

# Investing for Successful Retirement

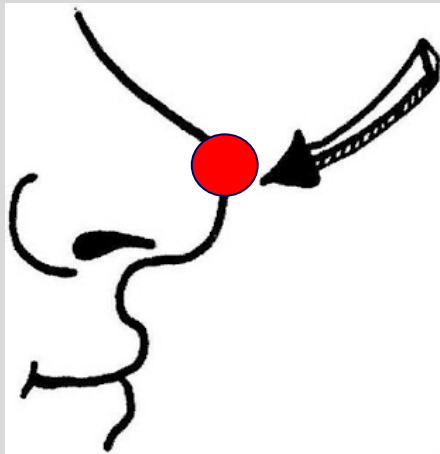
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**UD Osher – OLLI**  
**Spring 2024**

- **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.

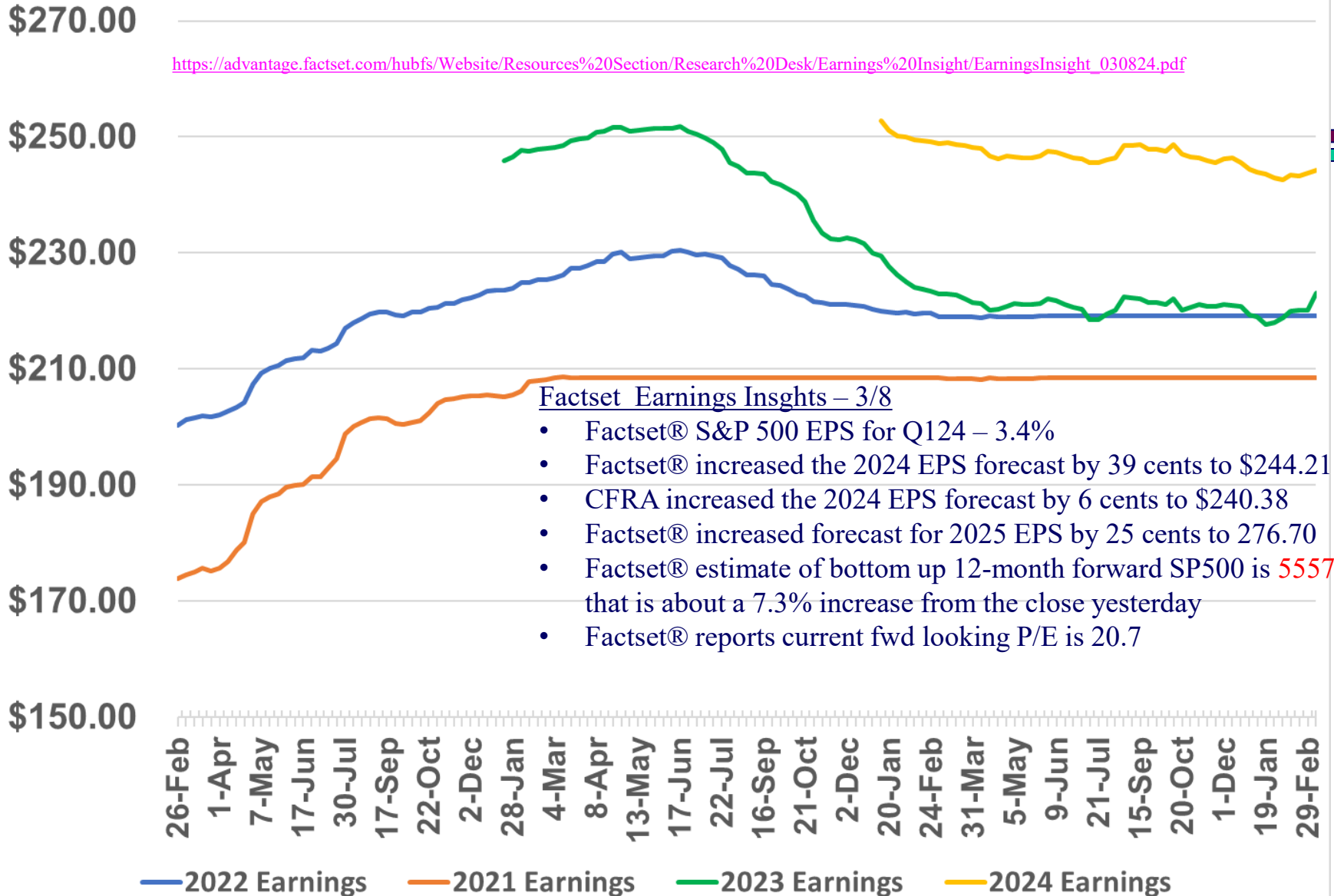
# Sixth Class – Mar. 13<sup>th</sup>

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- US Equities Market Review – 20 minutes
  
- ETFs deep dive – Part 2
  - Performance metrics
  - Risk
  - ETFs for various asset classes

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

[https://advantage.factset.com/hubfs/Website/Resources%20Section/Research%20Desk/Earnings%20Insight/EarningsInsight\\_030824.pdf](https://advantage.factset.com/hubfs/Website/Resources%20Section/Research%20Desk/Earnings%20Insight/EarningsInsight_030824.pdf)



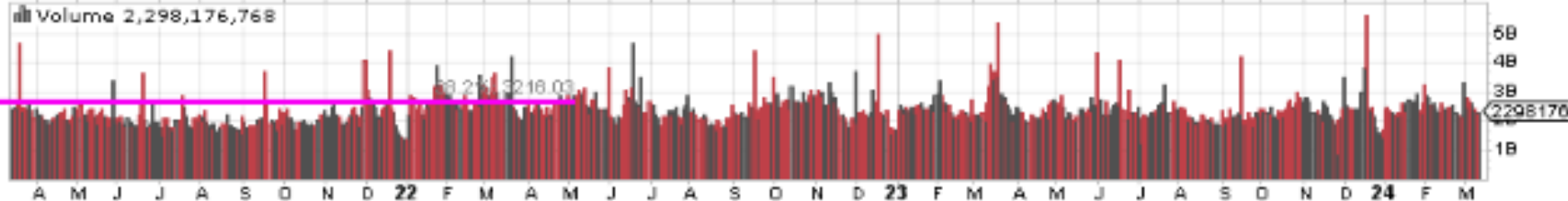
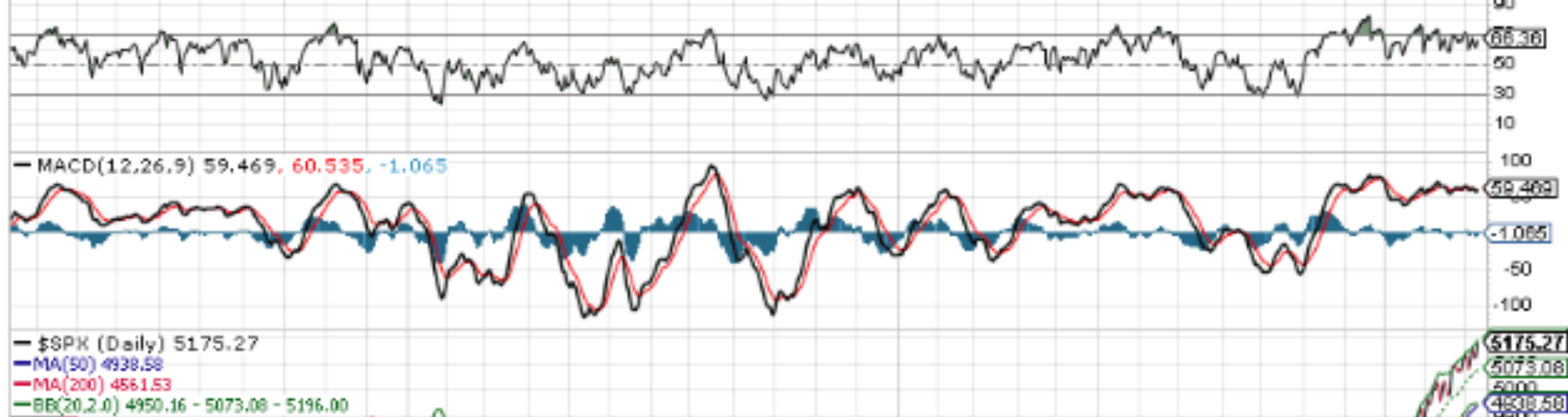
\$SPX S&P 500 Large Cap Index INDX

12-Mar-2024

Open 5134.30 High 5179.87 Low 5114.48 Close 5175.27 Volume 2.3B Chg +57.33 (+1.12%) ▲

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▲ RSI(14) 66.36



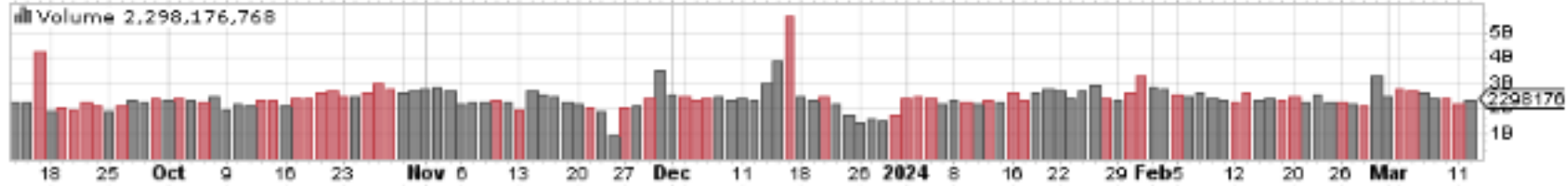
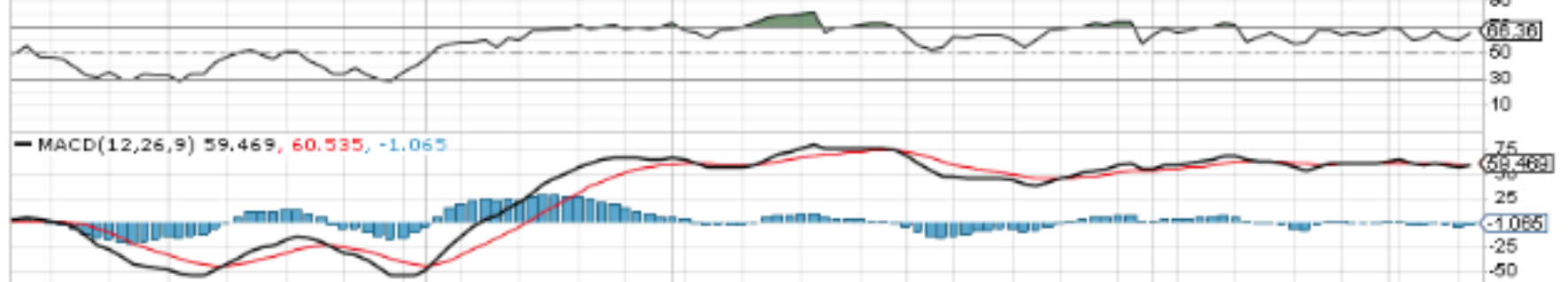
**\$SPX S&P 500 Large Cap Index INDX**

12-Mar-2024

Open 5134.30 High 5179.87 Low 5114.48 Close 5175.27 Volume 2.38 Chg +57.33 (+1.12%) ▲

© StockCharts.com

▲ RSI(14) 66.36



**\$NYAD NYSE - Advance-Delay Issues INDX**

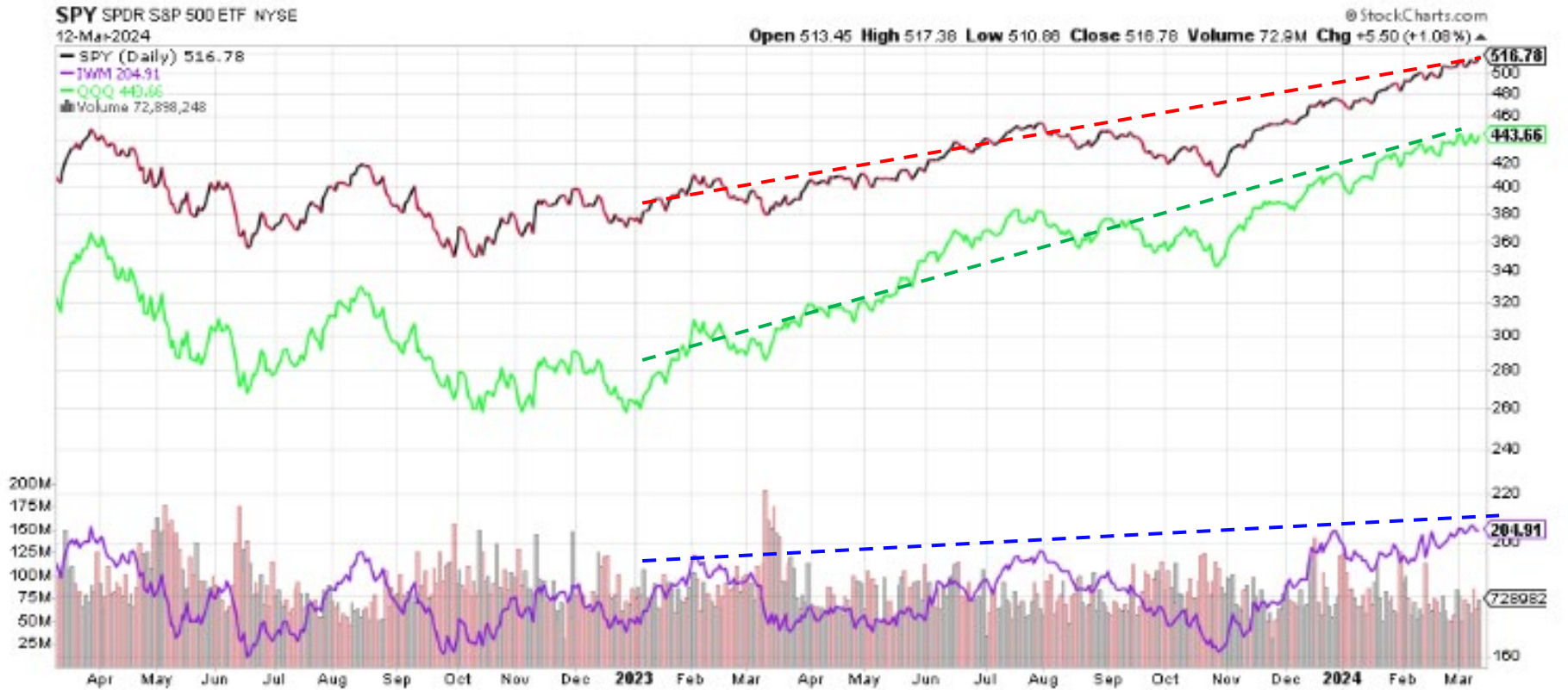
12-Mar-2024

© StockCharts.com

Open 4911.00 High 4911.00 Low 4911.00 Close 4911.00 Chg +283.00 (+6.34%) ▲



# Market Breadth – another way





This is NOT investment advice

# Weekly market direction ....

Prof. Guy Werner

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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	03/02/24	FOR THE WEEK														49	0.96%					278	1.74%
SUN	03/03/24	YTD														368	7.72%					1263	8.41%
SUN	03/03/24	FOR THE MONTH														251	5.18%					927	6.11%
MON	03/04/24	CONFIRMED UP (60% -80%)	4	5	P	P	P	5,130	-7	-0.14%	P	P	P	16,207	-67	-0.41%							
TUE	03/05/24	CONFIRMED UP (60% -80%)	4	6	P	0	P	5,078	-52	-1.01%	P	0	P	15,939	-268	-1.65%							
WED	03/06/24	CONFIRMED UP (60% -80%)	4	6	P	F	P	5,104	26	0.51%	P	F	P	16,031	92	0.58%							
THUR	03/07/24	CONFIRMED UP (60% -80%)	4	6	P	0	P	5,157	53	1.04%	P	0	P	16,273	242	1.51%							
FRI	03/08/24	CONFIRMED UP (60% -80%)	5	4	P	0	P	5,123	-34	-0.66%	P	F	P	16,085	-188	-1.16%							
SAT	03/09/24	FOR THE WEEK														-14	-0.27%					-189	-1.16%
SUN	03/10/24	YTD														354	7.42%					1074	7.15%
MON	03/11/24	CONFIRMED UP (60% -80%)	5	4	P	F	P	5,117	-6	-0.12%	P	F	P	16,019	-66	-0.41%							
TUE	03/12/24	CONFIRMED UP (60% -80%)	5	4	P	0	P	5,175	58	1.13%	P	F	P	16,265	246	1.54%							

[https://drive.google.com/drive/folders/0B6Qc\\_gipshXMelkzQ245d2R1eTQ?resourcekey=0-5pWglNqaJPJ12L2qYurMWg](https://drive.google.com/drive/folders/0B6Qc_gipshXMelkzQ245d2R1eTQ?resourcekey=0-5pWglNqaJPJ12L2qYurMWg)

# US Treasuries - long duration



# US Dollar - weekly



# Sixth Class – Mar. 13<sup>th</sup>

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- US Equities Market Review – 20 minutes
  
- ETFs deep dive – Part 2
  - Performance metrics
  - Risk
  - ETFs for various asset classes

# Types of Risk

- Systematic Risk – macroeconomic and other “system” events that influence the value of financial assets in general.
  
- Unsystematic Risk
  - Risk in the stock market
    - How stocks will perform in the current financial environment.
    - Measured by volatility in the asset class
    - Correlation of the asset class to the economy and other asset classes.
  - Risks to specific sectors / industries within the stock market.
    - How the industry will perform in the current economy
    - Measured by volatility in a specific sector
  - Risk in a specific company within the sector/industry
    - How the company performs in the sector/industry
    - What happens to that company
    - Measured by Beta for that company within the market.

Why are  
you taking  
risk?

# Passive – Index ETFs

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## □ Hierarchy

### □ Total market

#### □ Segments of markets

- Sectors within markets
  - Companies within the sector

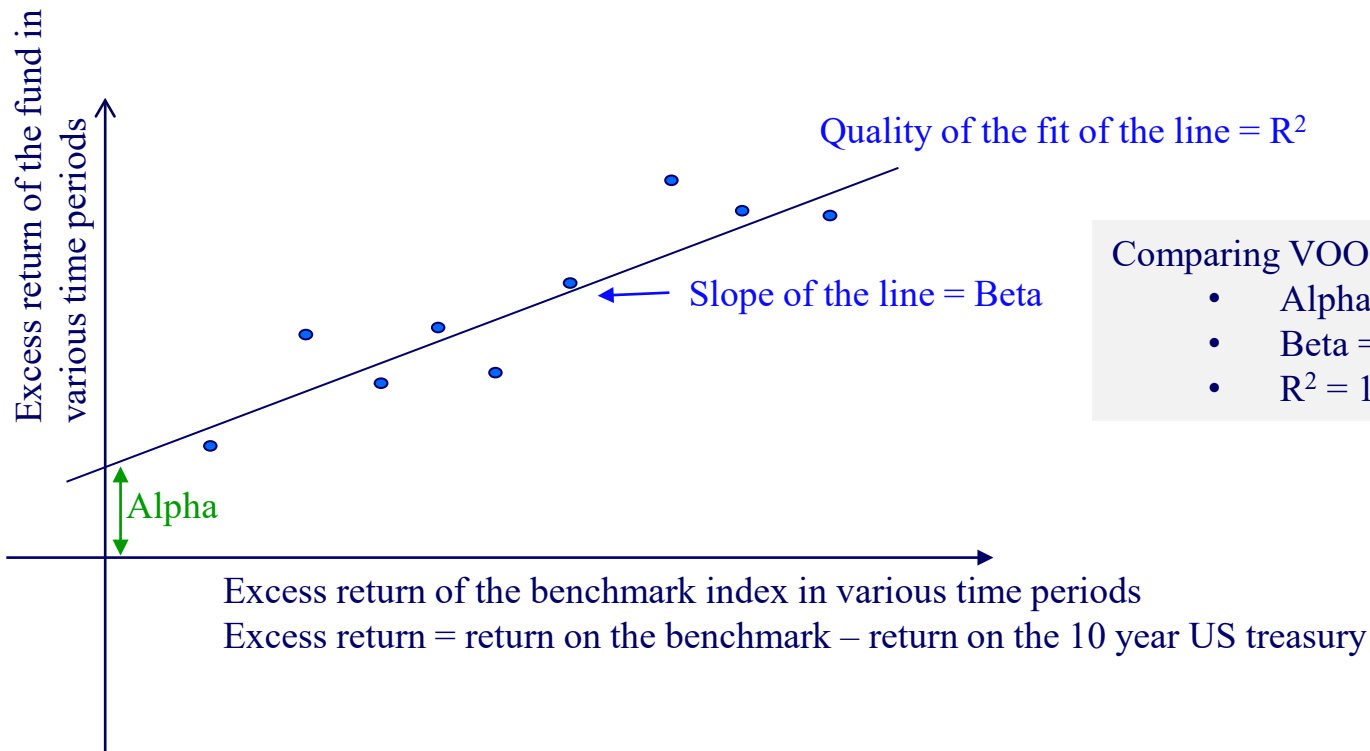
# US Equity Markets

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- Total US stock market
  - VTI – Vanguard Total US Stock Market ETF
  
- Segments by Size
  - Large Cap - VV
    - S&P 500 – VOO
    - NASDAQ 100 – Invesco QQQ
  - Mid Cap - VO
  - Small - VB

# Performance of a fund

- Performance is measured relative to
  - an Index Benchmark.
  - Return in a low risk investment like a 10-year US Govt. treasury bond.



Comparing VOO or SPY to the S&P 500

- Alpha = zero
- Beta = 1
- $R^2 = 100\%$



# Metrics for ETF performance

Metric	Definition / what it measures	Range	Good
Alpha	Excess return delivered relative to underlying index.	Zero is center	higher
Beta	Relative volatility of the fund compared to that of its benchmark index.	One is center	lower
R Squared	Percentage of a funds price movement that can be explained by changes in value of the underlying index	0 - 100	depends
Standard Deviation	Measure of the historical dispersion of a funds returns around its mean.		lower
Sharpe Ratio	Measure of excess return of a fund over the risk free return divided by its standard deviation. Estimates if a funds return comes from smart investing decisions or excess risk.		Higher
Expense Ratio	How much the manager charges to run the ETF		Lower
Liquidity	How much volume is traded every day (Bid - Ask spread)		High

# What's in the ETF

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## □ Portfolio

- Companies or individual investments
- Percent of holdings in that investment
- Number of holdings – depth or concentration
- Turnover

# What do you want in an ETF?

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- Reputable Sponsor
- Liquidity
- Delivers exposure to the asset class / index you want exposure to
  - High R-square to underlying asset class benchmark index
  - Low Beta
  - High Alpha
  - Low Standard Deviation
  - High Sharpe Ratio
- Low Expense Ratio and transaction fees.

# Morningstar® - ETF rating system

- Fund analyst, Proprietary Algorithm
- Criteria – minimum 3 years data
- Star system – 1 to 5 stars
  - Performance relative to other funds with similar asset classes, strategies.
  - How much risk is taken relative to others and benchmarks. Less is better.
  - 3 is average
    - 1 or 2 have underperformed
    - 4 or 5 have done the best in the comparison group.
- Medalist ratings – Negative, Neutral, Bronze, Silver and Gold
  - Predicted future performance of strategy based on *Net Alpha*
  - Evaluates 3 factors on a 5 point scale – high, above avg., avg., below avg., low
    - People                      Performance
    - Process                     Fees relative to excess return delivered
    - Parent
  - Higher bar for active strategies – must beat benchmark with performance justifying risk and fees

# Morning Star ETF screens

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- Gold Medal and 3 to 5 star rating
  - 219 funds passed the screen !!
- Ran screen on **Core** Gold and Silver ETFs
  - 29 Gold ETFs and 75 Silver ETFs pass the screen
- Results attached as a separate Excel file on the class website.

# US Equity Markets – Style

- Total US stock market
  - Style – Growth vs. Value

	Growth	Blend	Value
Large	VOOG	VOO	VOOV
Mid	VOT	VO	VOE
Small	VBK	VB	VBR

- Style – Dividend
  - High Dividend – VYM
  - Growing Dividend - VIG

# S&P 500 – Sector Weights



Sector Weights, Price Changes, Earnings Growth, P/Es, Yields and PEGs  
3/8/24

Weights & % Price Changes S&P Sectors	S&P 500			S&P MidCap 400			S&P SmallCap 600		
	% of 500	MTD	YTD	% of 400	MTD	YTD	% of 600	MTD	YTD
Communication Services	8.7	(0.1)	10.6	1.4	(0.8)	(8.6)	2.7	(0.2)	(3.6)
Consumer Discretionary	10.3	(2.2)	2.4	15.7	0.8	6.0	15.0	(2.0)	0.7
Consumer Staples	6.0	0.9	4.4	4.7	1.5	13.6	3.5	(2.8)	(5.0)
Energy	3.7	2.4	4.4	5.0	2.2	6.1	4.6	1.7	1.2
Financials	13.0	0.6	7.6	15.7	1.3	3.7	18.0	0.9	(4.2)
Health Care	12.6	1.0	7.1	7.6	2.1	5.7	10.7	1.8	0.7
Industrials	8.8	1.0	7.0	21.3	1.6	7.1	18.3	0.7	5.0
Information Technology	29.9	0.7	11.1	11.3	6.2	19.0	12.1	1.4	(1.9)
Materials	2.3	2.0	4.1	6.9	2.2	1.3	5.8	1.7	2.9
Real Estate	2.4	2.6	0.0	7.3	2.0	(4.3)	7.4	1.4	(4.0)
Utilities	2.2	2.5	(0.2)	3.2	5.1	6.9	1.9	0.5	(8.4)
<b>S&amp;P Indexes</b>	<b>100.0</b>	<b>0.5</b>	<b>7.4</b>	<b>100.0</b>	<b>2.1</b>	<b>6.1</b>	<b>100.0</b>	<b>0.5</b>	<b>(0.5)</b>
S&P/Citigroup Growth	54.7	(0.1)	10.2	53.7	2.3	11.7	51.1	0.6	2.0
S&P/Citigroup Value	45.3	1.3	4.2	46.3	1.9	0.4	48.9	0.5	(3.0)

# US Equity Markets – Sector

This is not investment advice

## Sector Performance by Business Cycle Phase

The table below shows how sectors have tended to perform in each stage of the business cycle. For more information on sector performance patterns, read [The Business Cycle Approach to Sector Investing \(PDF\)](#).

39% is AMZN and TSLA

40% is AAPL and MSFT

41% is Meta and Google

- XLFP
- XLRE
- XLV
- XLK
- XLI
- XLB
- XLP
- XLV
- XLE
- XLC
- XLU

Sector	Early	Mid	Late	Recession
Financials	+			
Real Estate	++			--
Consumer Discretionary	++	-	--	
Info. Tech	+	+	--	--
Industrials	++			--
Materials	+	--	++	
Consumer Staples			++	++
Health Care	--		++	++
Energy	--		++	
Communication Services		+		-
Utilities	--	-	+	++

++ Consistently Overperform    -- Consistently Underperform    □ No Clear Pattern  
+ Overperform    - Underperform

Unshaded (white) portions above suggest no clear pattern of over- or underperformance vs. broader U.S. equity market. Double +/- signs indicate that the sector is showing a consistent signal across all three metrics: full-phase average performance, median monthly difference, and cycle hit rate. A single +/- indicates a mixed or less consistent signal. Source: Fidelity Investments (AART).



# Equity Markets - Industry

- Specific Industry of interest
  - Based on market direction etc.
  - Fund manager / team make choices
  
- Examples
  - Solar Energy – TAN
  - Internet Security – HACK, BUG -> similar top holdings
  - Lithium & Batteries – LIT, BATT ->6% weight on TSLA
  - Biotech – IBB, XBI
  - Medical Devices – IHI
  - Airlines - JETS

# Active ETFs

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- Strategy / Style
- Active – Fund Manager/team

# Equity Markets - Active

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- Manager / Team chooses portfolio to achieve objective
- Equity Premium Income / growth
  - JEPI (covered calls – Equity Linked Notes), monthly distributions
- Multiple strategies
  - Low Beta
    - LVHD, EEMV
  - Active Beta
    - GSLC, GSIE
  - Momentum
    - MTUM, IMTM
  - Covered Calls
    - DIVO

# Equity Markets – Exotic Strategy

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- Multiple leveraged funds
  - Complex ETF
  - Low AUM, High Fees
  - Very short term focus – One Day!
  - Be very careful
- S&P 500 Double Leverage – SPUU or SOO
  - QQQ – triple - TQQQ and short SQQQ
- Direxion – single stock ETFs – TSLA daily bear TSLS

# US Bond Market

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## □ Type of Bond

- Federal Government
- Municipal Governments
- Corporate Bonds
  - Investment Grade
  - High Yield

## □ Term

- Long Term
- Intermediate Term
- Short term

# US Bond Market

- Total Bond Market – BND
- Total Corporate Bonds – VTC
- High Yield Bonds – HYG (iShares)
- Total Tax – Exempt - VTEB

	Short	Intermediate	Long Term
Treasuries	VGSH	VGIT	VGLT
Corporate	VCSH	VCIT	VCLT
Total Bond Mkt.	BSV	BIV	BLV

# International Markets

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## □ Equities

- Total International Markets – VXUS, IXUS, VEU
- Emerging Markets – VWO
- Developed Markets - VEA

## □ Bonds

- Total International Bonds – BNDX (Hedged)

# Precious Metals ETFs

<b>Investment Focus</b>	<b>Example ETFs</b>
<u>Individual Precious Metals</u>	
Gold	IAU, GLD, SGOL
Gold Miners	GDX, RING, GOEX
Silver	SLV, SIVR,
Silver Miners	SIL, SLVP
Platinum	PPLT, PLTM
Palladium	PALL
<u>Precious Metal baskets</u>	
Palladium + Platinum	SPPP
Gold + Silver + Platinum + Palladium	GLTR





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

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 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.

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

# ETFs that do the asset allocation

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## □ Balanced Funds

- iShares aggressive – AOA – 5 Star, Gold
- iShares moderate – AOM – 3 Star, Gold

## □ Target Dated funds

# Sources of information for ETFs

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- Morningstar
  - Paid subscription gives access to more content including medalist funds etc.
  - 2 part rating system – Stars for prior performance; Medals for future outlook
- AAI ETF database
  - Annual list of ETFs and performance (requires membership)
- Your Brokers website
  - ETF prospectus
  - ETF selection tools
  - ETF comparison tools
  - CFRA or other analyst reports on ETFs
- <https://etfdb.com/>
  - ETF database website – a lot of free information
  - Paid subscription provides more

# Seventh Class – March 20th

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- External speaker
  - Prof. Rich Jakotowicz, Univ. of Delaware
  - Investing in the current environment
- US Equities Market Review – 20 minutes

# Thanks !!

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- Happy Investing !!

- **My EMail**

  - [diyinvst@udel.edu](mailto:diyinvst@udel.edu)

- **Class website**

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