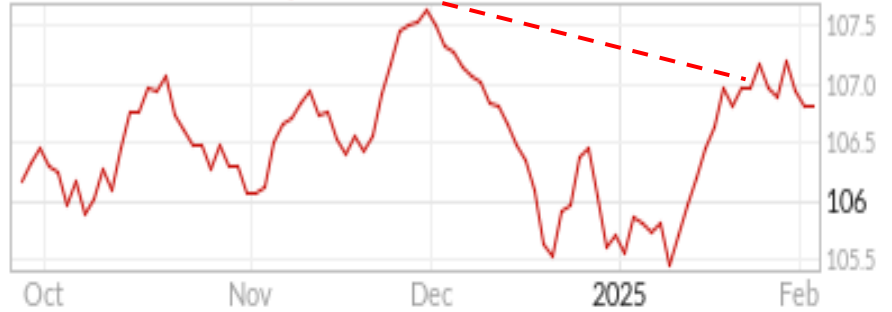
Open 46102.00 High 46102.00 Low 46102.00 Close 46102.00 Chg +1126.00 (+2.50%) ▲



SP500.I S&P 500 6,037.88 +43.31 +0.72% D



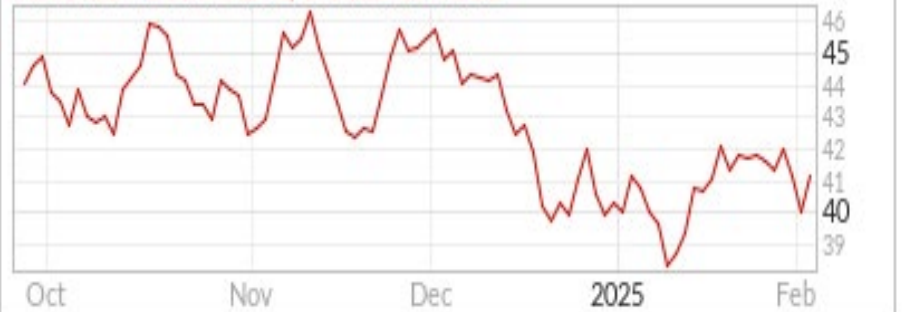
Advance / Decline Line, thousands 106.81



RUSSELL2000.I Russell 2000 2,290.21 +31.79 +1.41% D



Advance / Decline Line, thousands 41.18





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

COLUMNS C,D AND E ARE FROM IBD AND PROVIDED BY DAVE (IN THE NORTH) SMITH			DISTRIBUTION DAYS		S&P 500 TRIPLE SCREEN						NASDAQ TRIPLE SCREEN					
SAT	DATE	MARKET PULSE (IBD)	S&P 500	NASDAQ	8-20 EMA	MACD	RSI	CLOSING	Δ	%CHANGE	8-20 EMA	MACD	RSI	CLOSING	Δ	%CHANGE
	01/18/25	FOR THE WEEK							169	2.90%					469	2.45%
SUN	01/19/25	YTD							115	1.96%					320	1.66%
MON	01/20/25	TRUMP 2.0 FOTUS (Felon Of The United States)			F	P	P	5,996	0	0.00%	F	F	P	19,630	0	0.00%
TUE	01/21/25	CONFIRMED UP (80% -100%)	6	7	P	P	P	6,049	53	0.88%	0	0	P	19,756	126	0.64%
WED	01/22/25	CONFIRMED UP (80% -100%)	6	7	P	P	P	6,086	37	0.61%	P	P	P	20,009	253	1.28%
THUR	01/23/25	CONFIRMED UP (80% -100%)	5	6	P	P	P	6,118	32	0.53%	P	P	P	20,053	44	0.22%
FRI	01/24/25	CONFIRMED UP (80% -100%)	5	7	P	P	P	6,101	-17	-0.28%	P	P	P	19,954	-99	-0.49%
SAT	01/25/25	FOR THE WEEK							105	1.75%					324	1.65%
SUN	01/26/25	YTD							220	3.74%					644	3.34%
MON	01/27/25	CONFIRMED UP (60% -80%)	5	7	P	P	P	6,012	-89	-1.46%	P	P	F	19,341	-613	-3.07%
TUE	01/28/25	CONFIRMED UP (60% -80%)	4	6	P	P	P	6,067	55	0.91%	P	P	P	19,733	392	2.03%
WED	01/29/25	CONFIRMED UP (60% -80%)	4	6	P	P	P	6,039	-28	-0.46%	P	P	P	19,632	-101	-0.51%
THUR	01/30/25	CONFIRMED UP (60% -80%)	4	6	P	P	P	6,071	32	0.53%	P	P	P	19,681	49	0.25%
FRI	01/31/25	CONFIRMED UP (60% -80%)	5	7	P	P	P	6,040	-31	-0.51%	0	0	0	19,627	-54	-0.27%
SAT	02/01/25	FOR THE WEEK							-61	-1.00%					-327	-1.64%
SUN	02/02/25	YTD							159	2.70%					317	1.64%
MON	02/03/25	CONFIRMED UP (60% -80%) YES TARIFF	6	8	P	P	F	5,994	-46	-0.76%	0	F	F	19,391	-236	-1.20%
TUE	02/04/25	CONFIRMED UP (60% -80%) NO TARIFF	6	8	P	P	P	6,037	43	0.72%	0	F	P	19,654	263	1.36%

https://drive.google.com/drive/folders/0B6Qc_gipshXMelkzQ245d2R1eTQ?resourcekey=0-5pWglNqaJPJ12L2qYurMWg

TLT – 20 yr U.S. Treasury ETF

TLT iShares 20+ Year Treasury Bond ETF Nasdaq GM

4 Feb-2025

Open 87.55 High 88.45 Low 87.48 Close 88.43 Volume 33.4M Chg +0.27 (+0.31%) ▲

© StockCharts.com

TLT (Daily) 88.43

Volume 33,366,372



U.S. Dollar



First Class – Sept. 4th

- Class Introduction
- Market update
- Weekly Topic
 - What's different in investing in retirement?

Investing in Retirement

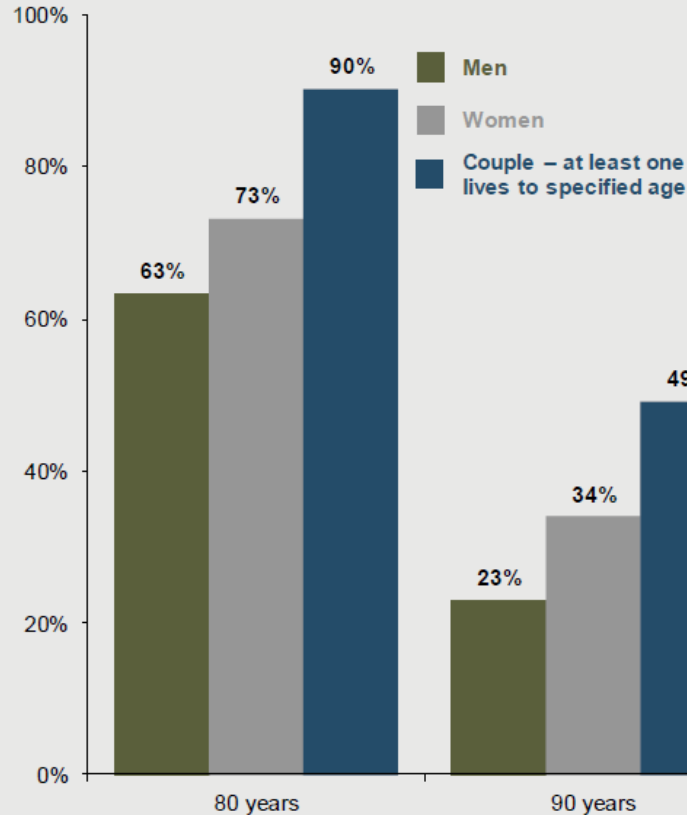
- Prior to retirement – Accumulation phase
- After retirement
 - Protect and grow the investment portfolio
 - Use the portfolio to produce income for current expenses
 - Draw down the principal as needed and in a way that does not exhaust it prematurely.
- 3 unknowns
 - How long will we live?
 - How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

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

Investing principles

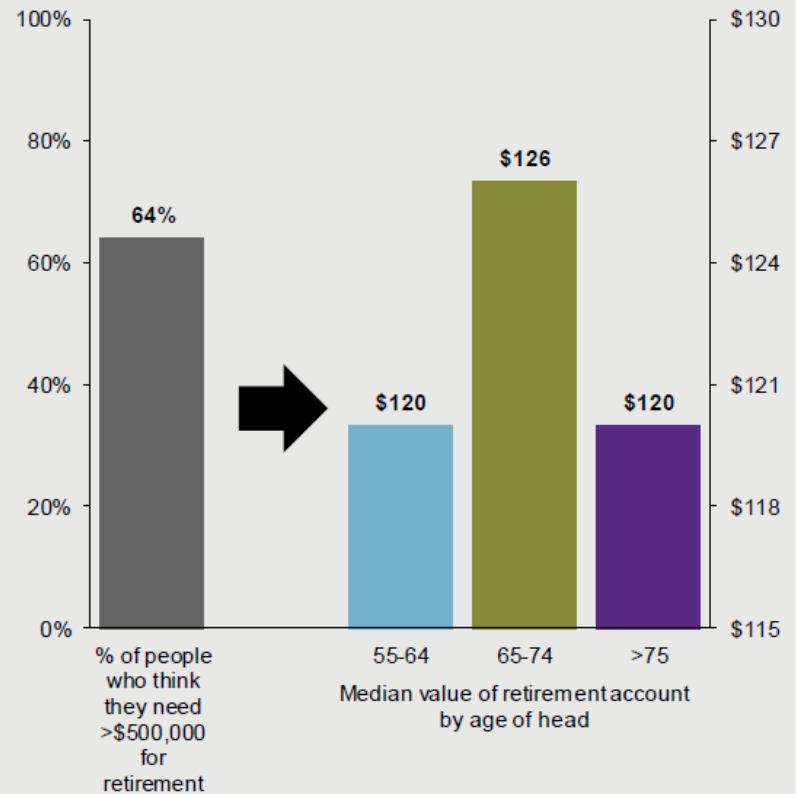
Probability of reaching ages 80 and 90

Persons aged 65, by gender, and combined couple



Retirement savings gap

Anticipated amount needed vs. actual savings, thousands

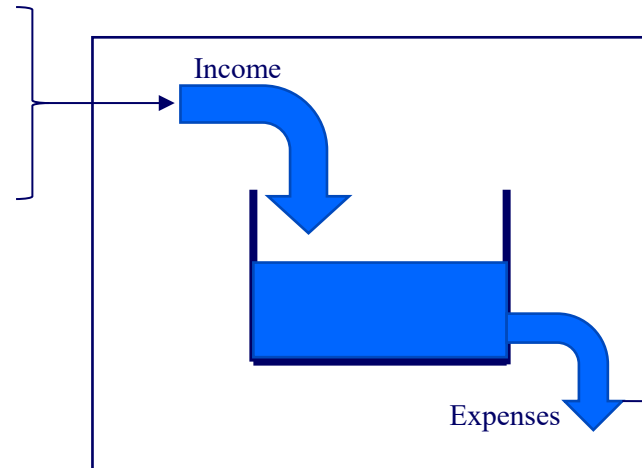


Source: J.P. Morgan Asset Management; (Left) SSA 2016 Life Tables; (Right) 2017 Retirement Confidence Survey, Employee Benefit Research Institute and Greenwald & Associates; 2016 Survey of Consumer Finances, Federal Reserve. EBRI survey was conducted from January 6, 2017 to January 13, 2017 through online 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.

62 **If you retire at 65 expect at least one spouse to need your nest egg for 25 to 30 years**

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

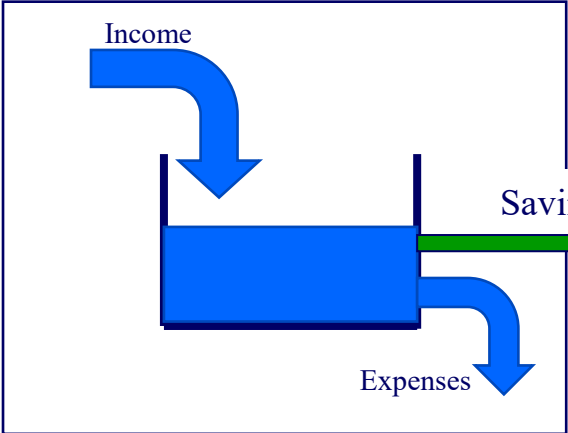
- Fun money
 - zero is not real / sustainable

Savings



Adding to or drawing from assets ?

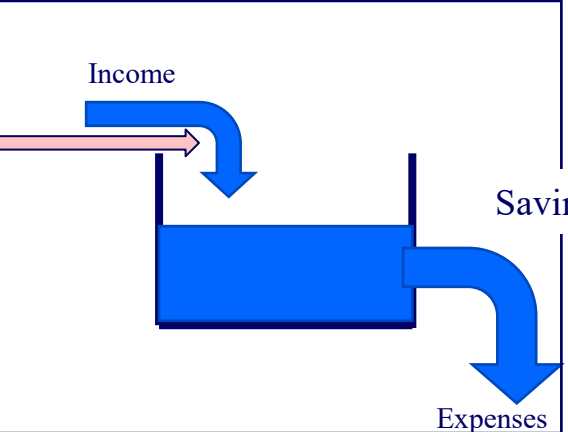
Income exceeds expenses



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

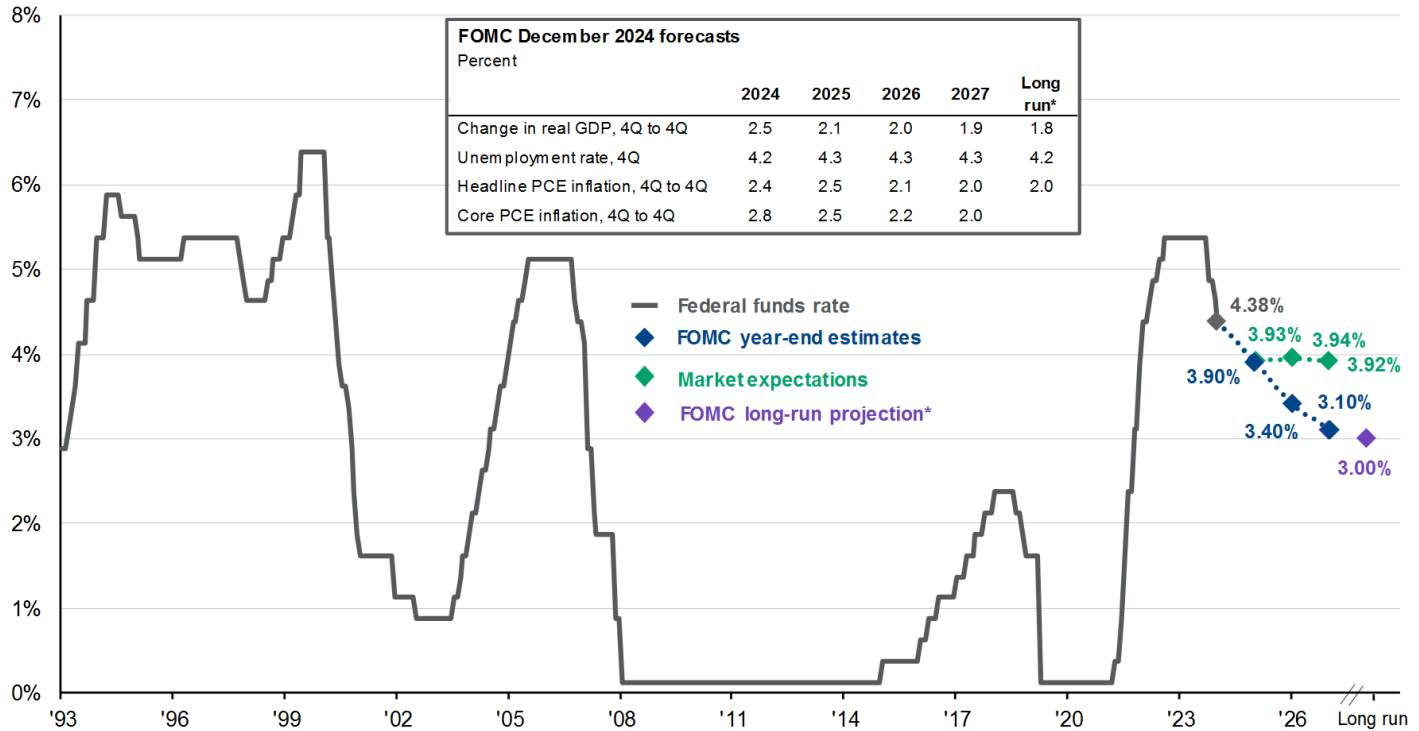
Date	1 Mo	2 Mo	3 Mo	4 Mo	6 Mo	1 Yr	2 Yr	3 Yr	5 Yr	7 Yr	10 Yr	20 Yr	30 Yr
1/2/2025	4.45	4.36	4.36	4.31	4.25	4.17	4.25	4.29	4.38	4.47	4.57	4.86	4.79
1/3/2025	4.44	4.35	4.34	4.31	4.25	4.18	4.28	4.32	4.41	4.51	4.6	4.88	4.82
1/6/2025	4.43	4.36	4.35	4.31	4.24	4.17	4.28	4.3	4.42	4.52	4.62	4.91	4.85
1/7/2025	4.42	4.35	4.35	4.31	4.24	4.19	4.3	4.33	4.46	4.57	4.67	4.97	4.91
1/8/2025	4.41	4.34	4.35	4.31	4.25	4.19	4.28	4.31	4.45	4.56	4.67	4.97	4.91
1/9/2025	4.44	4.36	4.35	4.31	4.24	4.16	4.27	4.31	4.46	4.57	4.68	4.98	4.92
1/10/2025	4.42	4.35	4.36	4.33	4.27	4.25	4.4	4.46	4.59	4.7	4.77	5.04	4.96
1/13/2025	4.42	4.36	4.37	4.34	4.3	4.24	4.4	4.49	4.61	4.71	4.79	5.05	4.97
1/14/2025	4.42	4.35	4.36	4.33	4.29	4.22	4.37	4.46	4.59	4.7	4.78	5.06	4.98
1/15/2025	4.4	4.34	4.35	4.32	4.26	4.19	4.27	4.34	4.45	4.55	4.66	4.95	4.88
1/16/2025	4.43	4.36	4.34	4.32	4.26	4.18	4.23	4.29	4.39	4.5	4.61	4.91	4.84
1/17/2025	4.43	4.35	4.34	4.32	4.28	4.21	4.27	4.33	4.42	4.52	4.61	4.91	4.84
1/21/2025	4.42	4.35	4.36	4.33	4.28	4.21	4.29	4.33	4.4	4.49	4.57	4.87	4.8
1/22/2025	4.42	4.35	4.36	4.32	4.28	4.2	4.29	4.34	4.43	4.51	4.6	4.89	4.82
1/23/2025	4.45	4.36	4.36	4.32	4.27	4.18	4.29	4.35	4.45	4.55	4.65	4.92	4.87
1/24/2025	4.45	4.36	4.35	4.32	4.25	4.17	4.27	4.33	4.43	4.53	4.63	4.91	4.85
1/27/2025	4.44	4.36	4.32	4.3	4.25	4.13	4.17	4.24	4.32	4.43	4.53	4.82	4.76
1/28/2025	4.44	4.35	4.31	4.3	4.26	4.14	4.19	4.25	4.33	4.43	4.55	4.84	4.78
1/29/2025	4.43	4.34	4.31	4.34	4.27	4.17	4.21	4.27	4.35	4.44	4.55	4.85	4.79
1/30/2025	4.37	4.38	4.3	4.33	4.27	4.16	4.18	4.24	4.31	4.41	4.52	4.81	4.76
1/31/2025	4.37	4.37	4.31	4.33	4.28	4.17	4.22	4.27	4.36	4.47	4.58	4.88	4.83



The Fed and interest rates

Federal funds rate expectations

FOMC and market expectations for the federal funds rate



Fixed Income

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, 2024.

J.P.Morgan ASSET MANAGEMENT



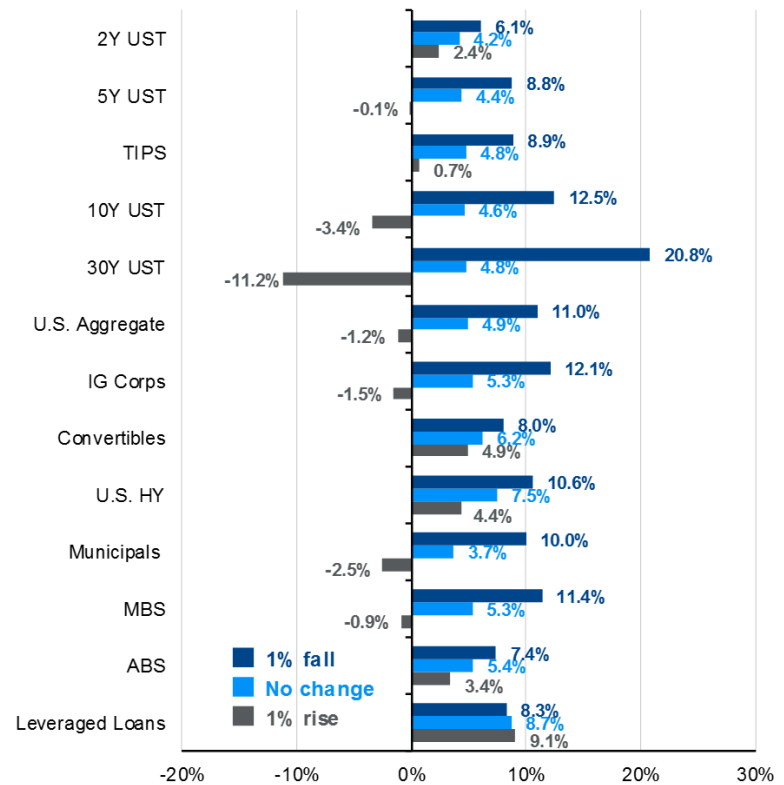
Fixed income market dynamics

Fixed Income

U.S. Treasuries	Yield		Return			
	12/31/2024	12/31/2023	2024	Avg. Maturity	Correlation to 10-year	Correlation to S&P 500
2-Year	4.25%	4.23%	3.79%	2 years	0.75	0.00
5-Year	4.38%	3.84%	1.19%	5	0.94	-0.02
TIPS	2.13%	1.72%	1.84%	7.1	0.73	0.33
10-Year	4.58%	3.88%	-1.73%	10	1.00	-0.07
30-Year	4.78%	4.03%	-8.09%	30	0.93	-0.11
Sector						
U.S. Aggregate	4.91%	4.53%	1.25%	8.4	0.90	0.25
IG Corps	5.33%	5.06%	2.13%	10.5	0.69	0.47
Convertibles	6.22%	7.26%	10.95%	-	-0.04	0.86
U.S. HY	7.49%	7.59%	8.19%	4.7	0.09	0.79
Municipals	3.74%	3.22%	1.05%	13.6	0.74	0.26
MBS	5.27%	4.68%	1.20%	7.8	0.81	0.26
ABS	5.38%	5.65%	6.81%	2.3	0.42	0.22
Leveraged Loans	8.68%	10.59%	9.33%	4.7	-0.22	0.62

Fixed income returns in different interest rate scenarios

Total return, assumes a parallel shift in the yield curve



Source: Bloomberg, FactSet, Federal Reserve Bank of Cleveland, Standard & Poor's, U.S. Treasury, J.P. Morgan Asset Management. Sectors shown above are provided by Bloomberg unless otherwise noted and are represented by - U.S. Aggregate; MBS: U.S. Aggregate Securitized - MBS; ABS: J.P. Morgan ABS Index; IG Corporates: U.S. Corporates; Municipals: Muni Bond; High Yield: Corporate High Yield; Leveraged Loans: J.P. Morgan Leveraged Loan Index; TIPS: Treasury Inflation-Protected Securities; Convertibles: U.S. Convertibles Composite. Convertibles yield is as of most recent month-end and is based on U.S. portion of Bloomberg Global Convertibles Index. Yield and return information based on bellwethers for Treasury securities. Yields shown for TIPS are real yields. TIPS returns consider the impact that inflation could have on returns by assuming the Cleveland Fed's 1-year inflation expectation forecasts are realized. Sector yields reflect yield-to-worst. Leveraged loan yields reflect the yield to 3Y takeout. Correlations are based on 15-years of monthly returns for all sectors. ABS returns prior to June 2012 are sourced from Bloomberg. Past performance is not indicative of future results.

Guide to the Markets - U.S. Data are as of December 31, 2024.

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

The big picture

Stock market since 1900

GTM - U.S. | 19

What, Me Worry?

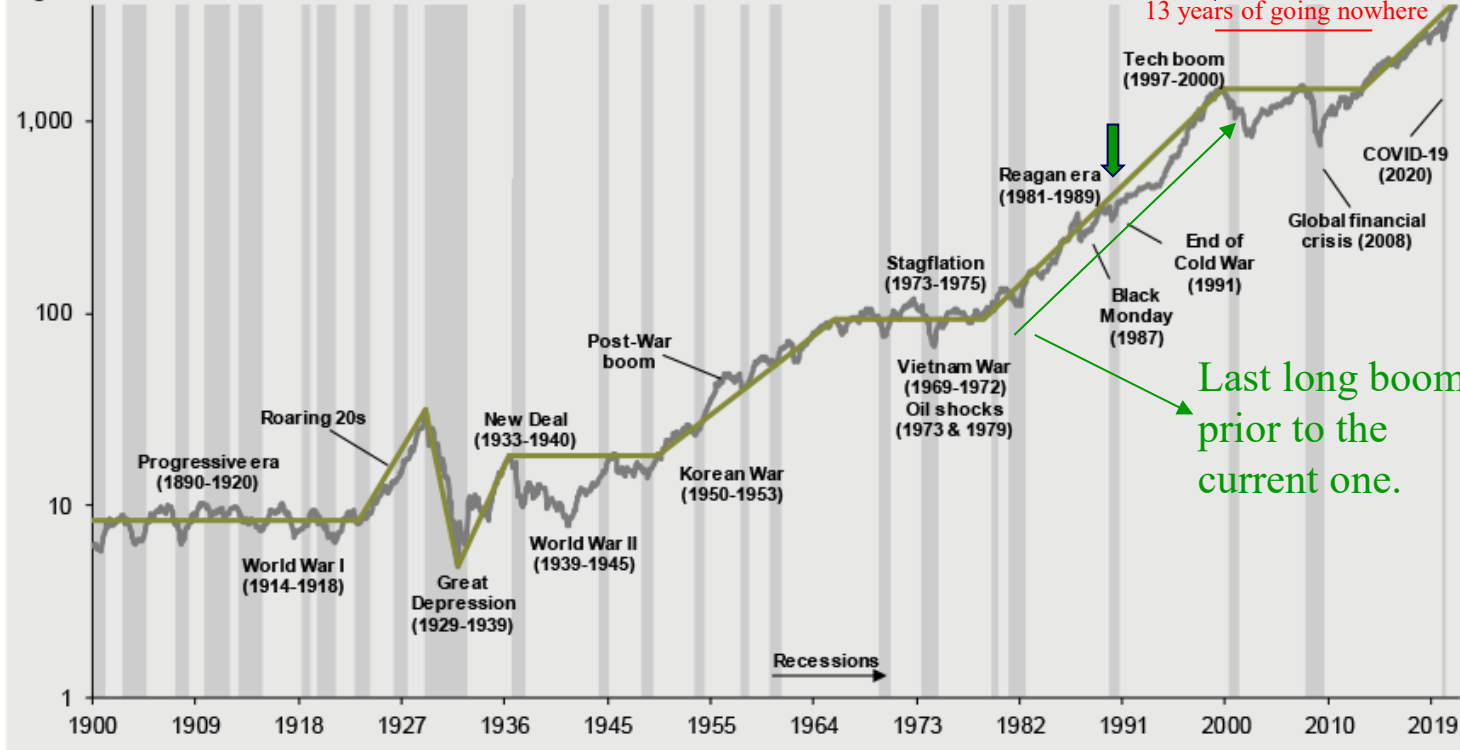


Mad Magazine

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

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>



Fed funds rate above 3%

Federal Reserve policy direction

- Stop injecting liquidity (QT, tapering)
- Adjust rates to neutral based on inflation data. Expected lowering currently paused.



Asset class returns

2010-2024		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Ann.	Vol.															
Large Cap	Small Cap	REITs	REITs	REITs	Small Cap	REITs	REITs	Small Cap	EM Equity	Cash	Large Cap	Small Cap	REITs	Comdty.	Large Cap	Large Cap
13.9%	20.6%	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%	25.0%
Small Cap	EM Equity	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	Small Cap
10.3%	17.9%	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%	11.5%
REITs	REITs	EM Equity	High Yield	EM Equity	DM Equity	Fixed Income	Fixed Income	Large Cap	Large Cap	REITs	Small Cap	Large Cap	Comdty.	High Yield	Small Cap	Asset Alloc.
9.4%	16.8%	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%	10.0%
Asset Alloc.	DM Equity	Comdty.	Large Cap	DM Equity	Asset Alloc.	Asset Alloc.	Cash	Comdty.	Small Cap	High Yield	DM Equity	Asset Alloc.	Small Cap	Fixed Income	Asset Alloc.	High Yield
7.2%	16.5%	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%	9.2%
High Yield	Comdty.	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	EM Equity
5.9%	16.1%	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%	8.1%
DM Equity	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	Comdty.
5.7%	15.1%	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%	5.4%
EM Equity	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	Cash
3.4%	10.4%	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%	5.3%
Fixed Income	High Yield	DM Equity	DM Equity	Fixed Income	Fixed Income	EM Equity	Small Cap	Fixed Income	Fixed Income	Comdty.	Fixed Income	Cash	Cash	EM Equity	Fixed Income	REITs
2.4%	9.4%	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%	4.9%
Cash	Fixed Income	Fixed Income	Comdty.	Cash	EM Equity	DM Equity	EM Equity	DM Equity	Comdty.	DM Equity	Comdty.	Comdty.	Fixed Income	Small Cap	Cash	DM Equity
1.2%	4.7%	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%	4.3%
Comdty.	Cash	Cash	EM Equity	Comdty.	Comdty.	Comdty.	Comdty.	Cash	Cash	EM Equity	Cash	REITs	EM Equity	REITs	Comdty.	Fixed Income
-1.0%	0.9%	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%	1.3%

Investing Principles

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 U.S. 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 U.S. 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 12/31/2009 to 12/31/2024. 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, 2024.

Second Class – Feb. 12th

- Market Update – Rajeev
- What does 2025 bring
 - Fundamental analysis
 - Technical analysis
 - Sectors of interest

- Questions

Thanks !!

□ Happy Investing !!

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